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STUDY OF SATISFACTION, LOYALTY, AND MARKET SHARE IN KUWAIT BANKS OFFERING MUTUAL FUND SERVICES

Adel Al-Wugayan, Kuwait University
Larry P. Pleshko, Kuwait University

ABSTRACT

Marketers contend that customer satisfaction, customer loyalty, and market share are important marketing effectiveness outcome variables in assessing firm's competitiveness. This study explores these variables in Kuwait banks by interviewing three hundred thirty mutual funds investors. The authors, using path analysis, present a variety of findings as they pertain to the banking industry. First, the expected significant positive relationship of customer satisfaction with loyalty is found to exist, although the actual effect size is minimal. Second, the expected significant positive relationship of loyalty with market share is strongly supported. Third, a moderate significant relationship between satisfaction and market share exists, though the relationship is negative in nature and contrary to expectations. It appears that, within this product-market, loyalty, which is at least partly derived from customer satisfaction, is a major determinant of market share and should be a major focus of any marketing program. However, satisfaction, while having a small positive influence on loyalty, seems to have an important and undesired - negative – relationship with market share. Thus, it appears that market share is dependent on banks creating and maintaining a large and loyal customer base, which partially evolves from satisfying those customers. But, banks having the largest levels of satisfaction in the customer base seem to have the smaller market shares, possibly indicating that service levels are significantly better in smaller share banks. Therefore, if larger share banks could improve their levels of service enough to upgrade customer satisfaction levels, then loyalty figures should increase, which should then be followed by increases in market shares.

INTRODUCTION

Although attaining growth and profitability is of paramount importance to businesses, systematic sector analysis aimed at identifying the relationship among key marketing outcome variables is scant at best. According to the basic consumer model, improved value should enhance brand choice and generate favorable satisfaction judgments, resulting in repeat purchase (brand loyalty), and ultimately to overall firm performance (Cooil et al. 2007, Leverin &

Liljander 2006, Story & Hess 2006, Reinartz, Werner & Kumar 2000, Pleshko & Cronin 1997, Rust & Zahoric 1993).

Expecting these general premises to hold for every industry or under every condition is generally met with justified skepticism. The marketing literature offers many examples showing that better product does not always translate into higher sales or larger market shares. Intervening variables such as poor marketing, poor relative value, or a variety of macro-firm factors can weaken the logical relationship between marketing effectiveness variables. Additionally, satisfaction with a service or a usage occasion is not sufficient to ensure customer loyalty or higher profitability even when satisfaction leads to improved market shares (Mitchell & Kiral 1998, Pleshko & Cronin 1997, Reichheld & Sasser 1990). Despite the positive effects of buyer loyalty on market share, loyalty is often found to be more prevalent in firms with smaller market shares (Ehrenberg & Goodhardt 2002, Knox & Denison 2000, Reichheld & Sasser 1990). Additional research is needed to verify the association between marketing effectiveness outcome variables.

This study investigates the interrelationships among consumer satisfaction, consumer loyalty, and market share in the mutual funds industry. Kuwaiti banks, local pioneers in offering mutual fund services, are considered to be concentrated yet operating in a monopolistically competitive industry (Al-Mutairi & Al-Omar 2009). Mutual funds are a unique service-type in that the investments themselves are potentially quite durable (lengthy) while still offering quick dissolution if necessary. Although banks have been the focus of a variety of studies, however investigations into the mutual funds service have been lacking.

CUSTOMER SATISFACTION

In general terms, satisfaction can be defined as the summary judgments formed after consumption. Although many models have been postulated to explain satisfaction, this study conceptualizes satisfaction to result from a comparison of mutual fund service and product expectations to the performance of the banks on these salient components (Al-Weqaiyan 1998, Churchill & Surprenant 1982). Meeting or exceeding initial expectations should lead to satisfaction whereas falling short of expected performance will generate dissatisfaction. User satisfaction judgments have been shown to impact various attitudinal and behavioral tendencies toward chosen brands (Breivik & Thorbjornsen 2008).

Customer satisfaction and buyer retention are generally considered among the most important long term objectives of firms (Cooil et al. 2007). Satisfied buyers should be more likely to repurchase again, or at least, consider repurchasing again than those with undesired service experiences (Kotler 1977, Keith 1960, Leavitt 1960). Importantly, satisfied buyers are known to provide important positive word-of-mouth communication (DeMatos & Rossi 2008). According to Reichheld and Sasser (1990), repeat customers can benefit a firm's cost structure through reduced costs per visit when compared to new customers. Additionally, maximizing

customer retention rates and minimizing customer defections are primary strategic objectives for most firms emphasizing the maintenance of market share through customer relationship management (Ching et al. 2004, Verhoef 2003). Thus, previously satisfied buyers may result in both reduced marketing costs and more stable sales/share levels if a large enough proportion of those satisfied buyers are retained as customers. Additionally, new buyers satisfied with their experiences can be expected to consider using the product/brand again in the future, possibly resulting in continued repeat patronage and increased shares.

BUYER LOYALTY

Brand loyalty is perhaps one of the oldest concepts of interest to marketing scholars. In the past, researchers have used different aspects of loyalty including "purchase possibility", "purchase frequency", "awareness", and "long-term trust/commitment" (Farley 1964, Brody & Cunningham 1968, Twedt 1967, Story & Hess 2006, Oliver 1999). Dick and Basu (1994) challenged the traditional view of brand loyalty as "repurchase-related behavior" and offered to define loyalty as an interrelation between both purchase behavior and brand attitudes. In this perspective, which has empirical support, true brand loyalty requires both repeat purchase behavior as well as significant psychological attachment to the chosen brand (Kerin et al. 2006, Pleshko & Heiens 1997, Pleshko & Heiens 1996).

Marketers contend that business performance is associated with maintaining adequately high levels brand loyalty. In fact, corporate incentives-based loyalty programs may lead to immediate increases in buyer loyalty, but with no guarantees that repurchase will continue in the long term due to a lack of psychological attachment (Story & Hess 2006). The association between loyalty and repurchase frequency has been complicated by the rise of buyer switching behavior due to reasons both at the individual level and the market level, as exhibited in variety seeking and aggressive promotional programs (Breivik & Thorbjornsen 2008, Al-Weqaiyan 2005). This is relevant to the company since marketing performance depends partially on managing both market penetration and customer retention (McDowell & Dick 2001, Lehmann & Winner 1997).

INTERRELATIONSHIP BETWEEN CUSTOMER SATISFACTION AND BUYER LOYALTY

It often suggested that strong loyalty is a major determinant of customer-business interaction (Cooil et al 2007, Tellervision 2006). If buyers are satisfied with their chosen brands, increasingly they will be inclined to re-purchase and eventually become loyal buyers exhibiting strong customer goodwill. Leverin & Liljander (2006) found that satisfaction with banks in Finland played an important role in determining loyalty, especially in less profitable sectors.

However, many researchers question the reliability of using satisfaction as a predictor of loyalty (Story & Hess 2006, Reichheld 2003, Oliver 1999). This alternative perspective notes that satisfaction may be an important requirement for loyalty, yet it may not be sufficient by itself to generate loyal customers. This view leads to the possibility of loyalty being classified as either of spurious or latent, rather than real. One can conclude from the work of Dick and Basu (1994) that truly loyal buyers must exhibit both behavioral loyalty and psychological loyalty. Latent loyalty is evident when buyers have favorable attitudes but exhibit a weak brand repurchase pattern. In contrast, when buyers with high brand repurchase lack preference towards that brand, this is referred to as spurious loyalty. The absence of either of these loyalty factors in empirical studies may explain the variability in the satisfaction-loyalty relationships.

From a conceptual viewpoint, the directionality of the satisfaction-loyalty relationships can take one of three possibilities: (a) satisfaction predicts loyalty, (b) loyalty predicts satisfaction, or (c) there no real correlation between satisfaction and loyalty. A related research question pertains to the identification of conditions under which each of these satisfaction-loyalty relationship possibilities exists. It is not the intention of the present study to address either of these major issues, but rather simply looks to determine if a relationship does indeed exist between loyalty and satisfaction. In this study, where highly involved product decisions have consequential results from very few possible repurchase occasions, it is proposed that satisfaction is expected to precede loyalty. Hence, the following hypothesis is formulated:

H1: Customer satisfaction and buyer loyalty should be positively associated in banks offering mutual funds investment services.

MARKET SHARE AND ITS RELATIONSHIPS WITH CUSTOMER SATISFACTION AND BUYER LOYALTY

Market share is a critical marketing outcome variable that should be influenced by both the satisfaction a buyer perceives from purchase and usage experience and the continued patronage of loyal buyers. According to recent empirical research, as satisfaction improves, consumers are more likely to engage in repeat purchases and positive word-of-mouth (De Matos & Rossi 2008). Higher levels of loyalty are found to be associated with positive word-of-mouth, an increased inclination to repurchase, and at the firm level, and an increase in profits per customer due to lower retention costs (Zeithaml 2000, Tellis 1988, Rosenberg & Czepial 1983). In the long run, the value of any business should increase as management reinvests those higher relative profits back into the firm (Day & Wensley 1988).

To management, the combined effects of psychological and behavioral loyalty provide many advantages. As markets mature, market share maintenance and growth strategies become exceedingly costly in order to combat rivals' competitive pressures. This may be overcome by

creating and maintaining a loyal buying base (Gounaris & Stathakopoulos 2004). Many previous studies have provided evidence relating loyalty to either market share or other performance indicators (Leverin & Liljander 2006, Fader & Schmittlein 1993, Colombo & Morrison 1989, Raj 1985, Robinson 1979). Many studies have found a positive relationship, where brands with large market shares usually have the most brand loyal buyers while brands with small market share suffer from low loyalty levels (Ehrenberg and Goodhardt 2002, Badinger & Rubinson 1997, McPhee 1963). This share-loyalty linkage is termed 'double jeopardy' and has be attributed to a variety of explanations, including switching gains or distribution channel advantages or popularity (Kumcit 2008, Pleshko & Souiden 2007, Caminal & Vives 1996).

Assessing the loyalty-share relationship is of prime interest in the present investigation. Earlier studies suggest that the prevailing direction of this relationship a positive relationship. The following hypothesis is coined accordingly as:

H2: Customers loyalty and market share are positively related in banks offering mutual funds investment services.

Repatronage in the service industry, and especially in the banking sector, depends largely on the level of customers' satisfaction. Previous research in the banking industry has shown that higher levels of customer satisfaction are associated with higher market shares (Pleshko & Cronin 1997). Failure to achieve relatively high satisfaction levels would lead to customer defections to better positioned competitors, resulting in eroded market shares over time. In the financial services industries, buyers will be dissatisfied if expectations regarding high levels of service, security, and safety are not met (Adams 2007, Tellervision 2006). Additionally, brand switching is easier as customers can transfer their business to better-serving institutions with convenience and few switching costs (Leverin & Liljander 2006). In light of this, the following hypothesis is advanced:

H3: There is a positive relationship between customer satisfaction and market share in banks offering mutual fund investment services.

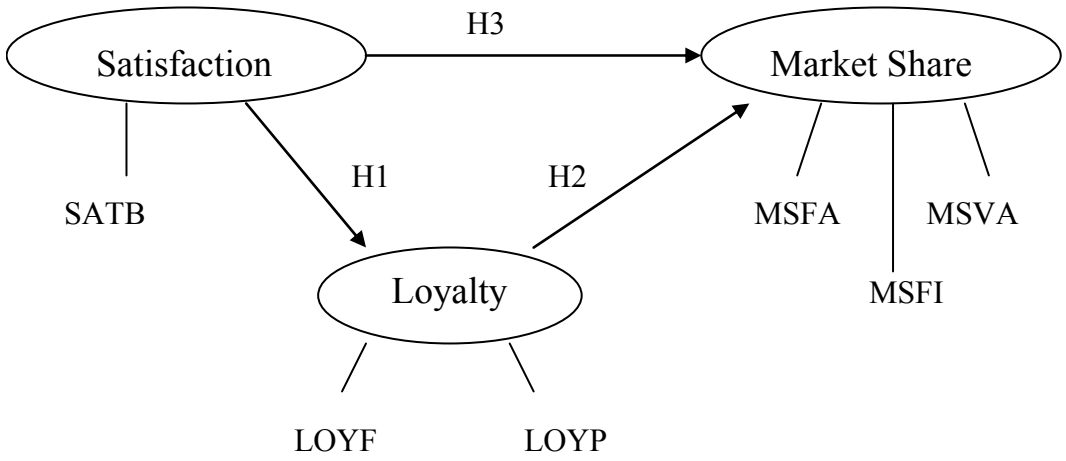
Figure 1 summarizes the proposed hypotheses. The reader may also use Figure 1 for general information about the indicators used to represent each construct in the study.

DATA COLLECTION

In testing the hypotheses, data is collected from investors with mutual funds at the various banks in the state of Kuwait. The sampling frame is comprised of bank customers in Kuwait and is derived from lists provided by the Central Administration of Statistics for the State of Kuwait. Data are collected from self-administered questionnaires collected from interview

visits to households of both local citizens and foreign residents. A multi-stage sampling procedure is employed in order to maintain an adequate representation of bank users in Kuwait. In addition, the sample closely matches the distribution of residences over the six districts of Kuwait. This procedure generated three hundred thirty mutual fund investors which are included in the study. The non-response rate is lower than ten percent, an acceptable number given that the information gathered is considered private and sensitive. Any respondents unwilling to share information about their banking activities were dropped from the study.

Figure 1
Model of Satisfaction, Loyalty, & Market Share



While many financial services companies operate in Kuwait, only those offering mutual funds are included in this study. There are thirty-six companies offering mutual fund services. However, most of the investment activity, nearly eighty-five percent, is handled through the ten major banks of Kuwait. Therefore, the ten banks are each included in the study as individual entities while the remaining twenty-six providers are grouped together into an 'other' category due to the small market shares evident with mutual funds. For the purpose of our analysis, there are eleven 'banks' or entities that will be included in the analyses; the ten major banks by market share, along with an 'other' category which includes the averages of twenty-six banks and financial services companies. Table 1 summarizes the banks and investors data derived from the respondents.

From Table 1 many items are noted regarding the sample: (i) the banks are identified in the first column, (ii) the number of investors for each bank are shown in the second column, (iii) the number of investors in the banks where the investors have the most mutual fund money invested is shown in column three, (iv) the total number of mutual fund accounts held by each

bank is shown in column four, and finally (v) the total mutual funds investments in Kuwaiti dinars is revealed in column five.

Table 1: Investor/Account Information for Mutual Funds

Bank#*	# Investors	# Investors** w/ most Kd	# Mutual Accounts	Total Kd Funds
33	74	45	99	3,083,503
17	94	46	140	3,905,120
27	45	40	50	1,269,456
20	45	20	63	1,677,000
03	30	20	41	700,000
12	20	16	24	692,667
32	22	16	26	633,000
28	26	15	39	448,000
15	24	14	34	504,500
34	42	14	71	995,000
Others (avg)	4.2	3.0	5.6	101,151
Others (tot)	108	80	145	2,629,933

* 36 total banks: 10 shown + 26 'Others'
** referred to as LOY1F

It is worthwhile to note that there is not a numerical correspondence between the number of investors, investor accounts, and respondents. In other words, (i) investors may have more than one mutual fund investment account and (ii) investors may have mutual fund investments at more than one bank. Thus, the numbers will show that there are more investors (530 total in column two) and accounts (732 total in column four) than total responding investors (326 total in column three). However, column three shows the bank where the customers have the majority of their investment money and those numbers will add approximately to the number of respondents: two hundred forty seven (three not grouped) associated with the ten major banks and eighty with the other banks: a total of three hundred and twenty seven investors/respondents. The mutual fund investments of the sample total approximately KD 16,538,179 which is split as eighty-four percent with the ten major banks and the remaining sixteen percent invested in the other twenty-six banking entities.

MEASUREMENT

Several indicators are used to measure the three constructs investigated in this study: market share, satisfaction, and consumer loyalty. The loyalty indicators are described below and are derived from research in other industries where similar measures are shown to be reliable and

valid (Pleshko 2006). The satisfaction indicator is commonly used in the literature to measure general satisfaction with a service (Pleshko & Cronin 1997). Also, the market share indicators fit the common definition of share as a percentage of a total related to an item of relevance, such as customers, sales, market size, or accounts. The aggregate market share, the aggregate loyalty indictors, and the satisfaction indicators are revealed in Table 2 for each of the banks. Note that to gather the data, the respondents were asked to write the bank, investment amount, satisfaction, and year initiated for each of their mutual fund investments.

Table 2: General Bank Statistics

Bank#*	MSFI	MSFA	MSVA	LOYF	LOYP	SATB
33	.1396	.1352	.1864	.1376	.6081	3.354
17	.1774	.1913	.2361	.1407	.4894	3.546
27	.0849	.0683	.0768	.1223	.8889	3.454
20	.0849	.0861	.1014	.0612	.4444	3.690
03	.0566	.0560	.0423	.0612	.6667	3.935
12	.0377	.0328	.0419	.0489	.8000	3.854
32	.0415	.0355	.0383	.0489	.7273	3.685
28	.0491	.0533	.0271	.0459	.5769	3.837
15	.0453	.0464	.0305	.0428	.5833	3.373
34	.0792	.0970	.0602	.0428	.3333	3.367
Others (avg)	.0078	.0076	.0061	.00920	.0281	3.494
Others (tot)	.2038	.1976	.1586	.2447	.7306	3.494

* 36 total banks: 10 shown + 26 'Others'
* Others averages are used in the analyses

Three indicators are used to measure aggregate market share. The first indicator, (MSFI), refers to the share of investors that each bank holds out of a total of five hundred thirty. Thus, MSFI is calculated as follows: $MSFI_i = S_i/530$, where 'S' refers to the data from column two in Table 1 and 'i' refers to the specific bank. So, regarding Bank 33 for example: $MSFI_{33} = 74/530 = 13.96\%$. From Table 2, it is noted that the range of MSFI is from a low of 0.78% for 'other' banks to a high of 17.74% for Bank 17.

The second market-share indicator (MSFA) refers to the share of mutual fund accounts/investments that each bank holds out of a total of seven hundred thirty two. Thus, MSFA is calculated as follows: $MSFA_i = T_i/732$, where 'T' refers to the data from column four in Table 1 and 'i' refers to the specific bank. So, regarding Bank 33 for example: $MSFA_{33} = 99/732 = 13.52\%$. From Table 2, it is noted that the range of MSFA is from a low of 0.76% for 'other' banks to a high of 19.13% for Bank 17.

The third market-share indicator (MSVA) refers to the share of money invested that each bank holds. Note that the total value of the respondents' investments in mutual funds is

Kd16,538,179. Thus, MSVA is calculated as follows: $MSVA_i = Z_i/16,538,179$, where 'Z' refers to the data from column five in Table 1 and 'i' refers to the specific bank. So, for Bank 33 for example: $MSVA_{33} = 3,083,503/16,538,179 = 18.64\%$. From Table 2, it is noted that the range of MSVA is from a low of 0.61% for 'other' banks to a high of 23.61% for Bank 17.

There is strong evidence to support the internal structure of the market share construct as the three market share indicators are significantly and positively related using the Spearman rank-order test. The relationships are as follows: MSFI-MSFA: *rho*=0.97 with $p<.01$, MSFI-MSVA: *rho*=0.90 with $p<.01$, and MSFA-MSVA: *rho*=0.88 with $p<.01$.

Loyalty is assessed using two indicators. The first loyalty indicator (LOYF) refers to the number of mutual fund investors at each bank. Specifically, LOYF is defined as the number of investors at each bank, where the investors are assigned to the specific bank where they have the largest investment in mutual funds (see column three, Table 1). This is adjusted by the total number of investors in the sample: three hundred and twenty-seven classified. So, regarding Bank 33 for example: $LOYF_{33} = 45/327 = 13.76\%$. From Table 2, it is noted that the range of LOYF is from a low of 0.91% for 'other' banks to a high of 14.06% for Bank 17.

The second loyalty indicator (LOYP) also refers to the number of mutual fund investors assigned to each bank as discussed above, but as a percentage of the total investors at each bank (see columns two and three, Table 1) rather than the total sample. So, regarding Bank 33 for example: $LOYP_{33} = 45/74 = 60.81\%$. From Table 2, it is noted that the range of LOYP is from a low of 2.81% for 'other' banks to a high of 88.89% for Bank 27. In other words, LOYP is the percentage of a bank's (Bank A) customers classified as loyal to the bank. (Bank A loyal)

The study includes a single indicator of consumer satisfaction with banks' mutual funds services. An overall indicator (SATB) is measured using a single item with ratings from very satisfied [5] to not at all satisfied [1] for each bank where respondents have investments. This measurement procedure is similar to that used in other studies in the financial services industry to measure general satisfaction (Pleshko & Cronin 1997, Dawes & Smith 1985). The satisfaction responses are aggregated to the specific bank and then averages are calculated. For the banks, the eleven averages of SATB have an average of 3.60 with a standard deviation of 0.21 and range from 3.35 to 3.93.

ANALYSIS/RESULTS

The analysis proceeds in two steps. Initially, the explained variance is derived for each relationship in the model. This will be accomplished using Spearman's (1904) rank-order test, which is explained in the next paragraph. As the indicators are aggregated across the banks and are not specific to each customer, Spearman's test is appropriate due to the small number of observations; the eleven 'banks'. The eleven observations are not of adequate size to perform parametric testing (Stevens 1986). Secondly, the model paths are analyzed to determine if they

are significant in relation to the overall model as presented in Figure 1. This will be accomplished using path analysis, as explained in later paragraphs.

The Spearman rank correlation coefficient is calculated as follows. The test statistic, *rho* or "*r*", is calculated with data taken from 'n' pairs (*Xi,Yi*) of ordered observations from the respondents on the same objects: the banks. Each of the two bank variables is ordered from smallest to largest and assigned relative ranks from one (lowest; in this case one) to n (highest; in this case eleven). Ties are assigned the average ranking value. These "rankings pairs", the two ordered variables of interest (*Xi,Yi*), are then used to calculate the test statistic, which is derived as follows: $r=1–6[Sum(d^2)/n(n^2-1)]$. In the equation, '*n*' equals the number of paired rankings for each bank (eleven) and '*d*' equals the absolute differences between the rankings for each bank (*Xi-Yi*). The rho values to be used in the model and shown in Table 3 (and Table 4) and have theoretical ranges between +1 (perfect positive association) and -1 (perfect negative association).

Table 3: Spearman Rho Statistics

	Indicator	MSFA	MSVA	LOYF	LOYP	SATB
MSFI	rho=	+.9705	+.9068	+.7932	-.0341	-.3159
MSFA	rho=	n/a	+.8818	+.6795	-.1636	-.3727
MSVA	rho=		n/a	+.8523	+.0909	-.2364
LOYF	rho=			n/a	+.4159	+.0568
LOYP	rho=				n/a	+.2364

Next, path analysis is used to test the overall relationships among the identified research constructs presented in Figure 1. Path analysis is a relevant technique for testing causal models using regression analyses (Pedhazur 1982). The technique allows the researcher to determine if the hypothesized model is consistent with the variable intercorrelations -the rho statistics in this study - or whether the null/full model is more relevant.

Using path analysis, our hypothesized/reduced model (Ha) is compared with a null/full model inclusive of all the possible paths (the Ho) using Equation one identified below (Pedhazur 1982, p. 619). The calculated test statistic, 'W', is distributed as a chi-square, with ‘m' degrees of freedom. If the null hypothesis is rejected, then support is provided for the hypothesized model. This means that, with a rejected null hypothesis, the tested path cannot be excluded from the model. On the other hand, if Ho is not rejected, then evidence does not support including the tested path(s) in the model.

In our model, Equation two and Equation three summarize the basic mathematical relationships where the Spearman rho statistics will be used. The relative weights are represented by the eleven relevant Spearman rho statistics: A_1, A_2, through A_{11} in the two equations. In order to test the hypotheses, it is necessary to determine the significance of the predictors by comparing a full model to a reduced model, wherein some of the predictors will be removed. Due to the multiple indicators for market share and loyalty, more than one indicator will be evident for each construct in

the full model and more than one indicator will be removed from the equations when dealing with the reduced models. Therefore, the full model will include all of the A_i (the r_i), while the reduced model will be without those A_i pertaining to a specific relationship-pair of constructs: either satisfaction-loyalty (A_1, A_2), or loyalty-share (A_4, A_5, A_7, A_8, A_{10}, A_{11}), or satisfaction-share (A_3, A_6, A_9).

Equation 1: $W = - (n-m) [\ln (1-R^2_o) / (1-R^2_a)]$

Where

W = X^2 statistic
n = number of observations = 327 respondents
m = d.f. = model paths hypothesized to be zero
ln = natural log
$R^2_o = R^2_{full} = 1-[(1-r^2_i) (1-r^2_{ii}) (1-r^2_{iii}) (etc.)]$
$R^2_a = R^2_{reduced} = 1-[(1-r^2_i) (1-r^2_{ii}) (etc.)]$
r_i = Spearman rho statistics = explained inter-correlations

Equation 2a: $LOYF = A_1*SATB + error$
Equation 2b: $LOYP = A_2*SATB + error$
Equation 3a: $MSFA = A_3*SATB + A_4*LOYF + A_5*LOYP + error$
Equation 3b: $MSFI = A_6*SATB + A_7*LOYF + A_8*LOYP + error$
Equation 3c: $MSVA = A_9*SATB + A_{10}*LOYF + A_{11}*LOYP + error$

The results of the path analyses tests are shown in Table 4, which reveals that none of the overall paths should be excluded from the model. For H1, the satisfaction-loyalty proposal, the table shows that W=19.74 (p=<.005), indicating that satisfaction is an important predictor of loyalty with a positive relationship and must be kept in the study. However, the goodness-of-fit index, Q=.941, suggests that the effect size for satisfaction-loyalty is minimal, about three percent ($((0.0568^2 + 0.2364^2) / 2 = 0.02956)$. For H2, the loyalty-share proposal, the table shows that W=945.06 (p<.001), indicating that loyalty is an important predictor of market share with a positive relationship and must be kept in the study. The goodness-of-fit index, Q=.053, suggests that the effect size for loyalty-share is large, nearly seventeen percent ($((0.7932^2 + 0.6795^2 + 0.8523^2 + 0.0341^2 + 0.1636^2 + 0.0909^2) / 6 = 0.1667)$. For H3, the satisfaction-share proposal, the table shows that W=101.15 (p<.001), suggesting that satisfaction is an important predictor of market share with a negative relationship and must be kept in the study. The goodness-of-fit index, Q=.732, suggests that the effect size for satisfaction-share is moderate, about ten percent ($((0.3159^2 + 0.3727^2 + 0.2364^2)) / 3 = 0.0982)$. Therefore, the path analysis results support the model as stated in Figure 1, except for the direction of H3, the satisfaction-share relationship, which is negative.

Table 4: Path Analysis Statistics										
Path Analysis	Path Eliminated	Rho	Sign	m	R^2o	R^2a	Q	W	'p'	Conclusion
I	H1: Sat-Loy		+	2	0.964	0.961	0.941	19.7	<.005	keep H1 path
	SATB-LOYF	.0568	+							
	SATB-LOYP	.2364	+							
II	H2: Loy-MSh		+	6	0.964	0.311	0.053	945.1	<.001	keep H2 path
	LOYF-MSFI	.7932	+							
	LOYF-MSFA	.6795	+							
	LOYF-MSVA	.8523	+							
	LOYP-MSFI	.0341	-							
	LOYP-MSFA	.1636	-							
	LOYP-MSVA	.0909	+							
III	H3: Sat-MSh		-	3	0.964	0.950	0.732	101.1	<.001	keep H3 path
	SATB-MSFI	.3159	-							
	SATB-MSFA	.3727	-							
	SATB-MSVA	.2364	-							

DISCUSSION

The general objective of the study is to determine if the general model presented in Figure 1 is valid in Kuwait banks offering mutual fund services. The results indicate that the model is appropriate, since all three relationships are found to be important and none of the constructs should be excluded from the model. As expected, higher customer satisfaction leads to (minimally) higher levels of customer loyalty (lending support to H1) and higher levels of loyalty lead to (greatly) more market share, supporting H2. The only unexpected result is that higher levels of customer satisfaction are associated with (moderately) lower levels of market share, hence the size, but not the direction, of H3 is supported.

The findings suggest the importance of developing customer loyalty in investment bank services. This item is congruent with many other studies across industries and supports literature linking loyalty to performance in financial institutions (Reinartz & Kumar 2002). As the results suggest, the relationship between buyer loyalty and market share is found to be positive with an estimate of effect size to be nearly seventeen percent. In one direction, loyalty leads to an increase of market share while in the other direction, market share may have a positive effect on loyalty (Reinartz & Kumar 2002, Hellofs & Johnson 1999, Fader 1993, Colombo & Morrison 1989). The directionality of this relationship was not addressed by the current study. If the relationship conforms to the standard temporal precedence where aggregate loyalty leads to more

aggregate buying, then firms wishing to increase market share performance would be wise to invest in loyalty-developing programs.

Our finding of a positive relationship between satisfaction and loyalty is consistent with previous literature where satisfied customers are more likely to become frequent users of a specific service brand than customers with dissatisfying experiences. While the magnitude of the satisfaction-loyalty association is significantly different from zero, this effect is low and estimated to be only about three percent. In a sense, higher levels of satisfaction seem insufficient to generate strong loyalty tendencies. It should be noted that satisfaction is only one of the many variables that contributes to the ultimate formation of buyers' loyalty (Oliver 1999). Oftentimes, other variables including situational, psychological, or even socio-cultural influences might lead a satisfied buyer to purchase different brands on a regular basis. The interplay of these moderating (or predictor) variables may act in a manner to dilute the satisfaction-loyalty relationship.

The direction of the relationship between satisfaction and market share is inconsistent with our prediction in H3. The relationship between satisfaction and market share is definitely significant, but negative. The estimated effect size is nearly ten percent. These findings underscore the transient nature of the impact of satisfaction on buying behaviors. Behaviors (market share) can be influenced by many exogenous and indigenous factors. Specifically, the level of marketing spending, the lack of a strong brand image, disadvantages in bank locations, or the existence of very large and powerful competitors might all contribute to low levels of market share even in the face of high satisfaction levels. More likely in this instance, it may be that large banks with larger client bases do not (or can not) provide the kind of customized services desired by customers, that is without increasing marketing mix expenditures and becoming less profitable. It is often the case where smaller firms specialize and/or provide better service by focusing on smaller and more manageable markets or segments. Possibly, in this market, larger banks had better customer satisfaction levels when they were smaller in size and thereby attracted more customers. But, over time cumulative satisfaction judgments of the banks diminished as growth occurred and buyers experienced different (decreased) levels of service.

Additionally, it is possible that the effect of satisfaction is mediated through loyalty. That is, a portion of the large main effect which loyalty has towards market share is due to an indirect effect from satisfaction. If this were the case, it might be estimated that an additional half percent $(((0.0568^2 + 0.2364^2)/2) * ((0.7932^2 + 0.6795^2 + 0.8523^2 + 0.0341^2 + 0.1636^2 + 0.0909^2) / 6) = 0.00493)$ be attributed to the effects of satisfaction on market share. This very small increase in explained variance (0.493%) doesn't seem to be very relevant to the model and seems to rule out any indirect (mediating) effect of satisfaction on share through loyalty.

In summary, the model in Figure 1 is supported with the following findings. First, as satisfaction increases, then loyalty increases slightly. This is in line with basic marketing premises and suggests that banks must continually emphasize satisfying the customer in marketing efforts. Secondly, as loyalty increases, then market share increases a fairly large

amount. This also supports the basic marketing theory and offers that a secondary effort should focus on turning satisfied customers into loyal buyers because increases in loyalty are associated with larger market shares. Third, increases in market share are associated with a moderate decrease in satisfaction (or vice versa). This item reveals the importance of customer service to any service organization. It may be that larger share banks do not offer the level of service that smaller share banks offer, with the result being less satisfaction with larger banks. In summary, a bank wishing to increase its share of the market might focus on expanding programs aimed at improving customer loyalty. These efforts targeting improved loyalty should include as the focus an emphasis on service to effectively increase customer satisfaction.

LIMITATIONS

The readers must wonder if the current findings are indicative of general tendencies or simply a characteristic of this limited study in the Kuwait market. Larger studies with more respondents taken over time are probably needed to truly identify the scope of the outlined model in banking. Additionally, this study only addressed banks as related to mutual funds services: no evidence is provided that these findings apply to other banking services, such as investment accounts, credit cards, or money transfers. Future research might also include both different target respondents as well as different product-markets, both in the banking sector and elsewhere across the GCC or other regions.

The question of measures may also be relevant. The use of other performance measures, such as profitability, as well as alternative indicators of each construct may add variety to the findings. Also, different types of loyalty might be included (true, spurious, latent, cognitive, affective, conative, and action) in order to capture a better explanation of the relationship among loyalty, customer satisfaction and market share (Oliver 1999, Dick & Basu 1994). Finally, satisfaction might be measured using the various dimensions of specific services, rather than as a global indicator.

REFERENCES

Adams, J. (2007). Plugged in. *Bank Technology News* (February).

AlMutairi, A.K. and H.A. AlOmar (2009). Competition in the Kuwaiti banking sector. *Arab Journal of Administrative Sciences*, 16 (2), 323-333.

Al-Weqaiyan, A. (2005). A cross-national study of repurchase intentions of fast-food meals. *Journal of International Food & Agribusiness Marketing*, 17(1), 95-116.

Al-Weqaiyan, A. (1998). *Examining the association between personal and cultural values and cross-national customer satisfaction*. Ph.D. dissertation, University of Rhode Island.

Badinger, A.L. and J. Rubinson (1997). The jeopardy in double jeopardy. *Journal of Advertising Research*, 37 (6), 37-50.

Breivik, E. and Thorbjornsen, H. (2008) "Consumer brand relationships: an investigation of two alternative models", *Journal of the Academy of Marketing Science*, 36, 443-472

Brody, R.P. and S.M. Cunningham (1968). Personality variables and the consumer decision process. J*ournal of Marketing Research*, 10, 50-57.

Caminal, R. and X. Vives (1996). Why market shares matter: An information-based theory. *Rand Journal of Economics*, 27, 221-39.

Ching, W., M.K. Ng, and K. Wong (2004). Hidden Markov models and their applications to customer relationship management. *Journal of Management Mathematics*, 15 (1), 13-24.

Churchill, G. A., Jr. and Surprenant, C. (1982) "An investigation into the determinants of customer satisfaction*", Journal of Marketing Research*, 19, 491-504

Colombo, R.A. and D.G. Morrison (1989). A brand switching model with implications for marketing strategies. *Marketing Science*, 8 (1), 89-99.

Cooil, B., T. Keiningam, L. Aksoy, and M. Hsu (2007). A longitudinal analysis of customer satisfaction and share of wallet: Investigating the moderating effect of customer characteristics. *Journal of Marketing*, 71, 67-83.

Dawes, R. and T. Smith (1985). Attitude and Opinion Measurement. *Handbook of Social Psychology*, 3rd ed. (1), G. Lindzey and E. Aronson, eds., New York: Random House, 509-566.

Day, G.S. and R. Wensley (1988). Assessing advantage: A framework for diagnosing competitive superiority. *Journal of Marketing*, 52 (2), 1-20.

DeMatos, C.A. and C.A. Rossi (2008). Word-of-mouth communications in marketing: a meta-analytic review of the antecedents and moderators. *Journal of the Academy of Marketing Science*, 36 (4), 578-596.

Dick, A.S. and K. Basu (1994). Consumer loyalty: Toward an integrated framework. *Journal of the Academy of Marketing Science*, 22 (2), 99-113.

Ehrenberg, A. and G.J. Goodhardt (2002). Double jeopardy revisited, again. *Marketing Research*, 14 (1), 40-42.

Fader, P.S. and D.C. Schmittlein (1993). Excess behavioral loyalty for high-share brands: Deviations from Dirichlet model for request purchasing. *Journal of Marketing Research*, 30 (Nov), 478-493.

Farley, J.U. (1964). Why does brand loyalty vary over products? J*ournal of Marketing Research*, 1, 9-14.

Gounaris, S. and V. Stathakopoulos (2004). Antecedents and consequences of brand loyalty: An empirical study. *Journal of Brand Management*, 11 (4), 283-307.

Hellofs, L.L. and R. Johnson (1999). Market share and customer perceptions of quality: When can firms grow their way to higher versus lower quality? *Journal of Marketing* 63 (1), 16-25.

Keith, R.J. (1960). The marketing revolution. *Journal of Marketing*, 24, 35-38.

Kerin, R.A., S.W. Hartley, E.N. Berkowitz, and W. Rudelius (2006). *Marketing*, 8th Edition, Boston: McGraw-Hill.

Knox, S.D. and T.J. Denison (2000). Store loyalty: Its impact on retail revenues – An empirical study of purchasing behavior in the UK. *Journal of Retailing and Consumer Services*, 7, 33-45.

Kotler, P. (1977). From sales obsession to marketing effectiveness. *Harvard Business Review*, 67-75.

Kumcit, U. (2008). Can distribution explain double jeopardy patterns? *International Journal of Retail & Distribution Management*, 36 (5), 409-425.

Leavitt, T. (1960). Marketing myopia. *Harvard Business Review*, 37, 45-56.

Lehmann, D.R. and R.S. Winner (1997). *Analysis for Marketing Planning*, 4th edition, Burr Ridge, IL: Irwin.

Leverin, A and V. Liljander (2006). Does relationship marketing improve customer relationship satisfaction and loyalty? *International Journal of Bank Marketing*, 24 (4), 232-251.

McDowell, W.S. and S.J. Dick (2001). Using TV daypart 'double jeopardy effects' to boost advertising efficiency. *Journal of Advertising Research*, 41 (6), 43-51.

McPhee, W.N. (1963). *Formal Theories of Mass Behavior*, New York: The Free Press.

Mitchell, V.W. and R.H. Kiral (1998). Primary and secondary store-loyal customer perceptions of grocery retailers. *British Food Journal*, 15 (7), 312-319.

Oliver, R.L. (1999). Whence consumer loyalty? *Journal of Marketing*, 63, 33-45.

Pedhazur, E.J. (1982). *Multiple Regressions in Behavioral Research*, Fort Worth, Texas: Holt, Rinehart, and Winston.

Pleshko, L.P. and N. Souiden (2007). A preliminary study of double jeopardy in selected retailers. *Academy of Marketing Studies Journal*, 11 (2), 87-106.

Pleshko, L.P. (2006). Multiple measures of loyalty: Validity and reliability tests in two retail settings. *Academy of Marketing Studies Journal*, 10 (1), 77-88.

Pleshko, L.P. and R.A. Heiens (1996). Categories of customer loyalty: An application of the customer loyalty classification framework in the fast-food hamburger Market. *Journal of Food Products Marketing*, 3 (1), 1-12.

Pleshko, L.P. and R.A. Heiens (1997). An empirical examination of patient loyalty: An application of the customer loyalty classification framework to the healthcare industry. *Journal of Hospital Marketing*, 11 (2), 105-114.

Pleshko, L.P. and J.J. Cronin (1997). An investigation into the relationship between consumer satisfaction, marketing performance, and firm performance in a service environment. *Journal of Customer Service in Marketing & Management,* 3 (1), 7-18.

Raj, S.P. (1985). Striking a balance between brand popularity and brand loyalty. *Journal of Marketing*, 49 (winter), 53-59.

Reichheld, F.F. (2003). The one number you need to grow. *Harvard Business Review*, 82 (12), 46-54.

Reichheld, F.F. and W.E. Sasser Jr. (1990). Zero defections: Quality comes to services. *Harvard Business Review*, 68 (5), 105-111.

Reinartz, W.J. and V. Kumar (2002). The mismanagement of customer loyalty. *Harvard Business Review*, 80 (7), 4-12.

Reinartz, W. and V. Kumar (2000). On the profitability of long-life customers in a non-contractual setting: An empirical investigation and implications for marketing. *Journal of Marketing*, 64, 17–35.

Robinson, J. (1979). Brand strength means more than market share. *Journal of Advertising Research*, 19 (5), 83-87.

Rosenberg, L. and J. Czepial (1983). A marketing approach to customer retention. *Journal of Consumer Marketing*, 2, 45-51.

Rust, R.T. and A.J. Zahorik (1993). Customer satisfaction, customer retention, and market share. *Journal of Retailing***,** 69 (2), 193-215.

Spearman, C. (1904). The proof and measure of association between two things. *American Journal of Psychology*, 15, 72-101.

Stevens, J. (1986). *Applied Multivariate Statistics for the Social Sciences*, Hillsdale, New Jersey: Lawrence Erlbaum Associates.

Story, J. and J. Hess (2006). Segmenting customer-brand relations: Beyond the personal relationship metaphor. *Journal of Consumer Marketing*, 23 (7), 406-413.

Tellervision (2006). Banks face big challenges in satisfying customers. Aspen Publisher, # 1345, May.

Tellis, G. (1988). Advertising exposure, loyalty, and brand purchase: A two-stage model of choice. *Journal of Marketing Research*, 25, 134-144.

Twedt, D.W. (1967). How does brand awareness-attitude affect marketing strategy? *Journal of Marketing*, 31, 64-66.

Verhoef, P.C. (2003). Understanding the effect of customer relationship management efforts on customer retention and customer share development. *Journal of Marketing*, 67 (4), 30-45.

Zeithaml, V.A. (2000). Service quality, profitability, and the economic worth of customers: What we know and what we need to learn. *Journal of the Academy of Marketing of Science,* 28 (1), 67-85.

A FEASIBILITY STUDY TO DEVELOP A FOREIGN LANGUAGE ACADEMY IN CHINA

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ABSTRACT

This research paper examines the opportunities and profit that can be attained in the foreign language industry in China. The demand of the English language for better career opportunities has grown at an exponential rate in recent years. Jobs in multinational companies and tourism have created substantial demand for language institutes and foreign instructors. In examining the market, the researchers decided on setting the language school in Yichang, Hubei Province, China. Yichang is a tier-3 city located in a strategic position along the famous Yangtze River that connects the east of China to the west. Due to the shortage of English schools in China in tier-2 or tier-3 cities, it is the researcher's theory that this institute will have the competitive advantage of the nearly untapped market in Yichang. Because of the exponential growth of tourism to China in recent years, as well as to Yichang, which is the location of the recently finished Three Gorges Dam, many Chinese are looking to improve their English skills in order to accommodate foreign visitors.

INTRODUCTION

The Zhuge Liang Foreign Language Academy will have four main services in China including teaching English to students of all ages, providing U.S. university admissions help for students wanting to study abroad, and brokerage services for corporation searching for teachers and students searching for tutors. The academy will be a joint venture with a Chinese business partner that is already involved and knowledgeable about the industry to prevent any risks associated with the start-up of the business.

In the marketing analysis, the major strengths were the location of the school in an untapped market for the industry, the demand for tourism English in the strategic location, and dual management to prevent issues with cross-cultural management. The main weaknesses discussed were cultural differences, attracting foreign instructors to Yichang, and language barriers. Areas of opportunity the academy will be searching to develop are expanding into other foreign languages such as French, Spanish, Japanese, and Korean. Starting an international school sector, developing online tutorials, and an English Tourism training branch will also be developed. The threats that were evaluated were competition of local institutes, large corporations, and the regulation of corrupt government officials.

ENGLISH AS A SECOND LANGUAGE (ESL) INDUSTRY BACKGROUND

The first English Language School was officially opened in 1862 by the Chinese Government under the Great Qing Dynasty in order to train the newly created diplomatic corps officers (10 Qiang & Wolff). In 2008, according to the U.S. Department of Commerce, there were more than 50,000 English language training institutes. The English language training market demand has grown more than 12% annually since 2006 and was predicted to be valued at more than $3.9 billion by this year. Chinese students have a strong desire to learn English in order to work for multinational corporations, which generally yield higher salaries. According to New Oriental, a domestic English language program, students can boost their salaries by 25% by attaining medium-level proficiency or 70% by attaining an advanced-level. The demand for English language training is fueled by the growing tourist industry. The Chinese Ministry of Education has encouraged its citizens to learn English to prepare for the amplified tourism for events such as the Beijing 2008 Olympics and the 2010 World Expo that will be hosted in Shanghai. The demand for English educators exceeds the limited supply due to the native English teachers lacking proficiency or the necessary qualifications. The U.S. Department of Commerce believes that the English language training industry is a lucrative market in which U.S. companies could greatly benefit (2 Bai).

Although the demand in tier-1 cities such as Beijing and Shanghai are starting to become saturated, the untapped market for tier-2 and tier-3 cities have created a definite shortage in the industry for these areas. Students learn ESL in public and private kindergartens, elementary schools, middle schools, high schools, universities, colleges, private business institutes, and training centers (10 Qiang & Wolff). Chinese students are required by the government to learn English starting from their primary school through their high school (2 Bai).

Chinese citizens of all ages take ESL classes, whether a 55 year old business man or a 3 year old preschooler, the Chinese are hungry for the English language at all ages. Many working professionals are interested in learning English and many are required by their companies to enroll in night classes offered on location. Because the government mandated English into the Chinese core curriculum in 2001, many older generations who work as taxi drivers, hotel staff, and hospital workers are expected to take classes and exams in order to keep their jobs. Civil servants in Shanghai are now required to get an English certificate known as BULATS (Business Language Testing Service) which is administered by the British Council in Shanghai (2 Bai).

China's growth in the past thirty years has enabled its citizens to retain a much higher level of disposable income than the country has ever experienced. From 2000 to 2009, urban per capita disposable income increased from $6.2 billion to $17.1 billion (12 US-China Business Council). In order to control the population, the Chinese government implemented the one-child policy. As a result of the one-child policy, children have become very accustomed to being the center of attention, leading children to have a large affect on the spending habits of the parents and grandparents. Over 5% of parents in urban cities in China deem education and training the top

spending priority. This "Little Emperor" phenomenon has created an environment where both parents and grandparents will invest large amounts of money so that the child may exceed in his/her studies.

ZHUGE LIANG FOREIGN LANGUAGE ACADEMY

Location

The Zhuge Liang Foreign Language Academy is the name chosen for a private English academy that will be located in Yichang, Hubei Province, China. The location the researcher selected for the academy was based upon the characteristics for growth of this small tier-3 city. The population is approximately four million people and it is located on the northern bank of the famous Yangtze River. Yichang connects the eastern and western parts of China serving as the transportation center (13 Yichang Travel Guide). Yichang is the largest hydroelectric base in the world due to the Three Gorges Dam Project and the Gezhouba Water Conservancy Project. With the completion of the Three Gorges Dam project in 2009, it is the researcher's theory that this city will grow at a very rapid pace. With the influx of tourists flowing into the city, I believe there will be a huge increase in the demand for English schools in Yichang as the tourism market grows. Yichang is a fairly small city with an untapped market for English schools, which is why this city was chosen to start the small business.

Origin of Name

The academy is named after a very famous statesman, strategist, and idealist during the Three Kingdoms period, Zhuge Liang, who became prime minister under the emperor Liu Bei in the Kingdom of Shu. His name is often associated with a very high level of intellectual wisdom.

Services

The foreign language academy will focus on four major services. The first service is to provide a quality English foundation to students during the weekends, so as not to conflict with their regularly scheduled curriculums, and weekday night classes to adult learners. Classes will be provided based upon each student's classification in English proficiency. Most classes targeted at primary through high school levels will be provided Fridays from 3:00 pm-8:00pm and Saturdays and Sundays from 8:00 am-8:00 pm. Most students in China only take one or two English classes on the weekends, which are added onto their regular curriculums in their general education schools. Also provided during the week from 6:00 pm to 8:00 pm are Business English classes, TOEFL Prep classes, Adult Beginner English I, II, and III.

The second service for students is to provide guidance to student's interested in applying to American universities. Services such as admissions preparation, networking within the company's partnerships, and recommendation letters from previous teachers are all benefits the students can receive in the TOEFL prep courses. In order to better provide the necessary help for the application and admissions process, the researchers would develop partnerships with several American universities, not only for an easier application process for the Chinese students, but also to develop a bigger marketing network to recruit American English teachers after they have received their diplomas.

The third service the academy will provide is acting as a broker between Chinese students looking for private tutors and English teachers looking for students to tutor in addition to their primary job. Many teachers and students in China want to participate in tutoring programs, yet there is a lack of any official service that provides an intermediary to link teacher and student. By providing this brokerage to link tutor to student, the tutoring industry can be considered legal with the area of taxation, since the researchers brokerage fee would include monthly taxes imposed on the tutoring service.

The last service the academy would provide is another type of brokerage, this one being between large Chinese corporations and English teachers. Many Chinese corporations are now hiring teachers and bringing them into the company for a few hours a day to teach their employees basic business English because of the boom in foreign investments. The corporations, however, do not have access to recruit teachers. The academy would set up a brokerage between companies wanting to hire teachers that are employees of Zhuge Liang Foreign Language Academy. Because most of the teachers the academy employs will be teaching on the weekends, this will give them an opportunity to make more money and use of their time teaching during the regular school week.

BUSINESS STRATEGY

Entry of the Market

There are three ways in which a foreigner can open a business in China: joint venture with an already established Chinese educational institution, joint venture with a Chinese partner, or wholly foreign-owned. By establishing a joint venture with a Chinese institution, the foreign entrepreneur benefits by gaining access to the institutions fixed assets and space. However, this method can also entail many disadvantages including management control, shared proceeds, and lack of power over the foreign language school. By partnering with a Chinese entrepreneur, the foreign entrepreneur can establish more power over its foreign language school and share the profits with only one other owner. In this type of contractual relationship the Chinese partner deals with all of the government issues and registration. This method is very beneficial because it can lower the risk level of miscommunication or negligence as seen in a wholly foreign-owned

strategy of entry to the market. Wholly foreign-owned enterprises are beneficial because all the profit earned from the business belongs to the owner/owners. This type of entry is also very risky because of the limited knowledge of the foreign entrepreneur and the limited information provided in English on the issues that may be problematic (7 JLJ Group).

Capital Requirements and Strategy

According to Li Jingjing, Confucius Institute of Arkansas Assistant Director, to open a school under a business license in China you must have at least 100,000 RMB in your account, which is approximately $14,700. The first thing you must do is register your company with the Industrial and Commercial Bureau. Next you need to acquire the state and local tax registration certificate. Then you need to visit the Bureau of Commodity Price to get the license for taking fees (8 Li Jingjing). Also, in order to be able to hire foreign teachers, you must acquire a SAFEA license. The foreign school must be open for one year before it can apply for the license. During this time the language school must develop a partnership or get sponsorship with an established government agency licensed to hire foreign teachers such as Women and Children's Ministry, a public school, or the Labor Department. The approval process for SAEFA includes inspection visits from both local and provincial level officials and final approval from Beijing (3 Hayes).

The Zhuge Liang Language Academy will focus on a business strategy in which a partnership is established with an experienced Chinese business person in the language industry. After acquiring a SAEFA license, the academy will hire both Chinese and foreign English teachers.

MARKETING & SALES STRATEGY SWOT ANALYSIS

Strengths:

The first strength of the Zhuge Liang Foreign Language Academy that I will address is the location. Because Yichang is a developing tier-3 city, there is a potential for substantial demand in the English language industry. The quality of education in tier-2 or tier-3 cities is lower than in tier-1 cities, indicating that the English proficiency in Yichang would be considerably below other developed cities. This scenario leaves open an opportunity for the academy to tap into the market by implementing a language training institute. One of the academy's main competitive advantages is the shortage of language training institutes in Yichang. The untapped market gives the academy a competitive advantage by being one of the first established language training institutes in the city. In analyzing the strength of the location in regards to employees, the labor costs generally tend to be 20 to 30 percent lower than Chinese citizens of coastal cities (11 Understanding Location Options).

An influential strength of the company is the thriving tourist industry in China, which creates an even higher demand for English. The expected number of foreign tourists flowing into China in 2010 was estimated at 64 million, the third most-popular tourist destination in the world (1 Asian Times Online). Since the 2008 Beijing Olympics, China has been adamant about improving its travel services area targeted at foreigners. There is a definite shortage of tour guides that are qualified to handle foreign tourists. Many vacationers complain about the quality or the fluency of the tour guide. This is mainly due to the low proficiency levels in China. The Three Gorges are one of the top tourist destination sites in China. Since the last of the three gorges is seen before reaching Yichang, most tours end in either Yichang or Wuhan. The Three Gorges Dam is located in Yichang causing much fame and prosperity in the region leaving a marketable area for training in areas of tourism English (13 Yichang Travel Guide).

The last strength discussed is the management of the company. One of the biggest complaints of the foreign English teachers is the lack of education, skills, or experience of schools managed by Chinese entrepreneurs that have no basic understanding of business management (10 Qiang & Wolff). Foreign English teachers usually cannot relate to management because the business practices are vastly different than Western practices. This is an advantage to the researchers company because having a partnership management can eliminate any sources of confusion or mistreatment. The Chinese partners in this venture will handle all of the Chinese staff and teachers, while the other partner can relate and deal with the foreign teachers.

Weaknesses:

Cultural differences are a main weakness that the company may encounter. Differences in management techniques, environment of the school, public utilities, food, culture, beliefs, and government regulation are all cultural differences between the East the West which may cause the company added pressures and problems. Saving face is an important difference between Chinese and foreigners that may be crucial in understanding the culture, so as not to offend the local citizens. Other cultural differences include pollution, crowding, and the level of sanitation. Foreigners experience a fair amount of culture shock when exposed to the environmental standards in China. By understanding the culture before entering the market, the researcher can ensure the company's success.

Attracting foreign teachers is another one of the main weaknesses the company faces. Because of the large demand for the foreign teachers and the limited supply, the company could potentially have issues in attracting foreign teacher to Yichang because it is a smaller, less glamorous city than Shanghai or Beijing. Chinese parents choose their schools based on the marketing of these foreign teachers because they want their children to learn from native-English speakers. In order to overcome this weakness, an effective strategy must be implemented to draw and retain the foreign teachers, most likely a very nice salary with added benefits. Although the salaries offered are shockingly low by Western standards of living, the purchasing power parity of $100 is equivalent to RMB 100 ($14.7).

The last weakness is also a very important cultural difference—language barriers. The company will have both a Chinese partner and foreign owners, which will eliminate quite a bit of miscommunication between the researcher and various business persons that may be encountered. Sometimes, no matter the level of fluency, whether English or Chinese, there are always miscommunications that have the ability to cause detriment to a company operating overseas. This weakness must be evaluated at all times, and proper safeguards against such language barriers must be overcome very quickly.

Opportunities:

After the company has attained profitability, one main area of opportunity is expanding into other foreign languages. French and Spanish are becoming increasingly popular in the Chinese mainland after English. Many ambitious Chinese students begin studying French and Spanish as electives. Many hire private tutors in order to utilize their language skills for resume enhancers or some students opt to study abroad in France or Spain. The Japanese and Korean languages have become more popular with the increase of tourism and the improved diplomatic relations. Expanding into these diverse languages can give the company more market coverage and increase the profitability by differentiating the school from other schools that only offer the English language.

Another service that the researchers will be looking into is providing an American education to American students living in China. Due to the rapid-growing foreign investment in China, many businesses are moving American citizens and their families to China. This causes a need for an education system targeted at foreign families living in China. This area is growing rapidly and it will be another area that is important to consider as the need grows. There are already a few established international schools around China that provide courses in English for all age ranges targeted at every nationality. These schools are normally more expensive than public schools and are attended by a wide variety of international students.

The next area to analyze for further development is in online tutorials. Chinese students are less social than American students, and most of the time, prefer to surf the web, chat online, or play computer games. Because the students are very computer-savvy, the company will look into developing online tutorials that can be downloaded and used via the internet. The tutorials would consist of a native English speaker presenting online lessons, but with the added convenience of accessing them from home at a time that suits the student. Also, the tutorials could include a variety of exercises and games that make learning English more fun than sitting in a class. This opportunity could generate considerable revenue because it can expand the market to more rural areas that do not have access to an English school, but do have Internet access. The last opportunity the company should investigate is opening an English Tourism branch of the company. This branch would be open to students of all ages interested in learning English to work in the tourist industry. The program would consist of a placement test and

various classes to build the English skills to provide relevant information about Yichang and also other regions in China. The main goal would be to attain a level of respect and recognition that would be distinguished in Yichang so that the certificate of completion of this program would be an almost necessary component of the tour guide resumes around Yichang.

Threats:

Some threats the company may face include domestic competition, large corporations moving into the market, and government regulation and corruption. Most Chinese generally have a great attitude towards Americans and are almost always welcoming to their country. However, when Americans start competing with the local competition, tensions begin to heat up. Many Chinese prefer their students to learn at a school that offers foreign teachers rather than Chinese English teachers, but when choosing between a Chinese run school and a partnership school, the competition is very stiff. There are universities, middle schools, and high schools in Yichang, but the researchers have not found any information thus far on any foreign language schools. The best strategy would be to go to Yichang to find the schools that are not advertised on the web. Most schools in China choose to advertise in the local newspaper. By researching the competition one could gain a better understanding of the threat posed by these local competitors.

Another threat is large ESL corporations moving into the market. Corporations such as English First and New Oriental have been operating in tier-1 cities in China for over ten years. These corporations have expanded all over China and are now operating multiple chains in tier-1 and tier-2 cities. These corporations are famous in China and considered to be some of the best ESL schools in China. If one of these schools were to open in Yichang, this could be a major threat to revenue and the retention of customers (7 The JLJ Group).

Regulation is also a major threat to foreign partnered ESL schools. Government officials are highly suspicious of foreign investors and more attention is focused on foreign owned ventures than on domestic owned. Since China is a developing country, there are all forms of corruption in the government and officials can demand payment for almost any "requirement" they see fit. Many Chinese think that because you are foreign with a white face you are undoubtedly rich. According to their standards and cost of living, this is an accurate prediction. Corruption in China is rampant and many government officials take advantage of the regulatory positions to overcharge fees and registration fees. By partnering with a native Chinese, the threat level is reduced but it is still a day-to-day threat that exists from investing in a foreign country.

SALES STRATEGY

Understanding the buying habits of Chinese is crucial for an effective sales strategy abroad. Chinese are generally very thrifty and are more inclined to save rather than spend due to the lack of credit available in the country (5 How to Differentiate Your Product in China). All the

components of the marketing campaign will be in Mandarin, the standard language of the country. Various media channels such as the Internet, radio, newspapers, social networking sites such as QQ the most popular and free instant messaging system in China, and flyers will be used to promote the academy's reputation during the initial opening of the school, as well as the duration of its lifetime. Traditional advertising, however, does not affect purchasing decisions of Chinese the same as the West. Most Chinese are reliant on third-party endorsements from friends and colleagues. In order to take advantage of this consumer trend, the academy would offer special discounts to the academy's Chinese staff and staff's family and friends for the first three months of the academy's operation. This would increase sales while also getting the academy better known in the community. Approximately 100% of Chinese households have a TV in which all the channels are government-sponsored and controlled. The government claims 1.2 billion viewers of China's staggering 1.3 billion, with 32 channels on every TV. Advertising in China is government regulated by advertising laws that state they should "be good for the physical and mental health of the people" also "conform to social, public, and professional ethics and safeguard the dignity and interests of the State." The academy will not advertise on television for the first few years because of the enormous costs. It is in area of opportunity that will be considered once the academy is operating at a more efficient capacity level. Print and broadcast organizations reach millions of viewers each day and are common forms of advertisement. The People's Daily newspaper reaches three to four million people. The academy would rely on the Chinese partner for most of the marketing and Mandarin services while also hiring local marketing experts to develop a website for the academy and advertisements on QQ.

Since Chinese consumers are decisively price driven, a marketing strategy would be centered upon providing a higher perceived value to the consumers than the actual cost of the services rendered. An effective sales strategy in China is value-added marketing which consists of including additional services free of charge. In order to encompass this idea into the academy, cultural training classes can be an optional class that students with higher levels of English can attend with no additional fees. The class would be taught by a different foreign teacher each week and would examine the foreign teacher's home country on a deeper level to provide cross-cultural training to the student. By marketing the academy's value-added advantages such as the free cultural training courses, business English brokerage, and tutoring brokerage, the academy will be offering a multitude of diversified services that English language schools in China do not offer creating a distinct niche in the untapped market (4 How to Advertise and Use the Media).

FINANCIAL PROJECTIONS

Analysis

The financial projections for the academy are based upon information provided by Luan Zhi, the owner of a school in Qingdao. The population of Qingdao is approximately 7 million

people. Since the cost of living is more expensive in Qingdao than in Yichang, an approximate 30% decrease in the figures provided by Luan Zhi was estimated.

In preparing the researchers financial estimations for the academy, the researchers hypothesized that the correct figures would be in between 10-30% decrease of the Qingdao figures. Qingdao estimates a more liberal estimation encompassing a 10% decrease for Yichang from the Qingdao figures to more conservative 30% decrease. The fixed assets are primarily start-up costs and are only included in the first year of operation costs. The fixed assets include 200 desks, eight computers, printers, copiers, furniture, paint, chalkboards, stationary, and miscellaneous funds for games and materials. The building rent estimation costs are based on a fairly good location with eight classrooms, a reception, two offices, and a kitchen. The academy will employ four foreign teachers, four teacher's assistants, five Chinese English teachers, and twelve staff members. Foreign teachers are generally paid twice that of Chinese English teachers in China. Also, language academies generally provide housing or a housing stipend for foreign teachers with assistance in renting an apartment. The academy will provide a very generous salary with a housing stipend based upon Yichang's cost of living. The foreign instructors will work 25 hours per week with overtime pay up to forty hours, as is customary for the industry. The Chinese instructors and staff will work 30 hours per week. Staff will consist of janitors, receptionists, and administrative assistants. The miscellaneous expenses include the minimum requirements to acquire a business license, regulatory fees for government officials, marketing costs, travel reimbursement to the foreign teachers upon completion of their one year contract, and a large preventative risk fund in order to allot money for any unexpected fees or costs not included in the expenses breakdown.

In the researcher's analysis of revenues, the costs were estimated again based on the figures from Qingdao. These costs to the customers vary for each class depending on the level of proficiency. The academy's class time hours of operation are 32 hours per week. There are eight classrooms providing 256 hours possible of operation time. Each class is two hours giving 128 classes per week offered at the academy. The revenues per student are based on the cost to the customer per month. The payment process, however, will be made in four monthly increments before the student is allowed to begin classes. Estimates of revenues were calculated based on operations at 100%, 75%, 50%, and 35% capacity for eleven months of operation per year, excluding one month for approximate holiday time. For the first year, the likely capacity of operation is 35% giving an estimate of RMB 4,689,300—6,029,100 ($689,602.94—$886,632.35). The before tax income for the academy ranges from RMB 3,022,880—3,886,560 ($444,541.18--$571,552.94). After conducting research on the marginal tax rate for Yichang, a 30% tax rate to encompass the taxes imposed on joint venture enterprises in China was chosen. The net income figures for year one of the academy range from RMB 2,116,016—2,720,592 (311,178.82--$400,087.06). These figures do not include the brokerage service revenues. Foreign teacher's regular pay is based on 26 hours per week at RMB 63.94 ($9.40) per hour. If the teachers choose to participate in the overtime hours, they will be calculated at 1.5 times their

regular hourly rate at RMB 95.91 ($14.10). The school will collect the fees from the corporation or independent students directly and disburse the overtime pay with the regular monthly salary netting RMB 184.09 ($27.07) for corporate tutoring and RMB 79.09 ($11.63) for private tutoring per hour per contract. The conclusions of the financial analysis were somewhat astounding that the company was able to break even in just the first year, even after the added $80,000 of risk preventative costs. Due to the low start-up costs of the school, this feasibility study has clearly shown that there is potential for high profits even running at 35% capacity.

FINAL RECOMMENDATIONS

After reviewing the research presented in this feasibility study, many potential areas of disaster may be prevented in opening the academy by implementing a sound strategy to enter and, if need be, exit the market. Contracts between partners, teachers, staff, and customers need to upheld and enforced throughout the academy's operation. Although contracts in China do not have the same legally binding applications as U.S. contracts, setting up clear terms may prevent problems with payment and performance standards.

To profit in this industry, one should make certain that the services rendered and Proforma financial statements created are in fact economically viable. To do this, it is believed that there should be more on-site research conducted before entering the market. Also, by learning more about Chinese-owned institutes, the researchers can focus on ways in which to improve upon their downfalls in human resource management and cross-cultural relations. To do this, investing in a foreign language institute in another city in China and working as a manager of foreign instructors may help me learn more about the industry and soak up information that will be useful when opening the language academy in Yichang.

By exercising the researchers due diligence in selecting a partner and being familiar with the regulations and laws in China, the researchers can effectively decrease the researchers risk. Most of the risk in this industry is centered on the selection of the appropriate partner that is trustworthy and knowledgeable about operations in language training institutes. By developing a good relationship with someone already in the market in another city or district of Yichang, it is conceivable to get into a partnership with a Chinese manager already invested in the industry. A good Chinese partner should have connections to smooth over red-tape and obstructive bureaucrats. The success or failure of the Zhuge Liang Foreign Language Academy depends on the selection and competency of the Chinese partner.

In conclusion, by making the right decisions and establishing milestones for performance, the academy can reap great rewards. Emphasis on economically viable knowledge of the market is crucial to success. Selection of the right partner must be given the greatest weight in the decision-making process. We believe that this company can profit and grow if the initial standards are met and a more comprehensive analysis can be conducted in Yichang to prevent any risks associated with the company's preliminary proceedings.

REFERENCES

Asia Times Online: China Business. Tour guide shortage hurts Chinese Tourism 12 April 2006. 27 February 2010<http://www.atimes.com/atimes/China_Business/HD12Cb02.html>

Bai, Eileen. South China: English Training Industry. April 2008. U.S.A. Department of Commerce. 27 February 2010 <http://www.buyusainfo.net/z_body.cfm?dbf=ccg1%2Cbmr11%2Cmrsearch1&search_type2=int&avar=19999&sector=1010&subsector=1097&country=China&month1=1&month2=1&year1=2008&year2=2010&logic=and&loadnav=no>

Hayes, Ken. Opening Your Own School. Part 1-Part 4. 30 July 2008. 15 February 2010<http://middlekingdomlife.com/blog/other_work/business_opts/opening-your-own-school-part-one/>

How to Advertise and Use the Media. 27 March 2010<http://chinafta.nzte.got.nz/solutions/sales-and-marketing/advertise-and...

How to Differentiate Your Product in China. 27 March 2010<http://chinafta.nzte.got.nz/solutions/sales-and-marketing/differentiate-y...>

Image provided by : http://www.backtogod.net/stories.php?action=Category&cat=15

JLJ Group. China: Education & Training Industry. "Access Dynamic and Emerging Markets". November 2007. U.S.A. Department of Commerce. 15 February 2010<http://www.buyusa.gov/china/en/education.html>

Li Jingjing. Information provided via email 17 February 2010.

Luan, Zhi. Information provided via email 17 April 2010.

Qiang, Niu & Wolff, Martin. China ESL: An Industry Run Amuck? (2004) 27 February 2010 <http://www.englishclub.com/tefl-articles/china-esl.htm>

Understanding Location Options. 27 February 2010<http://chinafta.nzte.got.nz/solutions/operational/location-options.html>

US-China Business Council. China's Economic Statistics 1996-2010. 27 February 2010<http://www.uschina.org/statistics/econothe researchers.html>

Yichang Travel Guide: City Map, History, Location, Hubei China. 27 February 2010<http://www.travelchinaguide.com/cityguides/hubei/yichang/>

ECONOMETRIC INVESTIGATION OF RELATIONSHIPS AMONG EXPORT, FDI AND GROWTH IN CHINA: AN APPLICATION OF TODA-YAMAMOTO-DOLADO-LUTKEPHOL GRANGER CAUSALITY TEST

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ABSTRACT

Most of the study of causal relationship of GDP or growth with Trade and Foreign Direct Investment in the context of China rely on cross country comparisons, or simple correlations/regressions disregarding nonstationarity properties, or at most on VAR or VECM or Johansen-Juselius cointegration technique of testing for Granger causality. The potential biases, pitfalls, influence of nuisance parameters and asymptotic unreliability of these techniques have been well documented in the literature and also briefly mentioned in this paper. Therefore, this paper employs the more recent and robust Toda-Yamamoto-Dolado-Lutkephol Augmented VAR(p) technique for testing Granger causality among four time series variables. This technique has been shown to provide more robust and asymptotically reliable results under wide variety of situations regarding the cointegration relationships among the time series. This study focuses on the post liberalization period and the results strongly support both Export-led and foreign-Direct-Investment-led Growth in China. Imports, however, do not have direct Granger causality towards GDP, but certainly influence it through the indirect channel of influencing Exports and Foreign direct Investment.

INTRODUCTION

China is a very an interesting and increasingly important case for study of relationship between growth, Trade and Foreign direct Investment. It is the largest country in the world, with a population of over 1.33 billion (in 2008) which is more than one-fifth of all the people in the world. The output of China accounts for more than 16% of global GDP when measured appropriately. In particular, when the aggregate output is measured using PPP (purchasing power parity) reflecting the actual purchasing power of a country's currency, China is third after the USA and Japan (see World Development Report 2009 and WTO report of 2009 which estimates GDP in PPP $ to be 7903.2 billion for 2008). Moreover, China alone has accounted for

roughly one fourth of global GDP growth in the last five years. During the period between 2000 and 2008, the growth rate of Chinese Economy was above 10% per year compared to only about 3.0 % for the world. Since initiating the reforms and open policy, China has achieved tremendous success. Growth of about 9.7 percent per annum since the late 1970s has helped to lift several hundred million people out of absolute poverty, with the result that China alone accounted for over 75 percent of poverty reduction in the developing world over the last 20 years (World Development Report, 2009). According to latest UNCTAD report, China ranked second in the world in merchandise exports, and ranked third in imports. The volume of exports was below 20 billion dollars in the early 1980s, but increased to almost 100 billion by early 1990s and jumped by leaps and bounds in the last decade to reach the estimated figure of 1428 billion dollars in 2008. This is a 30-fold increase in the volume of exports in the two decades between 1988 and 2008. China overtook the US in global export ranking in 2006 according to the News report of WTO and is projected to overtake Germany within a couple of years to become number one in exports. Imports have a pattern very similar and parallel to exports. The abundance of relatively skilled labor at low cost, the high saving rate domestically (the saving rate is about double that of a comparable country like India), the avalanche-like torrent of foreign investment flows, and the all-round vigorous support from the all-mighty Government has turned China into the "factory of the world", and its huge populations in turn offers lucrative consumer markets for multinationals. This Asian giant seems determined to become the world's next economic superpower.

In attracting FDI, China has remained at the top in the last decade. Starting with less than a billion dollars in the early eighties, the net flow of foreign direct investment increased to 3.5 billion dollars in 1990, but accelerated rapidly to exceed 35 billion by 1995, more than doubled in the next ten years (79 billion in 2005) and is estimated to be over 138.4 billion in 2008. Although some of these increased figures may be the result of round tripping of Chinese investors through Hong Kong (a part of China now) in order to enjoy government incentives for foreign investors, an increase of about 40-fold in less than 20 years is almost unparalleled. This trend remains strong and steady, despite the recent global slack in capital movements across countries.

In the last two decades there have been several studies on such relationships investigating Export led or Foreign Investment led growth in China, but all suffer from methodological issues. Most studies ignore the time series nonstationarity properties of these macro variables which can lead to spurious Regressions and Correlations. Some do investigate the nonstationarity properties but then imply the Granger Causality Tests using simple VAR or VECM or Johansen-Juselius cointegration procedures. But Toda and Phillips (1993) have provided evidence that the Granger causality tests in error correction Models (ECMs) still contain the possibility of incorrect inference and suffer from nuisance parameter dependency asymptotically (see also Lutkephol 2004, p. 148). Another problem with previous studies is that they have studied such relationships in bivariate contexts. However, in time series multivariate relationships may be quite different

from bivariate relationships. See the arguments of Love and Chandra (2005b), and Stock and Watson (2001), on the flaws in conducting bivariate analysis.

Therefore, in the present study we employ the more robust techniques of testing Granger causality developed by Toda and Yamamoto (1995) and Dolado and Lutkephol (1996), and also apply multivariate framework by including GDP, Export, Import and FDI in an Augmented lagged VAR or VARL model. As the review of literature shows, these robust techniques have not been employed in the Chinese context to study the relationships among these variables.

THEORETICAL FRAMEWORK

Export led Growth (ELG)

The notion that export leads economic growth has been subject to considerable debate in the development and growth literature for many decades (e.g., Keesing, 1967; Krueger, 1995). Broadly, the focus of the Export led Growth (ELG) debate is on whether a country is better served by orienting trade policies to export promotion or to import substitution. The neoclassical view has been that growth can be achieved by ELG. The growth records of Asian newly industrializing countries (NICs), mainly, Hong Kong, Singapore, Korea and Taiwan, and second-generation NICs (Malaysia and Thailand) - are cited as such examples (compared to other developing regions). Over the last four decades these NICs have approximately doubled their standards of living in every successive decade. China is the newest and now the most dominant member of this group. China's experience since the 1980s tends to support the argument that trade openness is a mechanism for achieving more rapid and efficient growth and better distribution of domestic resources (Findlay and Watson, 1996, p.4). Some authors (e.g., Krueger, 1995) identify trade policy as the crucial element of economic policy.

Some of the reasons cited in support of the ELG proposition are: (a) export growth represents an increase in demand for the country's output; (b) exports promote specialization in the production of export products, which in turn may boost the productivity level and the general level of skills and result in a more efficient reallocation of resources; (c) the outward oriented trade policy may also give better access to advanced technologies, learning by doing gains, and better management practices (e.g., Ben-David and Loewy, 1998) that may result in further efficiency gains; (d) exports may loosen a foreign exchange constraint (e.g., Chenery and Strout, 1966), which makes it easier to import inputs to meet domestic demand, and so enable output expansion; (e) some authors argue (e.g., Lal and Rajapatirana, 1987) that an outward-oriented strategy of development may provide greater opportunities and rewards for entrepreneurial activity, the key to extended growth. However, the support for ELG is not universal. Critics point out that the experiences in the East and Southeast Asian countries are unique in many ways and not necessarily replicable in other countries; e.g. Buffie (1992). Other researchers question whether a reliance on exports to lead the economy will result in sustained long-term economic

growth in LDCs due to the volatility and unpredictability in the world market; e.g., Jaffee (1985). There is also a potential for no causal relationship between exports and economic growth when the time paths of the two series are determined by other, unrelated variables (e.g., investment) in the economic system (see e.g., Pack 1988). Eventually, effectiveness of export promotion is an empirical issue. Over the last two decades or so there has been a plethora of such investigations, using a number of statistical techniques, from very simple to very complex. But the results have been mixed.

Foreign Direct Investment Led Growth (FDI-LG)

It is a general belief among policy makers and academicians that foreign direct investment (FDI) can be a source of valuable technology and know-how in addition to increased capital. Some of the popularly cited potential benefits of FDI are: (a) backward and forward linkages with the rest of the economy; (b) enhanced access to advanced technologies; (c) learning of improved management practices; (d) expansion and diversifification of the production capacity of an economy; (e) transfer of best practices in corporate governance and accounting practices; (f) integration of the domestic economy with the global economy and infusion of competition in the domestic economy; and (g) relatively more stability than other forms of international capital flows because of longer-term perspective. Both trade and FDI are also associated with growth, though their multichannel causal links remain largely unexplored especially in the case of China. Notwithstanding the strong conceptual case for a positive relationship between economic growth and FDI, the empirical evidence has been mixed. See for example, Blomström and Kokko (1998), Gorg and Greenaway (2004), Barba-Navaretti and Venables (2004), and Alfaro and Rodriguez-Clare (2004) for surveys of spillover channels and empirical findings. It has been recognized and well documented in the literature that there is possibility of two-way feedbacks between FDI and economic growth along with their long-run and short-run dynamics. Empirical investigations in the context of the Chinese economy have generally failed to provide any conclusive evidence in support of such two-way feedback effects although long-run cointegrating relation has been found (e.g., Mah, 2005).

Earlier studies, however, have several limitations in common. First, the period of observation is typically too short to capture the effects of economic reforms and the subsequent boom in FDI during the last 18 years or so. In the present study we show that this factor has significant influence on the results. Second, the econometric techniques employed (even in those studies which take into account the nonstationarity properties) are highly dependent on the results of testing for the cointegration relationships. Third, only bivariate relationship is studied in most of the previous studies, which may involve biases (see Love and Chandra 2005b). In this paper we avoid these methodological problems.

The Granger Causality and the Toda-Yamamoto-Dolado-Lutkephol (TYDL) Approach

The most prevalent causality approach is grounded in Granger's (1969) work, which builds on earlier research by Weiner (1956). The notion is one of predictability being synonymous with causality, and is based on the idea that a cause cannot come after an effect. We say that X causes Y if relevant available past information allows us to predict Y better than when past information without X is used.

As mentioned by Fugarolas, et al. (2007), there is an issue worth mentioning about the usual Granger causality tests. Following common practice, in the bivariate model the sequential testing procedure based on likelihood ratios tests to a dynamic VAR structure introduced by Johansen (1998 and 1991) and Johansen and Juselius (1990) is implemented. Once the existence of long-run relationships is accepted, their direction is checked on the basis of an error correction representation by means of a joint significance test of the coefficients. Fugarolas et al. argue that though cointegration refers to equilibrium in the long-run and causality to short-run precedence both notions are in fact linked: as long as an equilibrium relationship exists in the long-run between a pair of series, there must be some Granger causation in at least one direction between them to provide necessary dynamics. Nevertheless, it turns out that there is weakness in this two-step causality approach. According to Giles and Mirza (1999), this methodology calls for pre-testing unit roots and cointegration before causality testing and the results may suffer from size distortions and inference biases leading to an over rejection of the non-causal null hypothesis. Therefore, there is risk in using Granger causality tests in levels or in difference VAR systems or even in ECMs (see Toda and Yamamoto 1995; Rambaldi and Doran 1996, and Zapata and Rambaldi 1997). Nuisance parameters and nonstandard distributions enter the limit theory when either of the required rank conditions is not satisfied in the VECM or the Johansen-Juselius route (see Toda and Phillips, 1993, 1994, for more details). Following these studies referred here, the multi-step procedure testing causality conditional on the estimation of a unit root, a cointegration rank and cointegration vectors as generally used by previous studies in the Indian context may suffer from severe pre-test biases.

Therefore in the present study we carry out Granger causality test more suitable for multivariate analyses avoiding the need for cointegration examination, although the determination of the optimal order of lag structure and maximum degree of integration in the series involved are still required. In multivariate models where auxiliary variables (X_3) are used, it is possible that X_1 does not 1-step Granger-cause X_2, but can still help to predict X_2 several periods ahead (see for example, Dufour and Renault 1998). In multivariate setting X_1 may help to predict X_2 two periods ahead, even though it is 1-step noncausal, because X_1 may 1-step cause X_3, which in turn 1-step causes X_2.Consequently, care is needed when interpreting GNC in a multivariate system, incorporating additional variables, as opposed to a bivariate system (Giles and Williams 2000). We have taken this aspect into account in interpreting our results.

LITERATURE REVIEW

The empirical literature separates into three or four groups: the first group uses cross-country correlation coefficients to test the ELG hypothesis; the second group uses regression models (typically least squares based) that are again usually cross-country predicated; the third, recent group of studies applies various time series techniques to examine the exports-growth or FDI-growth nexus and the fourth group applies panel data and panel cointegration techniques. The group of cross-section research looks at rank correlation coefficients or simple OLS regressions between exports and output or FDI and output (or their growth) across a number of countries. The ELG or FDI led Growth hypotheses are supported when a positive and statistically significant correlation is observed. One issue arising from this body of work is that some of the results may involve a spurious correlation due to exports and FDI themselves being part of national product or all of them being influenced by some other variables. Potential problems with the later time series studies are also well documented in the literature. Greenaway and Sapsford (1994), Riezman et al. (1996), and Dhananjayan and Devi (1997) provide surveys on the earlier ELG works. For a more recent and an extensive survey of empirical works on export led growth see Giles and Williams (2000a and 200b). Lim, E.G. (2001) provides a survey of literature on FDI and Growth relationship.

Kueh (1992) discussed the impact of FDI to domestic investment, industrial output and export of the China's coastal area. It was found that the FDI was important to the social capital's formation. The joint venture had already become important industrial manufacturer and exporter of China's coastal areas. Sun (1996, 1998), Lee (1994), Chen (1995), and Dayal-Gulati and Husain (2000) analyzed the impact on China's regional economic growth of the FDI and found that FDI was an important factor to difference of economic growth among different regions. Graham and Wada (2001) studied the effects of FDI in China's growth performance employing neoclassical growth model and find that some part of Total Factor Productivity growth in the coastal region of China can be attributed to FDI flow. In the northern region the evidence is weaker. In contrast Kamalakanthan and Laurenceson (2005) revisited Krugman's (1993) contention that foreign capital can hardly be considered an important income growth driver, when in most developing countries it only accounts for a fractional share of gross capital formation. They concluded that in the case of contemporary China and India, the data suggests that Krugman's critique holds largely true, even in the coastal regions that are considered magnets for foreign investment and that domestic factors, rather than the driving forces of globalization, appear to be the more important determinants of income growth in both countries. But these authors do not employ any time series method. Li (2005) studied the relationship between FDI and China's economic growth using Granger causality and multiple regression model and find bi-directional causality.

Liu and Shu (2003) using data from China's Third National Industrial Census in 1995, investigated the determinants of export performance in China at industrial level, and their results

suggested that the export performance of different industries is significantly influenced by FDI. But they did not include time dimension in their work with data from only one year. Awokuse and Gu (2007) examined the FDI-Exports relationship in China using panel data for six dominating export and FDI receiving manufacturing sectors over period from 1995 to 2004. The empirical results suggest that FDI inflow to China has statistically significant positive effect on the exports as a whole, but its specific impacts vary by sector, also that FDI to non labor-intensive sectors are more efficient in stimulating exports than those to labor-intensive ones. Cheung (2009) examined the effect of FDI via export on innovation performance of China's high-tech product industries for the period 1995 to 2006 using the generalized least squares. But these authors also ignore the time series properties of the variables and use traditional regression methods for panel data. Similarly Berthelemy and Demurger (2000) studied the relationship of FDI and economic growth in china with panel data but do not use modern time series methods. Zhang (2006) employ neoclassical growth models and use panel data but artificially try to circumvent the problem of time series nonstationarity property by using the averages for three sub-periods instead of using the whole time series for 15 years. Similarly Vu et al. (2007) employ growth models and least squares but ignore the time series properties. Mah (2005) is one of the few studies which used time series models. He examined the causality between export expansion and economic growth in China using data covering the period from 1979 to 2001. Using a model allowing for different orders of integration revealed that they are cointegrated. The results of the error correction model show a bi-directional causality between them, supporting previous findings. But this study too, as most previous studies focuses on bivariate causality and also needs to be updated because of the very recent boom in FDI inflow and Exports of China. Tang et al. (2008) is another study which employed modern time series methods in the context of Export and or FDI led growth in China but it employs the VECM methodology following the Johansen cointegration technique. Thus a major contribution of this paper is to employ the recent and more robust Toda-Yamamoto-Dolado-Lutkephol technique in a multivariate framework for studying the causal relationship among Trade, FDI and GDP time series in the context of China using the data for 1979-2008.

DATA AND METHODOLOGY

Annual time series data for Export, Import, GDP and FDI from 1979 to 2008 were collected from World Development Indicators of the World Development Report. The econometric software used is the EVIEWS 7 version. We employ TYDL Granger causality test which is a simple procedure requiring the estimation of an "augmented" or "over fitted" VAR that is applicable irrespective of the degree of integration or cointegration present in the system. It uses a modified Wald (MWALD) test to test for restrictions on the parameters of the VAR(p) model. This test has an asymptotic chi-squared distribution with *k* degrees of freedom in the limit

when a *VAR* [k + d*max*] is estimated (where d*max* is the maximal order of integration for the series in the system).

Four steps are involved in implementing this procedure. The first step includes determination of the nonstationarity properties and the maximal order of integration (denoted as d*max* in the system. The second step is to determine the true lag length (k) of the VAR system using some suitable information criterion (or criteria). The unrestricted level *VARL*(k+ d*max*) is then estimated using some suitable estimation method (usually the SUR or Seemingly Unrelated Regressions technique). The last step is to apply standard Wald tests to the first *k* VAR coefficient matrix only in order to conduct inference on Granger causality while the coefficient matrices of the last *dmax* lagged vectors in the model are ignored. As shown by Toda and Yamamoto (1995), Dolado and Lutkephol (1996) and Rambaldi and Doran (1996) it is enough to add extra and redundant lags in estimating the parameters of the structure to ensure the standard asymptotic properties of the Wald statistic which maintains its usual limiting χ^2 distribution. Therefore, the TYDL enables the proposed MWALD statistic to test linear or nonlinear restrictions on these *k* coefficient matrices using the standard asymptotic theory (Fugarolas, et al. 2007). More importantly, the TYDL technique avoids the need for the preliminary tests for cointegration and is applicable irrespective of the integration or cointegration present in the system, because the singularity involved in the asymptotic distributions of the LS estimators is removed by fitting augmented VARL process whose order exceeds the true lag order by the highest degree of integration in the system. The study undertaken by Giles and Mirza (1999) also shows that this augmented lags method performs consistently well over a wide range of systems including near-integrated, stationary and mixed integrated and stationary systems; cases for which the pretesting approaches tended to over detect causality (Giles and Williams, 2000).

Following Fugarolas, et al. (2007) and denoting log of GDP by G, log of Export by E, log of FDI by F, and log of Imports by M, the augmented VARL(k+d) system can be shown as the following:

$$\begin{bmatrix} G_t \\ E_t \\ F_t \\ M_t \end{bmatrix} = \begin{bmatrix} \alpha_g \\ \alpha_e \\ \alpha_f \\ \alpha_m \end{bmatrix} + \sum_{i=1}^{k} \begin{bmatrix} \beta_{gg,i} & \beta_{ge,i} & \beta_{gf,i} & \beta_{gm,i} \\ \beta_{eg,i} & \beta_{ee,i} & \beta_{ef,i} & \beta_{em,i} \\ \beta_{fg,i} & \beta_{fe,i} & \beta_{ff,i} & \beta_{fm,i} \\ \beta_{mg,i} & \beta_{me,i} & \beta_{mf,i} & \beta_{mm,i} \end{bmatrix} \begin{bmatrix} G_{t-i} \\ E_{t-i} \\ F_{t-i} \\ M_{t-i} \end{bmatrix} + \sum_{i=k+1}^{k+d} \begin{bmatrix} \gamma_{gg,i} & \gamma_{ge,i} & \gamma_{gf,i} & \gamma_{gm,i} \\ \gamma_{eg,i} & \gamma_{ee,i} & \gamma_{ef,i} & \gamma_{em,i} \\ \gamma_{fg,i} & \gamma_{fe,i} & \gamma_{ff,i} & \gamma_{fm,i} \\ \gamma_{mg,i} & \gamma_{me,i} & \gamma_{mf,i} & \gamma_{mm,i} \end{bmatrix} \begin{bmatrix} G_{t-i} \\ E_{t-i} \\ F_{t-i} \\ M_{t-i} \end{bmatrix} + \begin{bmatrix} \varepsilon_{gt} \\ \varepsilon_{et} \\ \varepsilon_{ft} \\ \varepsilon_{mt} \end{bmatrix} \quad \text{.....(1)}$$

The Granger Non Causality hypotheses can be tested using MWALD on the following sets of restrictions:

i. H_0: $\beta_{ge,i} = 0$ for all $i \leq k \rightarrow$ Export does not Granger cause GDP
ii. H_0: $\beta_{gf,i} = 0$ for all $i \leq k \rightarrow$ FDI does not Granger cause GDP
iii. H_0: $\beta_{gm,i} = 0$ for all $i \leq k \rightarrow$ Import does not Granger cause GDP
iv. H_0: $\beta_{eg,i} = 0$ for all $i \leq k \rightarrow$ GDP does not Granger cause Export
v. H_0: $\beta_{ef,i} = 0$ for all $i \leq k \rightarrow$ FDI does not Granger cause Export
vi. H_0: $\beta_{em,i} = 0$ for all $i \leq k \rightarrow$ Import does not Granger cause Export
vii. H_0: $\beta_{fg,i} = 0$ for all $i \leq k \rightarrow$ GDP does not Granger cause FDI
viii. H_0: $\beta_{fe,i} = 0$ for all $i \leq k \rightarrow$ Export does not Granger cause FDI
ix. H_0: $\beta_{fm,i} = 0$ for all $i \leq k \rightarrow$ Import does not Granger cause FDI
x. H_0: $\beta_{mg,i} = 0$ for all $i \leq k \rightarrow$ GDP does not Granger cause Import
xi. H_0: $\beta_{me,i} = 0$ for all $i \leq k \rightarrow$ Export does not Granger cause Import
xii. H_0: $\beta_{mf,i} = 0$ for all $i \leq k \rightarrow$ FDI does not Granger cause Import

ESTIMATION AND RESULTS

Unit Root Test for the Integration Properties of the Data Series

In the first step of the estimation process, the study examines the stationarity properties of the data series. In stationary time series, shocks will be temporary and over the time their effects will decay as the series revert to their long run mean values. On the other hand, nonstationary series will contain permanent components and may show false or spurious relationships. When the stochastic process is nonstationary, the use of LS can produce invalid estimates. Granger and Newbold (1974) call such estimates 'spurious regression' results: high R^2 values and high t-ratios yielding results with no economic meaning. Phillips (1986) demonstrated that the Durbin-Watson (DW) statistics converge towards zero, and thus equations that report high R^2 and low DW are typical characteristics of spurious regressions. It has been well demonstrated in the literature that most of the economic variables are found to be nonstationary. A linear stochastic process has a unit root if 1 is a root of the process's "characteristic equation". Then the process will be nonstationary. The reason is that a unit root process has a variance that depends on the time variable t, and diverges to infinity. If, however, the other roots of the characteristic equation lie inside the unit circle, then the first difference of the process will be stationary. The present study employs the Augmented Dickey –Fuller (ADF) Test for test of presence of unit roots (that is nonstationarity) of the individual series. The ADF Test includes extra lagged terms of the dependent variables in order to eliminate autocorrelation. The lag length on these extract term is determined by the Akaike Information Criterion (AIC). The ADF Test results are shown in Table1.

Table 1. Augmented Dickey-Fuller (ADF) Test Results (Max lag 12)			
Variable	No Intercept or Trend	Intercept	Intercept and Trend
Log(GDP)	3.4762 (0.9996)	1.6630 (0.9993)	-1.1833 (0.8947)
Log(Export)	9.5132 (1.000)	1.5427 (0.9990)	-2.3683 (0.3860)
Log(FDI)	1.5506 ((0.9666)	-0.9226 (0.7646)	-1.4500 (0.8207)
Log(Import)	6.2042 (1.000)	0.8779 (0.9937)	-2.2270 (0.4574)
ΔLog(GDP)	-1.1543 (0.2202)	-2.7660* (0.0761)	-2.9687 (0.1654)
ΔLog(Export)	-0.3496 (0.5491)	-4.3123*** (0.0022)	4.9789*** (0.0022)
ΔLog(FDI)	-3.0340*** (0.0039)	-4.0455*** (0.0046)	-3.8325** (0.0302)
ΔLog(Import)	-2.5188** (0.0138)	-4.4591*** (0.0025)	-5.2515*** (0.0012)
Δ^2Log(GDP)	-5.6645*** (0.000)	-5.6132*** (0.0001)	-5.5931*** (0.0002)
critical values 1% 5% 10%	-2.6471 -1.9529 -1.6100	-3.6793 -2.9678 -2.6230	-4.3560 -3.5950 -3.2335
MacKinnon (1996) one-sided p-values are shown inside parentheses. Values are rounded to four decimal places. Significance at 10% if one *, significance at 5% if two **, and significance at 1% if three ***			

The results clearly indicate that all four time series are nonstationary when the variables are defined at levels with or without constant and trend. While Export, Import and FDI become stationary when their logs are differenced once, the Null hypothesis of unit root cannot be rejected for log(GDP) even after first differencing except at 10% level. This series becomes stationary (at 5% and 1%) only after second order of differencing. Therefore, we conclude that Export, Import and FDI are I(1) processes while GDP is I(2). Therefore d_{max} in our model is equal to 2. In the TYDL methodology this implies that we have to augment the VARL by over-fitting by additional two lag orders on top of the optimal order of lag for the VAR system.

Determination of Optimal Lag Order in the VAR System

The next step in our analysis is to determine the optimal lag order in the VAR system. Considering that we have annual data we experimented with maximum lag order of 4 and employed all the popular selection criteria with the result shown in Table 2.

The optimal lag order is 2 (k =2) according to sequential modified LR test statistic and Schwarz information criterion. Akaike information criterion, Final Prediction Error criterion and Hannan-Quinn information criterion indicate four lag orders. We accept the judgment the modified LR and Schwarz criteria considering parsimony in the small data set (only 30 years of observations). Thus the optimal lag order determined is k = 2. Thus, our augmented VARL is of order $k+ d_{max} =2+2 = 4$.

Table2. VAR Lag order Selection Criteria and Results Endogenous Variables: E F G; Exogenous: C Sample: 1971- 2008; included observations: 34					
Lag	LR[1]	FPE[2]	AIC[3]	SC[4]	HQ[5]
0	NA	0.000188	2.773081	2.966634	2.828817
1	208.9127	3.14e-08	-5.944373	-4.976606	-5.665691
2	34.36113*	1.57e-08	-6.734846	-4.992866*	-6.233219
3	15.01789	2.24e-08	-6.659299	-4.143106	-5.934726
4	20.02104	1.55e-08*	-7.653089*	-4.362683	-6.705572*
*indicates lag order selected by the criterion 1. LR: sequential modified LR test statistic (each test at 5% level) 2. FPE: Final Prediction Error 3. AIC: Akaike Information Criterion 4. SC: Schwarz Information Criterion 5. Hannan-Quinn Information Criterion					

Estimation of the augmented VARL (4) System and the Results of Hypotheses Tests

Following the results of the previous sections, we estimate the following VARL (4) system using SUR technique for the whole sample period (1979-2008).

$$\begin{bmatrix} G_t \\ E_t \\ F_t \\ M_t \end{bmatrix} = \begin{bmatrix} \alpha_g \\ \alpha_e \\ \alpha_f \\ \alpha_m \end{bmatrix} + \sum_{i=1}^{2} \begin{bmatrix} \beta_{gg,i} & \beta_{ge,i} & \beta_{gf,i} & \beta_{gm,i} \\ \beta_{eg,i} & \beta_{ee,i} & \beta_{ef,i} & \beta_{em,i} \\ \beta_{fg,i} & \beta_{fe,i} & \beta_{ff,i} & \beta_{fm,i} \\ \beta_{mg,i} & \beta_{me,i} & \beta_{mf,i} & \beta_{mm,i} \end{bmatrix} \begin{bmatrix} G_{t-i} \\ E_{t-i} \\ F_{t-i} \\ M_{t-i} \end{bmatrix} + \sum_{i=3}^{4} \begin{bmatrix} \gamma_{gg,i} & \gamma_{ge,i} & \gamma_{gf,i} & \gamma_{gm,i} \\ \gamma_{eg,i} & \gamma_{ee,i} & \gamma_{ef,i} & \gamma_{em,i} \\ \gamma_{fg,i} & \gamma_{fe,i} & \gamma_{ff,i} & \gamma_{fm,i} \\ \gamma_{mg,i} & \gamma_{me,i} & \gamma_{mf,i} & \gamma_{mm,i} \end{bmatrix} \begin{bmatrix} G_{t-i} \\ E_{t-i} \\ F_{t-i} \\ M_{t-i} \end{bmatrix} + \begin{bmatrix} \varepsilon_{gt} \\ \varepsilon_{et} \\ \varepsilon_{ft} \\ \varepsilon_{mt} \end{bmatrix} \quad \text{.....(2)}$$

The estimated SUR results for the whole sample period are given in the Appendix. The hypotheses for MWALD test become:

i. H_0: $\beta_{ge,1} = \beta_{ge,2} = 0$ → Export does not Granger cause GDP
ii. H_0: $\beta_{gf,1} = \beta_{gf,2} = 0$ → FDI does not Granger cause GDP
iii. H_0: $\beta_{gm,1} = \beta_{gm,2} = 0$ → Import does not Granger cause GDP
iv.. H_0: $\beta_{eg,1} = \beta_{eg,2} = 0$ → GDP does not Granger cause Export

v. H_0: $\beta_{ef,1} = \beta_{ef,2} = 0$ → FDI does not Granger cause Export
vi..H_0: $\beta_{em,1} = \beta_{em,2} = 0$ → Import does not Granger cause Export
vii. H_0: $\beta_{fg,1} = \beta_{fg,2} = 0$ → GDP does not Granger cause FDI
viii. H_0: $\beta_{fe,1} = \beta_{fe,2} = 0$ → Export does not Granger cause FDI
ix. H_0: $\beta_{fm,1} = \beta_{fm,2} = 0$ → Import does not Granger cause FDI
x. H_0: $\beta_{mg,1} = \beta_{mg,2} = 0$ → GDP does not Granger cause Import
xi. H_0: $\beta_{me,1} = \beta_{me,2} = 0$ → Export does not Granger cause Import
xii. H_0: $\beta_{mf,1} = \beta_{mf,2} = 0$ → FDI does not Granger cause Import

The results of MWALD test are shown in Table 3.

Table 3: TYDL Granger Non-Causality Test Results for China: Sample 1979-2008

Null Hypotheses	MWALD (df=2)	Conclusion
Export does not Granger cause GDP	6.7728** (0.0338)	Rejected at 5%
FDI does not Granger cause GDP	9.1429** (0.0103)	Rejected at 5%
Import does not Granger cause GDP	0.4048 (0.8168)	Cannot Reject
GDP does not Granger cause Export	9.4478*** (0.0089)	Rejected at 1%
FDI does not Granger cause Export	2.0379 (0.3610)	Cannot Reject
Import does not Granger cause Export	12.1490*** (0.0023)	Rejected at 1%
GDP does not Granger cause FDI	43.4296*** (0.0000)	Rejected at 1%
Export does not Granger cause FDI	10.9130*** (0.0043)	Rejected at 1%
Import does not Granger cause FDI	21.2074*** (0.0000)	Rejected at 1%
GDP does not Granger cause Import	0.0719 (0.9647)	Cannot Reject
Export does not Granger cause Import	3.2537 (0.1965)	Cannot Reject
FDI does not Granger cause Import	2.5534 (0.2790)	Cannot Reject

The p-values are shown inside parentheses. Triple star shows significance even at 1% and double star shows significance at 5%. No star indicates lack of significance at any reasonable level of significance.

Table 3 shows some interesting results, some expected some unexpected. The Granger causality from Export and FDI towards GDP is significant at 5% providing evidence of Export-led and FDI –led hypotheses in China. In contrast, the Granger causality from Imports towards GDP is not supported. That is, movements in Exports and FDI help explain successive GDP movements but movements in Imports do not add to the explanatory power of lagged GDP in explaining successive GDP values. On the other hand, the Granger causality of GDP towards Exports and FDI gets very strong support (significant even at 1% level) while GDP does not seem to Granger cause Imports. Thus, there is strong support for the hypotheses that Export are promoted by overall economic activity and FDI too is attracted more by overall growth. In

contrast, Imports do not seem to have such direct causality linkage in either direction vis-à-vis GDP. This is somewhat unexpected. We expect to see causality at least from GDP towards Imports. However, Imports seem to have linkage with GDP only through indirect channels. The Granger causality from Imports towards Exports is strongly supported (even at 1%). Similarly, Imports do Granger cause FDI. Thus, we can argue that Imports do influence GDP through indirect channels of Exports and FDI which in turn directly Granger cause GDP. However, the still unexplained strange result is that none of the three variables seem to Granger cause Imports, which is behaving almost as an externally determined force working through Exports and FDI in influencing the overall economic activity. Another interesting result is that while Exports have strong Granger causality towards FDI, there is no indication that FDI is causing Exports in the Granger sense. Thus, we can argue that rising exports seem to attract more FDI, but increased FDI in turn do not directly work as precursors of increased Exports. This is also somewhat unexpected. This tendency would be plausible if the increased FDI were directed more towards domestic and/or import-substituting industries than towards export promoting industries. Further analysis disaggregating the inflow of FDI by industrial sector may help clear this issue, which points to future direction of Research.

CONCLUSIONS

Using the robust Toda-Yamamoto-Dolado-Lutkephol augmented VARL technique of testing Granger causality this study finds bidirectional causality between GDP and Exports as well as GDP and FDI. Thus there is both Export-led growth and growth supported exports. Similarly, there is support for FDI-led growth and growth attracted FDI. Imports in contrast do not have direct causality linkage with GDP, but seem to influence GDP, nevertheless through the indirect channels of Exports and FDI. While Imports seem to have direct impact on both Exports and FDI, interestingly none of the three variables seem to Granger cause Imports. It seems that there are some other factors outside this model, which have influence on the volume of exports in the sense of Granger causality. This is a little unexpected in view of the traditional trade theory and the general impression wherein Imports are treated as dependent on GDP and Exports. These results should be taken, however, with a grain of salt acknowledging the fact that Granger causality is only an indication in a temporal sense of causes occurring prior to effects. In reality the occurrences may be reversed in the following manner. Suppose increased imports are caused by the expectation of the need created by increased future exports or production. If imports are treated as inputs to the process, then it makes sense. It is just like a producer stocking inputs before the actual production starts. Then the Granger causality sense would be reversed, because the results (increased stock of inputs) occur before the causes (need for increased production). This is, however, opposite to the methodology of existing Granger causality tests. This can only be captured by introducing expectation variable in the model. Similarly the unidirectional Granger causality from Exports towards FDI, which we find in our results, would

make sense if the increased FDI is directed more towards domestic consumption and or Imports substitution than towards Exports oriented industries. This indicates another direction of future research.

REFERENCES.

Alfaro, L. and A. Rodriguez-Clare(2004). Multinationals and Linkages: Evidence from Latin America, *Economia*, 4, 113-170.

Awokuse, T.O.(2007). Causality between exports, imports and economic growth: Evidence from transition economies. *Economics Letters*, 94, 389-995.

Barba-Navaretti, G. and A. J. Venables(2006). *Multinational Firms in the World Economy*, Princeton University Press

Ben-David, D. and M.B. Loewy(1998). Free-trade, growth, and convergence. *Journal of Economic Growth*, 3, 143-70

Bhatt, K.S., T. Sundari & K. Durairaj(2005). The Nexus between FDI and Economic Growth. In H.S. Kehal (Ed.) *Foreign Investment in Rapidly growing countries,* Palgrave Publishers, 168-79.

Blomstrom, M , and A. Kokko(1998). Multinational Corporations and Spillovers. *Journal of Economic Surveys*, 12, 247-77.

Buffie, E.F. (1992). On the condition for export-led growth. *Canadian Journal of Economics*, 25, 211-225.

Chenery, H. and A. Strout(1966). Foreign assistance and economic development. *American Economic Review*, 56(4), 679-733

Dayal-Gulati, A. and A.M. Husain(2000). Centripetal Forces in China's Economic Take-Off. *IMF Working Paper, 00/86*

De Mello, L.(1997). Foreign Direct Investment in Developing Countries and Growth: A Selective Survey. *Journal of Development Studies*, 34(1), 1-34.

De Mello, L. (1999). Foreign Direct Investment Led Growth: Evidence from Time Series and Panel Data. *Oxford Economic Papers*, 51, 133-151.

Dhananjayan, R.S. and N.S. Devi(1997). Exports and economic growth: a study of selected nations in Asia and Europe during 1980-81 to 1993-94. *Indian Journal of Applied Economics*, 6, 41-63.

Dickey, D.A. and W.A. Fuller(1981). Likelihood Ratio Statistics for Autoregressive Time Series with a Unit Root. *Econometrica*, 49(4), 1057 – 1072.

Dodaro, S.(1993). Exports and growth: a reconsideration of causality. *Journal of Developing Areas*, 27, 227-44.

Dolado, J.J. and H. Lutekepohl(1996). Making Wald test work for cointegrated VAR systems. *Econometrics Reviews*, 15, 369-86.

Dufour, J. M. and E. Renault(1999). Short Run and Long Run Causality in Time SeriesTheory. *Econometrica*, 66, 1099-1125.

Engle, R.F. and C.W.J. Granger(1987). Cointegration and Error Correction: Representation, Estimation and Testing. *Econometrica*, 55, 251-76.

Findlay, C. and A. Watson(1996). Economic growth and trade dependency in China. *DP #96/5*, *Chinese Economies Research Centre*, University of Adelaide.

Fugarolas, G., I. Manalich & D. Matesanz(2007). Are exports Causing Growth? Evidence on International Trade Expansion in Cuba, 1960-2004. *MPRA Paper No. 6323*

Giles, D. (1997). Causality between the Measured and Underground Economies in New Zealand. *Applied Economics Letters*, 4(1), 63-67.

Giles J.A. and C.L. Mirza(1999). Some Pretesting Issues on Testing for Granger noncausality. (*Mimeo)* Department of Economics, University of Victoria, *Econometrics Working Papers* No. 9914.

Giles, J. A. and C. L. Williams(2000a). Export-led growth: a survey of the empirical literature and some non-causality results. Part1. *Journal of International Trade & Economic Development*, 9, 261-337.

Giles, J. A. and C. L. Williams(2000b). Export-led growth: a survey of the empirical literature and some non-causality results. Part2. *Journal of International Trade & Economic Development*, 9, 445-470.

Gorg, H. and D. Greenaway(2004). Much Ado about Nothing? Do Domestic Firms Really Benefit from Foreign Direct Investment? *World Bank Research Observer*, 19(2), 171-97.

Graham, E. M., and E. Wada(2001). Foreign Direct Investment in China: Effects on Growth and Economic Performance. In Drysdale, P. (ed.). *Achieving High Growth: Experience of Transitional Economies in East Asia*, Oxford University Press.

Granger, C. W. J.(1969). Investigating causal relations by econometric models and cross-spectral methods. *Econometrica,* 37, 424-438.

Granger, C. W. J.(1981). Some Properties of Time Series Data and their Use in Econometric Model Specification. *Journal of Econometrics*, 16, 121-30.

Granger, C. W. J.(1986). Developments in the Study of the Cointegrated Economic Variables. *Oxford Bulletin of Economics and Statistics*, 48, 201-212.

Granger, C. W. J. (1988). Some Recent Developments in a Concept of Causality. *Journal of Econometrics*, 39, 199-211.

Granger, C. W. J. and P. Newbold(1974). Spurious Regressions in Econometrics. *Journal of Econometrics*, 2, 111-20.

Granger, C. W. J. and A. A. Weiss(1983). Time Series Analysis of Error Correction Models. In S. Karlin, T. Amemiya & L.A. Goodman(eds.), *Studies in Econometrics: Time Series and Multivariate Statistics.* New York (Academic Press), 255-278.

Greenaway, D. and D. Sapsford(1994). Exports, growth, and liberalization: an evaluation. *Journal of Policy Modeling*, 16, 165-86.

Jaffee, D. (1985). Export dependence and economic growth: a reformulation and respecification. *Social Forces*, 64, 102-18.

Johansen, S.(1988). Statistical analysis of cointegrating vectors. *Journal of Economic Dynamics and Control,* 12, 231-254.

Johansen, S.(1991). Estimation and Hypothesis testing of Cointegration Vectors in Gaussian Vector Autoregressive Models. *Econometrica*, 59, 1551-80.

Johansen, S. and K. Juselius(1990). Maximum Likelihood Estimation and Inferences on Cointegration -with applications to the demand for money. *Oxford Bulletin of Economics and Statistics*, 52, 169-210.

Kalirajan, K., A. K. Miankhel & S. M. Thangavelu(2009). Foreign Direct Investment, Exports, and Economic Growth in Selected Emerging Countries: Multivariate VAR Analysis. Working Paper Available at *SSRN*: *http://ssrn.com/abstract=1526387*

Keesing, D.B.(1967). Outward-looking policies and economic development. *Economic Journal*, 77, 303-20.

Krueger, A.O.(1995). *Trade Policies and Developing Nations*. Washington: Brookings Institution.

Krugman, P.R.(1996), *Rethinking International Trade,* Cambridge, MIT Press.

Li, W.(2005). Research on FDI and China's Economic Growth. *Chinese Business Review,* 4(3*)*, 42-7.

Li, X., and X. Liu(2005). Foreign Direct Investment and Economic Growth: An Increasingly Endogenous Relationship. *World Development,* 33(3), 393-407.

Lim, E.G. (2001). Determinants of, and the Relation between, Foreign Direct Investment and Growth: A Summary of the Recent Literature. *IMF Working Paper*, WP/01/175.

Liu, X.H., P. Burridge, & P.J.N. Sinclair(2002). Relations between Economic Growth, Foreign Direct Investment and Trade: Evidence from China. *Applied Economics*, 34, 1433-40.

Liu, X., C. Wang & Y. Wei(2001). Causal links between foreign direct investments and trade in China. *China Economic Review*, 12, 190-202.

Love, J. and R. Chandra(2004). Testing Export-led Growth in India, Pakistan and Sri Lanka using Multivariate Framework. *Manchester School*, 72(4), 483-496.

Love, J. and R. Chandra(2005a). Testing export-led growth in South Asia. *Journal of Economic Studies*, 32, 132-145.

Love, J. and R. Chandra(2005b). Testing export-led growth in Bangladesh in a multivariate VAR framework. *Journal of Asian Economics*, 15, 1155-1168.

Lutkephol, H. (2004). Vector Autoregressive and Vector error correction Models. In Lutkephol, H. and Kratzig, M. (ed.) *Applied time series econometrics*, Cambridge University Press, 86-158.

MacKinnon, J. (1996). Numerical Distribution Functions for the Unit Root and Cointegration Tests. *Journal of Applied Econometrics*, 11, 601-618.

Mah, J.S.(2005). Export Expansion, economic growth and causality in China. *Applied Economic Letters*, 12, 105-07

Pack, H. (1988). Industrialization and trade. In Chenery, H. and T.N. Srinivasan(eds.) *Handbook of Development Economics, Volume 1*, Amsterdam: Elsevier.

Phillips, P.C.B. (1986). Understanding spurious regressions in econometrics. *Journal of Econometrics*, 33(3), 311-40

Rambaldi, A.N and H.E Doran(1996). Testing for Granger Non-causality in Cointegrated Systems Made Easy. *Working Paper in Econometrics and Applied Statistics,* 88, University of New England.

Riezman, R.G., P.M. Summers & C.H. Whiteman(1996). The engine of growth or its handmaiden? A time series assessment of export-led growth. *Empirical Economics*, 21, 77-113.

Shan, J. (2002a). A VAR Approach to the Economics of FDI in China'. *Applied Economics*, 7(34), 885-893.

Stock, J.H. and M.W. Watson(1988). Variable trends in economic time-series. *Journal of Economic Perspectives*, 2(3), 147-174.

Stock, J.H. and M.W. Watson(1993). A simple estimator of cointegrating vectors in higher-order integrated systems. *Econometrica*, 61(4), 783─820.

Stock, J.H. and M.W. Watson(2001). Vector Autoregression. *Journal of Economic Perspective*, 15, 1011-15.

Tang,S., E. A. Selvanathan & S. Selvanathan(2008). Foreign Direct Investment, Domestic Investment, and Economic Growth in China: A Time Series Analysis. *UNU-WIDER, Research Paper No.* 2008/19

Thangavelu, S.M. and G. Rajaguru(2004). Is there an export or import-led productivity growth in rapidly developing Asian countries? A Multivariate VAR analysis. *Applied Economics*, 36, 1083-1093.

Toda, H.Y. and P.C.B. Phillips(1993). Vector autoregressions and causality. *Econometrica*, 61, 1367-93.

Toda, H.Y. and P.C.B. Phillips(1994). Vector autoregression and causality: a theoretical overview and simulation study. *Econometric Reviews*, 13, 259-85.

Toda, H. Y. and T. Yamamoto(1995). Statistical inference in vector autoregression with possibly integrated processes. *Journal of Econometrics.* 66, 225-250.

Weiner, N. (1956). The theory of prediction. In Beckenback, E.F. (ed.) *Modern Mathematics for Engineers (Series 1),* New York: McGraw-Hill, Chapter 8.

World Development Indicators (2009), The World Bank

Xu, Z.(1996). On the causality between export growth and GDP growth: an empirical reinvestigation. *Review of International Economics*, 4, 172-84.

Yamada, H. and H.Y. Toda(1998). Inference in possibly Integrated Vector Autoregressive Models: Some Finite Sample Evidence. *Journal of Econometrics,* 86, 55-95.

Zapata, H.O. and A.N. Rambaldi(1997). Monte Carlo evidence on cointegration and causation. *Oxford Bulletin of Economics and Statistics*, 59, 285-98.

Zhang, K.H. (2006). Foreign Direct Investment and Economic Growth in China: A Panel Data Study for 1992-2004. *Paper prepared for the conference of WTO*, China and Asian Economies, UIBE, Beijing, China.

APPENDIX: THE SYSTEM OF ESTIMATED EQUATIONS AND SEEMINGLY UNRELATED REGRESSION

G = C(1)*G(-1) + C(2)*G(-2) + C(3)*G(-3) + C(4)*G(-4) + C(5)*E(-1) + C(6)*E(-2) + C(7)*E(-3) + C(8)*E(-4) + C(9)*F(-1) + C(10)*F(-2) + C(11)*F(-3) + C(12)*F(-4) + C(13)*M(-1) + C(14)*M(-2) + C(15)*M(-3) + C(16)*M(-4) + C(17)

E = C(18)*G(-1) + C(19)*G(-2) + C(20)*G(-3) + C(21)*G(-4) + C(22)*E(-1) + C(23)*E(-2) + C(24)*E(-3) + C(25)*E(-4) + C(26)*F(-1) + C(27)*F(-2) + C(28)*F(-3) + C(29)*F(-4) + C(30)*M(-1) + C(31)*M(-2) + C(32)*M(-3) + C(33)*M(-4) + C(34)

F = C(35)*G(-1) + C(36)*G(-2) + C(37)*G(-3) + C(38)*G(-4) + C(39)*E(-1) + C(40)*E(-2) + C(41)*E(-3) + C(42)*E(-4) + C(43)*F(-1) + C(44)*F(-2) + C(45)*F(-3) + C(46)*F(-4) + C(47)*M(-1) + C(48)*M(-2) + C(49)*M(-3) + C(50)*M(-4) + C(51)

M = C(52)*G(-1) + C(53)*G(-2) + C(54)*G(-3) + C(55)*G(-4) + C(56)*E(-1) + C(57)*E(-2) + C(58)*E(-3) + C(59)*E(-4) + C(60)*F(-1) + C(61)*F(-2) + C(62)*F(-3) + C(63)*F(-4) + C(64)*M(-1) + C(65)*M(-2) + C(66)*M(-3) + C(67)*M(-4) + C(68)

Sample: 1983 2008
Included observations: 26
Total system (balanced) observations 104
Linear estimation after one-step weighting matrix

	Coefficient	Std. Error	t-Statistic	Prob.
C(1)	1.182217	0.184478	6.408438	0.0000
C(2)	-0.220548	0.299428	-0.736565	0.4662
C(3)	-0.301019	0.267917	-1.123552	0.2686
C(4)	0.157160	0.148669	1.057114	0.2975
C(5)	-0.019576	0.220362	-0.088833	0.9297
C(6)	-0.438780	0.168620	-2.602175	0.0134
C(7)	-0.086981	0.148530	-0.585607	0.5618
C(8)	0.380709	0.150853	2.523717	0.0162
C(9)	0.121577	0.056134	2.165827	0.0370
C(10)	-0.026291	0.087328	-0.301057	0.7651
C(11)	-0.089013	0.082269	-1.081974	0.2865
C(12)	-0.020378	0.030654	-0.664764	0.5104
C(13)	0.023707	0.128342	0.184716	0.8545
C(14)	-0.089589	0.141226	-0.634368	0.5299
C(15)	0.487370	0.135255	3.603349	0.0009
C(16)	0.026761	0.123100	0.217395	0.8291
C(17)	0.102330	0.409568	0.249848	0.8041
C(18)	-0.600207	0.236517	-2.537689	0.0156
C(19)	0.189069	0.383894	0.492503	0.6254
C(20)	-0.088020	0.343494	-0.256250	0.7992
C(21)	0.167905	0.190607	0.880898	0.3842
C(22)	0.442293	0.282524	1.565508	0.1262
C(23)	0.143807	0.216186	0.665202	0.5102
C(24)	0.645352	0.190429	3.388938	0.0017
C(25)	-0.186570	0.193406	-0.964652	0.3412
C(26)	-0.085531	0.071969	-1.188436	0.2424
C(27)	0.044918	0.111962	0.401189	0.6907
C(28)	0.032095	0.105476	0.304285	0.7627
C(29)	0.000708	0.039301	0.018020	0.9857
C(30)	0.573069	0.164546	3.482724	0.0013
C(31)	-0.205097	0.181064	-1.132732	0.2648
C(32)	0.200370	0.173408	1.155478	0.2555
C(33)	-0.303945	0.157825	-1.925833	0.0621
C(34)	0.968722	0.525103	1.844825	0.0733
C(35)	-1.352520	0.465667	-2.904481	0.0063
C(36)	-1.726394	0.755828	-2.284108	0.0284
C(37)	1.868197	0.676287	2.762431	0.0090
C(38)	-1.550993	0.375276	-4.132944	0.0002
C(39)	-1.228478	0.556246	-2.208514	0.0337

C(40)	1.027213	0.425638	2.413352	0.0210
C(41)	0.980671	0.374926	2.615640	0.0129
C(42)	1.064051	0.380788	2.794340	0.0083
C(43)	1.171344	0.141697	8.266564	0.0000
C(44)	-1.503572	0.220436	-6.820909	0.0000
C(45)	1.532228	0.207667	7.378301	0.0000
C(46)	-0.430688	0.077377	-5.566070	0.0000
C(47)	1.466363	0.323967	4.526277	0.0001
C(48)	-0.303378	0.356488	-0.851020	0.4004
C(49)	-0.498788	0.341415	-1.460943	0.1527
C(50)	-0.195717	0.310734	-0.629855	0.5328
C(51)	8.101214	1.033847	7.835987	0.0000
C(52)	-0.032054	0.374253	-0.085648	0.9322
C(53)	0.147706	0.607454	0.243156	0.8093
C(54)	-0.226333	0.543527	-0.416416	0.6796
C(55)	0.283871	0.301606	0.941198	0.3529
C(56)	0.399835	0.447051	0.894383	0.3771
C(57)	-0.529817	0.342082	-1.548800	0.1302
C(58)	0.107458	0.301325	0.356617	0.7235
C(59)	0.381396	0.306037	1.246242	0.2207
C(60)	0.177020	0.113881	1.554439	0.1288
C(61)	-0.253054	0.177163	-1.428371	0.1618
C(62)	-0.011366	0.166900	-0.068101	0.9461
C(63)	0.022633	0.062188	0.363941	0.7180
C(64)	0.842764	0.260370	3.236795	0.0026
C(65)	-0.397552	0.286507	-1.387586	0.1738
C(66)	0.484955	0.274393	1.767376	0.0856
C(67)	-0.297306	0.249735	-1.190489	0.2416
C(68)	-0.686768	0.830896	-0.826539	0.4139
Determinant residual covariance		2.98E-11		

THE NOTION OF LEGITIMACY AND ITS ACQUISITION IN A COGNITIVE BUSINESS ENVIRONMENT

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ABSTRACT

Multinational firms must continually work to maintain their legitimacy within their host environments. This is a particularly difficult task in environments where the rule-of-law was absent or very tenuous such as in regions of the former USSR. This paper reviews the legitimacy and relationship literature and relates it to the cognitive environment faced by Cargill's entry into the Ukrainian agricultural market. The factors contributing to Cargill's success in entering business networks within the agricultural sector are presented against the backdrop of existing theory concerning the nature of business relationships. A matrix is proposed for understanding the relationships that are likely to emerge under different environmental conditions found in Ukraine's emerging market.

INTRODUCTION

On January 25, 2006 Andreas Rickmers, President of Cargill Ukraine, wrote to Franklin Lavin, the Under Secretary for International Trade of the U.S. Department of Commerce, in support of Ukraine's request to be granted "market economy" status for the purposes of U.S. anti-dumping legislation. Market economy status was critical for Ukraine's struggling economy since with respect to trade with the U.S. it promised two important results. It would remove the Soviet era Jackson-Vanik amendment restricting trade with the USSR that carried over to its successor states and allow greater access of Ukrainian steel to U.S. markets. Added bonuses of market economy status included improved trade prospects with the EU and a smoother path for WTO membership that Ukraine eventually achieved in 2009. With so much at stake, a favorable recommendation from a major American company was highly prized.

Cargill had been active in Ukraine since 1991, the year the USSR collapsed and Ukraine declared independence, with the establishment of a joint venture with a Ukrainian agricultural research institute in the city of Dnipropetrovsk. Despite the large size and variety of Cargill's global footprint, its Ukrainian venture started out modestly with the objective of developing grain hybrids and varieties suitably adjusted to Ukrainian climate conditions. Cargill's representative in Ukraine, working from an unobtrusive upper story office in the capital city, Kiev, initially assessed the business climate and investment opportunities. The low profile kept the company from attracting the immediate attention of avaricious bureaucrats and organized

crime clans masquerading as business enterprises. At this time, Ukraine and the rest of the former constituent republics of the defunct Soviet Union were generically referred to in the western press as "the wild, wild East". The business landscape was uncertain as large state enterprises passed into private ownership in mysterious "privatization" processes. Business in the consumer segment was characterized by numerous petty merchants operating from outside stands hawking clothing from Turkey or used automobiles from Germany.

In a period of fifteen years, Cargill had not only succeeded in establishing itself in the Ukrainian market but had secured an enviable degree of legitimacy where its recommendations were sought by high levels of government and it was largely free of capricious conduct by local entities. The letter to Secretary Lavin noted that among the critical concerns for Cargill in Ukraine was the prompt refunding of value added tax (VAT) on agricultural commodities. The standard practice in Ukraine had been to delay VAT refunds so that foreign companies typically had to hire local lawyers to secure their refunds. The lawyer fees typically ran 25% - 30%; a ruinous amount in low margin markets such as Cargill's grain trading especially if months passed with the VAT remaining frozen. Of course the lawyers, judges and bureaucrats were all in cahoots and made a living within a system of contradictory laws and regulations. This paper will trace the history of Cargill's venture in Ukraine and specifically address how it acquired a high degree of legitimacy, a factor that allowed it to thrive, despite an opaque legal environment and the capricious rulings of the national courts.

The methodology employed in this paper is an in-depth case study. Case studies have been used to develop theories (Eisenhardt, 1989) and add insight to the working of business networks in emerging markets (Brouthers & Barmossy, 1997). Yin (2002) identifies three important case study characteristics this paper reflects: (1) they ask questions as to how or why something happened, (2) they do not require control over behavioral events and (3) they are oriented to current events. Piekkari et al. (2010) add a requirement to Yin's definition by linking the case study to existing theory. They propose, "a case study is an empirical inquiry that investigates a phenomenon in its real life context, relating it to theory and seeking to understand what the empirical phenomenon is a case of in empirical terms". Case studies have been extensively used as the methodology of choice in investigating business networks (Beverland & Lindgreen, 2010; Easton 2010).

The succeeding parts of the paper are organized as follows. A theoretical framework within which to analyze Cargill's venture by reviewing the literature on legitimacy, the notion of foreignness and types of relationships within operating business environments is presented. This is followed by a narrative of Cargill's attempt to embed itself within the Ukrainian business environment. The last section presents a framework for linking a firm's progress in securing legitimacy within a foreign context to existing theory. Legitimacy has been studied largely from a western or well established market driven economy perspective. There are very few studies that have looked at legitimacy or attempted to understand its dimensions within the former communist states of Eastern Europe or the region of the defunct USSR (Standifird & Weinstein,

2002). Hence, in looking at Cargill's acquisition of legitimacy in Ukraine, this paper contributes to the literature and adds to understanding of the evolution of an increasingly important market.

THEORETICAL ORIENTATION

Legitimacy

Suchman (1995) suggested that legitimacy is an assumption or shared perception that some given conduct of a party is proper, advantageous in some setting of norms, values and beliefs. Thus, common cultural values and acceptance of a given social structure confer legitimacy. There is a general scholarly consensus that the acceptance of an organization by its operating environment is a vital determinant of its ultimate success and survival. There are two types of legitimacy distinguished by Kostova and Zaheer (1999): (1) classes of organizations legitimacy and (2) organizational legitimacy. A further nuance, especially important in the case of large multi-national enterprises, adds an additional difference between the legitimacy of the company taken as a whole and its legitimacy as part of a subunit in a given country. This is relevant in this case since Cargill has a series of subunits s throughout the world such as Cargill Ukraine and Cargill Russia.

Closely related to legitimacy is the concept of cultural adaptation. Legitimacy issues may arise at any point during a venture's history and while the ability of an organization to adapt to its environment may contribute to legitimacy, adaptation in and of itself is not a sufficient condition. In other words, merely trying hard to gain legitimacy in a given country is no guarantor of success. The reason is that other factors may be in play including how the product is received by the host country and local regulatory issues. Kostova and Zaheer stress that legitimacy is socially constructed and there may be an absence of a one-to-one correspondence between a firm's ability to adapt to an environment and the way the adaptation process is perceived by the parties within the host environment. A firm may well be culturally adapted and yet lack legitimacy in a particular environment. Therefore, akin to the notion of "continuous improvement", the process of legitimization never stops and repeatedly tests and redefines the organization's interaction and fit with its environment. Significantly, the process is bounded rationally, since both the firm and environment may lack the information and institutional frameworks to understand, interpret and evaluate each other. The understanding and evaluation will be an iterative procedure over time. Hence, legitimacy is about how a focal firm manages to navigate within a network of other firms and important stakeholders defining its environment.

Foreignness

A nagging problem preventing successful foreign ventures identified by scholars is the "liability of foreignness" (Zaheer, 1995) which includes costs associated with spatial distance,

unfamiliarity with the host environment, economic nationalism, lack of legitimacy and sales restrictions imposed by the home country. Foreignness may include attributes that are readily visible but at the same time could include elements that exist at a lower level of awareness. Mezias (2002) provides additional insight into the foreignness construct. First, the liability of foreignness can stem from costs that are common to both foreign and domestic firms but foreign firms feel more of the impact because domestic firms have learned how to mitigate them. In a sense, the fittest or best managed domestic firms have evolved mechanism to thrive in their environment and presumably the less agile have perished. For instance, in the United States, American firms experience lower costs from labor lawsuit judgments than their foreign competitors because presumably they more keenly sense the consequences of labor disputes. In addition, domestic firms may benefit from government subsidies or exclusive contract arrangements denied foreign firms. It is worth noting that the problem of foreignness may be diminished through social accommodation, whereby the firm is responsive to the needs or concerns of the host society in areas such as education, pollution control or access to medical care (Luo, Shenker & Nyaw, 2002). Social accommodation becomes a mode for legitimacy improvement. A downside of social accommodation not addressed adequately by the literature dealing with opaque environments is delineating when does social accommodation turn to a type of bribery? While there is general agreement on the primary factors contributing to liabilities of foreignness, identifying a specific liability that may arise in a given country remains a problem because of the heterogeneous nature of knowledge about how to deal with emerging market countries like Ukraine.

Whether or not a foreign firm acquires legitimacy in its host environment is contingent on how quickly it can integrate into the network of firms that define the operating environment. Johanson and Vahle (2009) add another valuable insight that can impact legitimacy. They point out that successful organizations are tied into one or more networks with multiple nodes of relationships. This confers on the firm the status of an "insider". Within this context, firms can mutually learn from each other, build trust and grow in commitment. In their words firms are "linked by a non-trivial level of mutual control". Conversely, firms without a position in a relevant network are stigmatized as an "outsider". The point about multiple relationships is important since entering a new country with a single partner may not provide adequate exposure to business contacts. A firm seeking to enter a foreign market without any network links suffers from the "liability of outsidership". We will return to this point when we examine Cargill's experience in Ukraine.

Trust

Wilson (1995) points out that the "fundamental relationship building block" for sustainability of a relationship is trust. Leek et al. (2006) believe that trust may actually be a prerequisite for any joint development. In a cognitive environment it is extremely difficult if not

impossible to develop integrity and reliability between partners since there is little trust to bind parties together. Moorman et al. (1993) defined trust as a state in a relationship between parties whereby the party that is perceived as controlling vital assets (natural resources, know-how or technology) that the other party values will continue sharing them in a mutually beneficial manner.

The relationship literature between partners delves extensively into commitment, describing it as a strong preference for existing partners or maintaining the status quo (Teas and Sibley, 1980). Commitment has been defined as a multidimensional construct with distinguishable components which include elements of positive regard or desire for the other party, perceived economic costs and felt moral obligation. Meyer and Allen (1991) label these distinguishable conceptually dimensions as affective commitment (attachment), instrumental commitment (economic cost), and normative commtment (an obligation or moral responsibility). In a cognitive environment both affective and normative commitment which require trust or a moral obligation are not likely to develop, only instrumental commitment can develop and be sustained. Instrumental commitment, also called calculative, is a "calculative" act, where the committed partner stakes something of value to it, which Becker (1960) calls a "side bet on consistent future behavior." Staying power may cease to exist or fade away if the situation is not supported by extrinsic rewards. Brown, Lusch, and Nicholson (1995) describe instrumental commitment as being driven by perceived rewards or punishments. The economic dimension of commitment may be based on a "side-bet" or "trade-offs" of costs and benefits. Legitimacy, foreignness, outsidership, commitment and trust are important factors that exist within any environmental setting.

In their study of Russia's state-managed capitalism, Puffer & McCarthy (2007) use regulatory and cognitive dimensions to analyze the operating environment. Regulatory institutional environments feature formal laws, regulations, government enforcement mechanisms and transparency in business exchanges. On the other hand, a reliance on ingrained practices, historical values, informal networks or clans, and opaqueness foster and sustain cognitive environments. In effect what has been taken for granted in a cognitive society is what is also regarded as legitimate. For example, the routine expectation of a bribe by a state official for the performance of normal assignments is characteristic of cognitive settings. We suggest the latter type defines the institutional environment within former areas of the USSR directly affecting venture stability.

Environments and Relationships

At heart, business ventures are ultimately about institutional interactions. The institutional context emphasizes the so-called "rules of the game" (North, 1990). Here the interest is primarily with the inhibitions or constraints on economic activity. In short, companies must seek to maximize their welfare within the confines of existing laws, customs and

regulations. It is important to note that whereas in western societies, companies had many years if not decades to adjust to change, the situation in former communist states was dramatically different (Peng, 2003). Firms facing an operating environment where change came rapidly not only domestically but from international forces confronted an ominous predicament in that they did not have the requisite human, technical and financial resources to meet the transition. Institutional transformation creates ambiguity in cause-effect relations, and familiar templates such as five-year economic plans no longer apply. For instance, the Polish domestic television industry was rapidly overwhelmed by foreign competition as the country liberalized (White & Linden, 2002). Examples like this across the former Soviet zone of influence no doubt contributed to the distrust of foreign firms when they entered what for them were new promising emerging markets.

Researchers across different disciplines have proposed sets of norms for studying the dynamics of global relational exchanges. Macneil's (1980) major contribution to the study of norms was the recognition that in an organizational context pure market transactions are rare since most business transactions have relational components as a mechanism to co-ordinate inter-firm activities. The norms used in this study recognize Macneil's (2000) contribution but borrow also from Holmlund's (1997) insights. Specifically the categories include: (1) mutuality – solidarity; (2) resource dependence – information exchange; (3) continuity – maturity; (4) flexibility – adaptability; (5) context – embeddedness; (6) social capital accretion.

Mutuality between partners may be expressed by such concepts as trust and commitment. The suppliers of the Big Three American auto makers would be expected to show solidarity in the sense that they understand their mutual economic linkages. Resource dependence is the recognition that partners depend on each other for human, technical or financial assets since it may prove very difficult to develop all necessary resources independently. When partners bring together heterogeneous resources through information sharing they create a major strength for the relationship. The continuity factor posits that relationships evolve over time; past and future expectations impact on the current state. A relationship that has successfully matured, taking into account the many instances of broken bonds, can become a very specific asset and create entry barriers for would be competitors. Flexibility suggests that relationships are dynamic in nature. Both a firm's internal and external environment undergoes change that in turn requires continual adaptation. Embeddedness means that business conduct takes place within an overall framework of existing relationships governing a society. Thus, relationships are highly context bound and mirror the reality of their particular setting. Social capital buildup means that an organization is able to become part and parcel of its surrounding fabric making it difficult to attack. Firms that have successfully worked with foreign partners may be also able to build up sufficient social capital that protects them from xenophobia in the general market and makes it difficult even for domestic partners to be at odds.

CARGILL IN UKRAINE

To better appreciate Cargill's interest in Ukraine, it is worth reflecting on the scope of the company's global enterprises. Cargill, a privately held company, has operations in 65 countries spread over 5 continents. It is represented in countries covering a kaleidoscope of established governments ranging from dictatorial, authoritarian, populist, post-revolutionary and constitutional. A sample of representative countries includes Nigeria, Zimbabwe, India, Vietnam, China, Indonesia, France, Germany, the Netherlands, Ukraine, Russia, Italy, UK, Argentina, Venezuela, Egypt, USA and Mexico. For 2009, the company reported net earnings of $3.3 billion on sales in excess of $116 billion. World-wide the company has 160,000 employees employed primarily in agriculture but the company also participates in metal products trading and provides risk management services. In the U.S., the company alone accounts for 25% of grain exports. If the company were publicly held it would rank as a top 10 in the Fortune 500.

After the initial joint venture with the Research Institute in Ukraine mentioned earlier, Cargill established a wholly owned subsidiary, Cargill AT, for the purpose of trading grain, oilseeds, steel, sugar, fruit juice concentrate and cocoa. By 1995, the company expanded its infrastructure and commitment to the country by building a modern hybrid seed processing plant. Its in country work force had grown to 800 employees. Growing in confidence, Cargill proceeded to construct a sunflower seed processing plant, acquired grain silos in various regions of the country and expanded its fertilizer blending facilities. Sunflower seed oil exports earn Ukraine about a half billion dollars annually and potentially can become much higher. In this very important segment, Cargill's annual crushing capacity for sunflower seeds represented in 2005 about 25% of the market (Olearchyk, 2005). Not only had Cargill successfully negotiated Ukraine's opaque business environment, it was clearly becoming a major player in the agricultural sector. By 2009, Cargill had invested nearly $350 million into its Ukrainian operations.

The Ukrainian Grain Association (UGA) was formed in 1998 for the stated purpose of "making profound market reorganizations in the grain market of Ukraine". The overriding goal of the Association was to create a more transparent market operating on the basis of economic rationale rather than administrative fiat. Cargill became a member of the UGA that in 2009 counted 49 Ukrainian and international companies and was elected to the smaller circle of the group's Council of Representatives that determines policy and direction. A prime reason for Cargill's entering Ukraine was its conviction that grain output could be radically increased compared to historical volumes (Eastern Economist, 2001). This premise fits the overall stated mission of the UGA to transform Ukraine into a "powerful" grain country and most likely reflects Cargill's influence on the association. The ability to put pressure on the Ukrainian government bureaucracy or expose its shenanigans was especially important in 2006 and 2007 when the government imposed grain embargoes first on milling wheat and then on feed grain. Local commercial interests linked to the government hoped to prosper from the embargo by

procuring and then in turn selling export quotas to established grain exporters. The embargo inflicted more than $200 million in losses on grain exporters and farmers (Crane & Larrabee, 2007). Despite this setback, lobbying on behalf of Ukraine did have benefits for Cargill when Ukraine became a member of the WTO, making similar future embargoes far less likely since the government now had to adhere to a set of international guidelines and suffer the consequences for violations.

Another important network in Ukraine is the local chapter of the American Chamber of Commerce in Ukraine (AmCham Ukraine) where Cargill is a member. AmCham is a non-governmental organization under which member companies seek to advance common goals in Ukraine. The chapter supports companies currently doing business in Ukraine and works to promote the entrance of new foreign investors. The membership includes domestic Ukrainian companies and a diverse group of foreign organizations such as Proctor & Gamble, Coca-Cola, McDonald's, General Electric, Credit Lyonnais, Siemens, Sumitomo, Mitsubishi and Samsung (American Chamber of Commerce, 2010). Hence, this organization also serves as a mechanism to broaden and deepen Cargill's business network in Ukraine.

Next, we will look at a framework for analyzing Cargill's operations in Ukraine within a specific theoretical framework by linking the constructs of legitimacy and environmental types and then speculating on the evolution of the most likely business relationships and the subsequent impact on foreignness and outsidership.

DISCUSSION AND CONCLUSIONS

Cargill's history in Ukraine suggests it has been able to acquire and retain many of the attributes of legitimacy. In the words of Ashforth and Gibbs (1990), "Legitimacy is conferred upon or attributed to the organization by its constituents…like beauty it resides in the eye of the beholder". Since its entry into the Ukrainian market, there have been four presidential elections with orderly transitions of power between pro-western and pro-Russian parties but neither political faction has targeted global businesses as a problem. The types of problems Cargill faces are shared by domestic firms. Politically, all indicators attest Cargill has successfully woven itself into the Ukrainian business fabric. Regardless of a given party's western or eastern tilt, a general consensus always existed that Ukraine would benefit from market economy status and membership in the WTO. Cargill played a part in moving this process along and no doubt has built a reservoir of good will.

With its historical legacy and vast global operations, Cargill brings exceptional levels of expertise to new markets. Its managerial reputation and prestige contributes in no small measure to its legitimacy (D'Aveni, 1990). The continued investments in physical facilities and the expansion of its work force suggest that the company is confident about its future despite periodic episodes like the grain embargo. As part of the UGA and AmCham, Cargill has moved to insider status within the business community and has successfully networked with foreign and

domestic firms. For instance, Cargill purchased the sunflower seed crushing facility from Chumak, a Swedish firm, allowing the latter to focus on the refining and bottling operations for its consumer markets. The acquisition met the guidelines of Ukrainian regulators, a further endorsement of Cargill's legitimacy.

Table 1
Legitimacy-Environmental Type Matrix

Legitimacy	Environmental Type: Regulatory	Environmental Type: Cognitive
High	***Invest*** *Social capital accretion* *Solidarity* *Info exchange-resource dependence* *Continuity* *Embeddedness* *Flexibility-adaptability*	***Secure Position*** *Social capital accretion* *Info exchange-resource dependence* *Continuity* *Flexibility-adaptability*
Low	***Network*** *Information exchange* *Flexibility-adaptability*	***Unfavorable Odds*** *Information exchange*

As Cargill built up its legitimacy and gained the increasing trust of parties within the Ukrainian business environment, it successfully shed some of the doubt or stigma attached to foreignness or being an outsider. However, according to Transparency International, Ukraine remains a very corrupt state, so foreign and domestic companies continue to function in an opaque business setting. But even in this climate, Cargill has established a series of relationships. Table 1 suggests the possible relationships that will exist given regulatory versus cognitive environments contrasted to high versus low levels of legitimacy. Environments can be

partitioned on the basis of the generally accepted corruption index where 1 indicates very corrupt and 10 very transparent. Ukraine has a corruption index of 2.5 putting it in the bottom 25%. Ranking legitimacy is more problematic, especially in newly emerged market economies. As suggested earlier, research in this area has been sparse and legitimacy is also about perceptions albeit without the general consensus. Lacking a consensus, a reasonable place to start is to use years of operation within a given market as one surrogate measure along with the number of readily recognizable links within the host country's business network. Five years of successful activity and two visible business network affiliations would be a reasonable definition of some base legitimacy. Cargill is in its nineteenth year in the Ukrainian market and has acquired significant contacts in the Ukrainian political and business sphere; it has in our estimate a high degree of legitimacy.

In a regulatory environment, a firm with a high level of legitimacy would exploit all six of the possible relationships types. Firms with low levels of legitimacy even in regulatory environments will struggle because of the high degree of competition. Hence, their best course of action is to exchange information and be flexible for business opportunities. Both these cells in this analysis serve primarily as contrasts to the likely possibilities in a cognitive setting. High legitimacy in a cognitive setting allows for social capital build-up, continued information exchange and learning, stronger bonds based on continuity of a relationship and adaptability to ever changing conditions. This is the cell that best characterizes Cargill's current position in Ukraine. While cognitive environments are hard on organizations with high legitimacy, they can spell ruin for those with low levels. Firms in this position are best off exchanging information as a prelude to establishing trust and ascending the ladder of more relationships.

The dimensions of legitimacy for global firms operating in cognitive environments are a future path for research especially in countries like Ukraine and Russia. Some of the following questions could be addressed: How is legitimacy acquired in cognitive settings? How much legitimacy can a firm carry over as a result of its prestige to new settings? What are the best ways to exercise and build legitimacy? What are the ways that legitimacy erodes?

REFERENCES:

American Chamber of Commerce (2010). AmCham Ukraine. Retrieved from http://kievukraine.info/amcham.htm .

Becker, H.S. (1960). Notes on the concept of commitment. *American Journal of Sociology*, 6, 32-40.

Beverland, M., & Lindgreen, A. (2010). What makes a good case study? A positivist review of qualitative case research published in Industrial Marketing Management, 1971-2006. *Industrial Marketing Management*, 39: 56-63.

Brown, J.R., Lusch, R.F., &, Nicholson, C.Y. (1995). Power and relationship commitment: their impact on marketing channel member performance. *Journal of Retailing*, 71(4), 363-392.

Brouthers, K. & Bamossy, G. (1997). The role of key stakeholders in international joint venture negotiations: Case studies from Eastern Europe. *Journal of International Business Studies,* 28: 285-308.

Crane, K. & Larrabee, F.S. (2007). *Encouraging Trade and Foreign Direct Investment in Ukraine.* RAND: Santa Monica, CA.

D'Aveni, R.A. (1990). Top managerial prestige and organizational bankruptcy. *Organization Science*, 1: 121-142.

Eastern Economist Business Weekly (2001, Jan 29 – Feb 4). Cargill for stable climate. Retrieved from http://www.artukraine.com/commercial/cargill.htm.

Easton, G. (2010). Critical realism in case study research. *Industrial Marketing Management*, 30: 118-128.

Eisenhardt, K. (1989). Building theories from case study research. *Academy of Management Review,* 14(4): 532-550.

Fey, C.F. (1995). Success strategies for Russian-foreign joint ventures. *Business Horizons*, 38 (6): 49-54.

Holmlund, M. (1997). What are relationships in business networks? *Management Decision,* 35 (4): 304-310.

Johanson, J., & Vahle, J.E., (2009). The Uppsala internationalization process model revisited: From liability of foreignness to liability of outsidership. *Journal of International Business Studies*, 40: 1411-1431.

Johanson, M. (2008). Institutions, exchange and trust: A study of the Russian transition to a market economy. *Journal of International Management*, 14: 46-64.

Kostova, T., & Zaheer, S., (1999). Organizational legitimacy under conditions of complexity: the case of the multinational enterprise. Academy of Management Review 24 (1), 64–81.

Leek, S., Turnbull, P., & Naude, R. (2006). Classifying relationships across cultures as successful and problematic: Theoretical perspectives and managerial implications. *Industrial Marketing Management* 35(7), 892-900.

Luo, Y., Shenkar, O., & Nyaw, M., (2002). Mitigating liabilities of foreignness: defensive versus offensive approaches. *Journal of International Management* 8, 283–300.

Madhok, A. (2006). Revisiting multinational firms' tolerance for joint ventures: A trust-based approach. *Journal of International Business Studies*, 26. 117-137.

Mezias, J.M., (2002). How to identify liabilities of foreignness and assess their effects on multinational corporations. *Journal of International Management* 8, 265–282.

Meyer, J. P., & Allen, N. J. (1991). A three-component conceptualization of organizational commitment. *Human Resource Management Review*. 1, 61-89.

Moorman, C. Zaltman, G., & Deshpande, R. (1993). Factors affecting trust in market research relationships. *Journal of Marketing* 57(1) 81-101.

Olearchyk, R. (2005). Cargill expands sunflower business in Ukraine. The Kyiv Post, June 1. Retrieved from http://www.odessa-abc.com/article/38 .

Piekkari, R., Plakoyiannaki, E., & Welch, C. (2010). 'Good' case research in industrial marketing: Insights from research practice. *Industrial Marketing Management*. 39: 109-117.

Puffer, S.M. & McCarthy D.M. (2007). Can Russia's state-managed, network capitalism be competitive? Institutional pull versus institutional push. *Journal of World Business,* 42: 1-13.

Suchman, M. (1995). Managing legitimacy: Strategic and institutional approaches. *Academy of Management Review,* 20: 571-610.

Standifird, S.S. & Weinstein, M. (2002). Establishing legitimacy in emerging markets: An empirical comparison of the Warsaw, Budapest and Prague stock exchanges. *Journal of Comparative Policy Analysis: Research and Practice*. 4: 143-163.

Teas, R.K., & Sibley, S.D. (1980). An examination of the moderating effects of channel member firm size on perception of preferred channel linkages. *Journal of the Academy of Marketing Science* 8(3), 277-93.

White. S. and Linden, G. (2002) Organizational and industrial response to market liberalization: the interaction of pace, incentive and capacity to change*. Organization Studie*s 23:917-948.

Wilson, D. (1995). An integrated model of buyer-seller relationships. *Journal of the Academy of Marketing Science* 23(4), 335-45.

Yin, R.K. (2002). *Case Study Research, Design and Methods* 3rd ed. *Applied Social Research Methods Series* vol. 5. Thousand Oaks, CA. Sage Publications.

Zaheer, S., (1995). Overcoming the liability of foreignness. *Academy of Management Journal* 38 (2), 341–363.

THE LIFE CYCLE OF A PANDEMIC CRISIS: SARS IMPACT ON AIR TRAVEL

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ABSTRACT

This paper studies the effects of the SARS outbreak on air travel between the US and three destinations; China, Hong Kong and Taiwan. ARIMA models with interventions are used to estimate the timing, depth and shape of SARS impact on international air travel. Links between empirical findings and a conceptual framework for analyzing the life cycle of a crisis are established. The conceptual framework uses situational choice and governmental public relations differences by location to explain the response patterns to the crises. The research finds significant evidence that the impact and life cycle of SARS effect on air travel varies by location. Suggestions are offered for effective ways to minimize damage to tourism for future outbreaks of possible pandemics.

INTRODUCTION

The global tourism industry continues to struggle. Travel between the United States and Europe has been adversely affected by terrorist threats (Moss, Ryan, Moss 2008), global economic turmoil, pandemic outbreaks such SARS (Sudden Acute Respiratory Failure), and H1N1 flu. For example, 9/11 in the United States, the 2005 London bombings, the 2002 Passover attack in Israel, the 2004 train bombings in Madrid, Spain, and the war in Iraq have had major impacts on air travel and tourism to and from these regions; air travel to China and the much of the pacific-rim was disrupted by SARS pandemics in 2003 (Abdullah et al. 2004, Maggs 2003, Economist 2003). This research seeks to quantify the impact of SARS on air travel between the US and China, Hong Kong and Taiwan by modeling and estimating the life cycle (depth, shape, and duration) of the pandemics effect on air travel.

SARS first occurred in the Chinese province of Guangdong in November 2002. On March 15, 2003, the World Health Organization (WHO) issued the first travel advisory to Asia. On March 27, the WHO recommended screening departing passengers between the United States and China, Hong Kong and Taiwan. At about the same time, the WHO issued warning cards in airports with color coded alert levels. On May 8, the WHO started a program of infrared

screening of passengers at airports. Because of differences in control effort and response, the duration of SARS varied across locations, as shown in Table 1.

Table 1. Duration of SARS Epidemic and WHO Travel Alert			
	China	Hong Kong	Taiwan
First Case	11/16/2002	2/15/2003	2/25/2003
Last Case	6/18/2003	6/22/2003	7/3/2003
WHO Travel Alert Issued	4/2/2003	4/2/2003	5/8/2003
WHO Travel Alert Lifted	6/24/2003	6/23/2003	6/17/2003

The first confirmed case of air transmitted SARS occurred on a New York to Singapore flight March 14, 2003 (Wilder-Smith 2004). From March 17 to July 30, 2003, a total of 398 cases in the United States met clinical and epidemiologic SARS case criteria. The most common link was air travel (Schrag et. al. 2004). Worldwide there were more than 8,000 reported cases (Enserink 2003). As a result of SARS, world air travel dropped 2.6% in the first four months of 2003, in particular, air travel to Asia dropped as much as 68% (Abdullah et al. 2004).

Unlike governments of other affected nations, Chinese government initially tried to cover up SARS. The large death toll from SARS in China could be partly attributed to this 6-month denial. During the pandemic China eventually quarantined over 18,000 people, extended holidays, shut down public meeting places, and closed tourism agencies (Watts 2003, Chretien 2003).

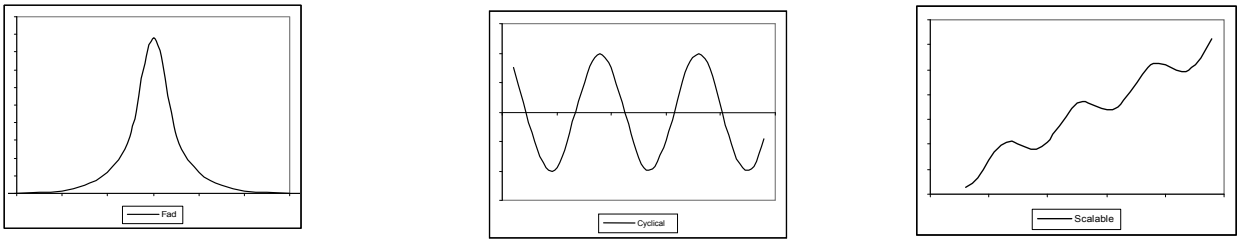
Fearing contacting the potentially fatal virus, tourists reduced their air travel. In this research the severity and the duration of this negative impact on air travel is quantified. Manning (2003) reported that the impact was not expected to be long lasting, while others have found evidence of permanent and long-term impact of events like SARS (Maggs 2003; Moss et al. 2008). , The conceptual literature on describing how the general public reacts to crises like SARS and the typical reaction patterns that are observed will be summarized in the next section.

CONCEPTUAL MODELS OF CRISIS REACTION

Several different frameworks have been proposed to model a business' or society's responses to crisis. Gonzalez-Herrero and Pratt (1996) postulated that the effect of a crisis on an organization follows one of three typical life cycle forms: scalable, cyclical or fad (see figure 1). The scalable form occurs when the effect of a crisis lasts over an extended period of time; the fad form in contrast reaches the apogee of the life cycle quickly and then falls off rapidly as there are no subsequent events to sustain the effect of a crisis. The third form is cyclical, depicting the impact of a crisis that oscillates over time. Gonzalez-Herrero and Pratt's crisis life cycles have been successfully applied to study catastrophic events affecting a specific company such as the McDonald's hot coffee spill case or the Exxon Valdez case. In this research Gonzales-Herrero

and Pratt's life cycle model is applied to a major pandemic and is used as a basis for analyzing the life cycle.

Figure 1. Three forms of the Crises Life Cycle



Interacting with the air traveler's decision making process is how information is received by the traveler. During a crisis, such as a pandemic, information is disseminated by governments and health agencies using public relations models. The practice of using public relations to promote travel and tourism after a crisis has significantly increased post 9/11.

Different portions of the public react differently to a crisis. A member of the public is classified as either passive or active. According to Grunig (1990) active publics seek out information, and also process passively gathered communication. Grunig proposes that in dealing with active publics only unsophisticated public relations practitioners would attempt to use mass media to influence the public's behavior (1990). When conflict occurs between organizations disseminating information and entities such as the news media publics are also more likely to make an issue out of the crisis intensifying the duration and depth of the crisis (Grunig 1993, 1995). On the other side appropriate organizational intervention can limit the growth of a crisis (Gonzalez-Herrero and Pratt, 1996). This would include identifying the active segment of the public and tailoring public relations as a two-way symmetrical information model to influence their behavior (Grunig, 1990).

Four basic models of public relations have been developed and are used by governments and agencies (Grunig, 1990). First is the agentry/publicity model (one directional flow) where positive information is released and negative information withheld in an attempt to lead the public. Second is public information model (one directional flow) where all information is released to the public. For these two models to operate in ethical manner the government must be able know what is best for public and assume that it has the right to change the public's behavior (Grunig 1993).

Third is the two-way asymmetrical model where information is not only released to the public but information is also gathered about the public and used to lead them. The fourth public relations model is two-way symmetrical where information flows both directions for mutual

decision making (Grunig & Hunt 1984, Grunig 1993). It has been shown that many governments use public relations models to attempt to influence the public's behavior (Grunig 1993). Grunig proposes that when practiced unethically these public relations can manipulate and deceive. Many of these public relations are international efforts by governments to promote travel and tourism. Most of these public relations programs are agentry/publicity or asymmetrical information models. Figure 2 depicts the inter-relationship between public relations, governments, publics, and the decision making process of the air traveler.

Grunig et al. (1995) found that Taiwan, while under martial law often employed the press/agentry and personnel influence models. The personnel influence model is when representatives of the organization use personnel favors or bribes to obtain desired outcomes. This behavior is often seen as unethical or boarder-line unethical. After martial law was lifted in Taiwan, the government became more open and the two-way symmetrical model became more common. In the United States, Grunig found that for government agencies the public information model was most common (Grunig, 1993, Grunig et. al, 1995).

In this research most air travelers are assumed to be "active" in terms of Grunig's situational theory (there is a problem, with varying levels of constraints, high level of personnel involvement with active and passive information processing). In terms of the situational choice model that would imply there are multiple destinations a travelers can select, multiple modes of transportation, or alternatively can select not to travel at all. This research also assumes that the traveler perceives there is a high level of risk of exposure to the pandemic if the pandemic's location is selected for travel.

This research will attempt to identify the form of the life cycle, depth, and duration for three locations affected by the SARS pandemic, China, Hong Kong, and Taiwan. Discussion of the different responses by the three governments and their impacts on the life cycle will follow.

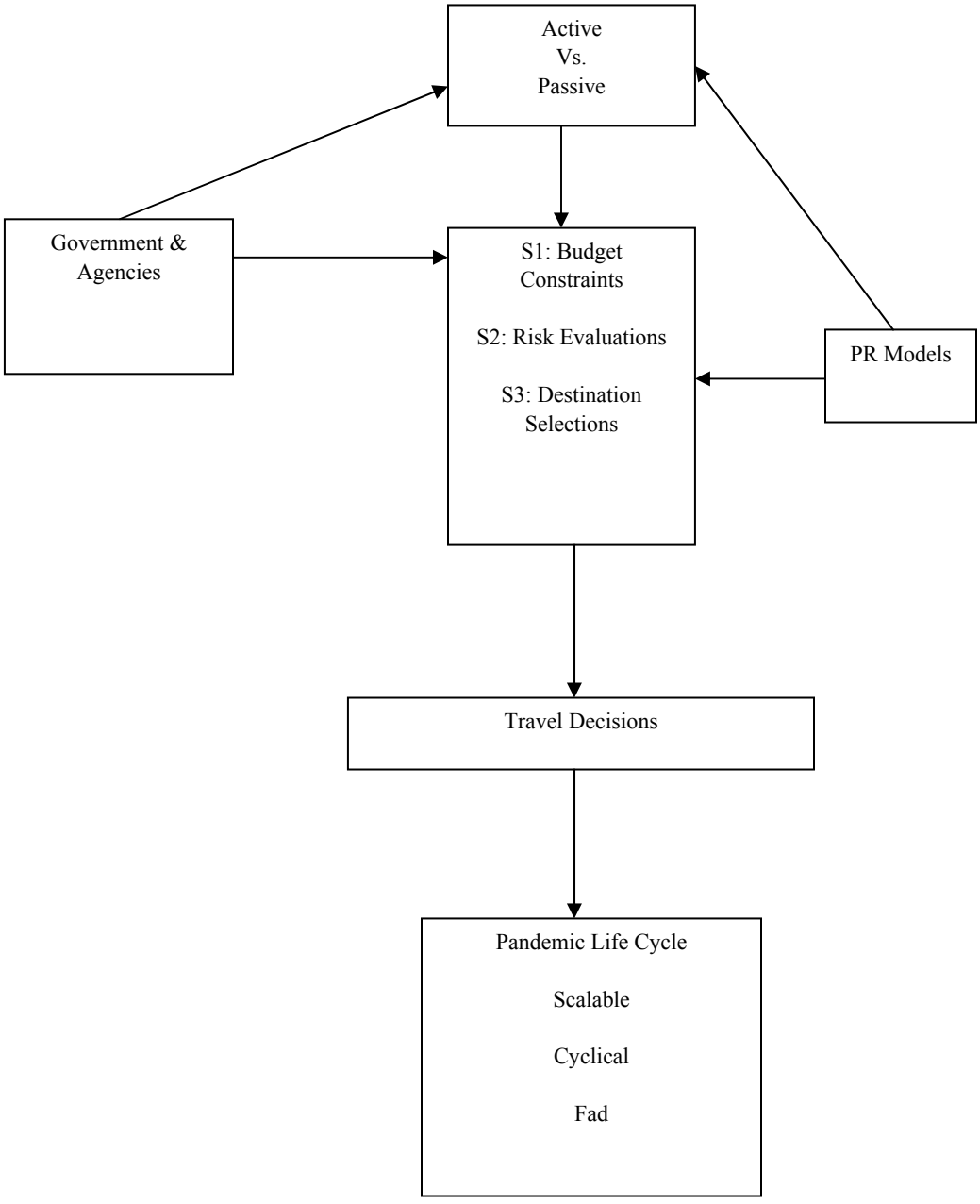
DATA

The data for this research was collected from two sources. Monthly passenger air traffic between the US and China, Taiwan and Hong Kong for the periods January 1990 through February 2008 was collected from the Research and Innovative Technology Administration coordinating the U.S. Department of Transportation Research Programs. Annual tourism air traffic and total air traffic between the US and China and Taiwan was collected from the U.S. Department of Commerce, Office of Travel and Tourism Industries for the periods 1996 through 2006. This second series is not currently available on a monthly basis or prior to 1996.

The time periods used for each series are determined by the availability of the data at the time of this research. The overall series lengths of approximately 18 years are more than adequate for modeling purposes. Seat capacity of flights going in either direction, in bound to the US or outbound from the US, is not a constraining factor. The minimum airplane seat occupancy

by month for the periods studied between all destinations studied was 37% and maximum seat occupancy was 84%. The average seat occupancy was 69% for the time periods studied.

Figure 2. Decision Making Process



For the periods when both tourist traffic and air passenger volume were available total tourist traffic was calculated as a percentage of direct flight passenger volume. Not all tourists fly directly between locations obscuring the true percentage of air passengers that are tourists and making it possible for tourism to be more than 100% of passenger volume. The data does indicate that tourism is a major component of air passenger volume between the locations studied.

TABLE 2. TOURISM AS A PERCENTAGE OF TOTAL AIR TRAFFIC

	HK+CN	TW
1996	103%	44%
1997	95%	48%
1998	92%	47%
1999	93%	47%
2000	86%	50%
2001	78%	48%
2002	81%	42%
2003	79%	41%
2004	82%	44%
2005	77%	42%
2006	69%	42%

METHODOLOGY

Monthly international air travel volume is usually highly seasonal. For example, Figure 3 (see results below) shows the monthly travel volume from China to the US. The travel volume repeats a similar pattern each year, it is low in the beginning of the year, reaches its peak around summer time, and drops to the lowest at the end of the year. Travel volume in a particular month is also highly correlated with that in the previous month. Multiplicative Autoregressive Integrated Moving Average (ARIMA) models provide a parsimonious method to model seasonal time series (Box and Jenkins, 1976). In this study multiplicative ARIMA models with dummy variables of the form of Equation (1) are identified for each time series.

$$Y_t = \sum_{i=1}^{k} \omega_i d_{it} + \frac{(1-\theta_1 B)(1-\theta_{12} B^{12})}{(1-B)(1-B^{12})} \varepsilon_t, \qquad (1)$$

All the series studied in this paper exhibit increasing variability as travel volume increases over time. In order to achieve constant variance, a log transformation of the original travel volume is necessary. In Equation 1, Y_t is the logarithm of the original series, B is the

"backshift operator" defined as $B^i Y_t = Y_{t-i}$. The dummy variables (d_{it}) are used to model possible intervention effects, i.e., d_{it}=1 when an intervention event occurs, 0 otherwise. The noise term ε_t is assumed to be normally distributed with mean zero and constant variance σ. All the series also show trend over time. In order to transform the data to stationary series, differences of orders 1 and 12 are taken by using the differencing term $(1-B)(1-B^{12})$. The seasonal correlations are modeled with the MA term $(1-\theta_1 B)(1-\theta_{12} B^{12})$.

Although the main focus in this study is the SARS effect, during the period of study, there are other events, such as 9/11 terrorist attack, that could affect air travel between US and Hong Kong, Taiwan and mainland China. These events must be considered in order to model the time series accurately. To estimates these intervention effects, in the initial fitting of the ARIMA models, two intervention events, the 9/11 terrorist attacks and the SARS outbreak are considered. Accordingly, d_{it}=1 when t=141, 142 (September and October of 2001 to test for possible effects of the 9/11 terrorist attacks), and t=160, 161, 162, 163 (April 2003-July 2003 to test for possible effects of the SARS outbreak). These events are tested for significance in the model.

In order to estimate the intervention effects a methodology similar to the method adopted by Moss et al. (2008) is used. In this method an ARIMA model with the intervention events of interest is estimated using the whole series. The estimated model is then used to forecast the original time series. Actual observations are used for the values of the lags in the model before the occurrence of SARS intervention. Beyond the occurrence of the SARS intervention, travel volume is estimated without SARS effects, and using forecasts for the values of the lags. By using this methodology it is possible to estimate the value of the time series under "normal" condition, i.e., assuming SARS had not occurred. Subsequently, the effect of intervention can be calculated as the difference between the actual values of the time series and the forecasts under "normal" condition. The difference can be graphed over time showing the shape, duration, and depth of the intervention. In addition to SARS, this study identified several other events that affected air travel significantly, such as 9/11 attacks. However, since the main focus in this paper is SARS, the effects of these events are estimated in the model but not studied in details using the above methodology.

RESULTS

This study shows that SARS has a significant impact on the travel volume from the United State to China, which is evident from the highly significant dummy variables for April 2003 to July 2003 (ω_1 - ω_4 in Table 3 below). An interesting finding is that the two dummy variables for the 9/11 attack are not statistically significant, as a result the two corresponding dummy variables are dropped from the model. One possible explanation is the lack of elasticity of the travel demand. The travel between US and China are under strict control, for example,

these two countries did not fully open tourist markets to each other until recently. As a result, most travel between the US and China required significant lead time and effort to arrange. Canceling a trip could mean substantial delays in rebooking or permanent cancellation of the trip. In the face of these consequences, travelers are less likely to re-arrange, or give up, their travel plans between the US and China.

Further analysis of the series reveals an unusual drop in travel volume at t=73 (January 1996) and an increase at t=77 (May 1996). To account for these changes two dummy variables are added and the model is re-estimated. These variables are statistically significant (ω_5 = January, 1996 and ω_6 = May, 1996, shown in Table 1). 1996 was an election year in Taiwan.

Then-president of Taiwan Lee Teng-Hui was seeking a second term. Lee strongly supported the secession of Taiwan from China. The Chinese government took a series of actions trying to send a message to Taiwanese voters that voting for Lee meant war. These actions included large-scale military exercises, and sending ballistic missiles 25-35 miles off Taiwan. The US responded by deploying two aircraft carrier groups to the area. This is the "1996 Taiwan Straits Crisis" (Ross, 2000). Lee won the election in March 1996 and the crisis ended peacefully, that partially explains the subsequent bounce back of travel volume in May 1996.

Table 3. Parameter Estimates US to China

Parameters	θ_1	θ_{12}	ω_1	ω_2	ω_3	ω_4	ω_5	ω_6
Dates			04/03	05/03	06/03	07/03	01/96	05/96
Estimates	.297	.735	-1.154	-1.826	-1.218	-.415	-.543	.429
Std. Err.	.065	.046	0.142	.143	.143	.142	.139	.139

The estimated and actual air travel volumes from US to China are plotted in Figure 3 below. Overall, the ARIMA model estimates the travel volume very accurately. The resulting R^2 is 0.841. Since Model (1) performs similarly when applied to the other time-series, similar plots will not be given in the subsequent analyses in order to save space.

The Ljung-Box Q test is used to test the randomness of the residuals. With 20 lags the p-value is 0.7026, which indicate the residuals follow approximately a white noise process. The sample autocorrelation function and partial autocorrelation function also indicate the residuals are free of serial correlation. The same procedures are used to test the model adequacy for all the series and similar results are obtained, the details are omitted to save space.

The forecast assuming no intervention effect from SARS is plotted with the observed travel volume in Figure 4. The difference between the observed travel volume and the forecast is plotted in Figure 5.

The data show that typically the peak of travel is reached around June each year. From the forecast plot above, it can be observed that SARS effect on air travel volume started in April 2003, reached its peak effect in May, started to decrease in June, and travel fully recovered

roughly in October. The maximum deviation between the forecast and the actual observation is 35,541(June 2003). From the deviation plot below, it can be observed that the effect of SARS reached its peak within 2 months (April and May), then returned to its normal level relatively quickly, this is consistent with the fad form of the crisis life cycle.

Figure 3. US to China Air Passengers Actual & Estimated

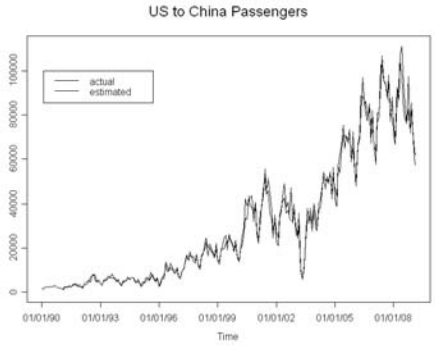


Figure 4. Actual & Estimated Air Travel w/o SARS Effect, US to China Air Travel

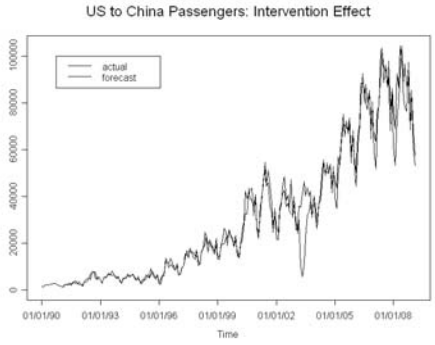
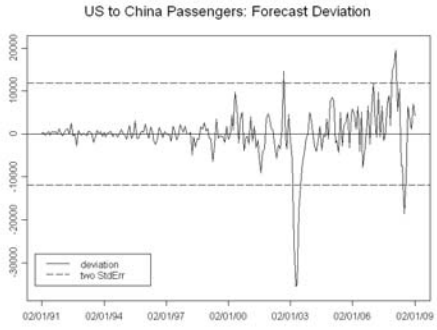


Figure 5. SARS Intervention, US to China Air Travel.

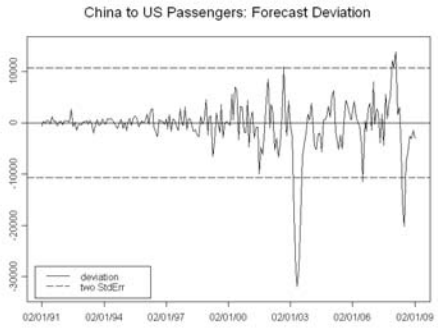


For air travel from China to the United States three dummy variables are included for interventions in the model: the 1996 Taiwan Strait crisis, the 9-11 attack, and the SARS epidemic. More specifically, d_{it} =1, for *t*=3/1996, 5/1996, 9/2001, 10/2001, 4/2003-7/2003. The estimation results show that 1996 Taiwan Straits Crisis caused the air travel to drop (ω_5 in Table 4). The SARS effects are again found to be highly significant (ω_1 - ω_4 in Table 4). The resulting R^2 is 0.843. Intervention from SARS is shown in figure 6.

Table 4. Parameter Estimates, China to the United States.

Parameters	θ_1	θ_{12}	ω_1	ω_2	ω_3	ω_4	ω_5
Dates			04/03	05/03	06/03	07/03	01/96
Estimates	.361	.706	-.509	-1.271	-1.173	-.649	-.367
Std. Err.	.063	.048	.131	.132	.132	.131	.128

Figure 6. SARS Intervention, China to US Air Travel



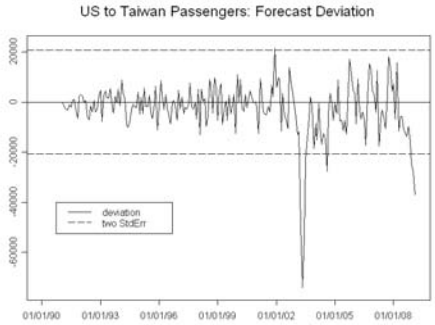
The SARS effect on China to US air travel behaves similarly to those on air travel from US to China. More specifically, due to SARS, travel volume started to drop in April 2003, reached the bottom in May, started to recover in June, and recovered around October. The maximum deviation between the forecast and the observation is 31,978 (June 2003). The overall pattern of the SARS effect is consistent with the fad form of the crisis life cycle.

To model the air travel volume from US to Taiwan, the following events are included in the initial model: the 1996 Taiwan Strait Crisis, the 9-11 attack, and SARS. Specifically, d_{it} =1, for t=1/1996, 9/2001, 10/2001, 4/2003-7/2003. All these effects, except 7/2003, are significant and negative. Among these events, SARS has the largest impact (ω_1 to ω_3 in Table 5), while the 9/11 intervention effect (ω_4 and ω_5) and the 1996 Crisis effect (ω_6) are smaller than the SARS intervention effect. The resulting R^2 is 0.889.

Table 5. Parameter Estimates, United States to Taiwan.								
Parameters	θ_1	θ_{12}	ω_1	ω_2	ω_3	ω_4	ω_5	ω_6
Dates			04/03	05/03	06/03	09//01	10/01	01/96
Estimates	.261	.621	-.491	-.957	-.472	-.218	-.222	-.179
Std. Err.	.066	.053	.072	.072	.072	.072	.072	.071

From the SARS intervention plot (Figure 7), the intervention effect of SARS is clearly evident. The maximum deviation between the forecast assuming normal condition and the observed values is 74,147 (May 2003). The SARS effect shows a pattern similar to the fad form of life cycle.

Figure 7. SARS Intervention, US to Taiwan Air Travel



For air travel from Taiwan to the US, the events considered initially are: the 1996 Taiwan Strait Crisis (1/2003), the 9-11 attack (9/2001 and 10/2001), and SARS (4/2003-7/2003). Dummy variables are included in the model to account for these effects. After the initial fitting of the model, the 1996 crisis is found statistically insignificant. Additionally, Sept. 2001 is found insignificant, while Oct. 2001 (ω_5 in Table 6) is marginally significant, which shows a lag in the response to the attack in Taiwan. The SARS effects are again highly significant (ω_1 to ω_4 in Table 6). The resulting R^2 is 0.806.

Table 6. Parameter Estimates, Taiwan to the United States							
Parameters	θ_1	θ_{12}	ω_1	ω_2	ω_3	ω_4	ω_5
Dates			04/03	05/03	06/03	07/03	10/01
Estimates	.418	.756	-.463	-.816	-.677	-.241	-.216
Std. Err.	.062	.044	.119	.121	.121	.119	.115

Figure 8. SARS Intervention, Taiwan to US Air Travel

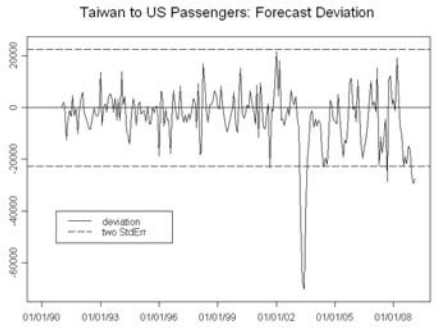


Figure 8 shows that the travel volume started to drop in April 2003 due to SARS, the effect reached its peak in June 2003, and the travel volume returned to the normal level around August 2003. This is consistent with the fad pattern. The maximum forecast deviation is 70,319 (June 2003).

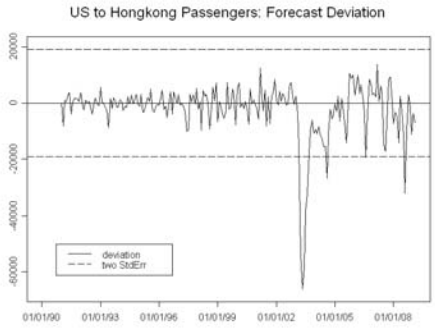
For air travel from US to Hong Kong, the 1996 Taiwan Strait Crisis, the 9-11 attack, and SARS are considered in the initial model, with d_{it} =1 for *t*=1/1996, 9/2001, 10/2001, 4/2003-7/2003, respectively. After the initial fitting, the 1996 crisis was again found insignificant and the dummy variable is dropped from the model. Air travel between US and Hong Kong is affected significantly by the 9/11 terrorist attack, which is evident from figure 9 and the highly significant intervention variables (ω_1 and ω_2 in Table 7). The resulting R^2 is 0.913.

Table 7. Parameter Estimates, United States to Hong Kong

Parameters	θ_1	θ_{12}	ω_1	ω_2	ω_3	ω_4	ω_5	ω_6
Dates			09/01	10/01	04/03	05/03	06/03	07/03
Estimates	.252	.758	-.309	-.383	-1.523	-2.122	-1.101	-.308
Std. Err.	.066	.044	.085	.085	.086	.086	.086	.086

Figure 9 shows that air travel from the US to Hong Kong dropped significantly after the 9/11 attack. This study shows the travel volume has not fully recovered from the 9/11 impact when SARS occurred in early 2003. SARS caused a larger drop in travel volume, however its effect lasted shorter than 9/11. SARS caused travel volume to drop in April 2003, bottomed in May, and returned to the pre-SARS level around September 2003. The maximum deviation is 66,023 (May 2003). On the other hand, it took a few years for the air travel between Hong Kong and US to recover after 9/11. The SARS intervention on air travel between Hong Kong and the US is much deeper and longer lasting than between the US and China or Taiwan exhibiting characteristics of a scalable life cycle.

Figure 9. SARS Intervention, US to Hong Kong Air Travel

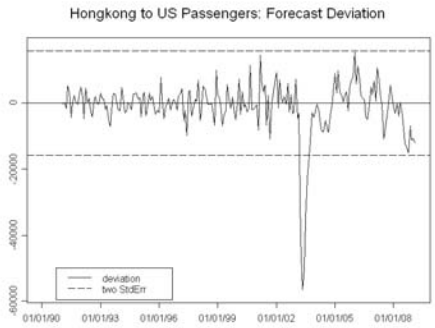


For air travel volume from Hong Kong to the US, the 1996 Taiwan Strait Crisis, (1/1996), the 9/11 attack (9/2001, 10/2001) and SARS (4/2003-7/2003) are considered in the model initially, and dummy variables are included in the model correspondingly. The 1996 crisis does not have a significant effect on the travel volume, and the dummy variable is dropped from equation 1. The other two events are found to have significant negative effects on travel from Hong Kong to US. The resulting R^2 is 0.894. The parameter estimates are summarized in Table 8.

Table 8. Parameter Estimates, Hong Kong to United States

Parameters	θ_1	θ_{12}	ω_1	ω_2	ω_3	ω_4	ω_5	ω_6
Dates			09/01	10/01	04/03	05/03	06/03	07/03
Estimates	.426	.937	-.233	-.359	-.942	-2.001	-1.193	-.351
Std. Err.	0.067	.046	.077	.077	.078	.079	.079	.078

Figure 10. SARS Intervention, Hong Kong to US Air Travel



Figures 10 shows that the effects of 9/11 attack and SARS on air travel from Hong Kong to the US are similar to those in the previous US to Hong Kong case. The impact of the 9/11 attack is longer-lasting than that of SARS, but both effects are consistent with the scalable life cycle. The maximum deviation is 56,466 (May 2003).

CONCLUSIONS

This research analyzes the effect on air travel of a potential pandemic, specifically the SARS virus. One of the main risks of mass transmission of this type of pandemic is thought to be international air travel (Hollingsworth et al. 2007). The findings indicate that the pandemic scare had a significant impact on air travel between the US and China, Hong Kong and Taiwan. However by using Gonzalez-Herrero and Pratt's (1996) life cycles of a crisis the research concludes that the form of the life cycle is differs by location.

A model integrating situational-choice and governmental use of public relations is proposed to explain the different life cycles. Knowing there is a potential pandemic the air traveler can choose not to fly or delay travel for varying lengths of time. The number of travelers affected and the length of the effect from the life cycle. This research proposes the traveler is actively seeking information about the pandemic prior to travel. A large portion of this information is disseminated by governments and governmental agencies using public relations models. The air traveler then must evaluate if the information received is adequate and can be trusted to evaluate risks. Next the theory proposes that there are varying degrees of control over the decisions made by the air travelers. If the travelers have little control over their travel plans then the information and risks concerning the pandemic will have a lesser effect on overall air travel to that location changing the shape of the life cycle.

In the case of Taiwan, as with all the locations, situational-choice model proposes the pandemic posses a high degree of risk to many of the air travelers. The Taiwanese government historically operates under a two-way symmetrical public relations model. As proposed by Grunig (1993, 1995), this is the optimal public relations model to utilize under a crisis. This gives the air traveler all available information and the government works with the public to insure the best outcomes. Air travelers to or from Taiwan also have a high degree of control over the decision of when or if to travel by air. Under these conditions the results show the impact of SARS on air travel was relatively short lived following a fad life cycle. This is shown in Table 9 by the short duration and smaller intervention in percentage of base travelers.

In the case of mainland China the government uses a press-agentry model of public relations. An aware public knows the government is not likely to release all relevant information to the public. The government may be acting in its own interest at the expense of the air travelers. In the early stages of SARS the Chinese government covered up the event altogether, consistent with the press-agentry model. Air travel to and from China during the time of the SARS outbreak was heavily regulated by the Chinese government. The travelers had little

control regarding the decision when or if to fly. In this case the impact of the potential pandemic is again smaller in percentage terms than Hong Kong but has a longer life cycle than Taiwan. The longer life cycle can be attributed to the initial denials by the Chinese Government and subsequent releases of information over time that fueled the crisis and extended the duration.

Table 9. Summary of SARS Interventions

	UStoCN	CNtoUS	UStoTW	TWtoUS	UStoHK	HKtoUS
2002	430,357	438,118	1,094,547	1,093,946	691,492	698,472
SARS	35,541	31,978	74,147	70,319	66,023	56,466
SARS%	8%	7%	7%	6%	10%	8%
Months	7	7	4	4	8	7

In the case of Hong Kong the Chinese government uses the same public relations model, press-agentry, however the air traveler has a high degree of control regarding the travel decision. In this combination the air traveler has control and unreliable information regarding a threat that may pose a high degree of risk. This creates the most severe and long lasting reaction to the potential threat. Hong Kong's SARS reaction more closely follows a scalable life cycle.

This research can offer suggestions for future outbreaks of potential pandemics such as swine flu. In the case of SARS after the fact it was shown that airport screening detected no positive cases (St. John et al. 2005). Masks provided questionable protection from the SARS virus. What does work to prevent spreading the virus across countries is limiting air travel until the pandemic is controlled. This can be a relatively short term event. A two-way symmetrical public relations campaign, as used by Taiwan, while giving the traveler a high degree of control has shown to result in an immediate but short lived drop in air travel.

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REFERENCES

Abdulla, A., G. Thomas, S. McGhee & D. Morisky (2004). Impact of Severe Acute Respiratory Syndrome (SARS) on Travel and Population Mobility: Implications for Travel Medicine Practitioners. *Journal of Travel Medicine*, 11(2), 107-111.

Box, G.E.P. and G.M. Jenkins (1976). Time Series Analysis: Forecasting and Control. Holden-Day, Oakland, 1st ed.

Chretian, J. (2003). Is China doing enough in the global fight against SARS?. *Maclean's*, 16(16), 16-19.

Economist (2003). Epidemics and economics. *Economist*, 367(8319), 69.

Enserink, M. (2003). SARS: A Pandemic Prevented. *Science*, 302(5653), 2045.

Fall, L.T. (2004). The increasing role of public relations as a crisis management function: An empirical examination of communication restrategising efforts among destination organization managers in the wake of 11th September, 2001. *Journal of Vacation Marketing*, 10(3), 238-253.

Gonzalez-Herrero, A. & C. B. Pratt (1996). An Integrated Symmetrical Model for Crises-Communications Management. *Journal of Public Relations Research*, 8(2) 79-105.

Grunig, J. E. (1990). Theory and Practice of Interactive Media Relations. *Public Relations Quarterly*, 35(3), 18-24.

Grunig, J. E. (1993). Public relations and international affairs: Effects, ethics and responsibility. *Journal of International Affairs*, 47(1), 137-163.

Grunig, J. E., L. Grunig, K. Sriramesh, Y. Huang & A. Lyra (1995). Models of Public Relations in an International Setting. *Journal of Public Relations Research*, 7(3), 163-186.

Hollingsworth, T., N. Ferguson & R. Anderson (2007). Frequent Travelers and Rate of Spread of Epidemics. *Emerging Infectious Deseases*, 13(9), 1288-1294.

Maggs, J. (2003). Ripple Effects from SARS. *National Journal*, 35(18), 1392-1393.

Manning, A. (2003, May 25). Travel Advisories for SARS are over – for now. *USA Today*, 8d.

Moss, S., C. Ryan & J. Moss (2008). The Life Cycle of a Terrorism Crisis: Impact on Tourist Travel. *Tourism Analysis*, 13, 33-41.

Ross, R. S., (2000). The 1995-1996 Taiwan Strait Confrontation: Coercion, Credibility, and Use of Force. *International Security*, 25(2), 87-123.

Schrag, S. et. al. (2004). SARS Surveillance during Emergency Public Health Response, United States, March-July 2003. *Emerging Infectious Deseases*, 10(2), 185-194.

St. John, R., A. King, D. Jong, M. Bodie-Collins, S. Squires & T. Tam (2005). Border Screening for SARS. *Emerging Infectious Deseases*, 11(1), 6-10.

Watts, J. (2003). China takes drastic action over SARS threat. *Lancet*, 361(9370), 1708-1709.

Wilder-Smith, A. (2004). A Case of In-flight Transmission of Severe Acute Respiratory Syndrome (SARS). *Journal of Travel Medicine*, 11(2), 130-131.

IMPACT OF APPLYING HUMAN RESOURCE MANAGEMENT PRACTICES ON EQUITIZED STATE-OWNED ENTERPRISES' FINANCIAL PERFORMANCE IN VIETNAM

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ABSTRACT

Vietnam has become one of the fastest growing economies. The economic renovation policy initiated in 1986, aims to transform Vietnam into a market oriented economy. The economic renovation has created profound changes for enterprises, making human resource management (HRM) a vital matter. One of the most important aims set up by the State has been to restructure the state-owned enterprises (SOEs) through equitization processes. The State believes that equitized state owned enterprises (ESOEs) will contribute to Vietnam's economic growth since ESOEs have been applying management practices utilized in developed countries. This paper focuses on HRM practices, and proposes a relationship between these practices and ESOEs' financial performance.

INTRODUCTION

Vietnam started a profound economic reform in 1986 that aimed to transform the country from a command economy into market oriented economy. From the early days of the economic reform, economic structure reforms and open-door policies have become an integral part of overall economics (World Bank, 1999). As a consequence, Vietnam has substantially elevated its economy and the living standards of Vietnamese people. The country reaped average economic growth rate (GDP) of over 7% during the 1990s and early 2000s, especially more than 8% in 2006, which made it one of the highest growing economies in the World (World Bank, 2006).

These reforms have been occurring in both the public and private sector. In the public sector, one of the most important aims of the State has been to restructure the state-owned enterprises (SOEs) through equitization (privatization) process. This process was initiated in 1992 with the statement of sales of SOEs to the public (Quang & Dung, 1998). This effort can be regarded as one that would convert un-profitable SOEs into more dynamic, fast growing private enterprises, injected with a stronger entrepreneurial spirit (Henrik, 2005).

It is worth noting that Vietnam had about 12,000 SOEs at the outset of its economic reforms; however, financial performance of these SOEs lagged since they lacked incentives to be

more efficient and profitable (Vu, 2004). In addition, they utilized a disproportionate level of the country's limited resources, holding approximately 75% of the country's assets, employing 30% of the labor force, and earning 85% of available bank credit; yet, contributing only 40% to the country's GDP (Nguyen, 1995).

The reasons for un-profitability and inefficiency of SOEs are innumerable, but mainly from SOEs management mechanism. This kind of mechanism, largely influenced by the subsidy system, did not motivate managers to be more responsible and open minded as actually practiced in a market economy. Specifically, there was no impetus to utilize business management methods, such as marketing, financial, or human resource management, to improve enterprise financial performance, because managers were not seriously appraised by enterprise results, and employees were not motivated to conduct their work well.

The equitization program has been successful in transforming a significant number of SOEs into equitized SOEs (ESOEs), and the Vietnamese government hopes that these ESOEs will operate their business activities under market conditions, and perform better than their former SOEs. It has been argued that what makes an enterprise effective is not only its financial resource, which ESOEs in Vietnam can manage to have but also important intangible assets such as human resource (Quang & Dung, 1998). Indeed, evidence has shown that economic development is positively related to investment in human capital (Torrington & Huat, 1994). Thus, ESOEs have recently begun to apply HRM practices, ubiquitous in the developed countries, in order to improve their financial performance. This study focuses on theoretically analyzing the effects of certain human resource management practices applied by ESOEs, such as human resource planning, compensation, training, performance appraisal, and recruitment and selection, on enterprise financial performance. More specifically, the objectives of this study are two-fold:

To examine how well are certain human resource management practices applied into ESOEs; and

What effects, if any, do these human resource management practices have on ESOEs financial performance?

BACKGROUND

Equitization is viewed as one of the primary approaches to reforming SOEs in Vietnam. Equitization can be conducted based on the following four forms (MPDF, 1999): (1) retaining state shares intact while selling new shares; (2) selling a given proportion of the existent state shares; (3) detaching and then selling parts of an SOE; and (4) selling off all state shares to workers and private shareholders.

In many countries, equitization has played an important role in setting up private property rights. In Vietnam, the situation is somewhat different due to the fact that there had been a private sector prior to 1998 when the equitization program was aimed at being speeded up. Hence, equitization can also be considered as a means in order to significantly change both the structure of ownership and the firm management mechanisms.

It should be noted that 2,220 SOEs were equitized at the end of 2004. Such enterprises accounted for approximately 40% of the total number of SOEs and owned about 8.2% of all SOEs' total state capital (Le, 2004). It is projected that equitization will be completed by 2010. By that time only about 1,200 SOEs will be completely owned by the state. Over the next year, About 1,460 SOEs will be equitized and among them are a number of large enterprises.

Although there are still many shortcomings pertaining to the equitization process, there are enough reasons for optimism if equitization is placed in the broader context of SOEs reform and private sector development. Firstly, equitization is likely to make favorable conditions for poorly performing firms to mobilize social and financial resources to work better in a new environment after being equitized. Although equitization is partial, gradual, and incomplete, it is still more efficient than 100% public ownership (Fredrik, 2006). According to statistics, ESOEs' chartered capital has significantly increased by 44%, revenue by 23.6%, employees' income by 12%, and dividend yield is 17.11% (Fredrik, 2006). In addition, a nation-wide survey of 261 ESOEs conducted by the Central Institute of Economic Management (CIEM) in 2002 revealed that equitization has had significantly positive effects on the overall performance, financial status, and restructuring of most enterprises. For example, 93% of firms reported that their financial performance improved after equitization.

The reasons for the positive results can be influenced by autonomy, incentives and corporate management. With incentives such as profit sharing, the new owners should be more inclined than the old to pursue efficiency, entrepreneurial opportunity and profits. Additionally, with the SOE constraints on wages being lifted, it is very likely for managers to attract high quality employees and to utilize performance based salary scales to motivate existing employees to effectively and efficiently perform their jobs.

Indeed, the autonomy that comes with equitization means that managers are freed to pursue efficiency, devote their time to things that really matter, which may result in improved performance. It is obvious that there is a relationship between autonomy and corporate governance that can be manifested via asking "who makes which decisions". In this regard, a new cadre of managers has emerged with a dynamic business spirit characterized by the ability of management in efforts to minimize threats and take advantage of opportunities as a consequence of the open-door policy. Managers in ESOEs have no longer to comply with orders coming down from the bureaucratic hierarchical management system, and they have much more room to exercise their own leadership and management competencies. In addition, they are more responsible for decisions they make in terms of firm outcomes, thus making substantial contribution to the performance of firms after equitization.

It is contended that although ESOEs were born via the equitization program, they play a pivotal role in Vietnam's economic growth rate in the coming years, and the success of ESOEs is expected to depend in part on how well managers of ESOEs govern two kinds of the firm resources, namely financial resources and human resources. This study focuses on the latter, and investigates what effects, if any, does the application of certain human resource management practices have on financial performance of ESOEs.

HUMAN RESOURCE MANAGEMENT PRACTICES AND FINANCIAL PERFORMANCE

Human Resource Planning

Little research has been done regarding human resource management practices in Vietnam. This is not surprising in a country where research is still virgin territory, especially in management (Ken, 2001). However, a number of studies exist that concentrate on the challenges of doing business (Von & Clarke, 1995), managers' work values (Ralston et al., 1999), and the examination of economic and investment environment (Kim, 1996; Scown, 1997; Venard, 1998). These scant studies reveal that one of the basic reasons that contributed to the defeat of SOEs is the absence of human resource planning. Thus, it can be expected that ESOEs will implement human resource planning practices in order to provide adequate and competent human capital for better firm performance.

For all enterprises, human resource planning is extremely important because it enables the organization to define and address the overriding people related issues in a meaningful, actionable way (Baird & Meschoulam, 1988). With increased emphasis on productivity, quality, and service, firms now recognize that attention to the financial and technological side of business must be balanced by attention paid to planning human resources (Walker, 2002). Human resource planning ensures that enterprises will have the right people with the right skills and in the right numbers, organized appropriately, and managed effectively (Greer et al., 1989; Schuler, 1989; Mills, 1985).

In addition, it is argued that the merger between strategic and human resource planning, concentrated on customer–employee ties, provides businesses with both strategic and organizational capability which cannot easily be imitated by rivals (Brush & Ruse, 2004). This is likely to generate unity between customers and employees. It also furnishes business with processes to set up strategies and appraise business needs, and to utilize resources to carry out those strategies. It brings about closed links between strategic and human resource planning aimed at generating the synergy and unique expertise of each party needed in the planning process. Finally, it brings about competitive advantage via collaboration, and improves firm financial performance (Ulrich, 2002). Given the fact that ESOEs are making efforts to plan their

human resources, and that research suggests a variety of benefits deriving from human resource planning; therefore it is proposed:

Proposition 1 - There is a significantly positive relationship between human resource planning and financial performance in ESOEs.

Compensation – Pay for Performance

During the time of centrally planned economy, all SOEs budgets were subsidized by the State. The State also played the role of the sole supplier and the biggest customer of SOEs. Production targets were assigned by the State and all the products had to be delivered back to the State for distribution. Under this system, SOEs did not have to pay attention to customer satisfaction and would only have little concern for business management. The employees and managers of SOEs seemed to avoid their duties by only limiting to what the centrally planned economy system required them to do. SOEs managers and employees were not motivated to perform their tasks due to the fact that no matter what different efforts and performance they made, they were paid the same, which destroyed their working morale. With the transformation of SOEs into ESOEs, it is strongly expected that ESOEs will apply the performance based pay philosophy, which has been overwhelming in firms in the developed economies, so as to inspire enthusiasm, efficiency, and productivity into their human resource capital.

The performance based pay consists of a set of practices that links rewards and bonuses to job performance. Traditionally, staffs are rewarded based on the amount of products they produce, with stock options where rewards are linked to shareholder value, commissions and bonuses, and profit or gain sharing (Rowley, 2003). The pay for performance has been theoretically and empirically supported, regarding the powerful impact it can have on job performance and, ultimately, the competitive advantage of a company. Economic theories, especially expectancy and agency theory, contend that people are inspired to work if they know that their performance is noted and rewarded (Vroom, 1964).

Empirically, research has shown that profit sharing has a positive effect on the financial performance of large firms in manufacturing, construction, and retailing industries (Bhargava, 1994); profit sharing has also been shown to have a positive effect on labor productivity in U.K. engineering firms (Cable & Wilson, 1990); and a negative effect on absenteeism and turnover (Wilson & Peel, 1991). Furthermore, a study of 400 UK and 100 American companies revealed that those using performance based philosophy pay resulted in more than twice the shareholder returns on average than those without (The economist, 1998). In the same vein, Luthans et al. (2001) observed that each dollar of incentive pay brought about a gain of approximately $2.34.

However, there are also studies eliciting the drawbacks of such pay systems. Some have indicated that pay for performance has some moral and practical problems (Kohn, 1993). Firstly, it is considered morally flawed due to the fact that it requires one person to control another.

Secondly, it is viewed as practically wrong due to the fact that pay for performance is very likely to harm productivity (Milkovic & Newman, 2003). Furthermore, the success of performance based pay philosophy is, in a broader context, dependent upon many exogenous variables, such as culture. For example, multinational companies should take culture into account when designing compensation strategies (Gomez-Mejia, 2002), especially CEO compensation (Tosi & Greckhamer, 2004).

While results are inconclusive, a significant number of studies support positive impacts of performance based compensation on firm performance. Therefore, we propose:

Proposition 2 - There is a significantly positive relationship between performance based compensation and financial performance in ESOEs.

Training

Human factor is the biggest bottle-neck to Vietnam's economic development. In spite of the fact that the educational system in Vietnam has made significant contribution to the generation of a competent workforce, good management skills are still scant that prevents Vietnam from its economic rejuvenation. It is criticized that universities and training institutes in Vietnam are not really successful in meeting the demand for technical and managerial skills.

According to a recent report in the Vietnam Economics News (1999), in spite of an increasing demand for professions in fields like architecture, marketing, accounting, finance, foreign languages, and computer science, universities and training institutes have lagged to disseminate these disciplines. Some universities are starting to respond to the challenges by focusing on business education, but are unable to fulfill the demand.

Economic reforms and the effects of utilizing new technologies have further enlarged the gap in managerial know-how. In the earlier period of economic reform, it was expected to observe the shortages in managerial skills necessary to interact with foreign firms, improve financial management, and upgrade computer and technical capacities. The failure to handle these issues in the years to come may hinder economic reforms.

Given the critical role of training in providing managers and employees with the technical and managerial skills required, the Vietnamese government has introduced the VND119.4 billion dollar program to assist human resource training for small and medium-sized enterprises, including a significant number of ESOEs (Decision 143/2004/QD-TTg, 2004), for the 2004-2010 period. The decision originates from the fact that human resources are viewed as one of the primary weakest points embedded in small and medium-sized enterprises which are a vital ingredient of Vietnam's socioeconomic development planning.

The program is scheduled into two stages. The first (2004-2008) would conduct surveys on the specific needs of small and medium-sized enterprises for human resource training, and would organize seminars and experience exchanges with both local and foreign organizations to

improve the firm performance. The second stage (2008-20010) is expected to involve a variety of training efforts for the development of the necessary skills on administration, marketing, finance, accounting, technology, and human resources.

Research has strongly suggested that training is related to organizational-level outcomes (Kozlowski et al., 2000). It should be noted that a variety of models found in the strategic human resource management literature are utilized to explicate how training is likely to result in better organizational outcomes. For example, a conceptual framework incorporating six theoretical models (e.g., the resource based view of the firm, the behavioral perspective, and cybernetic systems perspective) is developed by Wright & McMahan (1992) in order to thoroughly investigate strategic human resource management. According to their framework and the theoretical models, human resource management practices influence the human resource capital pool and human resource behaviors; human resource behaviors then lead to firm-level outcomes. Therefore,

Proposition 3 - There is a significantly positive relationship between training and financial performance in ESOEs.

Performance Appraisal

According to Cascio & Aguinis (2005), performance appraisal is the actual process of gathering information about individuals based on critical job requirements that describes the job-relevant strengths and weaknesses of each individual.

Performance appraisal is believed to play an important role in the human resource process by aiding training and rewarding decisions (Fombrun et al., 1984). It is, therefore, an essential input in career management as a whole. In addition, performance is considered as means to improve company operations, increase efficiency, increase product reliability, productivity and finally firm financial performance (Roberts, 1995; Youndt et al., 1996).

The ability to carry out meaningful performance evaluation on a regular basis and act on them can be regarded as a good test of an organization's human resource management philosophy. There is an agreement in the literature that the effectiveness of performance appraisals substantially depend on whether performance goals are achievable and motivational. This leads to avoiding a very common problem that performance assessments are based on social and political considerations, not on objective criteria of performance (Longenecker et al., 1987). Equally important, feedback should be provided in such a timely and constructive manner that is unlikely to result in either acrimony or unnecessary defensiveness (Conway et al., 2001).

In SOEs, there were many problems embedded in the appraisal system. Such problems consisted of prejudice, favoritism, insufficient knowledge of the employees performance, ignored outcomes, time-consuming, and deteriorating relationships among workers (Quang & Dung, 1998). Obviously, in spite of the fact that there were appraisal systems in SOEs, in almost

all situations, it was just a lip-service exercise that both managers and employees manipulated to generate satisfactory outcomes (Quang & Dung, 1998). Therefore, we propose:

Proposition 4 - There is a significantly positive relationship between performance appraisal and financial performance in ESOEs.

Recruitment and Selection

In the strategic human resource management literature, selection seems to play a crucial role in the attainment and development of human resource capital. This is regarded as the first step in which the firm seeks to gain the fit between human resource and business strategies. The notion of fit means that by owning the human resource capital that most adequately supports the business strategy, the firm positions itself to bring about competitive advantage through its people management (Schuler & Jackson, 1987). Research suggests that investment in effective selection can be positively related to organizational performance (Terpstra & Rozell, 1993). Studies have also attempted to derive the most efficient and cost effective formal methods (e.g., Anderson & Herriot, 1994; Heneman et al., 1997). As such, methods like assessment centers, psychometric tests, and bio-data have been ranked much higher than interviews (e.g., Reilly & Chao, 1982; Hunter & Hunter, 1984).

In ESOEs, a significant number of efforts have been just implemented in order to further formalize selection procedures consisting of the utilization of entrance examinations and lengthy induction/training periods. In general, the recruitment process is initiated via words of mouth and progresses with comprehensive assessments and analyses of potential candidates' merits and family background. Hence, when the candidates are invited to participate in an interview, it is possible that the interview panel has already had substantial knowledge of the candidates. It is therefore proposed that

Proposition 5 - There is a significantly positive relationship between recruitment and selection and financial performance in ESOEs.

CONCLUSION

Vietnam has nowadays been considered as one of the fastest growing economies in the World. The economic development of Vietnam is mainly believed to be attributable to the economic renovation policy initiated in 1986. The economic renovation policy aimed to transform Vietnam into market oriented economy from a closed, centrally planned economy. It has created profound changes in the business environment and labor markets leading to various and unfamiliar challenges for enterprises, making human resource management a vital matter.

The economic renovation policy has been occurring in both the public and private sector. In the public sector, one of the most important aims set up by the State is to restructure the state-owned enterprises (SOEs) through equitization process (SOEs are transformed into equitized SOEs – ESOEs). With this equitization process, the State strongly believes that ESOEs will make more contributions to Vietnam's economic growth rate in the coming time.

It is argued that to survive fiercer competition, ESOEs face the need to raise managerial competencies, especially for human resource management practices, to good levels found elsewhere in the World (McDaniel et al., 1999). Thus, this study theoretically proposed that certain human resources practices will have strong positive relationship with the financial performance of ESOEs.

LIMITATIONS AND FUTURE RESEARCH

This is a theoretical paper that suggests a relationship between HR practices and financial performance of Vietnamese ESOEs. Therefore, empirical work is necessary to support the propositions here presented and gain better understanding on the impact that HR practices have on ESOEs. Additionally, since the purpose of this work is to propose the existence of a relationship between HR practices and financial performance it does not analyze how these practices are implemented and what impact dues culture have in such practices. Future research is necessary to understand what specific practices are used in ESOEs in Vietnam, and how culture influences HR practices in this country.

REFERENCES

Baird, L., & Meschoulam, I (1988). Managing two fits of strategic human resource management. *Academy of Management Review, 13*(1), 116 – 128.

Bhargava, S (1994). Profit sharing and the financial performance of companies: evidence from UK Panel Data. *The Economic Journal, 104*(426), 1044 – 1057.

Brush, M.C., & Ruse, D.H (2004). Driving strategic success through human capital planning: how corning links business and HR strategy to improve the value and impact of its HR function. *Human Resource Planning, 28*(1), 49 – 60.

Cable, J., & Wilson, N (1990). Profit sharing and productivity: some further evidence. *Economic Journal, 100*(401), 550 – 555.

Cascio, W.F., & Aguinis, H (2005). *Applied Psychology in Human Resource Management (6th ed.)*. New Jersey: Prentice Hall.

CIEM (2003). Building a private sector enabling environment in Vietnam: a comparative evaluation of nine provinces. *Project CIEM/UNDP VIE 01/025*. Hanoi.

Conway, J.M., Lombardo, K., & Sanders, K.C (2001). A meta-analysis of incremental validity and nomological networks for subordinate and peer rating. *Human Performance, 14,* 267 – 303.

Decision 143/2004/QD-TTg (2003). *Human Resource Training for Small and Medium-Sized Enterprises*. Hanoi, August 10.

Fombrun, C., Tichy, N.M., & Devanna, M.A (1984). *Strategic Human Resource Management*. New York: Wiley.

Fredrik. S (2006). *State owned enterprises and equitization in Vietnam*. Working Paper.

Gomez-Mejia, L.R (2002). Compensation strategies in a global context. *Human Resource Planning, 14*(1), 29 – 41.

Greer, C.R., Jackson D.L., & Fiorito, J (1989). Adapting human resource planning in a changing environment. *Human Resource Management, 28*(1), 105 – 124.

Henrik, S.M (2005). Private-sector development in a transition economy: the case of Vietnam. *Development in Practice, 15*(3&4), 349 – 361.

Ken, K (2001). Human resources in Vietnam: the global challenge. *Thunderbird International Business Review, 43*(5), 625 – 650.

Kim, T.H (1996). *Vietnam's economy: the period 1945-1995 and it's perspective by the year 2020*. Hanoi: Statistical Publishing House.

Kohn, A (1993). *Punished by Rewards: The Troubles with Gold Stars, Incentive Plans, A's praise and Other Bribes*. Boston: Houghton Mifflin.

Kozlowski, S., Brown, K., Weissbein, D., Cannon-Bowers, J., & Salas, E (2000). A Multilevel Approach to Training Effectiveness. In K. Klein, and S. Kozlowski (Eds.), *Multi Level Theory, Research, and Methods in Organizations* (pp. 157 – 210).San Francisco, CA: Jossey-Bass.

Le, H.H (2004). *Equitization of SOEs: Practical and Theoretical Issues*. Chinh Tri Quoc Gia Publisher, Hanoi, Vietnam.

Longenecker, C., Sims, H., & Gioia, D (1987). Behind the mask: the politics of employee appraisal. *Academy of Management Executive, 1*, 183 – 193.

Luthans, F., Luthans, K.W., Hodgetts, R.M., & Luthans, B.C (2001). Can high performance work practices help in the Former Soviet Union? *Business Horizons, 43*(5), 53 – 60.

McDaniel, D.O., Schermerhorn, J.R., & Cuoc, H.T (1999). Vietnam: the environment for management development in the twenty first century. *Journal of Management Development, 18*(1), 79 – 93.

Milkovic, G.T., & Newman, J.M (2003). *Compensation (7th ed.)*. New York: McGraw-Hill.

Mills, D.Q (1985). Planning with people in mind. *Harvard Business Review, 63*(4), 97 – 105.

MPDF (1999). Private Enterprises in Vietnam: Survey on the Public Attitudes. *Private Sector Discussions 9*, Mekong Project Development Facility.

Nguyen, H.T (1995). *Vietnam: Reforming the State Enterprises: Toward an Agenda for Privatization*. Post Books, Bangkok.

Quang, T., & Dung, H.K (1998). Human resource development in state-owned enterprises in Vietnam. *Research and Practice in Human Resource Management, 6*(1), 85 – 103.

Ralston, D.A., Nguyen, V.T., & Napier, N.K (1999). A comparative study of the work values of north and south Vietnamese managers. *Journal of International Business Studies, 30*(4), 655 – 672.

Roberts, K (1995). The proof of human resource is in the profits. *People Management, 1*(3), 42 – 43.

Rowley, C (2003). *The Management of People: HRM in Context*. London: Spiro Business Press.

Schuler, R.S (1989). Scanning the environment: planning for human resource management and organizational change. *Human Resource Planning, 12*(4), 435 – 447.

Scown, M.J (1997). Reviewing Vietnam's reforms. *Asia World Street Journal, 12*(3), 27 – 48.

The Economist (1998). *Pay Preview*. August 29: 56 – 60.

Torrington, D., & Huat, T.C (1994). *Human Resources Management for Southeast Asia*. Prentice Hall, New York.

Tosi, H.L., & Greckhamer, T (2004). Culture and CEO compensation. *Organization Science, 15*(6), 657 – 670.

Ulrich, D (2002). Strategic and human resource planning: linking customers and employees. *Human Resource Planning, 15*(2), 47 – 62.

Venard, B (1998). Vietnam in mutation: will it be the next tiger or a future jaguar? *Asia Pacific Journal of Management, 15*, 77 – 99.

Vietnam Economics News (1999). *Vietnam: Education Run Amuck*. Hanoi, July 6.

Von, G.M.A., & Clarke, L (1995). Vietnam: tiger or kitten? *Academy of Management Executive, 9*(4), 35- 48.

Vroom, V.H (1964). *Work and Motication*. San Francisco: Jossey Bass.

Vu, T.T.A (2004). *A Positive Theory of Privatization for Vietnam*. Working Paper.

Walker, J.W (2002). Human resource planning: 1990s style. *Human Resource Planning, 13*(4), 229 – 240.

Wilson, N., & Peel, M (1991). The impact of absenteeism and quits of profit sharing and other forms of employees participation. *Industrial and Labor Relations Review, 44*(3), 44 – 68.

World Bank (1999). Vietnam Development Report 2000: Attacking Poverty. *Report No. 19914-VN*, Washington, DC: World Bank.

World Bank (2006). Vietnam Development Report 2007: Pillars of Development. *Report No. 20018-VN*, Washington, DC: World Bank.

Wright, P.M., & McMahan, G.C (1992). Theoretical perspectives for strategic human resource management. *Journal of Management, 18*, 295 – 320.

Youndt, M.A., Snell, S.A., Dean, J.W., & Lepak, D.P (1996). Human resource management, manufacturing strategy, and firm performance. *Academy of Management Journal, 39*(4), 836 – 866.

SOURCES OF INFORMATION AND COOPERATION FOR INNOVATION IN NORWAY

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ABSTRACT

In an age of global competition and rapid technological change, the capacity to innovate and adapt to change is crucial to business performance. Knowledge-based assets and organizational learning capabilities are recognized to be critical to a firm's innovative activities. The process of creating new knowledge requires absorptive capacity, which is defined as the firm's overall capacity for acquiring and assimilating information, and utilizing it effectively for firm performance (Cohen & Levinthal, 1990; Gray, 2006; Liao, Welshe & Stoica, 2002; Jansen, Van Den Bosch & Volberda, 2005; Teece, Pisano & Shuen, 1997; Zahra & Covin, 1995; Zahra & George, 2002). Empirical studies suggest networks have a strong influence on successful innovation as they relate to access to information (Cooper, 1993; Liao, Wu, Hu, & Tsuei, 2009). SMEs face challenges in competing with big business because large companies are more likely to have the resources to keep up with technological developments, track competitors, attract and retain skilled employees, and develop new products and processes (Eurostat, 2009, p. 46). This study uses data from the Eurostat Community Innovation Survey to examine the sources of information deemed highly important for innovation. Analysis of the data shows that large businesses in Norway were more likely than SMEs to cooperate with partners and to benefit from information from most sources, including government and universities, suggesting more can be done to encourage innovation in SMEs.

INTRODUCTION

A firm's overall ability to learn, integrate, and disseminate new knowledge internally, and then exploit this knowledge to enhance performance is often referred to as its absorptive capacity (Cohen & Levinthal, 1990; Gray, 2006; Heeley, 1997; Liao, Welsch, & Stoica, 2003; Teece et al., 1997; Wu & Young, 2002; Zahra & George, 2002). This learning ability is especially important to new firms because an organization needs prior knowledge in order to take in and use new knowledge, ultimately resulting in innovation, which is viewed as a vital to economic growth (Norwegian Ministry of Trade, 2010). Akgun, Keskin, Byrne, and Aren (2007) found a correlation between performance and innovativeness, which was associated with

learning capabilities, thus showing a link to absorptive capacity. Gray's (2006, p. 356) study of British SMEs confirmed that non-innovators were more likely to have firms that were struggling or weak.

SMEs face particular challenges in competing with big business because large companies are more likely to have the resources to keep up with technological developments, track competitors, attract and retain skilled employees, and innovate by develop new products and processes (Eurostat, 2009, p. 46). As in many countries, Norway is dominated by small businesses, many of which are in industries that typically have relatively low R&D (Norwegian Ministry of Trade, 2010). Despite this, Norway is one of the wealthiest and most productive countries in the world.

This study examines the knowledge acquisition aspect of absorptive capacity by analyzing the sources of information considered highly important for innovation as reported in the 2004 Eurostat Community Innovation Survey (2010). Because the size of the firm can influence its absorptive capacity, the results are compared for small, medium and large businesses in Norway. The following sections briefly explain the background of the concept and measurement of absorptive capacity, particularly in regard to the acquisition of knowledge. The results of this study on the sources of information deemed highly important for innovation and sources of cooperation are then presented.

SOURCES OF KNOWLEDGE AND ABSORBTIVE CAPACITY

Cohen and Levinthal (1990) modeled absorptive capacity as being related to the ability to conduct three basic activities: acquiring new knowledge, assimilating it into the firm, and then exploiting it for the company's benefit. Zahra and George (2002) re-conceptualized absorptive capacity as having four dimensions, with acquisition and assimilation as processes related to potential absorptive capacity, and transformation and exploitation of knowledge falling under the category of realized absorptive capacity. Others (Liao et al., 2003; Heely, 1997) have condensed absorptive capacity into two components—external knowledge acquisition and internal knowledge dissemination—and then placed exploitation of knowledge under the category of organizational responsiveness. Regardless of the model chosen, accessing, acquiring and using information is clearly important.

In many studies research, absorptive capacity has been measured through quantitative variables such as R&D spending/intensity (Cohen & Levinthal, 1990, Jantunen, 2005; Sofka, 2008; Stock, Greise, & Fischer, 2001; Tsai, 2001; Vega-Juado, Gutierrez-Garcia & Lucio, 2008; Zahra & Hayton, 2008), existence of a formal research and development department (Vega-Jurado, et al., 2008), the number of patents (Nicholls-Nixon, 1993), the number of employees with graduate degrees or the education level of employees (Gray, 2006; Musvio, 2007; Sofka, 2008; Vega-Juado, et al.,2008), or other similar proxy measures that focus on R&D or education.

Although these variables offer the advantage of being fairly straight-forward and easy to measure, they are not direct measures of knowledge acquisition or exploitation. Heely (1997) contends that although research spending is related to absorptive capacity, it is really more of a reflection of a firm's technical knowledge and expertise. It could also be noted that these sources focus on internal development rather than acquiring external information. According to the Norwegian Ministry of Trade (2010), employee trust and participation and a high level of acceptance of technological change by employees contribute to innovation in Norway, but are not as easily measured by studies that focus on quantitative factors of innovation such as R&D spending.

Given that most R&D is conducted in large organizations (Gray, 2006), measures such as R&D spending, the existence of formal research departments, and the number of patents held may not be completely appropriate for examining absorptive capacity in start-ups, especially micro-businesses and non-employers. Darroch and McNaughton (2002) included only firms with 50 or more employees based on the assumption that smaller firms would have different knowledge management practices. Similarly, Jantunen (2005) included firms with 50 to 1000 employees. Compared to micro-businesses with fewer than 10 employees, such businesses are likely to have different capabilities in terms of R&D spending and human resources. Measures of absorptive capacity based upon acquisition and use of knowledge, rather than R&D expenditures, are especially appropriate for firms with only a few, if any, employees, especially those that are not involved in high-technology industries.

Measures of marketing orientation (particularly the MARKOR model developed by Kohli and Jaworski in the early 1990s) have also been used to examine absorptive capacity (Armario, Ruiz & Enrique, 2008; Darroch & McNaughton, 2002; Jansen et al., 2002; Jaworski, Kohli & Kumar, 1993; Kohli & Jaworski, 1990; Liao et al., 2003). Studies using marketing orientation as a basis for absorptive capacity focus largely on the acquisition of knowledge from and about customers and competitors, assimilation and dissemination of this external knowledge, and then exploitation of this knowledge. This line of research has generally used a composite measure of knowledge acquisition based on the participant's level of agreement with statements such as the following from Jaworski et al. (1993):

In this business unit, we meet with customers at least once a year to find out what products or services they will need in the future.
In this business unit, we do a lot of in-house market research
We often talk with or survey those who can influence our end users' purchases (e.g., retailers, distributors).
We collect industry information through informal means (e.g., lunch with industry friends, talks with trade partners).

Jansen et al. (2002) used the basic MARKOR model as a basis, but then also added questions such as the following, which expand the range of sources of external knowledge from customers to other third parties:

Our unit periodically organizes special meetings with customers or third parties to acquire new knowledge.

Employees regularly approach third parties such as accountants, consultants, or tax consultants.

According to Darroch and McNaughton (2003), a knowledge-management orientation and a marketing orientation are very similar in that both involve knowledge acquisition, dissemination and exploitation, although a marketing orientation focuses primarily on knowledge pertaining to customers and competitors (Kohli & Jaworski, 1990; Narver & Slater, 1990). The MARKOR model focuses on marketing information, but the idea of obtaining knowledge from outside sources, whether formal or informal, rather than developing knowledge internally through R&D, is relevant and important to absorptive capacity.

Carrying this idea a step further, recent studies (Fosfuri & Tribo, 2008; Murovec & Prodan, 2009; Soo, Devinney & Midgeley, 2007; Vega-Jurado et al., 2008) have included access to various sources of information as part of knowledge acquisition when measuring absorptive capacity. They have included survey items that have based absorptive capacity measures on the degree to which respondents actively sought out external information, recorded it for future use, used the new knowledge and shared it with other people in the organization, and the degree to which respondents participated in conferences and training and kept abreast of new technology (Soo, et al., 2007). Fosfuri and Tribo (2008) and Murovec and Prodan (2009) derived their measures of potential absorptive capacity from companies' ratings regarding the importance of knowledge from various sources (suppliers, customers, competitors, universities, other research institutions, fairs/exhibitions, conferences/meetings, specialized journals) to innovation. Similarly, Vega-Jurado et al. (2008) based potential absorptive capacity on whether organizations subscribed to journals, attended conferences, and attended scientific fairs/exhibitions (higher participation resulted in a higher absorptive capacity score). They based realized absorptive capacity on the number of sources (suppliers, consumers, universities, technology institutes) of knowledge for innovation, with more sources giving higher absorptive capacity scores.

Liao et al. (2003) note that the most important knowledge is likely to come from customers and competitors, but a larger number of sources is better because a broader range of sources is more likely to lead to more information, which is expected to then create better options for identifying changes in the environment, thus leading to improved performance. Indeed, previous research has shown that new product development tends to be more successful when customer needs are clearly defined rather than when innovation is based on technology, suggesting that customers will be an important source of information (Campbell & Cooper,

1999; Cooper, 1993; Holt, Geschka & Peterlongo, 1984; Kirca, Jayachandran & Bearden, 2005; Lukas & Ferrell, 2000; Mavondo, Chimhanzi & Stewart, 2005; Rothwell, 1992). Governments can also influence entrepreneurship, especially in the early stages (Tan, Fischer, Mitchell & Phan, 2009). In Norway, most universities are publicly funded, making them somewhat similar to government sources.

Knowledge acquisition is an important element in absorptive capacity and ultimately innovation and performance. While absorptive capacity can be measured through spending on R&D (Cohen & Levinthal, 1990, Jantunen, 2005; Sofka, 2008; Stock et al., 2001; Tsai, 2001; Vega-Juado et al., 2008; Zahra & Hayton, 2008), which focuses on internally generated knowledge, acquisition of knowledge from external sources is also important, as seen in studies that examine absorptive capacity through analysis of sources of information (Armario et al, 2008; Darroch & McNaughton, 2002; Fosfuri & Tribo, 2008; Jansen et al., 2002; Jaworski et al., 1993; Kohli & Jaworski, 1990; Liao et al., 2003; Murovec & Prodan, 2009; Soo et al., 2007; Vega-Jurado et al., 2008). In the following section, the results of a study examining the sources of knowledge deemed highly important for innovation and the partners most often used for cooperation by Norwegian businesses are presented.

METHODOLOGY, RESULTS AND ANALYSIS

This study focuses on the knowledge acquisition aspect of absorptive capacity by examining the sources of information important for innovation as determined by small (10-49 employees), medium (50-249 employees) and large (250 or more employees) businesses in Norway. Data for the study, obtained from Eurostat's (2010) Community Innovation Survey 2004, included only those companies that had been engaged in innovation (development of a new or improved product or process) sometime between 2002 an 2004. A stratified sample was used for small businesses, while a census was conducted among all companies with 50 or more employees. The results shown in Table 1 report the percentage of small, medium and large businesses that stated each source (clients, suppliers, etc.) was a highly important source of information for innovation during the 2002-2004 time period. Only businesses that reported that they had been involved in innovation during this period are included in these data.

Analysis of the data shows that the source of innovation most commonly deemed "highly important" is the enterprise itself. Although large businesses were the most likely (62.8%) to name this source, this source was also the one used by the almost half (49.9%) of the small businesses and 55.5% of medium-sized businesses. This is not entirely surprising given that larger business naturally have more resources – both human resources and capital resources. This allows them to draw more upon themselves. It is perhaps more surprising that, given small businesses' relatively limited resources, they rely so heavily on their own information rather than looking to external sources. However, these results are similar to those reported by Robinson and

Stubberud (2010, 2009a, b, c), who found that small business owners in a series of European countries felt they needed no advice at all in starting and running their businesses.

TABLE 1: Sources of Information Highly Important to Innovation by Number of Employees			
Source / Number of employees	10-49	50-249	250+
Within enterprise	49.9%	55.5%	62.8%
Clients	33.9	36.3	41.4
Suppliers	20.3	20.3	16.7
Competitors	8.7	10.8	12.1
Conferences	8.3	10.0	8.8
Universities	2.5	3.3	7.9
Government	2.4	4.8	6.5
Consultants	5.7	7.6	6.5
Scientific journals	5.1	3.5	4.7
Professional associations	4.7	4.1	4.7

In terms of external sources, clients were the next most commonly cited source, consistant with researchers (Cooper, 1993; Kirca, Jayachandran & Bearden, 2005; Liao et al., 2003; Lukas & Ferrell, 2000; Mavondo et al., 2005) who say customers are highly important for successful innovation. Once again, larger businesses (41.4%) were more likely than small (33.9%) or medium (36.3%) businesses to use this source although it ranked second overall.

This pattern is reversed when looking at suppliers, which was the third ranked source for all businesses. Both small and medium businesses named suppliers more often (20.3%) than did large businesses (16.7%), although this represents only a 3.6% difference compared to larger differences in the top two sources. Similarly, the differences were rather small between SMEs and large businesses regarding the use of competitors, the fifth ranked source. The pattern seen for competitors was again the pattern of a greater percentage of larger businesses and a lowest percentage of small business claiming the source as a highly important source of innovation.

The relationship between size and likelihood of using a given source was also seen in the publicly funded government and university sources, as large businesses were approximately three times as likely as small businesses to use these sources. However, the overall percentages of companies reporting that government and universities were highly important sources of information for innovation were quite low, as these sources were highly important to only about 2.5% of small businesses and less than 8% of large businesses. This suggests that the majority of companies, regardless of size, did not find government or university sources to be highly important sources of information.

Conferences, professional associations, scientific journals and even consultants were not thought to be highly important to innovation by most companies. Small businesses may be more likely to consider scientific journals a highly important source of information because these are

relatively inexpensive compared to traveling to conferences and do not require time away from work in order to be utilized. Professional associations were used by all three types of organizations in similar proportions of around 4%. Overall, these results show that more businesses consider themselves as highly important sources of information for innovation than any of the external sources.

Because the sharing of information is often based on cooperation with other parties, this study also examined small, medium and large businesses' partners for cooperation in innovation (see Table 2). It is clear from the category of "all types cooperation" as well as the individual sources of cooperation that large businesses were more likely to cooperate with external parties in the quest for innovation. Large businesses were twice as likely, compared to small businesses, to cooperate with any source, and large businesses were three and four times more likely to say they cooperate with the publicly funded sources governments and universities. Small businesses were the least likely to state they had cooperated with any individual party.

TABLE 2: Cooperation Partners by Size of Business

Source / Number of employees	10-49	50-249	250+
All types-cooperation	28.7%	39.7%	58.1%
Suppliers	19.2	28.2	47.0
Government	12.3	20.7	43.7
Universities	10.5	19.9	41.9
Clients	18.9	27.8	39.5
Consultants	17.2	24.2	38.6
Competitors	10.2	13.4	25.1

Suppliers were the specific source most commonly cited for cooperation by all three types of businesses, but by especially large businesses (47.0%). However, it should be noted that the data in Table 1 showed that only 16.7% of large businesses stated that suppliers were a highly important source of information for innovation. In contrast, similar proportions of small businesses named suppliers as cooperative partners (19.2%) and highly important sources of information (20.3%). This suggests that although small businesses are less likely to cooperate with suppliers overall, they are more likely to reap important benefits from the relationship. Medium-sized businesses were just as likely to cite suppliers as a highly important source of information (20.3%), despite a higher proportion (28.2%) naming this source as a cooperative partner.

Clients, who were the most often cited source of highly important information for innovation, were also commonly named as cooperation partners. The relationship between large businesses and their clients was apparently more fruitful than that with suppliers as 39.5% of large business said they cooperated with clients and 41.4% deemed them highly important for information. While 18.9% of small businesses stated they cooperated with clients, more small

businesses named clients as an important source of information than any other external source (33.9%).

Competitors were, logically, the least likely partners for cooperation, yet over a quarter (25.1%) of large businesses named them as partners compared to 10.2% and 13.4% of SMEs. However, SMEs seemed to be more likely to benefit from the relationship than large businesses as 8.7% of small and 10.8% of medium-sized businesses had named them as important sources of information.

Large businesses were clearly the most likely to cooperate with the government (43.7%) and universities (41.9%) compared to small (12.3% and 10.5%) and medium-sized businesses (20.7% and 19.9%). However, neither of these were frequently cited as highly important sources of information as fewer than 2.5% of small, 4.8% of medium and 7.9% of large business reported they were highly important sources. Similarly, consultants were used by 17.2% of small, 24.2% of medium-sized and 38.6% of large businesses, yet fewer than 7.6% of any of them claimed them as highly important sources of information.

Overall, analysis of these results shows that large businesses are the most likely to consider their own enterprises as a highly important source of information, both compared to SMEs and compared to external sources. They are also the most likely to cooperate with external partners. The more employees a business has the more likely it seems to be to cooperate with others as medium-sized businesses were also more likely than small business to cooperate.

DISCUSSION AND CONCLUSIONS

A limitation of this study is that data provided by Eurostat were limited to overall percentages. However, the results suggest that overall, large businesses are likely to have higher levels of absorptive capacity based on greater knowledge acquisition from more sources of information. Because measures of absorptive capacity that hold that higher numbers of sources lead to greater absorptive capacity (Fosfuri & Tribo, 2008; Murovec & Prodan, 2009; Soo et al., 2007; Vega-Jurado et al., 2008), it could be similarly inferred that large businesses have more absorptive capacity than medium-sized businesses, which have more than small businesses, given that a relationship was seen between size and the likelihood of naming a source as a highly important source of information for innovation.

Size was clearly related to the propensity to cooperate as small businesses were the least likely to cooperate with other parties and large businesses were by far the most likely to cooperate overall with each individual source included in the study. It is logical that large businesses with R&D departments would be more likely to consider their own enterprises highly important sources of information for innovation because large businesses typically have greater resources, including budgets and educated employees. However, large businesses in this study were more likely than SMEs to claim almost all sources were highly important sources of information innovation. That is, there were few incidences in which SMEs were more likely to

cite a given source as highly important. One reason for this may be that large businesses were also more likely to cooperate with external parties. Large businesses used almost every source more, including internal sources, external industrial sources (customers and competitors), and public sources (government, universities), whereas SMEs used fewer sources overall. Future research should further examine this issue, especially given the fact that the majority of businesses in most countries are small. For example, these data beg the question of why small businesses are less likely to cooperate and less likely to take advantage of external sources of information. Alternatively, it might also be determined that small businesses perceive their access to external sources as limited, which would be an important problem for examination by policy makers and those involved in assisting SMEs.

One way to assist SMEs in innovation may be to help them discover and cooperate with external sources that are already available but not being used. For example, governments and universities often tout their goals of helping SMEs, but few businesses of any size in this study reported that these were highly important sources of information for innovation. Although large businesses were considerably more likely to cooperate with government and university sources, they were only slightly more likely to name these sources as highly important for innovation. Tighter connections between companies and governments and universities or a better understanding of the information needs of companies may improve innovation. However, it should also be noted that there seems to be a disconnect in terms of cooperation and providing highly important information for innovation. While over 40% of large businesses stated that they cooperate with government and universities, fewer than 8% named them as highly important sources of information for innovation. It would seem that SMEs would be better advised to cooperate with clients and suppliers, which were more often cited as highly important sources.

Indeed, given that the point of innovation is to create value for customers in terms of new products and services (Liao, Kickul & Ma, 2009), a closer relationship with customers that results in important information about their needs may also be a good opportunity for companies of all sizes, but especially SMEs. As stated earlier, new product development tends to be more successful when the needs of customers are clearly defined, (Campbell & Cooper, 1999; Cooper, 1993; Holt et al., 1984; Kirca, et al., 2005; Lukas & Ferrell, 2000; Mavondo et al., 2005; Rothwell, 1992). as could happen with closer relationships with these sources. The MARKOR model of marketing orientation (Jansen et al., 2002; Jaworski et al., 1993; Kohli & Jaworski, 1990). may be useful not just in terms of marketing and customer relationships, but also in improving overall absorptive capacity that can lead to improved innovation and performance.

REFERENCES

Akgun, Ali E., Halit Keskin, John C Byrne, & Selim Aren. (2007). Emotional and learning capability and their impact on product innovativeness and firm performance. *Technovation, 27(9),* 501-513.

Armario, J.M., D. M. Ruiz, & M. Enrique. 2008. Market orientation and internationalization in small and medium-sized enterprises. *Journal of Small Business Management, 46, 485–511*

Campbell, A.J. & R.G. Cooper. (1999). Do customer partnerships improve new product success rates? *Industrial Marketing Management, 28*, 507-519.

Cohen, W.M., & D.A. Levinthal, 1990. Absorptive capacity: A new perspective on learning and innovation. *Administrative Science Quarterly,* 35, 128-152.

Cooper, R.G. (1993). *Winning at new products.* Reading, MA: Addision-Wesley.

Darroch, J & R. McNaughton, R. 2002. Examining the link between knowledge management practices and types of innovation. *Journal of Intellectual Capital,* 3, 210-222.

Eurostat. (2009). European facts and figures. European Commission.

Eurostat. (2010). Epp.eurostat.ec.europa.eu. Retrieved 4.July 2010.

Fosfuri, A. & J.A. Tribo. 2008. Exploring the antecedents of potential absorptive capacity and its impact on innovation performance. *Omega: The International Journal of Management Science,* 36: 173–187.

Gray, C. 2006. Absorptive capacity, knowledge management and innovation in entrepreneurial small firms. *International Journal of Entrepreneurial Behavior and Research,* 12, 345-360.

Harding, R. 2003, *Global Entrepreneurship Monitor UK.* Report 2002, London Business School, London.

Heeley, M. 1997. Appropriating rents from external knowledge: the impact of absorptive capacity on firm salesgrowth and research productivity. *Frontiers of Entrepreneurship Research*, Babson College, Babson Park, MA.

Holt, K., H. Geschka, & G. Peterlongo. (1984). *Need assessment, A key to user-oriented product innovation.* Chichester: John Wiley & Sons, Ltd.

Lukas, B.A. & O.C. Ferrell. (2000). The effect of market orientation on product innovation. *Academy of Marketing Science Journal, 28(2),* 239-247.

Jansen, J. J. P, F.A.J. Van Den Bosch, & H.W. Volberda, H. W. 2005. Managing potential and realizedabsorptive capacity: How do organizational antecedents matter? *Academy of Management Journal,* 48, 999-1015.

Jantunen, A. 2005. Knowledge-processing capabilities and innovative performance: An empirical study. *European Journal of Innovation Management,* 8, 336-349.

Jaworski, Bernard J, & Kohli, Ajay K. (1993). Market orientation: Antecedents and consequences. *Journal of Marketing,* 57, 53-70.

Kirca, A.H., S. Jayachandran, & W.O. Bearden. (2005). Market orientation: A meta-analytic review and assessment of its antecedents and impact on performance. *Journal of Marketing, 69*, 24-41.

Kohli, A. K., B. J. Jaworski & A. Kumar. 1993. MARKOR: A Measure of market orientation. *Journal of Marketing Research* 30, 467–477.

Kohli, A. K., & B. J. Jaworsk. 1990. Market orientation: The construct, research propositions, and managerial implications. *Journal of Marketing* 54, 1–18.

Liao, Shu-Hsien, Chi-Chuan Wu, Da-Chian Hu, & Guange An Tsuei. (2009). Knowledge acquisition, absorptivecapacity, and innovation capability: an empirical study of Taiwan's knowledge-intensive industries. *World Academy of Science, Engineering and Technology, 53,* 160-167.

Liao, J., J. R. Kickul & H. Ma. (2009). Organizational dynamic capability and innovation: An empirical examination of internet firms. *Journal of Small Business Management, 47(3)*, 263-286.

Liao, J., H. Welsh, H. & M. Stoica. 2003, Organizational absorptive capacity and firm responsiveness: An empirical investigation of growth-oriented firms. *Entrepreneurship Theory and Practice,* Autumn, 63-85.

Lukas, B.A. & O.C. Ferrell. (2000). The effect of market orientation on product innovation. *Academy of Marketing Science Journal, 28(2),* 239-247.

Mavondo, F. T., J. Chimhanzi, & J. Stewart. (2005). Learning orientation and market orientation, relationship with innovation, human resources practices and performance. *European Journal of Marketing,39(11/12),* 1235-1263.

Murovec, N. & I. Prodan. 2009. Absorptive capacity, its determinants, and influence oninnovation output: Cross-cultural validation of the structural model. *Technovation,* doi:10.1016/j.technovation.2009.05.010

Narver, J. C., & S. F. Slater. 1990. The effect of a market orientation on business profitability. *Journal of Marketing* 54, 20–35.

Norwegian Ministry of Trade and Industry (2010). http://www.regjeringen.no/nb/dep/nhd/tema/innovasjon/a-norwegian-puzzle.html?id=582903. Retrieved 12 September 2010.

Robinson, S. & Stubberud, H.A. (2010). Social networks and entrepreneurial growth. *European Applied Business Research Proceedings*, 182-187.

Robinson, S. & Stubberud, H.A. (2009a). Business incubator explanations: Networking andgender differences. *Management Review: An International Journal, 4(2)*, 4-28.

Robinson, S. & Stubberud, H.A. (2009b) Developing network ties and absorptive capacity through business incubators. *Proceedings of the conference of the International Journal of Arts & Sciences, 1-20.*

Robinson, S. & Stubberud, H.A. (2009c). Sources of advice in entrepreneurship: Gender differences in businessowners' social networks. *International Journal of Entrepreneurship, 13,* 83-101.

Rothwell, R. (1992). Successful industrial innovation: Critical factors for the 1990s. *R&D Management, 22(3), 221-239.*

Sofka, W. 2008. Globalizing domestic absorptive capacities. *Management International Review*; 48, 769-92

Soo, W., T. Devinney, & D. Midgley. 2007. External knowledge acquisition, creativity and learning in organizational problem solving. *International Journal of Technology Management,* 38.

Storey, D. 1994. *Understanding the small business sector.* Routledge, London

Tan, J., E. Fischer, R. Mitchell & P. Phan (2009). At the center of the action: Innovation and technology strategy research in the small business setting. *Journal of Small Business Management, 47(3)*, 233-262.

Teece, D, G. Pisano, & A. Shuen, (1997). Dynamic capabilities and strategic management. *Strategic Management Journal,* 18, 509-533.

Vega-Jurado, J., A. Gutierrez-Garcia, & I. Fernandez-de-Lucio, 2008. Analyzing the determinants of firm's absorptive capacity: Beyond R&D. *R&D Management,* 38, 392-405.

Wu, C., & A. Young. 2002. Critical operating problems and survival rates in small firms: A look at small business institute clients." *Journal of Developmental Entrepreneurship,* 7:1-23.

Zahra, Shaker A., & George Gerard, 2002. Absorptive capacity: A review, reconceptualization, and extension. *The Academy of Management Review,* 27, 185.

Zahra, Shaker A., & Hayton, James C. (2008). The effect of international venturing on firm performance: The moderating influence of absorptive capacity. *Journal of Business Venturing, 23, 195-220.*

REVISITING BLACK, MENDENHALL, AND ODDOU (1991)'S FRAMEWORK FOR INTERNATIONAL ADJUSTMENT MODEL: A PRESCRIPTIVE APPROACH

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ABSTRACT

Black, Mendenhall, and Oddou's Framework for International Adjustment (FIA) is a well-known and established research model that describes the cross-cultural adjustment process for expatriates (Black, Mendenhall & Oddou, 1991). The main purpose of this research is to refine some dimensions of FIA into a more prescriptive model that systematically investigates factors related to the expatriate adjustment. First, we provide an updated review of more recent literature to further define elements of the FIA model as well as to expand some parts of the model. Second, we propose a more prescriptive research model of international adjustment to inform and direct expatriates and their organizations for successful cross-cultural adjustment. Third, we suggest appropriate measures for the constructs of the research model and propose hypotheses for empirically testing the prescriptive model.

INTRODUCTION

Due to the rapid rise of globalization over the past half century, organizations are faced with new challenges in managing global human resources such as expatriate failure and intercultural ineffectiveness. Not surprisingly, the estimated range of failure for overseas assignments is somewhere between 16% and 70% depending on the relative novelty of the host country (Sims & Schraeder, 2004). The cost of failure at any given firm varies from $65,000 to $1 million (Shannonhouse, 1996). The total cost for American firms has been estimated to exceed $2 billion annually (Punnett, 1997). Further, failed assignments can damage firm reputation, disrupt relationships with locals, and negatively affect expatriate's psychological health (Fisher & Hartel, 2003). Therefore, with increasing expansion into international markets, organizations must give even greater attention to the selection, training, competency and adjustment of their expatriates.

In order to respond to the challenges, researchers have intensively studied international adjustment issues such as cultural value dimensions, cross-cultural skills, and cross-cultural training. Prior to the cultural value dimension studies (e.g., Hofstede, 1980; Lingenfelter &

Mayers, 1986; Trompenaars, 1993; Javidan & House, 2001), most of the cross-cultural research was focused on expatriate adjustment to culture shock. Typically, these earlier studies centered on the U-curve adjustment pattern that takes place after the expatriate arrives on a foreign assignment (McCormick & Chapman, 1996; Black & Mendenhall, 1991). Social learning theory was then employed to explain adjustment from the perspective of individual learning through social interaction during acculturation (Black & Mendenhall, 1991; Bandura, 1977). Some other studies found pre-departure selection and preparation as an important factor for adjustment while identifying variables that predict intercultural effectiveness for either selection or training purposes (e.g., Hutchings, 2002; Liu & Lee, 2008). It should be noted that many competency variables, such as flexibility, are cross-culture general traits so that they apply regardless of which culture the expatriate is entering (Bochner, 1973). However, much of the trait research then shifted in favor of 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).

While each of these research streams makes important and unique contributions to the literature on expatriates' international adjustment, their models are mainly descriptive and largely based upon a somewhat isolated single theoretical perspective. So, we believe that a more prescriptive and comprehensive theoretical model is needed for responding to the present challenges properly including a 1) a more recent literature review, 2) a comparison and synthesis of constructs and models from multiple theoretical perspectives, and 3) to update the key variables of international adjustment for investigating the current phenomenon appropriately. Fourth, there is a need to more thoroughly examine the relationship between cross-cultural effectiveness and adjustment.

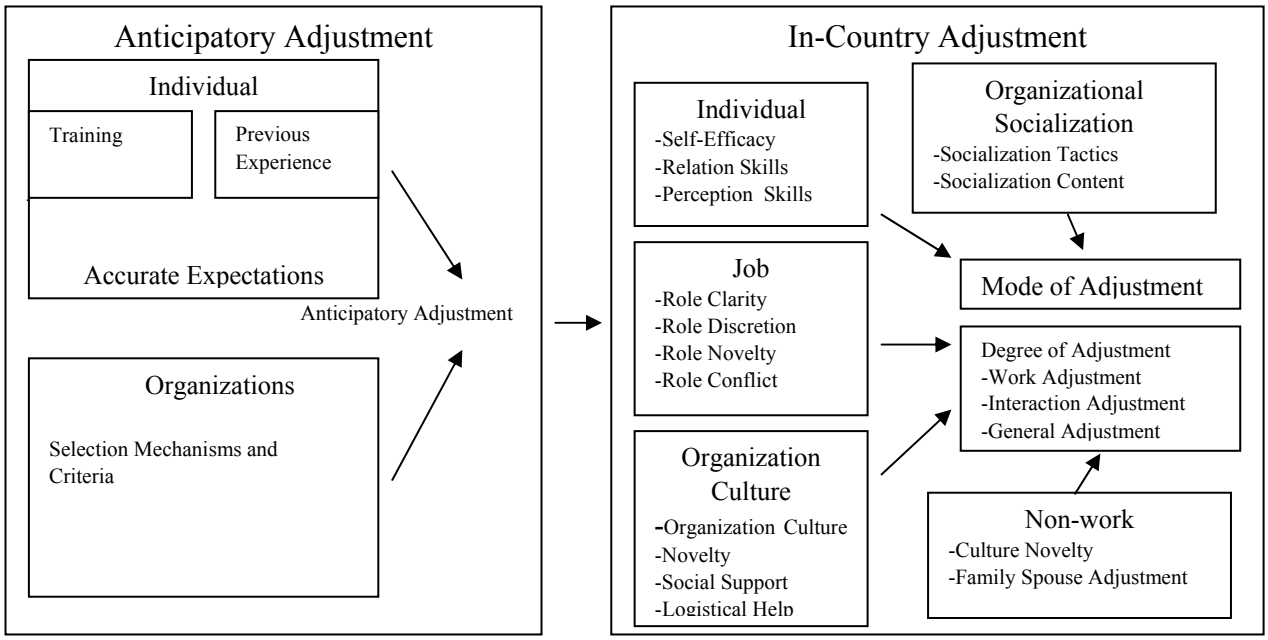
THE FRAMEWORK FOR INTERNATIONAL ADJUSTMENT (FIA) MODEL

Black, Mendenhall and Oddou (1991) proposed the following model (see Figure 1 below) to explain the overall process for international adjustment. The model recognizes cross-cultural adjustment as a multi-dimensional construct that traditionally has been defined as the extent of psychological comfort that an expatriate experiences when encountering different aspects of a new culture (Black, 1988; Black & Stevens, 1989; Liu & Lee 2008). As described in the U-curve theory, the degree of adjustment plotted against time begins at a high point during the initial honeymoon phase, followed by an almost immediate drop in adjustment caused by culture shock, followed by an upward adjustment and finally, mastery. Adjustment is not so much a matter of conformity to a specific culture but is observed as increasing satisfaction in being able to cope because the expatriate learns how to work effectively within the host country. In short, the goal for adjustment is not assimilation, only acculturation. The degree of adjustment may be specific to a country, organization, or the individual expatriate. It should also be noted that the

social learning theory approach mentioned above deemphasizes specific time frames for adjustment and focuses on learning curves for individuals.

However, early studies (e.g., Baker & Ivancevich, 1971; Adler, 1983a) found that "Management researchers have largely failed to study systematically the psychological, social, and behavioral concerns of managing overseas operations" (Liu & Lee, 2008, p. 182). One of the exceptions is the Black et al. (1991)'s Framework of International Adjustment (FIA). FIA provides a good foundation 1) to build upon; 2) to identify a more comprehensive list of competency factors and models from the literature; 3) to integrate those factors and models into a systematic framework; and 4) identify, where possible, actual or potential interaction effects while synthesizing factors and models.

Figure 1: Framework of International Adjustment from Black et al. (1991)



The FIA has an advantage in that it begins to move away from the strictly linear model of adjustment, based on time, toward the recognition of adjustment as a broad multifaceted construct with interacting dimensions. This seems reasonable considering that individuals vary in the amount of time they need for adjustment. Beginning with the Anticipatory Adjustment Phase, prior to entering a new culture, expatriates are typically selected for overseas service based upon technical or managerial capabilities. Some receive technical training along with culture-general and culture-specific training. Expatriates may also have had prior cross-cultural experience traveling to the country of destination on business trips or may have lived in another

culture. Selection, training, and previous experience all contribute to more accurate expectations for entering into the in-country adjustment period. Black, Mendenhall, & Oddou (1991) identified five major in-country variables affecting adjustment. First, individuals bring with them differing levels of self-efficacy, relational skills and perceptions that may be either evaluative or non-judgmental. Second, the degree of clarity, discretion, novelty, and conflict in the job itself strongly influences adjustment outcomes. Third, how novel (different) the host organization's culture is compared to the parent corporation and the level of social and logistical support from the host organization, play a major role in adjustment. Fourth, whether formal or informal, effective tactics and content of organizational socialization help expatriates successfully learn inside the host organization. Fifth, non-work factors including how novel the mainstream culture is and whether family-spouse are successful in adjusting, influence the overall success of the placement. All five factors simultaneously interact and contribute to the mode and degree of overall adjustment.

LITERATURE REVIEW

The following literature review is organized around the FIA. Again, the purpose of this study is to review recent research to update the FIA, to identify gaps between the FIA and the recent research, to build an extended model with more clearly defined elements, to integrate the elements of the model where possible. Thus, we try not to repeat what Black, Mendenhall, & Oddou. (1991) identified here.

Anticipatory Adjustment

Three elements of anticipatory adjustment appeared in the literature: testing, training, and previous experience. Testing in intercultural effectiveness can play an important role in preparing expatriates. Candidates should be tested for openness to diversity, interpersonal ability, and language skills (Ayoko & Hartel, 2000). Cross-cultural testing can inform the expatriate about the degree of their preparedness to engage in cross-cultural situations. Further, specific language and culture pre-testing may be necessary to determine the level and type of training required for overseas adjustment.

Rigorous pre-departure cross-cultural training reduces stress, uncertainty, and culture shock (Sims & Schraeder, 2004). Training may include both cross-cultural specific and general content. Other approaches to cultural training are cross cultural assimilators (Bhawuk, 2001), total immersion in the host culture and language prior to beginning the new assignment (Pires & Stanton, 2000, 2005), and various global leadership development programs. Adjustment was found to improve by enhancing an expatriate's language skills (Shaffer & Harrison, 2001).

Two types of cross-cultural experience emerged from the literature: experience with the host culture and experience living and working in any other culture. In a study on selection for

overseas expatriates, Australian managers, who had limited exposure in the global market and were not exposed to international best practices, consequently had difficulty serving in Chinese assignments and lacked general globalization skills necessary for success in international business (Edwards, O'Reilly, & Schuwalow, 1997; IRIC, 1995). Therefore, previous experience with the host culture or an overseas assignment is valuable in preparing expatriates.

Black, Mendenall, & Oddou (1991) emphasize the importance of multinational organizations using a wider range of selection criteria for expatriates than domestic employees. Often, high performing domestic workers are selected for overseas assignments when, in fact, they may lack skills and knowledge for overseas assignments. When selecting expatriates, there are different advantages to choosing parent country nationals (PCN), host country nationals (HCN), and third country nationals (TCN). PCNs know the corporate culture but lack knowledge about local labor markets, education systems, language, and culture (Scullion, 1992). HCNs often lack knowledge of the corporate culture but have no difficulty with local issues. More frequently, organizations are hiring TCNs because they can readily adapt to any culture. Hutchings (2002) reports that organizations are making greater efforts to select expatriates who have language and cross-cultural skills and who have completed other foreign assignments. This finding indicates that companies are still not willing to invest in support but, because the demands of an overseas assignment are challenging, companies are acknowledging the need to select expatriates who require less support since they already have knowledge of the host country.

One strategy for integrating individual training and international experience with organization selection mechanisms is sending expatriates abroad to develop global competencies. Even when they are short-term, these are developmental opportunities from which expatriates gain tangible value-added organizational skills and knowledge, culture specific and general knowledge and skills, an increase in global perspectives, ability to communicate more effectively with people from diverse backgrounds, and a better understanding of trends in business (Mendenhall, 1991 in Liu & Lee, 2008; Hutchings, 2002). Organizations need to brief expatriates extensively prior to being sent on overseas assignments. Briefings should include goal setting and performance expectations in addition to learning about socio-cultural limitations of functioning in the host environment (Hutchings, 2002). Fisher and Hartel (2003) found that human resource managers need not only to identify factors that influence intercultural effectiveness, they need to assess workers on these factors and create interventions including diversity awareness and cross-cultural training. They need to teach mental models and how to apply them in the host country, and as already noted, to provide exposure to foreign travel.

In-Country Adjustment

Black, Mendenhall, & Oddou (1991) identified key factors affecting intercultural effectiveness and adjustment while defining 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. Intercultural effectiveness and adjustment include four dimensions, namely, self-orientation, other-orientation, perceptual skills and cultural toughness (Black et al., 1991). 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.

Fisher and Hartel (2003) further assert that three personal factors contribute to intercultural effectiveness: ability to communicate effectively, to establish relationships, and to cope with psychological stress. 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 if 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, p. 9).

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.

A similar concept 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, p. 52). 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. Finally, empathy and ethnocentrism are assumed as the basis for judgment of CCSI. Three abilities are measured in the 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 to integrating and examining cognitive and behavioral dimensions of cross-cultural effectiveness.

Both Shaffer and Harrison (1998) and Liu and Lee (2008) found that job satisfaction contributes to intercultural adjustment. Job satisfaction can be a reflection of good treatment (fairness and respect), emotional health, organizational functioning, benefits, co-workers and bosses, and the work itself. One benefit of job satisfaction is the presence of more cooperative employees who are willing to contribute to the success of the organization. For expatriates, job satisfaction may function as a hygiene factor for the total overseas experience, i.e., the presence of job satisfaction is necessary but insufficient. Low job satisfaction would certainly contribute to an unsuccessful assignment. In fact, Black, Mendenhall, & Oddou (1991) found that job satisfaction is both a predicted outcome of adjustment and is a predictor of cross-cultural adjustment. Organizations need to have policies and practices in place to support job satisfaction.

Black, Mendenhall, & Oddou (1991) found that organizational socialization, the process by which organizations bring new members into their culture, contributes to intercultural adjustment. This process includes being made a group member, being taught how to communicate in context, and how to accomplish objectives. Socialization, when properly enacted, can contribute to career success. Further, socialization of a new member into the group is also a benefit to the group as they "resocialize" and adjust to change that accompanies membership in a new organization culture.

Liu and Lee (2008) argue "expatriates that are better socialized in the host country are likely to adjust more effectively." Like job satisfaction, socialization is a predictor of adjustment. Policies and practice should foster work-related relationships and networks. However, host organizations still give relatively little attention to in-post support (Hutchings, 2002). Toh and DeNisi (2007) applied social identity theory to create a model centered on the role of HCNs' influence on the adjustment of expatriate managers. The model identifies expatriate and HCN characteristics that enhance the prominence of expatriate national identity and outgroup categorization by the HCNs. Further, they identified HCN socializing behaviors that were either displayed or withheld from the expatriate that affected the adjustment. Toh and

DeNisi (2007) argue that multinational corporations need to be aware of HCN/expatriate social interactions in the host location. Selmer and DeLeon (1996) focused their research on organizational acculturation. In studying Singaporean managers employed by Swedish companies in Singapore, they found that nationals working in foreign-owned business subsidiaries were able to learn work values from the parent organizational culture. Organizational acculturation may be used as a strategy of cultural control applied by the parent organization.

With regard to non-work in-country adjustment, Pires and Stanton (2000, 2005) question the efficacy of culture immersion strategies. They note that cultural values and norms in the individual typically are not changed by simply living in or learning the language of another culture. They found that those who effectively use social networks with a more similar ethnic community, with which the expatriate can more closely identify, may fare better than those immersed in the mainstream culture. In short, if the expatriate finds similarity with at least one segment of the culture, s/he will use that social network as entry into the new culture. This strategy is made possible by large global migration over the past half century providing potential networks and ties for new arrivals. Hutchings and Murray (2002) argue that support is essential for expatriates to improve coping with cross-cultural and emotional demands of overseas assignments. For example, the Chinese turn to their personal network system, GuanXi, to resolve stress and problems. Westerners entering the Chinese cultural system will lack necessary emotional support without such a network. Hutchings (2002) also reported that few of the Australian expatriates in their study had received in-post support for their families other than medical and shopping facilities. Expatriates should be involved, not only in work-related activities and relationships but also in social activities that involve them and their families in the host national culture and local community (Liu & Lee, 2008).

One model found in the literature that integrates the five in-country adjustment dimensions of the FIA is Liu and Schaffer (2005)'s development of a social capital model for expatriation. Social capital exists in relationships and networks among social actors and is created through exchanges between those actors (Karner, 2000; Bourdieu, 1986). Social capital is both created and maintained through these exchanges (Lin, 2001a; Lin 2001b). Expatriates form social networks and gain resources including, but not limited to, wealth, power, reputation or performance. Performance, for example, can be measured through three dimensions: relational, job, and knowledge transfer. Expatriates also maintain social capital through exchanges in social networks. For example, they maintain their physical and mental health, life satisfaction and general psychological well-being by relying on networks, even those with host country nationals (HCN). Liu and Schaffer (2005) found that opportunity (prospect of gaining access to multiple resources from others) and host country national ability (interpersonal skills and cultural empathy) were forms of social capital that had the greatest influence on expatriate adjustment and performance. Performance (relational, job, and knowledge transfer) was most influenced by network density, depth of relationship with HCNs, norm of reciprocity, and the

HCN's interpersonal skills and cultural empathy. Implications of this research suggest that social capital is maintained and expanded when deep and extensive social networks exist within HCNs. The expatriate's knowledge and skills, job dimensions, understanding of organizational culture, social support, and logistical help are all enhanced through network interaction with HCNs. This may also be true of nonwork dimensions if HCN networks are formed beyond the work place. However, Liu and Lee (2008) point out that it may be difficult for expatriates to rely on HCNs due to language and cultural differences.

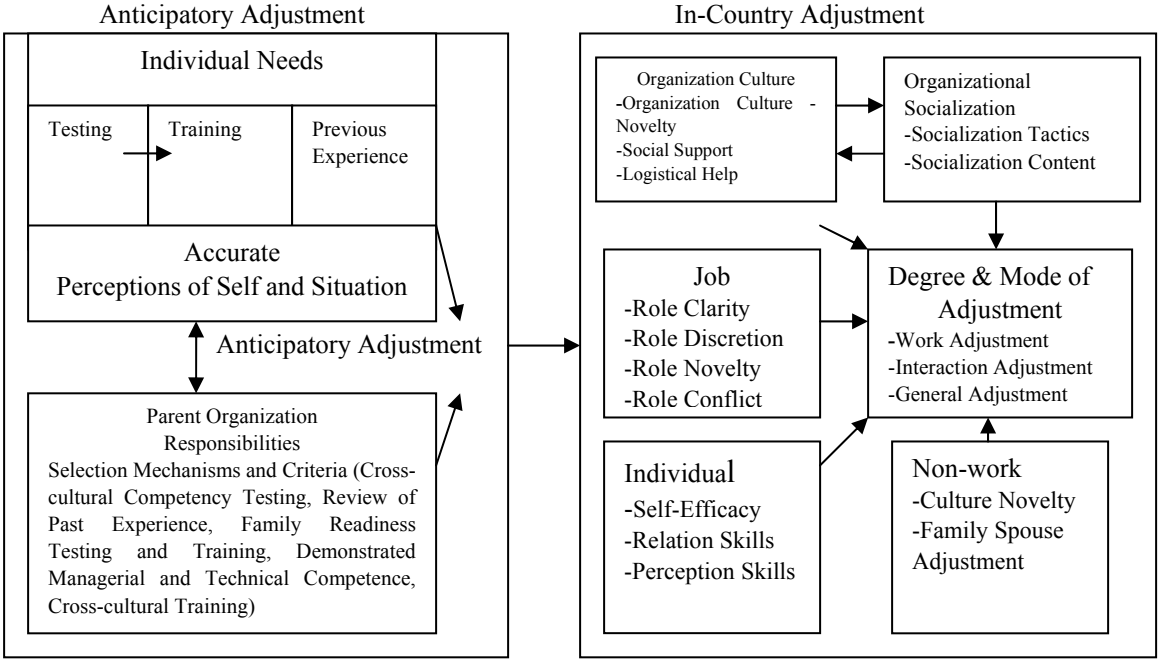
Black, Mendenhall, & Oddou (1991) identify three facets of mode and degree of adjustment - the outcome of the total adjustment process. They are work adjustment, interaction adjustment, and general adjustment. Work adjustment, while aided by similarities in parent company policies and procedures, involves the adaptation to new work roles, tasks, and the host environment. This dimension can be measured most easily, not only by perceptions of the expatriate, but through traditional means of performance appraisal. Interaction adjustment, the most difficult of the three, is the degree of comfort an expatriate experiences while communicating with both host country nationals at work and outside of work.

Bartel-Radic (2006) emphasizes that the process of intercultural interaction can be enhanced significantly through participation on international or intercultural teams. Employees can be regularly assigned to work on virtual international teams. Therefore, intercultural interaction plays a major role in intercultural learning. "Interculturation" may take two forms: indirect interaction, for example through the media, and direct interaction as in face to face meetings. According to Bartel-Radic (2006), to foster intercultural interaction and learning, the desire to learn, positive emotion, and a critical reflection on one's own culture, are required. Therefore, measuring the interaction adjustment outcome is more complex than work adjustment. General adjustment is the overall adjustment to living in another country including domestic issues such as housing, shopping, health care, and cost of living. Peltokorpi (2008) found that positive general adjustment is directly related to expatriate language ability and traits of emotional stability and cultural empathy. However, it might be argued that issues such as these will involve the expatriate's spouse and will need to be measured by engaging both spouses.

REVISITING BLACK, MENDENHALL, AND ODDOU'S (1991) FIA

The Framework of International Adjustment Model has utility for understanding the multifaceted interactive construct and process of overall cross-cultural adjustment. While based upon Black, Mendenhall, & Oddou's (1991)'s FIA, here we argue for a more prescriptive, rather than only descriptive model, to guide both researchers and practitioners (see Figure 2 below for our prescriptive model). Most of the changes to the model are found in the Anticipatory Adjustment Phase where newly assigned expatriates and their parent organizations can influence adjustment.

Figure 2: Modified Framework of International Adjustment adopted from Black et al. (1991)



Beginning with both the Individual and Organization Anticipatory Adjustment dimensions, several enhancements can be made to the model from findings in the literature. Cross-cultural work interaction and effectiveness testing provided by the organization for the individual can determine specific training needs, closing or identifying many deficiencies prior to departure. Testing can provide additional information about the training needs of candidates interacting with organizational responsibilities from Anticipatory Adjustment. While a test or even set of tests should not be used to make a final determination of readiness for an overseas assignment, they may help to identify individuals who are currently ready and those who may need more preparation. A more detailed model should include language and culture-specific training, general cross-cultural training, diversity training, and interpersonal communication and skill training. Previous experience might include assignments to work on international training teams and making short-term visits to the host country prior to a long-term assignment. Therefore, testing should be added to the "Individual Needs" dimension to indicate that testing informs the expatriate and the company about his/her training needs and abilities. For example, testing for cross-cultural social intelligence and intercultural competency inform the individual and company about the expatriate's level of self-efficacy, relation, and perception skills required for in-country adjustment. From a research perspective, we propose that In-Country Adjustment skills can and should be tested during the anticipatory adjustment stage. Therefore, we offer the following research propositions:

Proposition 1: A broad range of relevant testing is positively associated with a candidate's accuracy of perceptions about self and the cross-cultural situation to which they are being assigned.

Proposition 2: A broad range of relevant testing is positively associated with proper selection of relevant customized training.

Proposition 3: Accurate perception of self and the cross-cultural situation to which an expatriate is assigned is positively associated with Anticipatory Adjustment.

Proposition 4: Previous cross-cultural experience is positively related to accurate perception of self and the cross-cultural situation to which an expatriate is assigned.

Proposition 5: The interaction effect of testing, training, and previous experience is positively related to accurate perceptions of self and the cross-cultural situation.

Further, there is a need to connect the "Individual Needs" with "Organization Responsibilities" dimensions, i.e., showing the interaction of responsibilities between expatriate and his/her company. For this reason, the organization dimension must include testing and training as well. The combination of Individual Needs (testing, training, and previous experience) interacting with organizational responsibilities create a more comprehensive and prescriptive model for Anticipatory Adjustment. Moreover, organizational testing and review of past experience provide a partial but significant input to selection of expatriates. Extending testing and training to expatriates' families, especially spouses, may also assist expatriates and companies in preparation and even selection decisions. So, we propose:

Proposition 6: The degree of organization responsibility for providing a broad range of relevant testing is positively associated with Anticipatory Adjustment.

Proposition 7: The degree of organization responsibility for providing a broad range of relevant training is positively associated with Anticipatory Adjustment.

Proposition 8: The degree of organization responsibility for providing relevant cross-cultural experience is positively associated with Anticipatory Adjustment.

Proposition 9: The degree of organization responsibility for providing relevant managerial and/or technical training is positively related to Anticipatory Adjustment.

Proposition 10: The degree to which the organization effectively meets individual needs is positively associated with Anticipatory Adjustment.

The In-Country Adjustment dimension involves five sub-dimensions including individual efficacy, relation, and perception skills, job attributes, organization culture, organizational socialization, and non work factors. This research showed an abundance of studies related to individual skills and a moderate number of studies related to cross-cultural job attributes, organizational socialization/culture, and non work factors. Recommendations of this research are as follows:

Self-efficacy, relation skills, and perception skills are generally good categorical descriptors for individual skills. However, the availability of various models and tests for self efficacy, relational skills and perception skills (including but not limited to intercultural competency, social intelligence and capital) make it possible to pre-test for these skills during the Anticipatory Adjustment stage and post-test for these skills during and after the In-Country Adjustment phase. It should be noted that cross-cultural social intelligence and social capital, in particular, move Black, Mendenhall, & Oddou's (1991) idea of individual skills from solely a trait and behaviorally-focused construct to a more robust social interactive dimension. In short, the latest research identifies the ability to correctly interpret social situations, make positive and accurate judgments, and then effectively interact with others as the units of analysis for study.

Job attributes including role clarity, discretion, novelty, and conflict have been studied extensively in the U.S. However, this review seems to indicate that less research has been conducted on these attributes for expatriates in foreign countries. Job attributes seem to play an important role in In-Country Adjustment. More studies on job attributes, similar to Liu and Lee's (2008) research on Taiwanese expatriates in the U.S., are needed to conclude that job satisfaction and other job factors are significant contributors to expatriate adjustment.

Organization culture and socialization - Organizational socialization refers to acculturation or socialization to a particular organization's culture (Liu & Lee, 2008; Toh & DeNisi, 2007; Selmer & DeLeon, 1996). For this reason, there is an apparent but undefined relationship between organizational socialization and organization culture novelty which should be tested. Black, Mendenhall, & Oddou (1991) argued that socialization must be understood and studied in terms of formal organization tactics and congruent content and the influence of these two dimensions on high or low role innovation. Institutional socialization is associated with low role innovation and a custodial mode of adjustment. Individual socialization (self-socialization) is associated with high role innovation, and, therefore, an innovative mode of adjustment. We will not attempt here to repeat Black et al.'s organizational socialization propositions because they relate to mode of adjustment more than degree of adjustment – our primary focus. Organization culture, as defined by Black et al. (1991), seems to focus on the degree of relative novelty in the host organizational culture compared to the parent culture from which the expatriate comes. The degree of difference in cultures influences the adjustment process. We propose that this construct must be measured in terms of the expatriate's perception of difference. Black et al. (1991) propose that social support within the host organization culture is positively associated with the "degree of international adjustment, especially work adjustment" (p. 310). Black et al. appear to have assumed that social support would be provided by host nationals in the company. Our review of the literature suggests that social support may also come from organizational members who have backgrounds more similar to the expatriate (Pires & Stanton, 2000, 2005). While Pires and Stanton advocate this approach for general adjustment related to non-work purposes, we suggest that binding with individuals or groups from the expatriate's home organization at the host organization, will produce a similar positive

adjustment effect. Therefore, we offer the following propositions according to the recommendations:

Proposition 11: Intercultural competency, cross-cultural social intelligence, and social capital are positively associated with the degree of adjustment during the In-Country Adjustment phase.

Proposition 12: The degree of expatriate perception of host organization culture novelty is negatively associated with degree of adjustment, especially work and interaction adjustment.

Proposition 13: Expatriate perception of strong informal social support in the host organization is positively associated with the degree of adjustment, especially work and interaction adjustment.

Proposition 14: The strength of expatriates' relationships with other home organization nationals at the host national organization is positively associated with international adjustment, especially work interaction adjustment.

The degree of logistical support remains important primarily as an influencing factor on non work issues. Therefore, while socialization and culture should be treated as distinct research constructs, they appear to be closely related and, for the purpose of simplicity, are co-located in revised model.

Non-work is a term that was frequently used throughout the literature. Culture novelty and family-spouse adjustment are indeed significant factors in overall adjustment and success. Therefore, there seems to be support for non work as a distinct and significant construct. High culture novelty is negatively related to international adjustment. High family adjustment is related to employee international adjustment. As mentioned above, Pires and Stanton (2005) argue that expatriates who seek, find, and embrace home nationals living in the same host national community, are better able to adjust to culture novelty.

Degree of adjustment (work, interaction, and general adjustment are the central outcomes of this model and the most useful for future research and guiding practitioners. To strengthen this model, this construct needs to direct researchers and practitioners toward strong measures of expatriate success including, for example, 360 degree adjustment evaluations with parent and host national company supervisors and subordinates. Further, objectives measures that take into account completion of the overseas assignment by the expatriate and spouse/family are needed. Failure of family adjustment may lead to expatriate failure. Therefore, we propose the followings:

Proposition 15: The strength of the expatriate's affiliation with home country nationals living in the host culture is positively associated with international adjustment, especially general adjustment.

Proposition 16: The strength of the expatriate's family's affiliation with home country nationals living in the host culture is positively associated with the family's international adjustment.

Proposition 17: Adjustment evaluations, as measured by parent and host supervisors and peers, are positively associated with international adjustment, especially work adjustment.

Proposition 18: Family/spouse adjustment is positively associated with expatriate adjustment.

Proposition 19: Expatriate completion of the assignment (remaining for scheduled stay) is positively associated with international adjustment.

Proposition 20: Family/spouse completion of the assignment (remaining for the scheduled stay) is positively associated with international adjustment.

In the end, the majority of overseas assignments appear to foster professional and personal growth opportunities for the expatriate, family, and company. However, the toll that the overseas assignments have on some individuals or families who lack the inherent or learned attitudes, knowledge and skills for the rigors of the long-term cross-cultural experience, is a reasonable concern. Failure can be damaging to individuals, their families, their careers, their companies and even diplomatic relations between countries.

DISCUSSION, CONCLUSION, AND FUTURE RESEARCH

This paper provides an extended model of Black, Mendenhall, & Oddou's. (1991) FIA which has been a useful, integrative, and comprehensive model for understanding cross-cultural adaptation in the international organizational context. While we update a recent literature review as well as measurements for the FIA, we believe our extended model would provide better a framework for the adjustment process. The following are some recommendations for future research using the model:

1) Individual cross-cultural effectiveness testing is a key component of the extended model proposed in this research. Both the Intercultural Competency Scale (ICS) designed by Elmer (1986) and Cross-Cultural Social Intelligence (CCSI) developed by Ascalon, Schleicher, and Born (2008) are measurements that could be used to determine pre-departure preparedness and adjustment and progress throughout the overseas assignment. A pre-test followed by periodic measures of effectiveness would be useful in further testing the synthesis of the Anticipatory Adjustment and In-Country Adjustment portions of the model. In addition to reliability testing for both instruments, correlations between the two measurements may provide insights into the comparative robustness of the more trait/behavioral instrument (ICS) and the CCSI which assesses subjects' judgments of social interactions. 2) A second research focus is to compare outcomes (Degree of Adjustment) of expatriates who have received various types and degrees of pre-departure training and who have had various degrees of previous cross-cultural

experience. Work, interaction, and general adjustment outcomes may be measured through a combination of post-test scores, completion of the overseas assignment, and 360 evaluations of expatriate performance. Interaction effects among testing, training and previous experience should also be measured. 3) Determining degrees of expatriate In-Country development with regard to social capital, identity, and acculturation is necessary. The interaction effect among Individual, Job, Organizational Culture/Socialization, and Non-Work dimensions should be a primary focus of future research. Instruments need to be identified or, in some cases, developed.

REFERENCES

Adler, N.J. (1983a). Cross-cultural management research: The ostrich and the trend. *Academy of Management Review,* 8, 226-232.

Adler, N.J. (1983b). Cross-cultural management: Issues to be faced. *International Studies of Management and Organization,* 13, 3-45.

Ascalon, Ma. E., D.J. Schleicher & M.Ph. Born (2008). Cross-cultural social intelligence: An assessment for employees working in cross-cultural contexts. *Cross Cultural Management,* 15(2), 109-130.

Ayoko, O. & C.E.J. Hartel (2000) in Fisher and Hartel (2003). Culturally heterogeneous workgroups: The role of the leader. *Paper presented at the 53rd annual meeting of Academy of Management, Toronto, Canada.*

Baker, J.C. & J.M. Ivancevich (1971). The assignment of American executives abroad. *California Management Review,* 13(3), 39-41.

Bandura, A. (1977). *Social Learning Theory.* Prentice-Hall, Englewood Cliffs, NJ.

Bartel-Radic, A. (2006). Intercultural learning in global teams. *Management International Review,* 46(6), 647-678.

Bhawuk, D. P. S. (2001). Evolution of culture assimilators: Toward theory-based assimilators. *International Journal of Intercultural Relations*, 25(2), 141-163.

Black, J.S. (1988). Work role transitions: A study of American expatriate managers in Japan. *Journal of International Business Studies*, 19(2), 277-294.

Black, J.S. & M. Mendenhall (1991). The u-curve adjustment hypothesis revisited: A review and theoretical framework. *Journal of International Business Studies*, 22(2), 225-247.

Black, J.S., M. Mendenhall & G. Oddou (1991). Toward a Comprehensive Model of International Adjustment: An Integration of Multiple Theoretical Perspectives. *Academy of Management Review*, 16(2), 292-317.

Black, J.S. & G.K. Stevens (1989). The influence of the spouse on American expatriate adjustment and intent to stay in Pacific Rim overseas assignments. *Journal of Management,* 15, 529-544.

Bochner, S. (1973). The mediating man and cultural diversity. *Topics in Cultural Learning.* 1, 23-27.

Bourdieu, P. (1986). 'The Forms of Capital.' In J.G. Richardson (ed.), *Handbook of Theory and Research for the Sociology of Education,* 241-258. Westport, CT: Greenwood Press.

Cantor, N. & J.F. Kihlstrom (1987). *Personality and Social Intelligence. Prentice-Hall, Englewood Cliffs, NJ.*

Edwards, R.W., H. O'Reilly & D. Schuwalow (1997). Global personnel skills: A dilemma for the Karpin Committee and others. *Asia Pacific Journal of Human Resources, 35(3), 80-89.*

Elmer, M. (1986). **Intercultural** *Effectiveness: Development of an* **Intercultural Competency Scale**. Unpublished doctoral dissertation, Michigan State University.

Fisher, G. B. & C.E.J. Hartel (2003). Cross-cultural effectiveness of western Expatriate-Thai client interactions: Lessons learned for IHRM research and theory. *Cross Cultural Management,* 10(4), 4-28.

Hammer, M.R. (1987). Behavioral dimensions of intercultural effectiveness: A replication and extension. *International Journal of Intercultural Relations.*11, 65-88.

Hofstede, G. (1980). *Cultures Consequences: International Differences in Work-related Values.* Sage Publications: Beverly Hills, CA.

Hutchings, K. (2002). Improving selection processes but providing marginal support: A review of the cross-cultural difficulties for expatriates in Australian organizations in China. *Cross Cultural Management,* 9(3), 2002.

Hutchings, K. & G. Murray (2002). Australian expatriates experiences in working behind the bamboo curtain: An examination of Guanxi in post-communist China. *Asian Business and Management,* 1, 373-393.

Institute for Research into International Competitiveness (IRIC), (1995). *Customer's Views of Australian Management: Asian-Pacific Viewpoints,* Perth: Curtin University.

Javidan, M. & R.J. House (Spring 2001). Cultural acumen for the global manager: Lessons from Project GLOBE. *Organizational Dynamics, Spring 2001, 289-305.*

Karner, T.X. (2000). 'Social Capital', in E.F. Borgatta and R.J.V. Montgomery (eds.) Encyclopedia of Sociology, 2637-2641, New York: Macmillan Reference USA.

Kobrin, S. (1988). Expatriate selection and strategic control in American Multinational Corporations. *Human Resource Management Journal,* 27(1), 63-75.

Lysgaard, S. (1955). Adjustment in a foreign society: Norwegian Fulbright grantees visiting the United States. *International Social Science Bulletin*, 7: 45-51.

Liu, C.H. & H.W. Lee (2008). A proposed model of expatriates in multinational corporations. *Cross-Cultural Management,* 15(2), 176-193.

Liu, X. & M.A. Schaffer (2005). An investigation of expatriate adjustment and Performance: A social capital perspective. *International Journal of Cross Cultural Management,* 5(3), 235-254.

Lin, N. (2001a). *Social Capital: A Theory of Social Structure and Action.* Cambridge: Cambridge University Press.

Lin, N. (2001b). 'Building a network theory of social capital' in N. Lin, K. Cook, And R.S. Burt (eds.) *Social Capital: Theory and Research,* 3-29. New York: Aldine De Gruyter.

Lingenfelter, S.G. & M.K. Mayers (1986). *Ministering Cross-culturally.* Grand Rapids: Baker.

Marlow, H.A. (1986). Social intelligence: Evidence for multidimensionality and Construct independence. *Journal of Educational Psychology,* 78(1), 52-58.

McCormick, I. & T. Chapman (1996). Executive relocation: Personal and organizational tactics. In *Managing Across Cultures: Issues and Perspectives* (ed. Pat Joynt and Malcom Warner). London: International Thomson Business.

Mumby, D.K. & L.L. Putnam (1992). The politics of emotion: A feminist reading of bounded rationality. *Academy of Management Review,* 17(3), 465-486.

Oberg, K. (1960). Culture shock: adjustment to new cultural environment. *Practical Anthropologist*, 7, 177-182

Oddou, G. & M. Mendenhall (1991). Succession planning for the 21st century: How well are we grooming our future business leaders? *Business Horizons,* 34, 39-47.

Ollilainen, M. (2000). Gendering emotions: gendering terms: Construction of emotions in self-managing teamwork. In N.M. Ashkanasy, Hartel, C.E.J., & Zerbe, W.J. (Eds.), *Emotions in the workplace: Research, theory, and practice:* 82-96, Quorum Books: London.

Peltokorpi, V. (2008). Cross-cultural adjustment of expatriates in Japan. *The International Journal of Human Resource Management,* 19(9), 1588 – 1606.

Pires, G. & J. Stanton (2000). Ethnicity and acculturation in a culturally diverse country: Identifying ethnic market segments. *Journal of Multilingual and Multi-Cultural development,* 21(1), 42-57.

Pires, G. & J. Stanton (2005). *Ethnic Marketing: Accepting the Challenge of Cultural Diversity.* Thomson Learning, London.

Pires, G., J. Stanton & S. Ostenfeld (2006). Improving expatriate adjustment and effectiveness in ethnically diverse countries: Marketing insights. *Cross Cultural Management: An International Journal,* 13(2), 156-170.

Punnett, B. (1997). Towards an effective management of expatriate spouses. *Journal of World Business,* 3, 243-258.

Salovey, P. & J. Mayer (1990). Emotional intelligence. *Imagination, Cognition And Personality,* 9 (185-211).

Scullion, H. (1992). Strategic recruitment and development of the global manager. *Proceedings of the Third Conference on International Personnel/Human Resource Management,* Ashridge Management College, United Kingdom.

Schaffer, M. & D. Harrison (1998). Expatriate's psychological withdrawal from International assignments: work, non-work, and family influences. *Personnel Psychology,* 51, 87-118.

Schaffer, M. & D. Harrison (2001). Forgotten partners of international assignments: Development and test of a model of spouse adjustment. *Journal of Applied Psychology,* 86(2), 238-254.

Selmer, J. & C. De Leon (1996). Parent cultural control through organizational acculturation: HCN employees learning new work values in foreign business subsidiaries. *Journal of Organizational Behavior*, 17(1), 557-572.

Shannonhouse, R. (1996). Overseas-assignment failures. *USA Today/International,* November, p. 8.

Sims, R. & Schraeder (2004). An examination of salient factors affecting expatriate culture shock. *Journal of Business and Management,* 10(1), 73-88.

Tan, J.A.C., C.E.J. Hartel, D. Panipucci, & V.E. Strybosch (2005). The effect of emotions in cross-cultural expatriate differences. *Cross Cultural Management,* 12(2), 4-15.

Toh, S.M. & A.S. DeNisi (2007). Host country nationals as socializing agents: a social identity approach. *Journal of Organizational Behavior*, 28(3), 281-301.

Trompenaars, F. (1993). *Riding the Waves of Culture*. London: Nicholas Brealy.

THE EFFECTS OF CRISIS ON THE SECURITY EXCHANGE: CASE STUDY OF ISTANBUL SECURITY EXCHANGE

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ABSTRACT

One of the most important criteria in showing the development level of a country is that financial markets of the country have gained depth. The most important function of financial system is reconstruction of economy and as a result of this, contribution to economical growth by playing a crucial role in the distribution process of capital. From this respect, Stock exchange is the leading indicator in showing countries' financial depth .The crisis that develop either internally and have a growing contagion effect with globalization, make themselves felt in stock exchange with an increasing severe.

After the crisis in 2000-2001, Turkey has lost the growing trend lasting for twenty seven quarter in the following of 2008 crisis. With this study, we have tried to explain where the crisis has started via national share indices of Istanbul stock exchange, how it has developed and how it has gained and in which way it has continued oscillation with the help of tables and graphics.

Key Words: Financial Crisis, Stock Exchange, Istanbul Stock Exchange.

INTRODUCTION

Countries need to increase investments for realizing their industrialization. Developing countries provide their capital needs from banking system in order to increasing investments. However banking system doesn't have sufficient information, skills and effectiveness to turning funds into productive investment projects. Capital markets forwarding funds, which collected by filling banking system's gaps, to productive investments projects and thus accelerate growth and industrialization process of countries. In this sense, the most important institution of the capital markets is the Security Exchange. Security Exchanges provide small savings to be gained to the economy increase the liquidty of securities which traded in primarily market and transfer capital to productive investment projects. Besides, Security Exchanges serve as an economic barometer because of being affected by economic indicators quickly and showing direction of expectations. With transferring funds to the companies managed transparently and well, Security Exchanges lead bad companies to be taken over, thus it causes the increase of the economic efficiency.

Countries take steps to inflow the capital needed for investments with the effection of globalization in direction of liberalization of financial system. But regulations in this direction reduce the resistance of the countries against external shocks besides increasing the entry of hot money. Thus starting a crisis in foreign countries increases also the effect of contagiousness.

CAPITAL MARKETS AND SECONDARY MARKETS

Financial system is a system that balance supply and demand of funds and make funds available in terms of time, amount, maturity and individuals (Akdis, 2000:5).

The financial system has an extremely important function in the economy because it enables funds to move from economic agents who lack productive investments opportunities to those who have such opportunities (Mishkin, 1996:2).

One of the important factor that countries needed to realize development and industrialization is to increase investment thus enable funds which will be used in investments sufficient and qualified. Therefore financial markets have important role in the economy. As known, countries need developed financial markets to realize development and growth; this is why diversity and debth of instruments and institutions of financial markets is very important (Oksay, 2000:1).

Capital markets are factor markets that enterprises meet their needs for medium and long term funds, individual and institutioanal financial investors in the excess of savings want to make good use of savings (Capanoglu, 1993:1).

Capital markets are extremely important for countries' economy to provide them in terms of stock investment. Especially by eliminating financial intermediation, capital market's active role in linking real and financial sector place capital markets top priority position in terms of turning savings into investment.

Capital markets are important in terms of spreading risk and manage investment profitable. But the most important risk in this market is flight capital because of economic instability and trust problem. With loosing current balance because of economic reasons, arisen insecurity risk and instability leads entrepreneur not to invest even if there is low interest rate (Okay, 2003:226).

Primary market exists when savers can buy directly certificates of bond and stock from institution that issued bond or intermediate of issued bond institution. The important thing in the primarily market is to buy securities from first issuers. Attaining a bank or brokerage house once in awhile is not an obstacle for this purchase to be in primary markets (Karslı, 2005:31).

Secondary market is a market that trading securities which has already offered to public before. The biggest operation of capital market occurred in secondary markets. (Basoglu and oth.., 2009:16). The main purpose of secondary market is to create demand for primary market and help its development by increasing securation conversion rate. Transactions in this market are not related to companies, transactions include only trading transactions of securities as they are commercial good (Kondak, 1999:26).

Trading volume of secondary market is much bigger than primary market in developed markets. The best part of organized secondary market is Security Exchange (Karslı, 2005:34). Investors want to profit by taking advantage of actual price movements of stock in secondary market in accordance with changing market conditions. Therefore, forecasting future price movements of stocks is extremely important in terms of the magnitude of gains and looses for investors. However, these markets, which could not reach a certain stability and depth, are affected directly by economic fluctuations and shocks. Economic fragility may affect stock's price in this market sometimes negatively or positively and at high rates. This process causes investors to gain or loose. Uncertainty and risk, which caused by the nature of economy, make difficult forecasting future value of stock's price (Özdil and Yılmaz, 2006:212). There

are two reasons for investors to action in the secondary market. One of them is information and the other one is liquidity. Having information about securities in the secondary market is better compared to other markets (Civan, 2007:7).

SECURITY EXCHANGE

Places for trading of certain goods acording to certain rules are called the Security Exchange. All kinds of asset may have its own Security Exchange. Basically assets which traded in market divide into two as real assets and financial assets (Coskun, 2008:424).

The only institution of organized market segment of capital markets is "Security Exchange". Security Exchange is indispensable organ of capital markets and besides provide efficient market environment for transactions, it also helps to finding the real value of securities and makes easier the process of investment. These markets also provide investors the ability to turn securities into cash at any time. Also, information about the securities can be obtained more easily and accurately, therefore decision process of investment will be shorten and easier, and risk and uncertainty related securities will be reduced (Inag, 1994:339).

Security markets are places where security transactions are done in through agents and created by capital owners who search of investment fields in the 19 century. Until 19 century there was not any specific place for people, who has securities and want to change the securities, to venue. Transactions were generally performed in the streets. Later, cafes, restaurants or this kind of places have been used for the purpose of changing securities when replicate of the process. Increases of transactions and gain formal qualifications lead business process to connect to certain rules. Today, there is functioning securities market in many countries. Aforementioned security exchanges continue work as in the field of local, national and international. The most important of international security exchanges are New York, London, Tokyo, Toronto, Paris and Frankfurt (Basoglu and oth.., 2009:55).

Companies can obtain their financial needs through stock or bond selling through security exchanges. The opportunity of obtaining financial needs through security exchanges depends on companies past performance and expected to achieve profitability of future projects. Therefore, the security exchange also carries out the functions for providing financial resource to people who can use it in best project. The function of financing procurement accrues in the stage of first export of securities. Later, Security Exchanges may perform other functions through changing hand of securities. Financial procurement through Security Exchanges stipulated especially for the purpose of protecting small investors. Therefore the potential of carrying out these functions of security exchange remains limited especially in developing countries. Moreover, state's issue of high yielded instruments which attracts the vast majority of resources in the financial markets limits this function of the stock exchange market (Turkkan, 2008:1).

Security exchanges are required to fulfillment of certain rules at the level of Security Exchanges and general economy in order to carrying out the expected functions. The requirements which Security Exchanges meet at the necessary level are outlined below:

A high share of institutional investors in the Security Exchange. That is the possibility of evaluating shares as long term savings

Free float rate of the companies is in proportion to take control of the company.

The depth of security exchanges is to be sufficient, in other words the daily buying and selling of shares in the Security Exchange should be only marginally effective level on shares' value.

Addition to ensuring the transparency of stock exchange transactions, the existence of deterrent regulations and controls made for preventing from "insider trading" (Turkkan, 2008:2).

BENEFITS OF SECURITY EXCHANGE TO ECONOMY AND FINANCIAL SYSTEM

Security exchanges are one of the first places which are affected by inflation, the changes in exchange rates, supply of money, GDP and political instability. For this reason security exchange indices carry out its function as an indicator on much macro economic analysis. If a sector or some firms in a sector in the economy grows rapidly then capital will be directed towards to that sector or firms. This can easily occur in the Security Exchange environment. Thus, resources will be moved to fertile fields. On the other hand, it is also possible that strong companies can take over weak companies by collecting their shares at the low price in the Security Exchange. Thus, structural changes have occurred in the industry, companies which managed badly will have been passing into other hands through Security Exchanges (Inag, 1994:342-343).

Security exchanges are places where securities can be easily converted into cash. Security exchanges provide individual, who sell securities in the secondary market, the opportunity of buying newly securities from primary market. Thus, issuance of securities' demand increases in the primary market. On the other hand, if those, who bought securities from security issuance or secondary market, have difficulties while willing to sell or necessarily selling securities then they don't want to buy securities once more. More importantly individual will not deposit their savings on securities in case they need cash after a short or long period to use in another investment or business (IMKB, 2008:10).

Security Exchanges are the tools for expansioning capital to base. Security exchanges provide millions of people to be a partner of the companies and benefit from their revenue. In this context, Security Exchanges are an institution that increases acceptability of market mechanism as socially. At the same time, it is also a tool for being democratic and transparent in the economy. Because of all the transactions of publicly traded companies have to inform public correctly and in this context need shareholders' approval regarding to companies' attempt. In a sense, this case means relations of production become social (Turkkan, 2008:1).

A set of rules are implemented in buying and selling security, the issuer of securities are reviewed and subject to regular audits during quotation, therefore It provides a safe optimum for investors.

Security exchanges provide protection for investors. Companies have to meet certain conditions for being in the exchange list and trading their securities in Security Exchange. In a sense, these companies are under continuous supervision and information about these companies open public in a shortest time for the purpose of protecting investors (IMKB, 2008:10).

FINANCIAL CRISIS

Crisis is fluctuations that occur out of the acceptable limit of changes on the price or amounts in any goods, services, factors or foreign exchange market (Kibritcioglu, 2000:5). Crisis starts as result of

speculative attack of financial investors' expectations about the country's economic conditions becomes risky and it intensifies extend of these attacks' violence (Aslan ve Suslu, 2001:662).

A financial crisis is a nonlinear disruption to financial markets in which adverse selection and moral hazard problems become much worse, so that financial markets are unable to efficiently channel funds to those who have the most productive investment opportunities (Mishkin, 1996:17). In other words, the financial crisis express the process of financial system' disruption insomuch as prevent to carry out financial system's function that canalize resources towards productive investment field in the country (Uyar, 2003:11). Also, the extistence of some main elements such as working of financial markets under the condition of imperfect information and incomplete markets, adverse selection and moral hazard play role in this process.

Excessive rise in interest rates, rapidly decline of stock's price, increasing uncertainity in financial markets, and proliferation of panic that experienced by banks and acceleration of capital flight from the country are the most important indicators (Eser, 1995:49).

As reviewing past of financial crisis, Kinleberger states that the urge of human beings to be rich in ready and easy way follows three-stage process, purchasing irratioanally with bandwagon effect in the first stage (Mania), people wanting to take the advantage of oppurtunity pulls outof the market when the prices reach peak, confusion and disturbance starts when people purchasing from high prices understands that they can't benefit from speculation (Panic)and at last, moving to sales brings to inevitable collapse in contemplation of decreasing loss (Acar, 2009:120).

Crisis is seen as normal phenomenon especially in the developing country which preferred by international capital. The frequency of financial crisis and financial burden brought by crisis in these countries are much more deeply compared to experience in developed countries. This situation of developing countries is derived from features of general economic structure as macro scale, financial institutions and other firms which is not a part of financial sector as micro scale (Conkar ve Ata, 2003:3).

One of the striking important development before the period of financial crisis in developing countries is rapid increase of private foreign funds, and most of these funds enterance are in the form of borrowing. Rapidly debt of these countries is generally occurred after financial liberalization program or determining nominal exchange rates according to certain rules or shedules. Foreing currency input (if it has not been sterilized as in Turkey) causes monetary expansion, increase in demand, non-decline of inflation, real appreciation of local currency and escalation in import demand. Sustainability of inflow of foreign resources (external borrowing) depends on sustainability of applied currency rate or liberalization program. When doubts appear in this regard, it means that countries have been entered into crisis. Any spark in this situation can initiate the crisis (Uygur, 2001:17).

Advance understanding and better evaluation of leading indicators are important on financial crisis. Three is three indicator of the process of financial crisis' inception. First of all is cronic and growth tendency of current account deficit, second is the dissolve tendency in reserves and third is decline in Security Exchange and increase in interest rates. First of the signs, which turn these indicators into real crisis, is defacto devaluation as result of exchange rate rush and uncontrolled increase in exchange rate (Boratav, 2001:50).

2008 CRISIS

The most distinctive feature of current global financial system is that U.S current deficit is financed by Asian countries in largely current deficit providing low interest rate .The process of this system affects many things such as USA economy to progress ,the low progress of interest rates in global markets, the pressure for China to be revalued. Considering Asian countries, which has current accounts surplus, it can be seen that their saving rate is too high. After Asian crisis, savings of these countries increased much more but their investment did not increase at the same rate. In this context, increase of the difference between savings and investments of countries in the Asian region causes increase in current account deficit. On the other hand there also must be over-consuming countries in order to canalize over-saving countries' savings to other countries. On the other hand, Asian Central Banks contributes to finance USA current accounts deficit in order to maintain the competitiveness of export sectors with the interventions on foreign exchange market in an attempt to keep their currency low. Asian Central Banks had bought dollars when foreign exchange was interefered in, and they invest these dollars to US Treasury bonds and other American securities. A large part of current account deficit is financed by Asian Central Banks, not private sector investors (Yalcıner, 2007:1-6).

When foreign exporters are credited with dollar balances due to the US currency account deficit they are used to buy U.S national debt, financing its fiscal deficit. Consequently, the dollar outflow from the US has beed flooding the international capital markets with American dollars, feeding asset or financial inflation to the rest of the world. Since the owners of the dollar debt are looking for a highest possible return, the situation has encouraged moral hazards, creating a bubble in the U.S. housing market, and eventually and increase in the prices of oil, food, and other commodities. The reason that the dollar-balances are re-invested in the U.S. capital markets is primarily that they have the most developed financial markets in the world, whereas most other countries are not able to invest the foreign capital safely in their own financial systems. It does not mean that there is no need for investment in emerging or developing economies, but rather that the U.S. has a comparative advantage in banking and finance, making it more profitable to invest there. The problem is that the systemic imbalance in the U.S. economy creates a phenomenon which is often referred to as excess liquidty. It means that there is more liquidty in the system that what is needed, and since the money has to go somewhere it is invested in one asset market after another, inflating eact in turn. When the bubble in the subprime mortage market burst, it was followed by a jump in the prices of oil and food, mostly due to financial speculation via futures contracts (Perelstein, 2009:15).

The prices of real estate rising faster than cost of debt directs many people directs to mortgage, the increasing demand of real estate causes prices and so the expectatios of profit. Thus, go around in circles which gradually increase in return of property prices and investments. These price increases are not sustainable and some mortage borrowes' unable to pay their debt when price increases slow down and this lead to "rotten mortgages" (sub-prime mortgage) crisis (Ertuna, 2009:7).

Starting from the second half of 2007, the effect of financial crisis is gradually increase particularly in developed countries'market. With negative influence on balancesheet of financial intermediate, firms and household, intense uncertainty turn financial crisis into economic crisis (BDDK, 2008:1).

As a result of volatility of financial markets of US and implemented policies after these volatilities caused a recession in total credit market in 2007. Approximatelly 4 trillion dollars net loans were used in the US in 2007.

When examining sources of 4 trillion net credit utilization in 2007 in US credit market it can be seen that the rest of the world's market, which refers the share of financial sector with other developing countries' market, are predominate The share of other countries'market on credit supply in the third quarter of 2007 decreased to 11% correlate with interest rate, increase in Security Exchange volatility and value of the dollars. Tightening of credit conditions due to the result of volatility occurred in credit markets lead to reduce the possibility of both borrowing and credit supply in the market. Contraction in credit markets makes negative pressure on growth of US economy. US government has been using open market operations for funding credit market and resolves the liquidity constriction in the period of 2007 crisis. To give a solution for financial turmoil, FED preferred firstly making open market operations, and secondly overnight lending to financial institution and underwritten commercial banks for the purpose of provide markets additional liquidity during a financial crisis (BDDK, 2008:36–37).

THE EFFECTS OF THE CRISIS IN 2008 ON TURKEY

Despite not being based on the internal dynamics of Turkey, because of the need of the financing of current account deficit and our international trade's being especially related to the countries which feel the crisis deeply, global crisis has affected our country since the last quarter of 2008. Because of shrinkage of demand, especially the sectors which export has affected very much. Global crisis has taken hold of almost all industries and geographical areas. The shrinkage of demand has made the productions decline especially in the manufacturing industry, construction and commerce sectors. By January 2009, Turkish industry has kept on shrinking day after day for 6 months. The main reasons of speed of expansion's slowing down in 2008 are the easing down the capital inflow, both the internal and external recession of investment, dependent on the increase of the risk in global economy, decline especially in the private sector capital investment, increase in the fluctuation of money market and Turkish Liras' losing in value (TBB, 2009:13)

Compared to the previous year, Turkish financial sector's active size of assets reached to 947.8 billion TL in 2008 by increasing 177.7 billion Turkish Liras and the proportion of financial sector actives to GDP became %99.8. Taking the global economic crisis into account, it is seen that growth performance of Turkish banking sector has contributed to economy significantly.

While domestic resident portfolio investment rose to 544 billion Turkish Liras, increasing by %18,7 compared to 2007, the total amount of investments which belong to foreign residents declined by %36,6 and decreased to 67 billion dollars.

Government security investment of foreign residents was decreasing but deposit was increased. In the year of 2008 stock investment of demostic residents decreased 35,5%, stock investments of foreign residents decreased 40,6% with respect to previous year. The impact of global financial crisis on investment preferences obviously performed in the last quarter of 2008. Decreasing international liquidity with the effect of global crisis and increasing borrowing cost showed the effect on resources of external markets particularly in the last quarter of the year. The total amount of external resources decreased 11% with respect to previous year (BDDK, 2008:12).

In 2008, since the size global crisis have growth in national revenue decrease 1,1%, GDP has been 950 billion Turkish Liras. With the trend of downsizing in production, unemployment rate becomes 14% at the end of the year. Althouth current account deficit get in downsizing trend in the second half of 2008, it rose at the level of 42 billion dollars. Direct foreign investment and private sectors creit create capital inflow but last months of the year privare sector becomes net loan payers (TSPAKB, 2008:4).

It is felt that Current global and local economic developments have had an effect on markets. Thus the interest rate of Central bank raised to 16.75% with the enhancements in 2008 is brought down in certain periods as a result of the problems in international markets' keeping on limiting the domestic and foreign demand and the limited effects of fluctuations in exchange rate on inflation. The rate is reduced to 8.75% in June 2009 with regard to deeping of deceleration in economic activity. The realization of annual consumer inflation as 5.24% and the decline of producer price as 2.46. There is a scope for limited discount in policy interest rate. In addition to economic conjuncture and policy interest rate, by enabling to observe moderate decline in DİBS and deposit interest. The decline in consumer interest rate is limited because of maintenance of uncertainty (BDDK, 2009:10).

Market value of financial institution decreased $45 billion level at the end of 2008. In Istanbul Security Exchange (ISE), the recession felt especially in the last quarter of 2008 and the loss in Turkish Liras have influenced the recession of the market value. (TBB, 2009:8)

By the first quarter of the year 2009, Turkish financing sector's size of assets has regressed to the level of 945.2 billion TL, decreasing by %0,3 compared to the previous year. Inspite of bank's, consumer financing firms', mutual funds', pension company's size of assets increasing, the growth speed of financial renting, factoring, insurance business, securities investment associations, real estate investment associations affected the general growth speed negatively. On the other hand, banking sector's total size of assets has increased by %2.9 in the mean time. Although banking sector is having a rough time globally, the good performance of Turkish banking sector draws attention during March 2009. Thanks to interest discount done by Central Bank of Turkey (TCBM) and the positive progress happened in ISE, while gaining of mutual funds increased, their %19.7 size of assets and financial sector's size of assets has scored the highest proportional increase. In this term, securities investment associations' size of assets declined by %8.2. In the first quarter of 2009, the total size of portfolio investments belonging to domestic residents accounted for 566.9 billion TL, increasing by %4.2 compared to the end of 2008. While deposit and repo investments of TL fell in 2009 compared to December 2008, other items of investments increased. Proportionally the highest increase became in the esteemed mine accounts by %70. (BDDK, 2009: 15).

THE EFFECT OF THE CRISIS 2008 ON NATIONAL ISE 100 PRICE INDICES

The market indices of stock, generally depended on a specific stock, is a statistical indicator created for reflecting the total performance of the market. (Reilly, 1992:140) Stock indices which are general indicators of the market give general information about "market performance" by using the price of stocks within the scope of indices. Stock indices generally reflect the momentary situation of the market. Another important subject about the market indices of stock is that whether the indices only shows the capital earning or loss called price movement or it shows the total gaining movement which pays attention to the dividends which are paid as cash. (Daglı, 2009:193)

ISE the Security Exchange is a system which was established for evaluating the performance of price and gaining of stocks which has been treated at the exchange. ISE price indiceses are counted and published during the whole session while gaining indiceses are only counted and published at the end of the session and they are used as basis indices for National ISE100 Indices Market. ISE100 indices consists of the first 100 stocks which are put in order according to the terms determined by ISE out of the companies which are treated at the National Market except for stock exchange investment association. ISE100 indices contain the stocks of ISE50 and ISE30 automatically. ISE Council states the stocks which are going to be placed in indices by assessing periodical market data. The stocks which are treated in the National Market are supposed to be treated at least 60 days at the exchange by the end of the evaluation period (November, February, May and August) in order to be received to ISE30 and ISE50 and ISE100 İndiceses. However the part of stock's market value which is offered to public firstly, by the date of public offering, there is no condition of being treated at the exchange at least 60 days for stocks parts of which are in the preservation of The Registry Agents Inc. (MKK) in the National Market and whose market value is approximately over %2 or above. The stocks which have these qualities and high market value are sufficient of being treated at the exchange by the end of the assessment period.

One of the criteria taken into account regarding development and depth of capital markets is indiceses related to trading volume and transaction sum in Security Exchange as a barometer of financial markets. Data were evaluated starting from 1900s when the liberal financial system showed itself in every stage of life instead of starting from ISE establishment. Although liberal financial system has been started to be implemented and the founding of ISE is older, our work started in 1900s in terms of functioning of instituitions and systems because of available depicts and problems. More realistic inferences are tried to be made by benefiting from USD data retrieve from inflation effect along with TL to retrieve from inflation effect for removal of seasonality effect in the study. All figures used in the study show as of 1990Q1-2009Q4.

Crisis emerged in 1993-94s, 2000-01s and in 2008 in Turkey. The figures obtained, Figure 1 and 2 suggests very clearly. Although It seems that high inflation rate in Turkey during 1993–94 can't show the 93–94 crisis in Figure 1, Figure 2 can exactly show all crisis in point of USD. In the period of crisis İstanbul stock Exchange indice has functioned as a barometer. Exchanges are indispensable part and indicator of financial and economic system for each country. İstanbul Stock exchanges confirm this criterion. Figure 3 and 4 based on trading volume reveals a fact about İstanbul stock Exchange as follows: By moving on datas which particularly occurred in USD, it may be called "Turkish stock exchange is not deep and developed one" considering the value of all transactions occurred in periods until 1994. At this stage of country, having a crisis downgraded this undevelopment and non-deepining even further. After the crisis in 1997-1998 and specially the period of 2000, ISEhas gained great momentum. It can be said that it is a motorized power of developing country. Considering 2008 crisis, all first 4 figures shows the damage of crisis and recession in the country. When examining first four figures, it can be seen that Turkey has been entered into crisis at the beginning of the 2008 and during this year it went on by increasing the violence of this period of recession. In 2009, crisis continued but also an improvement can be seen. By the end of 2009 it can be seen that effect of crisis still goes on and Security Exchange indiceses still could not reach the value before crisis. ISE performed successsfully its function as Security Exchange. The data were reflected in the indices and indices gave an idea to all investors about what was

the general situation of country. Being of indicator of the economy and financial system was exhibited successfully.

Figure-1.Closing Price of ISE National 100 Stock's Price Indices-TL: (19990Q1-2009Q4)

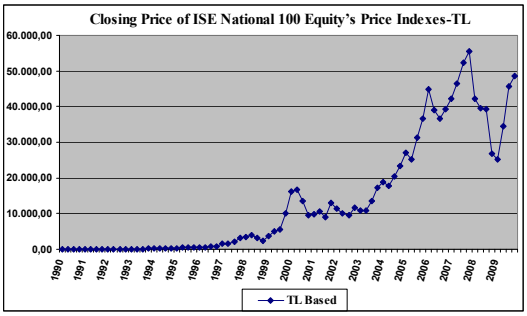

Figure-2.Closing Price of ISE National 100 Stock's Price Indices-USD: (19990Q1-2009Q4)

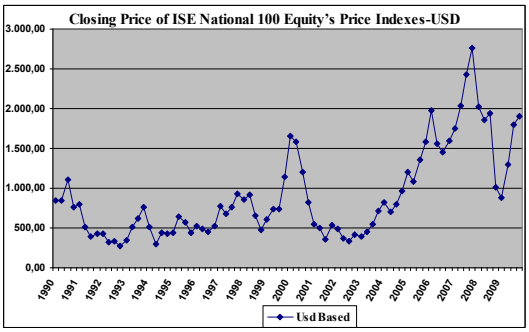

Figure-3.Traded Value of ISE National Market- TL: (19990Q1-2009Q4)

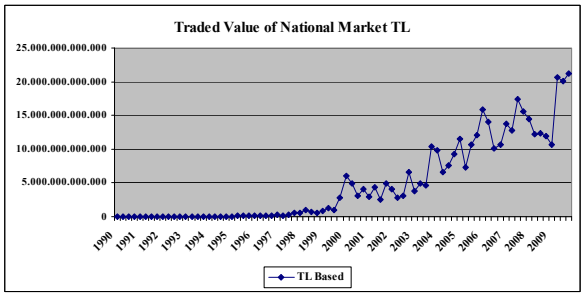

Figure-4. Traded Value of ISE National Market- USD: (19990Q1-2009Q4)

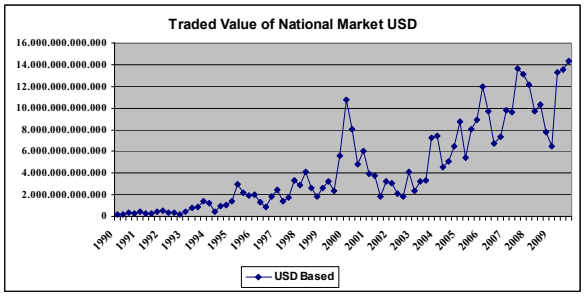

Figure-5.Trading Volume of ISE National Market-TL: (19990Q1-2009Q4)

Figure-6.The Number of Contracts of ISE National Market: (19990Q1-2009Q4)

Figure-5 and 6 tells us something about crisis and it is especially about depth and development of Turkish Security Exchange. Figure-5 shows Transaction Volume of Istanbul Stock Exchange and Figure-6 shows The Number of Contracts of Istanbul Stock Exchange.

Monetary value is more important than number of transaction. The number of transactions can be deceiving. A transaction may be more significant and harsh then hundred or thousand transactions. Therefore it is good to fasten on Figure 5 which shows especially the monetary value of transaction quantity. Figure 5 prove that the monetary value of transaction that occurred years of 1990 and 2000 as little as absent and this period goes o very long like 10 years. With the beginning of 2000, it shows that

country has a development and exploit period in capital market. This figure also proves the economic crisis that country face in years of 2002-2003 and 2008-2009. Figure 6 explains that transactions occurred till 1994 are not noteworthy and the transactions occurred after 1994 have serious increase.

This situation means that orientation of depositors is directed to ISE in the country. Again Figure-6 shows clearly that indices of Security Exchange decrease not only as monetary value but also the number of transaction.

As a result, ISEis a barometer and an indicator related economic and financial situation in macro sense. Not only going to better but also going to worse times of the processs of Turkey's economic and financial structuring can be seen transparently that how much this good or bad process goes on. 6 Figures which created for this purpose and used in the analysis above proves us this situation.

CONCLUSION

Capital markets are the most significant arguments of the overall system that the economical and financial structure set up.The success and development of real sectoris directly and positively related to success and development of capital markets. Stock Exchange and indiceses are the indications of running financial system.From this point of view, comments and inferences about stock exchange and real sectors can be made.Developments in financial system show ıtself in real sector after a while.

The same proposition is valid in unfavorablecase,In other words Security Exchange indiceses that shows a negative development have the same effect on real sector. The general course of countries' economy is upward when economical and financial system is indicator to "bullish market".This adverse effect showed ıtself in real sector of the country when ecenomical and financial system is indicator to "bear market". The power of source and funds that provide processing of real markets depends on well functioning of financial system.The resources not being obtained can not be tranferred to real sector as a matter of course, So It will cause real sector to slow down and unable to develop. Stock exchange indiceses as a barometer is indication of positive and negative case in the up and down period. As we look through the worldwide, Dow Jones, Standart and Poor's 500 İndices, Nasdaq, Merval, Bovespa, IPC, All Ordinaries are considered as American Stock Exchanges, Dow Jones, FTSE 100, CAC 40, XETRA DAX, ATX, BEL-20, MIB TeL, AEX General, OSE All Share, Madrid General, Swiss Market, ISE are considered as European Stock Exchanges. Shangai Composit, Hang Seng, BSE 30, Nikkei 225, KLSE Composit, PSE Composite, SEUOL Composit, All Share, SET, Twain considered as Asian and Far Eastern stock exchange. All these stock exchanges are integrated with financial and economical system and affected by any kind of activation. Each one is indicative.In globalizing world, integration of financial system to globalization progress is a important reality. Apart from activation resulting from country's integral dynamics, positive and negative cases resulting in the markets of neighbouring and non-neighbouring country affects the ecenomical and finacial system of the country. In this case, indiceses referred as the most important indicator of finacial system shows every effect that occurs.

REFERENCES

Acar, M. (2009). Globalization As A Straighten and Libertory Process. Ankara: Orion Publishing House.

Akdis, M.(2000). Global Financial System, Financial Crisis and Turkey. Istanbul: Beta Publications.

Aslan, E. , Suslu, B.(2001). A General Assesment of Occured Crisis in Turkey: New Turkey In The Light of Financial Crisis, Number: 41, Year:7, September-October 2001.

Basoglu, U. , Ceylan, A. , Parasız, I. (2009). Finance (Theory, Institution, Aplication) Bursa: Ekin Publications.

BDDK. Banking Regulation and Supervision Agency. (2008). ABD Mortgage Crisis. Official Statement. Number.3.

BDDK. Banking Regulation and Supervision Agency. (2009). Financial Markets Report. March 2009 – Number 12.

Boratav, K. (2001). Capital Movements in 2000/2001 Crisis. Journal of Economic, Administration and Finance. 16 (186).

Civan, M. (2007). Capital Markets Analysis and Portfolio Management, Ankara: Gazi Publisher.

Coskun, M. (2008). Capital Markets, Eskisehir: Genc Copy Center.

Capanoglu, M.B. (1993). Privatization Applications of Capital Markets and Security Exchange. İstanbul: Beta Publisher.

Conkar, K., Ata, H., (2003). Crisis Ratio Which Can Use As Prevention Financial Crisis and An Assestment From The Point of Turkey. Afyon Kocatepe University. SEAS (IIBF) Journal. Number:2.

Daglı, H.(2000). Stock Market Indices and Turkey. Balıkesir University. Journal of Social Science Enstitute. Binder: 3. Number.4.

Dogu, M. (1996). Emerging Markets' Stock and Turkey. Ankara: SPK Publishers.

Ertuna, Ö. (2009). Lesson From Crisis: Is It An Opportunity? Journal of Acconting and Finance, Number: 43, July 2009.

Eser, K. (1995). 1994 Financial Crisis and Quest For Reform. Journal of Economic, Administration and Finance, Eylul 1995.

Inag, N. (1994). Analysis Development and Capital Market. The Central Bank of Turkey (TCBM) Research General Directoarate.

ISE. (2008). Basic Information Guide of Security Exchange and Capital Market, Istanbul.

Karslı, M. (2005). Capital Market and Security Exchange. Istanbul: Alfa Publication.

Kibritcioglu, B. (2000).Monetary Crisis. Unpublished Treasury Specialist Thesis. Ankara.

Kondak, N. (1999). Enterance to Security Exchange. İstanbul: Der Publications.

Mishkin, F. (1996) Understanding Financial Crises: A Developing Country Perspective. Nber Working Paper 5600. Newyork.

Oksay, S. (2000). New Legal Regulations in Financial Markets (Re-Regulasyon) Needs and Turkish Financial System. Marmara University Social Science Enstitute. Öneri Journal, June 2000.

Okay, E. (2003). Is It Real Sector's Boom that Deepen Financial System In Turkey or Vice Versa? 7th National Finance Symposium.

Özdil, T., Yılmaz, C. (2006). Determination of The Highest Income Strategy on Purchasing Decision of Stocks Operated Sectorial Base in Istanbul Security Exchange (ISE), Celal Bayar University Management and Economic Journal, Binder:13, Number:2.

Perelstein, J. S. (2009). Macroeconomic Imbalances in The United States And Their Impact On The International Financial System. The Levy Economics Instutute Of Bard College. Working Paper No:554. Norway.

Reilly, K. (1992). Investments, Third Editions. The Dryden Pres. Forth Worth.

Turkkan, E. (2008). Role of Security Exchange on The Process of Competition. http://Www.Rekabet.Gov.Tr/İndex.Php?Sayfa=Sayfahtml&Id=605. E.T. 17.12.2009.

TBB. Banks Association of Turkey. (2009). Our Banks 2008.

TSPAKB. Association of Capital Market Intermediary Institutions of Turkey. (2008). Turkey Economy.

Uyar, S. (2003). Banking Crisis. Ziraat Printing A.S.

Uygur, E. (2001). "Turkey From Crisis To Crisis: 2000 November and 2001 February Crisis", Turkey Economic Association Discussion Paper. 2001.

http://Www.Econturk.Org/Turkiyeekonomisi/Krizdenkrize.Pdf

TOBB. Union of Chambers and Security Exchange. (2009). 2008 Economic Report. http://www.tobb.org.tr/yayinlar/yayinlar.php E.T. 17.12.2009.

Yalcıner, B. (2007). The Imbalance of Global Economy. Capital Markets Board Research Report.

STRATEGIC POSITIONING OF NATIONS AS BRANDS

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ABSTRACT

While significant progress has been made in the field of nation branding in recent years, a critical application of marketing that is still for the most part neglected, misunderstood, and mismanaged is nation brand positioning. The positioning decision is often the crucial strategic decision for a brand because the brand position is central to stakeholders' perceptions and choice decisions (Aaker & Shansby, 1982). Effective positioning of nations as brands helps attract investment, business and tourism, builds markets for exported products, and enhance public diplomacy (Quelch & Jocz, 2005). "A good understanding of what positioning entails is a key requisite for anyone involved in nation-brand development" (Dinnie, 2008, p.51). However, little has been published to date regarding the application of positioning strategy to nation brands.

The purpose of this paper is to enrich the marketing practices of nation states. This paper defines the concept of positioning, explains its importance, distinguishes positioning from the similar psychological constructs of image and reputation, and discusses the application of positioning strategy as it pertains to nation brands. The six-step process introduced by Aaker & Shansby (1982) is adapted to illustrate how nations should go about developing an effective positioning strategy to help them compete more successfully over the long term in the global marketplace.

INTRODUCTION

Positioning has long been acknowledged as a core branding activity (Ries & Trout, 1981; Aaker & Shansby, 1982; DiMingo, 1988). Positioning is the act of designing an organization's offering and image to occupy a *distinctive* place in the target market's mind (Kotler, 2000). For example, Charmin is positioned as *the* soft bathroom tissue. Excedrin is positioned as *the* headache medicine. Nyquil is positioned as *the* nighttime cold medicine. MaltoMeal is positioned as *the* economy cereal brand. Grey Poupon is positioned as *the* expensive, top-of-the-line mustard. Each of these brands holds a distinct position in its product category and the organization's product, promotion, distribution and pricing strategies are designed to communicate and support the brand's unique position.

The positioning decision is often the crucial strategic decision for a company or a brand because the position can be central to customers' perception and choice decisions. Further, since all the elements of the marketing program can potentially affect the position, it is usually

necessary to use a positioning strategy as a focus for development of the marketing program. A clear positioning strategy can ensure that the elements of the marketing program are consistent and supportive. (Aaker & Shansby, 1982, p.56)

"A good understanding of what positioning entails is a key requisite for anyone involved in nation-brand development," such as advertising agencies and branding consultancies (Dinnie, 2008, p.51). As explained by Innis Maggiore, "What often goes wrong with marketing campaigns can be traced to a misappropriation of marketing focused on branding when the first thing required is positioning…Without positioning, brand value isn't sustainable because the position itself is where a brand's fundamental difference – and hence its value – lies" (http://www.innismaggiore.com/Difference/Positioning.aspx). By directing all of its marketing efforts towards a desired position, the nation maintains a coherence and unity in its activities and establishes a specific image.

POSITIONING VERSUS IMAGE AND REPUTATION

Positioning (or rather, its related construct, position) is often misused interchangeably with the psychological constructs of image and reputation. While there are similarities among the constructs, there are also very important differences. Both "images and reputations are each formed through a continuous and multifaceted process and are the products of a multiple-variable impression formation process located at the interaction among an institution's issued signals or texts, as well as contextual and personal factors (Cornelissen & Thorpe, 2002, p. 175; see also Fombrun & Shanley, 1990; Williams & Moffitt, 1997). However, despite the similar process through which both images and reputations are formed, the two constructs are not the same. Images concern immediate impressions while reputations are more enduring over time (Grunig, 1993; Williams & Moffitt, 1997).

"An *image* is the immediate set of meanings inferred by a subject in confrontation/response to one or more signals from or about an institution. Put simply, it is the net result of the interaction of a subject's beliefs, ideas, feelings, and impressions about an institution at a single point in time" (Cornelissen & Thorpe, 2002, p. 175). "Corporate image is the immediate mental picture that audiences have of an organization" (Gray & Balmer, 1998, p.687). Country image, more specifically, may be defined as "the total of all descriptive, inferential, and informational beliefs one has about a particular country" (Martin & Eroglu, 1993, p.193). While images may be personal (an image held by an individual) or collective (an image share by many individuals), it is the collective image that is of interest to marketers (www.bledcom.com/uploads/papers/Tunca.pdf).

While most institutions have distinguishable images (Wilbur, 1988), the image of most nations is vague because there is a general level of ignorance of countries other than one's own (O'Shaughnessy & O'Shaughnessy, 2000). This would seemingly offer an opportunity for most

nations to build their brand for projection to the world (O'Shaughnessy & O'Shaughnessy, 2000).

"A *reputation*, on the other hand, is a subject's collective representation of past images of an institution (induced through either communication or past experience) established over time" (Cornelissen & Thorpe, 2002, p. 175). Reputations typically evolve over time as a result of consistent performance, reinforced by effective communication, whereas images can be fashioned more quickly through well-conceived communication programs (Gray & Balmer, 1998). The concept of *reputation* is closely related to *position* in that both are enduring over time and difficult to change.

A brand's *position* is how the brand is perceived in the minds of consumers, relative to competitive offerings. The characteristics of a good position for the brand are thought to be (1) perceived uniqueness (e.g. different from competitors), (2) prevalence (e.g. how many customers are aware of it), and (3) strength (Aaker, 1991). Establishing uniqueness is a key point in nation positioning (Dinnie, 2008). National tourism advertising campaigns can often be criticized for scoring very poorly in terms of uniqueness (Dinnie, 2008). "Many tourism campaigns make generic, undifferentiated claims for their sandy beaches, sunny climate, laidback lifestyle, and so on" (Dinnie, 2008, p.52). Many nations can make such claims; such claims are not unique to a particular nation. Nations need to find a position that is unique to them, such that stakeholders can readily identify the nation by its positioning statement. Differentiation is the key to building and maintaining a competitive advantage; people make decisions based on differences (http://www.innismaggiore.com/Difference/Positioning.aspx). Prevalence and strength can be achieved by the nation's communication strategies. The advertising, public relations, tourism materials, and other promotions of the nation should be coordinated to make and repeatedly reinforce a strong, unified positioning statement.

Unlike image, *position* evolves and, if managed effectively, becomes stronger over time. In contrast, an image is not static, but has elements that fade in and out while only the vaguest image is retained without sustained effort (O'Shaughnessy & O'Shaughnessy, 2000). Furthermore, position differs from image in that it implies a frame of reference, the reference point usually being the competition (Aaker & Shansby, 1982). This is an important distinction since it is not sufficient for a nation to have a positive image; in order to be successful over the long term, the nation's offering must be perceived more favorably than competitive offerings.

APPLICATION OF POSITIONING TO NATION BRANDS

Aaker & Shansby (1982) identify a number of ways in which a positioning statement can be conceived. The six approaches to positioning are: (1) by attribute, (2) by use, (3) by user, (4) by product category, (5) by price/quality, and (6) competitive positioning. In the following paragraphs, each of the six approaches is illustrated first by using popular brand examples and then by providing either real or potential examples of nation brand positioning.

Positioning by Attribute

The most frequently used positioning base is associating the brand with a particular attribute, product feature, or user benefit. For example, Charmin is *the* soft bathroom tissue and Viva is *the* durable paper towel.

Nation brands can similarly mobilize a dominant attribute. For example, although the United States is a hugely complex and contradictory society, observers may note a special connection to the attributes of freedom and independence (Moser, 2003; O'Shaughnessy & O'Shaughnessy, 2000). America was the first country "to make democracy and free trade the cornerstones of its national identity and national purpose" (Anholt, 2005, p.304). The attributes of freedom and independence is consistent across stakeholder groups. For example, when it comes to intellectual talent, UK students increasingly choose US Universities over Oxford and Cambridge because American Universities "have an environment that stimulates more entrepreneurship and creativity" (Gilmore, 2002, p.290). Similarly, business stakeholders rank the United States first in terms of selecting a location for business investment because the US is "still seen as the most attractive business environment – the Land of Opportunity'" (Anholt, 2005, 298).

O'Shaughnessy & O'Shaughnessy (2008) caution that the dominant attribute selected for positioning must represent something realizable rather than wishful thinking or some normative goal. In other words, the strategy must be rooted in the reality of the national rather than being an invention that may have little relation to the country's reality (Anholt, 2007; Dinnie. 2007; Gilmore, 2002). For example, the Foreign Office of the British government sought to reposition Britain as a bold modern state with its "Cool Britannia" campaign launched in the 1990's. The program failed. The problem was that half the British population was not into cutting edge fashion, design, music and the arts (Gilmore, 2002). As Chris Powell (1999) chairman of the BMP DDB advertising agency reports, Britain is still perceived as staid and old-fashioned. In fact, many British industries actually thrive on traditional characteristics such as honor and reliability (Gilmore, 2002). Interestingly, the BMP DDB study revealed that honesty was a perceived attribute associated with the British (Powell, 1999).

Nations are often tempted to position themselves along multiple attributes. However, positioning strategies that involve a number of attributes can lead to a diluted brand position and confusion in the minds of stakeholders.

Positioning by Use

The second positioning base is by use. Nyquil is the nighttime cold medicine and Excedrin is the headache pain reliever. In nation branding, Switzerland is the country of choice when one needs personal banking services (Gilmore, 2002). The fact that this position is

cemented within Switzerland's banking client secrecy laws means that other countries trying to promote themselves as a personal financial center would have difficulty entering the market and competing on this front (Gilmore, 2002). Personal banking is perceived as a distinct use associated with Switzerland.

Another example of positioning by use is Singapore's traditional position as the best entry point to Asia for Western multinationals (Quelch & Jocz, 2005). This position was supported by the reality that its laws, institutions and educated English-speaking workforce made doing business from Singapore safe and easy (Quelch & Jocz, 2005).

Finally, when it comes to the best place to live and work, the nation brand of choice is Canada. Canada is ranked high in terms of job opportunities and overall attractiveness as a place to live (The Anholt-GfK Roper Nation Brands IndexSM 2008 Highlights Report).

Positioned by User

Positioning by user is the third positioning base. For a long time, Schaeffer beer was positioned for the heavy beer drinker. Pepsi distinguishes itself from Coke by positioning itself for the young at heart (the Pepsi generation).

Examples of nations that position on the basis of user are scarce, however existing empirical research regarding nation brand perceptions suggest some possibilities. While tourism represents one of the three major sectors in which nations compete, only one nation can claim to be the top destination for tourists. According to the Anholt-GfK Roper Nation Brands IndexSM 2008 Highlights Report, Italy takes first place overall in tourism, featuring a variety of widely popular destinations. Most respondents to the 2008 survey say they would be moist likely to visit Italy (assuming money was no obstacle). Italy is the country of choice for tourists.

Another example comes from the same survey (The Anholt-GfK Roper Nation Brands IndexSM 2008 Highlights Report). France is the nation for those in the arts, e.g. film, music, art, and literature. France was ranked first in terms of cultural heritage and people's appreciation for contemporary culture. This is the country where those who are serious about the arts congregate.

Positioning by Product Category

Some brands position themselves as belonging to a product category that they really do not belong to. I Can't Believe It's Not Butter positions itself as a butter. Seven-Up began associating itself with cola beverages in an effort to break free from consumer perceptions that Seven Up was a mixer rather than a soft drink.

Examples of nation positioning by product category are few. However, a city positioning statement can be used as a starting example. "Miami – Financial Capital of South America" (Kotler & Gertner, 2002) positions this city as part of South America rather than where it truly belongs, North America. On expatforum.com, one blogger explains to potential expatriates:

"Miami is not an American city. It is the financial capitol of South America and is really a foreign city."

The country slogan "Wales: Big Country," although seemingly generic, appears to be associating this nation with the larger nations of the U.K. "In the United Kingdom, Wales, equal to 20,779 km², is used in phrases such as "an area the size of Wales" or "twice the area of Wales". England is 6.5 times the size of Wales, and Scotland is four times the size of Wales" (http://en.wikipedia.org/wiki/List_of_unusual_units_of_measurement). The reason for using Wales as a unit of measure is not known, but it probably relates to its relatively small size. Wales is positioning itself as a big country, a classification to which it does not belong in realistic terms.

Positioning by Price/Quality

In many product categories, some brands offer more in terms of service, features, or performance; a higher price and prestigious communication strategies serve to signal this higher quality to the customer (Aaker & Shansby, 1982). For example, Grey Poupon distinguishes itself as the top of the line mustard. Other brands distinguish themselves as the no-frills, low price alternative. Taking this approach, Malt-o-Meal is recognized as the economy brand among cereals.

According to the HSBC 2008 survey, the United Arab Emirates (UAE) is recognized as the most luxurious nation in the world (Bowman, 2008). More expatriates in the UAE are able to afford added extras such as owning a boat, having a swimming pool, taking regular holidays, and employing extra staff than anywhere else according to the survey (Bowman, 2008). The UAE appears to be pursuing this high-end position by "aggressively courting Western educators and experts" (The Anholt-GfK Roper Nation Brands IndexSM 2008 Highlights Report). Alternatively, Leffel (2009) identifies Thailand as the cheapest country in the world to visit. Farrell (2004), however, cautions against positioning a nation as the low cost alternative. Revenues attracted by price competition are prone to leave as quickly as they arrived, chasing the next low bidder (Farrell, 2004).

Competitive Positioning

In all positioning strategies, the position implies a frame of reference, the reference point usually being the competition (Aaker & Shansby, 1982). However, some brands choose to make a successful competitor the reference point as the positioning strategy. The classic example of competitive positioning is the one used by Avis rental cars. Avis positioned itself as "number 2." Consumers fully understood that the number 1 company in rental cars was Hertz. Avis wanted to make sure that when consumers thought about Hertz as a provider of rental cars, they would also consider Avis. Being number 2 meant that Avis would try harder to please the customer.

On occasion, nations may use this positioning base as a means of associating themselves with more well-known and/or highly-regarded nations/regions. For example, 'Scotland – Silicon Glen' (Kotler & Gertner, 2001) represents an attempt by Scotland to associate itself with Silicon Valley, the southern part of the San Francisco Bay Area originally recognized for its large number of silicon chip innovators and manufacturers and later more generally for high tech businesses. Silicon Valley continues to be the leading high-tech hub because of its large number of engineers and venture capitalists (http://en.wikipedia.org/wiki/Silicon_Glen). In fact, the term 'Silicon Valley' has come to be used as a metonym for the high-tech sector (http://en.wikipedia.org/wiki/Silicon_Glen). The term 'Silicon Glen' conjures up an immediate association with Silicon Valley in the minds of consumers.

MANAGERIAL IMPLICATIONS

Nations are increasingly being conceptualized as brands. Given that the key task of branding is to differentiate an offering from that of competitors, developing a positioning strategy for the nation brand is prerequisite to strategic branding (http://www.innismaggiore.com/Difference/Positioning.aspx). To be effective, nation brand positions must be distinctive, singular, accepted, and translatable.

Distinctive Positioning

Establishing points of difference is a key task in brand positioning (Dinnie, 2008). Dinnie (2008) observes that positioning platforms used by countries in recent years are meaningless. The problem is that nations tend to select bland, inoffensive positioning platforms so as not to offend anyone (Dinnie, 2008). Examples include South Africa: Alive with possibility, Bolivia: The authentic still exists, Thailand: Amazing Thailand, and India: India shining (Dinnie, 2008). Slogans developed for national brands tend to be equally generic. For example: Austria: At last; Austria: You've arrived; Greece: Beyond words; and Andalucia: There's only one. If the nation names were removed from these statements, it would be impossible to match the statement with any particular country. In other words, there is no distinct positioning.

Singular Positions

Just as with the temptation by organizations to position themselves along multiple attributes, organizations are also tempted to use multiple positioning bases. In other words, there is a tendency to try to be all things to all people. Not only would such an approach be difficult to implement, but it leads to a confused perception in consumers' minds. Effective positioning

requires perceived uniqueness (the one and only brand associated with the particular position), strength (a strong and clear association with the position), and prevalence (whereby the majority of targeted consumers are aware of the brand's position).

Accepted Positioning

Successful positioning requires the support of its members. Unfortunately, it's far easier for corporations to enlist the support of their employees than for a nation to enlist the support of its citizens. Employees are paid to adopt the corporate strategy and may be released from employment for failure to do so. National leaders have little influence other than persuasion. "If the vast majority of citizens do not buy into or are cynical about the marketing proposition, it simply will not work. Visitors to the country will discover that the reality does not reflect the promise…" (Quelch & Jocz 2005, p.231). The "Cool Britannia" program launched by the British government failed in great part because half the British population did not accept the new position (Gilmore, 2002), and neither did people outside Britain (British Council, 1999). An effective positioning program depends on the nation's members rallying around the chosen positioning strategy (see Quelch & Jocz, 2005).

Translatable Positioning

In addition to being distinctive and accepted, the positioning statement needs to be translatable simply because a country has different stakeholders to address (Gilmore, 2002). The positioning statement must therefore be sufficiently rich and deep so that it can be translated into multi-faceted sub-positions that have relevance and meaning to each stakeholder group, while retaining its integrity by staying true to its spirit and core values (Gilmore, 2002). As noted by Quelch & Jocz (2005), messages reaching different stakeholder groups should be coordinated and consistent. This last aspect holds great importance because one of the great difficulties of country branding lies in the complexity of its various audiences (Gilmore, 2002). Interestingly, while audiences are indeed complex and distinct, they are not necessarily separate (Quelch & Jocz, 2005); "tourists at today's Olympic Games may be tomorrow's foreign direct investors" (Quelch & Jocz, 2005, p.236).

"The purpose of nation branding is not to come up with an attractive logo and catchy tag line, although those can help. Rather, the purpose is to develop a strategy to harness your national assets to an overarching identity that will help you achieve the optimal position for your country in the global system" (Cromwell, 2008). Only after the strategic positioning work has been done should the communications people be tapped to translate the brand into images and messages that can be used to reach stakeholder markets (Cromwell, 2008).

The Six Step Process

In order to develop a positioning strategy, nations must (1) determine what key attributes stakeholders use in comparing nations and which attributes are most important and (2) identify the relative positions of the nation against other similarly perceived nations on the important attributes (Kotler & Fox, 1994). In keeping with this general approach, Aaker & Shansby (1982) present a six-step process for developing a positioning strategy. The first step is to identify the competitors. A nation's competitors are other nations that might receive consideration as an alternative to the nation's offer. For example, if Hong Kong were positioning itself as the financial center of Asia, Viet Nam would not be considered a competitor because it lacks the infrastructure, the rule of law, and the transparency and corporate governance necessary to be competitive (Gilmore, 2002). Another way to think about 'competitors' when it comes to nation positioning is to identify nations that are similarly sized or trying to attract the same targets (Quelch & Jocz, 2005). In most cases, there will be a primary group of nations that directly compete and one or more secondary competitors (Aaker & Shansby, 1982). In the example above, Hong Kong would more likely be competing against Singapore and perhaps Shanghai (Gilmore, 2002). One way to identify competing nations is to conduct perceptual mapping research to identify which countries are perceived similarly along salient attributes, user groups, use contexts, etc.

The second step is to determine how each of the competitor nations is perceived and evaluated (Aaker & Shansby, 1982). In other words, what associations (expressed as nation attributes, user groups, and use contexts) do stakeholders use in evaluating different nations? For example, some nations may be considered formal and impersonal or friendly and personal, safe or vulnerable, used for team sports or used for high country sports, diverse or homogenous, rigid or accommodating, and so forth. Such perceptions are formed by the things that are done in the country and the way they are done, the things that are made in the country and the way they are made, the way other people talk about the country and the way the country talks about itself (Anholt, 2007, p.30). It is important to understand how the nation and its competitors are perceived.

The next step is to determine the positions currently held by all competing nations, including the nation conducting the research (Aaker & Shansby, 1982). For each nation, survey respondents may be asked to respond to questions such as: (1) With respect to other nations, I would consider ABC nation to be (list attributes identified in step 2); (2) I would expect the typical user of ABC nation to be (list user groups identified in step 2); and (3) ABC nation is most appropriate for (list uses identified in step 2). The nation would also want to determine which of the attributes, user groups, and uses are considered important and which serve to effectively distinguish one nation from another. However, planners should keep in mind that respondents from the ABC nation are likely to rate their nation higher than other nations, and

therefore internal and external responses should be analyzed separately to statistically determine if the two groups are in fact responding dissimilarly.

The fourth step is to analyze the target population (Aaker & Shansby, 1982). Subgroups within the target population (e.g. direct foreign investors, importers, tourists, etc.) may hold different perceptions of the nation. Cluster analysis could be used to identify the various segments of the target population. Subgroups may, for example, be classified into segments defined by the associations they consider most important.

Next, the nation must decide on its positioning strategy (Aaker & Shansby, 1982) .

Positioning usually means that an overt decision is being made to concentrate only on certain segments. Such an approach requires commitment and discipline because it is not easy to turn your back on potential buyers. Yet, the effect of generating a distinct, meaningful position is to focus on the target segments and not be constrained by the reaction of other segments. (Aaker & Shansby, 1982, p.61)

It may be that not all segments identified in the segmentation study are worth pursuing with a unique marketing program. For example, a segment may emerge that values a particular attribute of the country, but the segment size and significance does not warrant its explicit consideration in developing the positioning statement. In selecting the positioning strategy, the nation may initially consider alternatives using each of the positioning bases described above and then select the base and the specific positioning statement based on the research findings and on the criteria of its being distinctive, singular, accepted and translatable. A further critical consideration in selecting a position for a nation is to make sure it can deliver what it promises – and commit to doing so over the long term. For example, a nation that positions itself on the attribute of innovation cannot then do something contrary, such as failing to enforce intellectual property protection. Such a move would destroy the nation's unique position (and often it's competitive advantage), and have a negative impact on the nation's reputation for integrity.

The final step is to monitor the nation's position over time and make adjustments to the marketing strategy as may become necessary (Aaker & Shansby, 1982). Market research should benchmark perceptions among stakeholder groups both internally and externally, over time. In some instances, nations find it necessary to reposition their nation brands when either the nation fails to achieve the desired position or when the positioning base is no longer important to target groups. The British Council conducted a survey two years into the "Cool Britannia" program and decided to abandon the program shortly thereafter given its ineffectiveness (Gill, 2001; *The Economist* 2002).

The Money Issue

When it comes to the marketing of any nation, there is always the money issue. Positioning -- and the marketing plan necessary to develop and support the positioning strategy -- takes up a large amount of resources, in both administrative time and money (Domeisen, 2003;

Romaniuk, 2001). While nations have the opportunity to build their national brands for projection into the world, it costs money and to date countries have not found it easy to do so (O'Shaughnessy & O'Shaughnessy, 2008).

Furthermore, spending money on marketing in nation branding can be highly controversial. One political issue for nations is the potential backlash of diverting scarce funds into a positioning 'exercise' rather than improving other resources (see Firstenberg. 1991). Stakeholders must be made to recognize the crucial aspect of effective positioning and its long-term implications in the increasingly competitive global market – and the catch-22 situation they will likely face by not developing, implementing and supporting an effective positioning strategy. As claimed by Anholt (2007), the alternative to managing a nation brand is not the failure to manage the brand, but rather letting someone else manage it for you. In the absence of any branding strategy, public opinion will brand countries according to the most familiar cliché, "which is almost always simplistic, usually out of date, frequently rather unflattering, and occasionally extremely unhelpful" (Anholt, 2007, p.41). On occasion, the 'someone else' managing your nation brand may be the government agency of another country (Anholt, 2007). When a nation fails to manage its brand, any outside party can manipulate and exploit the brand image to achieve its own ends (Fan, 2006). At stake is the country's success in attracting international investment and tourism and promoting exports (Cromwell. 2008; Quelch & Jocz, 2005). The development, management and protection of a nation brand require a disciplined, comprehensive approach and a sustained amount of concerted action on the part of the nation (see Anholt, 2005; Fan, 2006).

REFERENCES

Aaker, D.A. & G. Shansby (1982). Positioning Your Product. *Business Horizons*, 25, 56-62.

Aaker, D.A. (1991). *Managing Brand Equity: Capitalizing on the Value of a Brand Name.* New York: The Free Press.

Anholt, S. (2005). Anholt Nation Brands Index: How Does the World See America? *Journal of Advertising Research*, (September), 296-304.

Anholt, S. (2007). *Competitive Identify: The New Brand Management for Nations, Cities and Regions.* UK: Palgrave Macmillan.

Bowman, D. (2008). UAE Most Luxurious Country in the World for Expats. *Arabian Business.Com*, (July 26), Retrieved April 6, 2009, from http://www.arabianbusiness.com/525885-uae-most-luxurious-country-in-world-for-expats.

British Council (1999). Through Other Eyes: How the World Sees the United Kingdom. London, UK: British Council.

Cornelissen, J. & R. Thorpe (2002). Measuring a Business School's Reputation: Perspectives, Problems and Prospects. *European Management Journal*, 20(2), 172-178.

Cromwell, T. (2008). Korea Lacks in Strong Identity in Brand Positioning. Retrieved April 1, 2009, from http://www/koreatimes.co.kr/www/news/special/2009/03/260_32859.html.

DiMingo, E. (1988). The Fine Art of Positioning. *Journal of Business Strategy,* 9(2), 34-38.

Dinnie, K. (2007). Competitive Identify: The New Brand Management for Nations, Cities and Regions. *Journal of Brand Management*, 14, 474-475.

Dinnie, K. (2008). *National Branding: Concepts, Issues, Practice.* Oxford: Elsevier.

Domeisen, N. (2003). Is There a Case for National Branding? *International Trade Center,* No. 1. Retrieved 4/6/2009 from www.tradeforum.org/news/fullstory.php/aid/534/Is_There_a_Case_for_National_Branding_.html.

Fan, Y. (2006). Branding the Nation: What is Being Branded? *Journal of Vacation Marketing,* 12(1), 5-14.

Farrell, D. (2004). The Case for Globalization: The Results of McKinsey's Latest Study of the Pros and Cons of Emerging Market Foreign Investment. *International Economy*, 18(1), 52.

Firstenberg, P.B. (1991). Private Education Competes for Survival. *Management Review,* (April), 33-35.

Fombrun, C. & M. Shanley (1990). What's in a Name? Reputation Building and Corporate Strategy. *Academy of Management Journal,* 33(2), 233-258.

Gill, A.A. (2001). It's Official…Cool Britannia has Finally Been Canned. *Sunday Times*, March 25th.

Gilmore, F. (2002). A Country – Can it be Repositioned? Spain – The Success Story of Country Branding. *Brand Management*, 9(4-5), 281-293.

Gray, E.R. & J.M.T. Balmer (1998). Managing Image and Corporate Reputation. *Long Range Planning*, 31(5), 685-92.

Grunig, J.E. (1993). Image and Substance from Symbolic to Behavioral Relationships. *Public Relations Review,* 19(2), 121-139.

Kotler, P. (2000). *Market Management.* Upper Saddle River. NJ: Prentice Hall, Inc.

Kotler, P. & K. Fox (1985). *Strategic Marketing for Educational Institutions.* Englewood Cliffs, NJ: Prentice Hall.

Kotler, P. & D. Gertner (2001). Country as Brand, Product, and Beyond: A Place Marketing and Brand Management Perspective. *Brand Management,* 9(4-5), 249-261.

Leffel, T. (2009). *World's Cheapest Destinations: 21 Countries Where Your Money is Worth a Fortune,* 3rd ed. e-book published by Booklocker.com, Inc.

Martin, I. M. & S. Eroglu (1993). Measuring a Multi-Dimensional Construct: Country Image. *Journal of Business Research,* 28(3), 191-210.

Moser, M. (2003). *United We Brand.* Boston: Harvard Business School Press.

O'Shaughnessy, J.O. & N.J. O'Shaughnessy (2000). Treating the National as a Brand: Some Neglected Issues. *Journal of Macromarketing,* 20(1), (June), 56-64.

Powell, C. (1999). UK's Stuffy Image Costs Businesses Dear. *The Sunday Times*, 26 (September), Business Section, 24.

Quelch, J. & K. Jocz (2005). Opinion Piece: Positioning the Nation State. *Place Branding*, 1(3), 229-237.

Ries, A. & J. Trout (1981). *Positioning: The Battle for Your Mind.* New York: McGraw-Hill, Inc.

Romaniuk, J. (2001). Brand Positioning in Financial Services: A Longitudinal Test to Find the Best Brand Position. *Journal of Financial Services Marketing,* 6(2), 111-121.

The Economist (2002). Selling Britain: The Shock of the Old; At Last, Britain Seems to Have Given up Trying to be Hip. (July 13), 49.

Wilbur, S. (May, 1988). Assessing a University's Image for Short-term and Long-term Enrollment Planning. *Paper presented at the twenty-eighth annual forum of the Association for Institutional Research*, Phoenix, AZ.

Williams, S.L. & M. Moffitt (1997). Corporate Image as an Impression Formation Process: Prioritizing Personal, Organizational, and Environmental Audience Factors. *Journal of Public Relations Research,* 9(4), 237-258.