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THE IMPACT OF SHANGHAI-HONG KONG STOCK CONNECT POLICY ON PRICE DIFFERENCE AND ANNOUNCEMENT EFFECTS

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ABSTRACT

This paper investigates the impact of "Shanghai-Hong Kong Stock Connect Policy" on price difference and announcement effects of A Shares and H Shares, using daily data from Aug., 2014 to Feb., 2015. Data were obtained from Bloomberg. To be comparable, we collect simultaneous trading data. We find that listed time and SSE 180 sample share variables have a significant effect on price difference. The price difference after Shanghai-Hong Kong Stock Connect Policy is bigger than the price difference before Shanghai-Hong Kong Stock Connect Policy. Moreover, we find that implementation of the Shanghai-Hong Kong Stock Connect Policy has announcement effects.

JEL: G14, G34

KEYWORDS: Price Difference, Announcement Effects, Shanghai-Hong Kong Stock Connect Policy

INTRODUCTION

Foerster and Karolyi (1999) test the Merton's cognitive hypothesis of investors by a model of stock proceeds, which shows that cross-listing can alter market risks and increase the base of shareholders. With the trends of internationalization, many enterprises take advantage of multiple channels to finance. This not only promotes the awareness of overseas enterprises, but also decreases the influence of many uncertain factors on capital cost. Through the progressively opening transcend range, investors around the world can overcome investment obstacles and participate in different investment areas and opportunities successfully.

Cross-listing is a vital channel for all companies to finance around the world. However, the cross-listing of China firms started relatively later. On July 15, 1993, the Tsingtao Brewery Co. was listed in Hong Kong, and listed in Shanghai Stock Exchange (SSE) on Aug., 27, 1993. Hong Kong is the first choice for China companies to list (Friends of the Accounting, 2011). The similarity between cultures and concepts between China and Hong Kong facilitate this popularity. Investors can easily understand and contact with each other. Besides, Hong Kong returned to China in 1997. It was also a peak for China companies to being listed in Hong Kong. In the 21st century, the time required for China companies to list in Hong Kong became be shorter. A shares and H shares became the main forms for China cross-listing. Chen (2005) analyzes 16 companies listed simultaneously in China and Hong Kong with the integration model and Granger causality. He finds that when Hong Kong investors could directly invest in the A share market, the resulting liquidity has a significant effect on the stock price.

To strengthen the exchange relationship and contact between China and Hong Kong capital markets, and construct two-way open policy, the governments of China and Hong Kong carry out the policy Shanghai-Hong Kong Stock Connect Policy (SHKSCP). SHKSCP is a cross-boundary investment channel that connects the Hong Kong Stock Exchange and the Shanghai Stock Exchange. Under the program, investors in each market are able to trade shares on the other market using their local brokers and clearing houses. The capital flow policy becomes two-way instead of one-way, and the range has been enlarged between China and Hong Kong. This process can resolve hidden issues of transitional systems such as depository

receipts, Cross-Border Investment Scheme, Qualified Foreign Institutional Investors (QFII) and Ren Min Bi Qualified Foreign Institutional Investors (RQFII). SHKSCP facilitates cross-country trading and addresses restrictions and regulations for foreign investors to enter stock market such as currency and region of a country.

In order to achieve inter-connectivity, investors from two countries can directly buy or sell the listed stocks authorized from the other market. The implementation of SHKSCP should have positive effects on China and Hong Kong stock markets. First, since the prices of A shares and H shares are not the same, the discount and premium level between two markets could change. Second, Hong Kong investors can trade with their original stock account without restriction of investing limitation and threshold. However, with the system of market inter-connectivity, capital mobility is more flexibility. It can further promote the two-way development of China and Hong Kong stock markets. It can help obtain more attention from international investors thereby raising China and Hong Kong stock market's competitiveness. The purposes of this paper are as follow. First, we investigate the changes of the discount or premium level of companies which are listed both in China and Hong Kong stock markets after SHKSCP. Second, we explore the announcement effect of SHKSCP on the prices of individual shares. The remainder of this paper is organized as follows. In literature review section, we present the related literature. Data and methodology section describes the data and defines the variables. In the results and discussion section, we show the regression results and discussions. The conclusion section provides some closing comments.

LITERATURE REVIEW

Cross-listing can solve the investor cognitive hypothesis by Merton (1987). He argued investors will invest in the individual shares they are familiar with due to the difference of information they receive. Testing Merton's investor cognitive hypothesis, Foerster and Karolyi (1999) show that cross-listing can change market risks and increase the base of shareholders. Levine and Schmukler (2003) find that cross-listing can raise international liquidity but harm the liquidity of domestic stocks. Wu (2010) discusses the volatility and liquidity of share prices after cross-listing and finds when H shares are cross-listed to A shares, its effect of volatility and information asymmetry reduce. Huang et al. (2011) reveal that transparency degree of information has significant effects on the returns of individual stock depending upon whether the company is cross-listed.

Price differences result from a lack of market circulation of both sides. Chen (2005) finds that when investors in Hong Kong could directly invest in the A share market, liquidity risk was more violent than before reform. Moreover, the liquidity has a significant effect on the stock price. Yan and Greco (2006) conclude that different prices on China and Hong Kong stock markets result from different risk premiums. Chen (2008) argues that China and Hong Kong stock markets have hidden problems of discounts and premiums because of market segmentation. With an increasing opening range of markets, the discount or premium level of China and Hong Kong stock markets will decrease. Yuan (2009) shows that relative liquidity, relative stock supply, information asymmetry and exchange rate changes have significant influence on the price difference of China and Hong Kong stock market. Announcement effects are the phenomenon that future share price performance and trading volume changes as current important economic events happen. Fama et al. (1969) argued the event study is an important way of studying the effect of economic events on a company's value. Lu (2009) observes the abnormal reactions before and after the event date and finds that regardless of what kind of event occurs, most cumulative abnormal returns of the ten days before event date are significantly not equal to zero. Most abnormal returns and those in the event date have the same direction.

DATA AND METHODOLOGY

This paper selects 85 companies that were listed simultaneously in China and Hong Kong as a sample. To explore differences of the performance of enterprises listed simultaneously in China and Hong Kong before and after the announcement of SHKCP, the study period was set from Aug., 2014 to Feb., 2015. We sampled from the daily closing price of individual shares, trading volume and data of enterprises listed

simultaneously in China and Hong Kong. Totally, we have 134 days during this period so that we have 11,390 daily data points. To be more comparability, we convert Shanghai and Hong Kong's stock price to the Hong Kong currency. The price difference is calculated as follows:

$$\frac{P_{Shanghai}(HKD/_{RMB})-P_{Hong\ Kong}}{P_{Hong\ Kong}}.$$ (1)

where $P_{Shanghai}$ is the closing price of A share, $P_{Hong\ Kong}$ is the closing price of H share and HKD/RMB is the exchange ratio.

The price on Shanghai and Hong Kong exchanges are the closing price of the same day and the exchange ratio is for the same day of Taiwan Standard Time (TST) at three o'clock p.m. from Bloomberg. The announcement date is November 10, 2014 and the implementation date is November 17, 2014. The daily closing price and trading volumes of individual shares are from Hong Kong Yahoo! Daily closing price data are from Bloomberg. If either Chinese or Hong Kong stock markets do not have closing prices on some specific dates, we delete these daily data. To discuss the determinant of price differences, the regression model is used as follow:

$$y_t = \alpha_1 + b_1 X_{1it} + c_1 X_{2it} + d_1 X_{3it} + e_1 X_{4it} + f_1 X_{5it} + \epsilon$$ (2)

Where y_t equals the average price difference; X_1 equals a dummy variable meaning the listed time. If the listing time in Shanghai is earlier than that in Hong Kong, it is 1. Otherwise, it is 0; X_2 is the dummy variable indicating whether it is an overseas listed company. X_3 is the dummy variable meaning whether it is a SSE 180 sample share. X_4 is the dummy variable indicating the specific industrial category. If a firm belongs to financial industry, it is 1. Otherwise, it is 0; X_5 equals the outstanding shares of the company. We adopt the event study to explore whether the SHKCP has an effect on share price. We calculate the sampling companies' cumulative abnormal returns 30 days before and after the announcement date of SHKCP to investigate whether there is the announcement effect. The announcement date is November 10, 2014, which is jointly announced by China Securities Regulatory Commission (CSRC) and Securities & Futures Commissions of Hong Kong (HKSFC). Abnormal returns are calculated by the returns of each company minus the market return over the event period.

$$AR_{it} = R_{it} - R_{mt}$$ (3)

where R_{it} equals the actual returns of the company i in the time t; R_{mt} equals the returns of the weighted index stock in the time t. We use "Hang Seng Index" in Hong-Kong stock market and "SSE Composite Index" in Shanghai stock market. Since Zibart (1985) points out that the AR with standardization is helpful to improve the verification ability, we estimate the cumulative value of each enterprise's stock AR after standardization. CAR is the cumulative value of daily abnormal returns during the specific period as follows:

$$SAR_{it} = \frac{AR_{it}}{\sqrt{Var(AR_{it})}}$$ (4)

$$CAR_i(t_1, t_2) = \sum_{t_1}^{t_2} SAR_{it}$$ (5)

where SAR_{it} is the standardized abnormal returns of company i in time t; $VAR(AR_{it})$ is the abnormal returns variance of company i in time t; $CAR_i(t_1, t_2)$ equals the CAR of of company i in time t. The study uses Brown and Warner (1985)'s t-test to verify whether CAR in the event period is significantly differently from zero, as follows:

$$H_0: \ CAR(t_1, t_2) = 0 \tag{6}$$

$$H_1: \ CAR(t_1, t_2) \neq 0$$

$$\text{t} = \frac{\overline{CAR(t_1, t_2)}}{\hat{S}(CAR(t_1, t_2))/\sqrt{N}} \tag{7}$$

RESULTS AND DISCUSSION

Hang Seng China AH Premium Index (HSCAHPI) stands for the premium or discount level while A shares and H shares list in Shanghai and Hong Kong stock market simultaneously. Figure 1 shows the AH premium index appears upward after the implementation of SHKSCP.   All the AH premium index are above 100. It indicates that A share to H share has a premium phenomena after SHKSCP. After the announcement of SHKSCP, Shanghai and Hong Kong stock markets changed drastically. The Shanghai stock market has not lifted the restrictions completely. The premium circumstance between A share and H share exist for a long period but will be within the established interval. In brief, we expect SHKSCP will affect the performance of A share and H share. Whole markets' financial events will have influence on the liquidity of capital as well. This empirical result is similar with Chen (2005), who shows the policy announcement will affect liquidity, and liquidity has significant influence on price differences.

Figure 1: Hang Seng China AH Premium Index (2015)
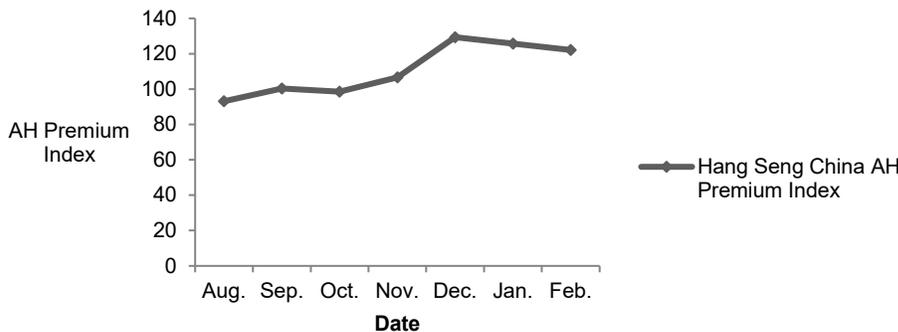
This figure indicates the Hang Seng China AH premium index. The period is from August, 2014 to February, 2015 which is the same with our sampling period. An AH premium index above 100 implies that A share to H share has premium circumstance.

Table 1 presents the descriptive statistics of the variables. It shows the mean of price difference after SHKSCP is larger than that before SHKSCP, which is consistent with the result that the AH premium index increases after SHKSCP. The mean and median values are above 0. This indicates that before or after SHKSCP, both indicate a premium phenomenon. The price difference is similar with Chen (2008), which argues that Shanghai and Hong Kong stock markets hide the problem of the price difference because of market segmentation. Moreover, it is similar with Gregory and Hansen (1996), which shows the range of price difference between Shanghai and Hong Kong stock markets will be smaller along with the increasing market opening extent. The mean listing time equals 26.74%. It indicates that the percentage whose listing time in Hong Kong is earlier is about three times than that in Shanghai. The mean of the overseas listed company variable is 80.23%. It shows that a majority of the sample firms are overseas listed. X_3, a dummy variable represents SSE 180 sample share. All of SSE 180 sample shares are typical sampling stocks in the stock market. The market value, scale and liquidity of the sampling companies in SSE 180 sample shares are higher than other companies in the same industry. As a result, we take SSE 180 sample share as our one of variables. The mean of SSE 180 sample share is 50%. X_4 is a dummy variable representing Specific industrial category. There are 15 companies (about 17.44%) in the financial industry in our sample. We apply the financial industry as our basis of classification since the capital will enter in financial industry,

whose EPS is less than that in other industries before SHKSCP. X_5 is the Outstanding shares variable. We argue that the more outstanding shares, the more liquidity of the stock. This phenomenon will affect the change of stock price. The mean of outstanding shares is 25,929.99 million.

Table 1: Summary Statistics

	Mean	Median	S.D.	Max.	Min.
Price difference number before implementation	30.68%	23.74%	0.439	205.13%	-19.80%
Price difference number after implementation	72.71%	57.34%	0.661	337.67%	-9.81%
Listed time	26.74%	0	0.443	1	0
Overseas listed company	80.23%	1	0.398	1	0
SSE 180 sample share	50%	0.5	0.5	1	0
Specific industrial category	17.44%	0	0.379	1	0
Outstanding shares(million)	25,929.99	5,649.65	66,174.197	351,406	277.66

This table summarizes descriptive statistic of the main variables. "Average price difference" is the ratio of the difference between the closing price of A share and the closing price of H share to the closing price of H share If the listing time in Shanghai is earlier than Hong Kong, Listed time is 1, otherwise 0. If the company is overseas listed company, Overseas listed company is 1, otherwise 0. If the company is included in SSE 180 sample share, SSE 180 sample share is 1, otherwise 0. If the company is financial industry, Specific industrial category is 1, otherwise 0. The unit of Outstanding shares is in millions.

Table 2 represents the coefficient of listed time variable is significantly negative before (after) the implementation of SHKSCP at the 1% (5%) level. This implies that when the company is listed in the Shanghai market earlier than in Hong Kong, the premium range is smaller. Currency circulation between Shanghai and Hong Kong is more unrestricted after SHKSCP and capital can be more mutually invested. Therefore, the listed time variable is not significant after SHKSCP. The coefficients of SSE 180 sample share variable are negative and significant before and after SHKSCP at the 1% level. Moreover, overseas listed company, specific industrial category and outstanding shares variables are not significant.

Table 2: Analysis of the Factor of Price Difference

	Price Difference Number Before Implementation	Price Difference Number After Implementation
Intercept	0.646***	1.083***
	(0)	(0)
Listed time	-0.272***	-0.32967**
	(0.008)	(0.029)
Overseas listed company	-0.108	-0.023
	(0.381)	(0.898)
SSE 180 sample share	-0.425***	-0.288***
	(0.008)	(0.008)
Specific industrial category	-0.086	-0.180
	(0.242)	(0.371)
Outstanding shares	-0.085	-1.040
	(0.242)	(0.329)
Adjusted R-squared	0.295	0.254

*This table provides and analysis of factor price differences. Dependent variable is Average price difference. There are five independent variables. If the listing time in Shanghai is earlier than Hong Kong, Listed time is 1, otherwise 0. If the company is overseas listed company, Overseas listed company is 1, otherwise 0. If the company is included in SSE 180 sample share, SSE 180 sample share is 1, otherwise 0. If the company is financial industry, Specific industrial category is 1, otherwise 0. The unit of Outstanding shares is million. *, **, *** indicate significance at the 10, 5 and 1 percent levels respectively.*

Tables 3 shows that except the period (-30, -10), all cumulative abnormal returns are significantly positive. Specifically, the cumulative abnormal returns of sample stocks in the Hong Kong stock market are larger than those in the Shanghai stock market. The reason might be that the stock price of Hong Kong stock market is cheaper than the stock price of Shanghai stock market before SHKSCP. Therefore, the announcement effect in the Hong Kong stock market is larger than the Shanghai stock market. Moreover, the influence of SHKSCP on stock prices has happened before SHKSCP. This empirical result is similar with Lu (2009), which mentions that no matter what the specific event is, cumulative abnormal returns 10 days before the event date are significantly different from zero.

Table 3: Abnormal Returns and Cumulative Abnormal Returns in Shanghai Stock Market and Hong Kong Stock Market of a Share and H Share Round the Announcement Date of SHKSCP

	Hong Kong		Shanghai	
Event window	AR	CAR	AR	CAR
(-30,-20)	0.011	0.161**	0.009	0.008*
	(0.140)	(0.003)	(0.22)	(0.085)
(-30,-10)	-0.009	0.143	0.028***	0.027***
	(0.212)	(0.268)	(0.008)	(0.006)
(-30,0)	0.078***	0.533***	0.017**	0.016*
	(0.007)	(0.005)	(0.025)	(0.098)
(0,10)	-0.026**	0.519***	0.018***	0.252**
	(0.013)	(0.001)	(0.002)	(0.021)
(0,20)	0.008***	1.122***	0.034	0.566***
	(0.005)	(0)	(0.357)	(0.009)
(0,30)	0.009**	2.040***	0.054	1.303**
	(0.059)	(0.001)	(0.119)	(0.007)

*This table presents the empirical results of the abnormal returns (AR) and cumulative abnormal returns (CAR) in Shanghai and Hong Kong stock markets of A share and H share. The time series is from prior 30 days to the announcement date of Shanghai-Hong Kong Stock Connect Policy to the announcement date of SHKSCP. *, **, *** indicate significance at the 10, 5 and 1 percent levels respectively.*

CONCLUDING COMMENTS

In this paper, we investigate the related issues of Shanghai A share and Hong Kong H share around the implementation of SHKSCP. Investigating the price difference and running regression models to examine the factor of price difference, we find that both listed time and SSE 180 sample share variables reveal premium phenomena. Due to the highly premium circumstance of H share, the price differences between A share and H share becomes larger after the implementation of SHKSCP. Moreover, almost all cumulative abnormal returns are significantly positive. At the 10% significant level, there are cumulative abnormal returns in Shanghai and Hong Kong, which implies there exists an announcement effect before and after the 5 days of the announcement date of SHKSCP.

This paper has the following limitations. The sample period is relatively short possible resulting in a lack of confidence in the results. In SHKSCP, the number of investable stocks in A share is 568 and the investable stocks in H share is 266. To investigate cross listing, our sampling companies are defined as listed in the Shanghai stock market and Hong Kong stock market simultaneously. As a result, the number of sampling companies falls to 85. The small sample size might lead to a lack of confidence. Future researchers might lengthen the sample period. Moreover, since stock prices are influenced by many factors, future researchers can use the matching method to do a robustness check. Lastly, the Taiwan stock market is also affected by SHKSCP. Only professional investors in Taiwan can buy the stocks of SHKSCP. The professional investors' tax is very high for investing in Taiwan stock. To decrease tax expense, professional investors in Taiwan might turn to other investments. Further researchers could explore the impact of SHKSCP on the Taiwan stock market.

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INDUSTRY EFFECTS AND CONVERTIBLE BOND SEQUENCE

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ABSTRACT

In this paper, we study how the announcement returns of convertible bonds change for different issues in a sequence for firms in various sectors of the economy. We show that industrial firms obtain significantly lower returns in later issues of convertible bonds compared to former issues. In fact, the announcement returns for the first issue of these firms in our sample period is insignificant while the returns for later issues are significantly negative. We obtain the same result for industrial firms even after we control for other variables that affect announcement returns of convertible bonds. Our results show that the announcement returns for financial firms and utilities do not present this pattern. The returns for these firms are similar for different convertible bond issues in a sequence.

JEL: G30, G32

KEYWORDS: Convertible Bonds; Sector Analysis; Announcement Returns; Sequence of Issues

INTRODUCTION

P rior studies show that the stock price effects of equity issue announcements change as firms raise capital more often. For example D'Mello et al. (2003) show that for stock price reaction to equity issues become less negative each time firms go to the capital markets. Similarly, Iqbal (2008) finds that the stock price reaction to rights issues increases with later issues in a sequence of offerings. In this study, we analyze whether the stock price reaction changes with each issue for debt offerings as well. We focus on convertible bond offerings since prior literature shows that on average the announcement of convertible bond offerings result in a negative stock price reaction. Hence, the decrease in the stock prices is a major cost for firms issuing convertible bonds. We study a sample of 231 convertible bond offerings made by firms in the industrial, financial, and utilities sectors. All firms in our sample have made at least two offerings during the sample period. We find that the announcement returns of offerings made by industrial firms change dramatically with each additional issue. Our univariate and multivariate results both show that the announcement returns become more negative for the later issues of these firms. This finding is consistent with our hypothesis that each convertible bond offering has information content and signals additional negative information about the issuing firm. Our results show that there is no significant change in the announcement returns of financial firms and utilities. This result indicates that the regulatory requirements in these sectors reduce the information content of securities firms issue. The paper is organized as follows. In section 2, we summarize the prior literature on the announcement returns of convertible bonds and the sequence of security issues. In section 3, we form our hypothesis and in section 4 we present the results of our empirical analysis. In section 5, we conclude our paper.

LITERATURE REVIEW

Announcement Effects of Convertible Bonds

One of the earlier studies on the announcement effects of convertible bond issuance is Dann and Mikkelson (1984). In their paper, Dann and Mikkelson study how convertible bond issue announcements affect shareholder wealth. They show that for the 1970 to 1979 period firms in the US markets obtained significantly negative returns when they announced at the announcement of convertible bond offerings. Dann and Mikkelson test the following three alternative hypotheses that may explain stock price effects of convertible bond issues. First, if the proceeds of the issues are used to refinance existing debt and/or their equity-like component claims have high value, convertible bond issues can be leverage decreasing. Therefore, convertible bond issue announcements can signal unfavorable information. Alternatively, the announcement of new external financing may be conveying unfavorable information about the firm. Another explanation for the negative announcement returns can be that the underpricing of initial issues can lead to a wealth transfer from the current stockholders to the new bondholders. Dann and Mikkelson's empirical analysis does not provide support for these hypotheses.

Eckbo (1986) studies the announcement returns of firms that issue debt and raise their leverage considerably. Eckbo tests three hypotheses. In the "zero impact" hypothesis, insignificant announcement returns are predicted since debt issues represent a pure capital change with which the market value of the issuing firm remains unchanged. The "positive impact hypothesis" argues that leverage increases signal that the management has favorable expectations about the firm's future performance and the firm's capacity to take advantage of debt-related benefits has increased. The "negative impact hypothesis" states that shareholders will react negatively to the debt issue announcement because firms signal unfavorable information about their prospects when they raise external financing. Eckbo finds that the announcement returns for straight bonds are insignificant while there are negative returns to the announcement of convertible bond issues. Mikkelson and Partch (1986) investigate the nature of the information conveyed by security offerings. They find that for completed equity and convertible bond offerings there are positive returns between the issuance and announcement and negative returns at the time of issue. This finding is consistent with their hypothesis that managers have incentives to issue securities when the securities are overpriced. They also find that returns for cancelled offerings are negative between the announcement and the cancellation, and positive at cancellation. More recently, Duca et al. (2012) find that the stock price reaction to convertible bond announcements is negative. In fact, they show that in the sample period the announcement returns become twice as negative in later years compared to earlier years. Studies on non-US firms such as Gillet and de La Bruslerie (2010), Chen et al. (2008), and Ammann et al. (2006) confirm prior findings.

Sequence of Security Issues

D'Mello et al. (2003) study the relationship between the stock price reaction to equity issues and the sequence of these issues. They find that a positive relationship exists between the announcement returns and the sequence of equity offerings for industrial firms. They examine three alternative explanations for this relationship. First, they study the relationship between the extent of information asymmetry between the market participants and the managers of the firm. Second, they examine whether the announcement returns are influenced by the stock and operating performance following the previous equity issue. Third, they test the relationship between the expectations of the investors about the future performance of the firm and the announcement returns. They find the increase in the announcement returns in each sequence is because of the decrease in the information asymmetry about the firm. In his study Iqbal (2008) finds that the market reaction to rights offerings increases in later offerings in a sequence. He shows that this pattern is due to the availability of larger amounts information in later issues. Iqbal also finds that firms

raise equity with shorter intervals between two issues and they raise a larger amount of equity in later issues in the sequence a result of lower information asymmetry.

Sector and Announcement Effects

Janjigian (1987) studies the announcement returns of convertible bonds issued by firms in different sectors. He finds that firms in different sectors obtain different average returns. The announcement returns are lowest for financial firms, followed by transportation firms and industrial firms. The announcement returns are significantly negative for firms from these three sectors but the returns for utilities are higher in magnitude and they are insignificant. Horvitz et al. (1991) study the announcement returns of the bank holding companies. They show that the average announcement return in this sector is insignificant. They state that the capital adequacy requirement of banking regulations for this sector may be resulting in the insignificant returns. This finding indicates that since bank holding companies operate under the regulatory constraints the security offerings have little information content. Hence, when companies in this sector issue securities, investors are less able to infer that these securities are overvalued.

Hypotheses

Hypotheses on Sequence and Announcement Returns

Mikkelson and Dann (1984), Mikkelson and Partch (1986), and Eckbo (1986) argue that convertible bonds signal negative information about the firm. If each convertible bond issue has information content, each issue announcement will signal additional negative information about the firm. As a result, we would observe the announcement returns to latter issues to be more negative than former issues. However, in their study, D'Mello et al. (2003) and Iqbal (2008) suggest the opposite effect. D'Mello et al. (2003) find that there is a positive relation between the announcement returns and sequence of equity issues. Iqbal (2008) argue that the significance of sequence on announcement returns persists in the case of rights issues as well. These two studies suggest that the lower stock price reaction in equity issues is because of the lower information asymmetry about the firms' prospects in the issues that are later in the sequence. Hence, while the former group of studies suggests lower announcement returns for later convertible bond issues, the latter set of studies suggest higher announcement returns.

Hypotheses on Sector Influence

Eckbo et al. (2007) argue that the market reaction to the security offerings of the utilities sector is lower. They argue that utilities have less discretion to time the market in order to take advantage of periods of security overvaluation. Regulation slows the issue approval process or forces the firm to issue securities at certain times, thereby reducing the firm's ability to time the market. Similarly, Masulis and Korwar (1986), Pettway and Radcliffe (1985), and Asquith and Mullins (1986) argue that the investment and financing plans of utilities are made public regularly and therefore the offerings of these firms convey less information compared to firms in the industry sector. Horvitz et al. (1991) argues that the announcement returns of firms in the banking sector could be similar to the returns for utility sector firms. Bank regulation emphasizes capital adequacy and there are regulatory requirements related to the security offerings of these firms. As a whole, these studies imply that the convertible bond issues of firms in the utilities and financial sectors have less information content and therefore should result in less negative announcement returns. Since each issue in will carry low levels of information for firms in these sectors, the announcement returns will not differ for different issues in a sequence. Hence, although we expect the convertible bond announcement returns of industrial firms to change for later issues in a sequence, we do not expect to see this pattern for the case of industrial and utility firms.

DATA AND METHODOLOGY

Our sample consists of 231 completed convertible bond issues made between 1985 and 2011. All offerings are made by public companies and issued in the US markets. All of the firms in the sample have issued convertible bonds multiple times (at least twice) during the sample period. We obtain our initial sample from Thomson Financial's Securities Data Corporation (SDC) Database. The issue-related variables we use in our analysis are also obtained from this database. We obtain our annual firm-specific variables from COMPUSTAT and stock returns from CRSP. Table 1 shows the percentage of issues offered during each year of the sample period by the firms in the industrial, financial, and utilities sectors. We classify firms with two-digit SIC codes of 49 as utilities, those with one-digit SIC code of 6 as financial firms, and all other firms as industrial firms. The highest percentage of issues by industrial firms was made in years 1986 and 1992. There were no issues made by industrial firms in years 1985, 2004, 2005, 2010, and 2011. The largest percentage of issues for financial firms was in 1986 and for utilities in 1999. The issues were distributed about evenly between the first and second halves of the sample period. About 54% of the issues made by industrial firms were in the first half of the issues while 55 % of the issues were made by financial firms, and 52 % of the issues of utilities were made during the same period.

Table 1: Annual Distribution of Sample Issues

Years	Industrials (%)	Financials (%)	Utilities (%)
1985	0.00	0.00	0.00
1986	10.53	20.00	4.76
1987	9.47	0.00	9.52
1988	4.74	0.00	0.00
1989	3.68	5.00	4.76
1990	5.26	0.00	4.76
1991	6.84	0.00	9.52
1992	10.53	5.00	9.52
1993	10.00	10.00	0.00
1994	3.68	0.00	0.00
1995	0.53	10.00	4.76
1996	6.32	5.00	0.00
1997	2.11	0.00	4.76
1998	3.68	0.00	4.76
1999	6.32	10.00	14.29
2000	4.74	10.00	0.00
2001	3.16	5.00	4.76
2002	0.53	10.00	4.76
2003	1.58	5.00	4.76
2004	0.00	0.00	4.76
2005	0.00	0.00	0.00
2006	0.53	0.00	0.00
2007	0.53	0.00	0.00
2008	1.05	0.00	0.00
2009	4.21	5.00	9.52
2010	0.00	0.00	0.00
2011	0.00	0.00	0.00

This table presents the annual percentage distribution of the convertible bond issues in the sample. The sample consists of completed convertible bond issues made between 1985 and 2011 by public companies trading in US markets. All firms in the sample have issued convertible bonds multiple times during the sample period. Financial firms are those firms that have a one-digit SIC code of 6, utility firms are firms with a two-digit SIC code of 49 as utilities, and all other firms are classified as industrial firms. We obtain our sample of convertible bonds from SDC database.

Table 2 shows the characteristics of the issues and firms in our sample. In this Table, we measure market value of equity as the price multiplied by the number of common shares outstanding. The average market value of equity for industrial firms is about $ 3.8 billion while the median is $ 1.7 billion. Financial firms are comparable in size with also about $ 3.8 billion in average market value while utilities are larger with an average market value of $ 4.4 billion. In Table 2, we define market-to-book ratio as the price multiplied by the company's common shares outstanding, divided by common equity. The average market-to-book ratio for industrial firms and utilities is about 3 while the median ratio is about 2.3 for

both sectors. The market-to-book ratio is lower for financial firms with an average and median value of about 1.

Table 2: Descriptive Statistics on Sample Issues

Variable		Industrials	Financials	Utilities
Market Value of Equity		3797.0	3817.5	4380.5
		(1683.1)	(509.40)	(2292.8)
Market-to-Book Ratio		2.9267	1.0171	3.0008
		(2.3130)	(0.9500)	(2.3015)
ROA		2.6409	-0.1100	3.0749
		(4.3655)	(0.4260)	(3.2545)
NPM		2.6226	0.3715	9.7059
		(3.5020)	(3.1225)	(10.131)
Proceeds		265.37	396.20	170.99
		(137.50)	(97.813)	(115.00)
Maturity		16.184	16.119	14.291
		(15.240)	(20.290)	(15.200)
Yield		6.0519	7.0769	8.3155
		(6.0000)	(7.2500)	(6.6300)
Use of Proceeds	1. Investment and acquisitions	2.63	5.00	9.52
	2. General corporate purpose	61.05	55.00	52.38
	4.Debt refinancing/ retirement	29.47	25.00	38.10
	3. Other	6.84	15.00	0.00

This table presents the characteristics of the sample firms and issues. The sample consists of completed convertible bond issues made between 1985 and 2011 by public companies trading in US markets. All firms in the sample have issued convertible bonds multiple times during the sample period. Financial firms are those firms that have a one-digit SIC code of 6, utility firms are firms with a two-digit SIC code of 49 as utilities, and all other firms are classified as industrial firms. We obtain our sample of convertible bonds from SDC database. Market value of equity is the price multiplied by the number of common shares outstanding. Market-to-book ratio is the price multiplied by the company's common shares outstanding, divided by common equity. Return on assets is the income before extraordinary items divided by total assets. Net profit margin is the income before extraordinary items, divided by net sales. Proceeds is the total dollar amount raised from the issue and is measured in millions of dollars. Maturity is the number of years until the stated maturity of the bonds. Yield is the yield to maturity of the bonds. Use of proceeds is the purpose the firms stated for the offering and indicates the percentage of issues with a particular use. All firm-specific variables are measured at the end of the fiscal year before the offering and are obtained from Compustat. Issue-specific variables are obtained from the SDC database.

In Table 2, we measure the return on assets as the income before extraordinary items divided by total assets. The average return on assets was about 2.6 for industrial firms and 3.1 for utilities. Financial firms had lower return on assets; the average was -0.1 and the median 0.5. In this Table, we define the net profit margin as the income before extraordinary items divided by net sales. The net profit margin was highest for utilities with an average value of 9.7% and lowest for financial firms with 0.4%. The average net profit margin was 2.6 % for industrial firms while their median value was 3.5. The average amount of proceeds from the convertible bond issue for financial firms was about $ 396 million and this was the largest value among the three sectors. The average proceeds was $ 265 million for industrial firms and $ 171 million for utilities. The average maturity was about 16 years for both industrial firms and financial firms. The average maturity was shorter for utilities with 14 years. The average yield to maturity was highest for utilities with a value of 8.3 % while the average yield was 6.1 % for industrial firms and 7.1% for financial firms. Table 2 also shows how the firms in our sample planned to spend the proceeds from the convertible bond issue. The most popular use of the proceeds was general corporate purposes for all three sectors and more than half of the firms in each sector stated this purpose for their issues. The second most popular choice was debt refinancing and retirement. Also, 2.6 % of industrial firms, 5 % of financial firms, and 9.5 % of utility firms list investments and acquisitions as the purpose of their proceeds.

RESULTS

Univariate Analysis of Sequence and Announcements Returns

Tables 3, 4, and 5 show the median and mean announcement returns for issues in each sequence for firms in the three sectors we study. In these Tables, we define stock returns as abnormal returns obtained from the market model where the CRSP value-weighted return is used to proxy for the market return. Beta is estimated over 240 days ending 11 days before the date of the filing. We estimate the announcement period returns around the filing dates as opposed to the announcement dates in the Wall Street Journal (WSJ) because since 1985 the WSJ reporting of security announcements is infrequent and using these announcements results in major data loss. Table 3 shows our analysis for the industrial firms. The results show that in the three-day window surrounding the announcement period, on average industrial firms lose about 2% of their value. Both the mean and median overall announcement returns were significantly negative for all of the five periods we studied. However, when we study only the first issues of the industrial firms, we find that the announcement returns were insignificant for all five periods. On the other hand, both the mean and median announcement returns for second and later issues are significantly negative. On average firms lose about 2.8% of their market value in these later issues. We also study the difference between the announcement returns of first issues and later issues made by industrial firms in our sample. The results in Table 3 show that both the mean and median announcement returns were lower for later issues in the sequence compared to the first issue. We show the results of the statistical tests comparing the announcement returns of issues in different sequences in the last column of Table 3. We find that the difference in both the means and medians were significant for the first and the later issues for industrial firms in four out of the five announcement periods we study. Hence, our univariate analysis presented in Table 3 show that for industrial firms the announcement returns become more negative compared to initial offerings in a sequence. This finding is consistent with the arguments of Dann and Mikkelson (1984), Mikkelson and Partch (1986), and Eckbo (1986) and our hypothesis that each convertible bond offering signals additional unfavorable information about the firm, resulting in more negative announcement returns.

Table 3: Univariate Analysis of Announcement Returns for Different Sequences of Industrial Firms

Announcement Period	All	First Issues	2nd And Later Issues	Difference of First and 2+ Issues
(-5,+5)	-0.0245***	-0.0067	-0.0380***	2.15**
	(-0.0196)***	(-0.0022)	(-0.0282)***	(2.1361)**
(-3,+3)	-0.0233***	-0.0091	-0.0341***	2.26**
	(-0.0216)***	(-0.0130)	(-0.0288)***	(2.1361)**
(-1,+1)	-0.0194***	-0.0074	-0.0285***	2.75***
	(-0.0169)***	(-0.0073)	(-0.0248)***	(3.9121)***
(-1,0)	-0.0103***	-0.0021	-0.0165***	2.04**
	(-0.0074)**	(0.0008)	(-0.0130)***	(1.8401)*
(0,+1)	-0.0065**	-0.0028	-0.0093**	1.07
	(-0.0051)*	(-0.0034)	(-0.0086)**	(1.2480)

*This table presents the results of the univariate analysis of announcement returns of industrial firms for different issues in the sequence. The sample consists of completed convertible bond issues made between 1985 and 2011 by public companies trading in US markets. All firms in the sample have issued convertible bonds multiple times during the sample period. Financial firms are the sample firms excluding those with one-digit SIC code of 6 (financial firms) and two-digit SIC code of 49 (utilities). We obtain our sample of convertible bonds from SDC database. Abnormal returns are calculated using the market model, beta is estimated using CRSP value-weighted index over 240 days ending 11 days before day 0, the convertible bond issue announcement date. Stock returns are obtained from CRSP. Mean abnormal returns are in the first row in each cell and the median abnormal returns are in the second row. We use t-test to test the significance of the means and sign rank test for the medians. The numbers in "Difference" columns represent p-values of t-tests in the first row and z values of median scores test for the differences in means and medians respectively for the first issues from those of the second and later issues in our sample. ***, **, and * denote significance at 1, 5 and 10 percent levels respectively.*

In Table 4, we present the results of our univariate analysis of the announcement returns of financial firms. We find that both the mean and median announcement period returns for the whole sample of financial firms are negative for all announcement return periods that we analyze. However, the returns are not significant at the conventional levels. The announcement period returns are also insignificant for the first issues of financial firms. For the second and later issues only the median announcement returns for the period (0,+1) is significantly negative. For all other periods, the returns are negative but insignificant. In Table 4, we do not find a significant difference in the announcement returns of the first issue compared to the returns of the later issues. Table 5 shows our univariate results for utilities. The mean and median of the overall announcement returns are negative for all event periods that we study and these returns are significant in most cases. The announcement returns are negative and significant for most of the event windows for the first issues of utilities as well.

Table 4: Univariate Analysis of Announcement Returns for Different Sequences of Financial Firms

Announcement Period	All	First Issues	2nd And Later Issues	Difference of First and 2+ Issues
(-5,+5)	-0.0034	0.01054	-0.0142	0.44
	(-0.0073)	(0.00328)	(-0.0094)	(0.4880)
(-3,+3)	-0.0306	-0.0120	-0.0451	0.99
	(-0.0024)	(-0.0008)	(-0.0039)	(0.4880)
(-1,+1)	-0.0352	-0.0194	-0.0476	0.71
	(-0.0110)	(-0.0100)	(-0.0121)	(0.4880)
(-1,0)	-0.0318	-0.0117	-0.0475	1.00
	(-0.0041)	(0.0050)	(-0.0053)	(0.4880)
(0,+1)	-0.0217	-0.0044	-0.0351	1.37
	(-0.0053)	(0.0071)	(-0.0053)*	(0.5216)

This table presents the results of the univariate analysis of announcement returns of financial firms for different issues in the sequence. The sample consists of completed convertible bond issues made between 1985 and 2011 by public companies trading in US markets. All firms in the sample have issued convertible bonds multiple times during the sample period. Financial firms are those firms that have a one-digit SIC code of 6. We obtain our sample of convertible bonds from SDC database. Abnormal returns are calculated using the market model, beta is estimated using CRSP value-weighted index over 240 days ending 11 days before day 0, the convertible bond issue announcement date. Stock returns are obtained from CRSP. Mean abnormal returns are in the first row in each cell and the median abnormal returns are in the second row. We use t-test to test the significance of the means and sign rank test for the medians. The numbers in "Difference" columns represent p-values of t-tests in the first row and z values of median scores test for the differences in means and medians respectively for the first issues from those of the second and later issues in our sample. ***, **, and * denote significance at 1, 5 and 10 percent levels respectively.

Table 5: Univariate Analysis of Announcement Returns for Different Sequences of Utility Firms

Announcement Period	All	First Issues	2nd And Later Issues	Difference of First and 2+ Issues
(-5,+5)	-0.0151	-0.0272	-0.0042	-0.66
	(-0.0373)	(-0.0464)	(-0.0116)	(-0.6505)
(-3,+3)	-0.0311**	-0.0420*	-0.0211	-0.76
	(-0.0445)**	(-0.0554)*	(-0.0178)	(-0.6505)
(-1,+1)	-0.0201	-0.0190	-0.0212	0.07
	(-0.0282)**	(-0.0290)*	(-0.0272)	(-0.6505)
(-1,0)	-0.0155*	-0.0141	-0.0169*	0.17
	(-0.0182)**	(-0.0201)*	(-0.0182)	(-0.2351)
(0,+1)	-0.0053	-0.0056	-0.0050	-0.04
	(-0.0087)*	(-0.0091)*	(-0.0053)	(-0.6505)

This table presents the results of the univariate analysis of announcement returns of utility firms for different issues in the sequence. The sample consists of completed convertible bond issues made between 1985 and 2011 by public companies trading in US markets. All firms in the sample have issued convertible bonds multiple times during the sample period. Financial firms are those firms that have a two-digit SIC code of 49. We obtain our sample of convertible bonds from SDC database. Abnormal returns are calculated using the market model, beta is estimated using CRSP value-weighted index over 240 days ending 11 days before day 0, the convertible bond issue announcement date. Stock returns are obtained from CRSP. Mean abnormal returns are in the first row in each cell and the median abnormal returns are in the second row. We use t-test to test the significance of the means and sign rank test for the medians. The numbers in "Difference" columns represent p-values of t-tests in the first row and z values of median scores test for the differences in means and medians respectively for the first issues from those of the second and later issues in our sample. ***, **, and * denote significance at 1, 5 and 10 percent levels respectively.

For the second and later issues, the returns continue to be negative but are mostly insignificant. Table 5 shows that the first issues results in more negative returns compared to later issues. However, the difference between the returns of the first issue and later issues is statistically insignificant for all event windows we are studying.

The results in Tables 3-5 show that there is strong evidence that later issues in a sequence of convertible bonds result in more negative returns. However, these results are confined to industrial firms. The announcement returns of financial firms and utilities do not change significantly for different convertible bond issues in a sequence. These results are consistent with Masulis and Korwar (1986), Pettway and Radcliffe (1985), and Asquith and Mullins (1986) and Horvitz et al. (1991) who argue that the regulatory requirements of the financial and utility firms result in lower levels of information content of the security issues of these firms. In the next section we perform multivariate analysis on our industrial sector sub-sample in order to further explore the change in the announcement returns for later issues.

Multivariate Analysis of Sequence and Announcement Returns

It is possible that the sequence and announcement return relationship we identified for industrial firms in our univariate analysis is caused by other factors. Hence, in this section we use ordinary least squares (OLS) regressions to control for other factors that may affect the announcement returns of convertible bonds. Prior literature suggests that the following factors may influence the announcement returns: Information asymmetry: Majluf and Myers (1984) argue that when there is more information asymmetry between insiders and outside investors, the adverse selection costs of external security issues increase. As a result, we expect firms that have high information asymmetry to have lower announcement returns. As in D'Mello et al. (2003), we use the size of the firm as a proxy for the level of information asymmetry. Large firms are more likely to be followed by analysts and the popular press and as a result have more information available to the public. Hence, on average, small firms have more information asymmetry.

Issue size: Miller and Rock (1985) argue that external financing shows that the actual earnings of the firm are below the expected earnings. Consequently, the size of the issue should have a negative impact on the stock price reaction to debt financing. We measure the issue size as the proceeds of the issue divided by the total assets of the firm.

Underwriter fees: The fees for the underwriting services can be a major cost of issuing securities. Higher underwriter fees should result in lower announcement returns since high issue costs are detrimental for shareholders. We measure underwriter fees in proportion to the proceeds from the convertible bond issue.

Bond risk: Myers (1984) and Myers and Majluf (1984) show that riskier securities are more sensitive to firm value changes. Hence, the stock price reaction to the issuance of riskier securities should result in lower announcement returns. We proxy the riskiness of the convertible bonds with a dummy variable that takes the value of 1 for issues rated investment grade by Moody's and zero otherwise.

Stock exchange: D'Mello et al. (2003) argue that the exchange listing of the firm can affect the investor response to corporate announcements. We control for this effect with a dummy variable that takes a value of one if firms are listed on the AMEX or the NYSE, and zero otherwise.

Growth opportunities: Jensen and Meckling (1976) show that levered firms are prone to the risk-shifting problem because of shareholders' limited liability. Shareholders of levered firms have an incentive to take risky projects due to the unlimited upside but bounded downside of potential of future cash flows. Barclay and Smith (1995) argue that investment opportunities of firms can be seen as options whose values depend on their exercise in an optimal fashion. As a result, the risk-shifting problem is higher for firms with higher growth opportunities due to the greater conflict between the bondholders and shareholders of

these firms over the exercise of the option. These arguments suggest that firms with high growth opportunities should obtain more negative announcement returns when they issue convertible bonds. Growth opportunities are measured with the market-to-book ratio.

Financial Distress: Andrade and Kaplan (1998) indicate that the most important reason for financial distress is high leverage. To the extent that firm value is reduced as the probability of financial distress increases, we expect firms that engage in leverage-increasing transactions when they already have high leverage to face unfavorable stock price effects. This argument suggests that when firms with high leverage announce that they will issue bonds, they will obtain lower returns.

Issue period: Bayless and Chaplinsky (1996) and Pilotte and Manuel (1996) show that there has been a decrease in the stock price reactions to corporate announcements over time. We control this announcement time period effect using a dummy variable that has the value of one for bond issue filings in the first half of the sample period and zero for issues later in the sample period.

Use of proceeds: Mikkelson and Partch (1986) show that how the firm intends to use the proceeds of the debt issue is a significant determinant of the announcement period returns. They show that the announcement returns are higher for firms that use the proceeds to finance investment expenditures. We measure the use of proceeds with a dummy variable that takes the value of one for issues used for investments and zero otherwise.

Operating Performance: Bae et al. (2002) show that the announcement returns of convertible bond issues are higher when the operating performance of the issuing firm is better. We measure the operating performance of a firm with sales growth defined as the change in the dollar sales volume over sales in the year prior to the issue. We expect firms in our sample with higher operating performance to have higher announcement returns. Table 6 shows our OLS regression results controlling for the factors we have identified above. The following model is used in our regression analysis:

$$CAR = a + b*Sequence + c*Assets + d*(Issue\ Size) + e*(Underwriter\ Fee) + f*Rating + g*Exchange + h*(Market\text{-}to\text{-}Book) + i*(Debt\ Ratio) + j*Year + k*(Proceed\ Use) + l*(Sales\ Growth) \qquad (1)$$

In these regressions, the dependent variable is the abnormal stock returns for the period (-3,+3). In this Table "sequence" is a dummy variable that takes the value of 0 for the first issue and 1 for the second and later issues of our sample firms during the sample period. Other variables are defined above. Parallel to our results from the univariate analysis, we find that the coefficient of the sequence dummy is negative and significant in all five regressions. This finding indicates that later convertible bonds in a sequence of issues made by industrial firms result in more negative announcement returns compared to earlier issues. This result is consistent with our hypothesis that each convertible bond issue has information content and signal additional negative information about the firm. In the regressions in Table 6, the coefficient of total assets is significantly positive. This indicates that, consistent with our hypothesis, firms with lower information asymmetry (larger firms) obtain higher announcement returns when they issue convertible bonds. Contrary to our expectations, the coefficient of the underwriter fee variable is positive. Other variables do not have significant coefficients in our regressions.

Table 6: Regression Analysis of Announcement Returns of Industrial Firms and Sequence

Variable	Regression 1	Regression 2	Regression 3	Regression 4	Regression 5
Intercept	-0.0091	-0.1786	-0.1797	-0.1735	-0.1764
	(-1.09)	(-1.83)	(-1.87)	(-1.81)	(-1.83)
Sequence	-0.02500 **	-0.0771 ***	-0.0773 ***	-0.0744 ***	-0.0783 ***
	(-2.25)	(-3.17)	(-3.23)	(-3.11)	(-3.30)
Assets		0.0235 *	0.0240 *	0.0243 * (1.96)	0.0241 * (1.97)
		(1.87)	(1.99)		
Issue Size		0.0025	0.0025	0.0022	0.0022
		(0.60)	(0.62)	(0.55)	(0.56)
Underwriter Fee		0.1356 **	0.1329 **	0.1407 **	0.1393 **
		(2.03)	(2.08)	(2.22)	(2.15)
Rating		0.0047		0.0063	0.0040
		(0.15)		(0.22)	(0.13)
Exchange		-0.0401	-0.0389	-0.0359	-0.0387
		(-1.51)	(-1.55)	(-1.39)	(-1.50)
Market-to-Book		0.0031	0.0032		0.0025
		(0.59)	(0.65)		(0.53)
Debt Ratio		0.0002	0.0002	-0.0001	
		(0.29)	(0.28)	(-0.13)	
Year		0.0546	0.0552	0.0536	0.0550
		(1.63)	(1.67)	(1.62)	(1.66)
Proceed Use		-0.1129	-0.1099	-0.1041	-0.1120
		(-1.29)	(-1.30)	(-1.22)	(-1.29)
Sales Growth		0.0002	0.0002	0.0003	0.0002
		(0.82)	(0.82)	(1.05)	(0.89)
N	184	51	51	52	51
Adj-R^2	0.0216	0.2099	0.2287	0.2150	0.2275
F-Value	5.06 **	2.23 **	2.51 **	2.42 **	2.50 **

This table presents the results of the regression analysis of different issues in a sequence of issues made by our sample of industrial firms. The sample consists of completed convertible bond issues made between 1985 and 2011 by public companies trading in US markets. All firms in the sample have issued convertible bonds multiple times during the sample period. Financial firms are those firms that have a two-digit SIC code of 49. We obtain our sample of convertible bonds from SDC database. The dependent variable is the announcement period returns for the period (-3,+3) where day 0 is the announcement day. Abnormal returns are calculated using the market model, beta is estimated using CRSP value-weighted index over 240 days ending 11 days before day 0, the convertible bond issue announcement date. Stock returns are obtained from CRSP. Sequence is a dummy variable that takes the value of 1 for second and latter issues and zero for the first issue. Assets is the natural logarithm of the total book value of assets. Issue size is the total proceeds divided by the book value of total assets time 100. Underwriter Fee is the underwriter fees as a percentage of total proceeds. Rating is a dummy variable that takes the value of one for bonds rated investment grade and above by Moody's and zero otherwise. Exchange is a dummy variable that takes the value of one for issuers listed in NYSE Amex and zero otherwise. Market-to-Book is the price multiplied by the company's common shares outstanding, divided by common equity. Debt Ratio is the sum of long-term debt and debt in current liabilities, divided by the book value of total assets. Year is a dummy variable that takes the value of one for offerings made in 1997 and before and zero for later issues. Proceed Use is a dummy variable that takes the value of one for issues with the use of the proceeds stated as investment and acquisitions and zero otherwise. Sales Growth is the percentage change in sales since the previous year. The t-statistics are in parentheses. ***,**, and * denote significance at 1, 5 and 10 percent levels respectively.

CONCLUDING COMMENTS

In this paper, we study the announcement returns of convertible bond issues in a sequence of issues for the industrial firms, financial firms, and utilities. Our sample consists of 231 completed convertible bond issues made between 1985 and 2011 in the US markets. All convertible bond issues are made by public companies and all firms in our sample have issued convertible bonds at least twice during the sample period. Our univariate analysis results show that the announcement returns of industrial firms become more negative with each issue in a sequence of convertible bond issues. This result persists even after we control for other factors that may affect announcement returns in regression analysis. This finding is consistent with our hypothesis that each issue of a firm conveys additional unfavorable information to financial markets, resulting in more negative returns in later issues. We do not find a sequence effect for financial firms and utilities whish shows that the regulatory requirements in these sectors reduce the information content of the security issues. A of the limitation of this study is that it uses only US firms and markets. Future research should study the convertible bond sequence issue for different sectors using

data on international firms and markets. The results of these studies should be compared to the US results presented in this paper.

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ASSESSMENT OF SUSTAINABLE TOURISM IN MEXICO

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ABSTRACT

This study examines the sustainable tourism system in Mexico. We examine the norms and laws that regulate and sustain; the governmental organisms that impulses its development in terms of value chain. We also present a diagnosis of the situation by way of an extensive review of information in digital libraries and databases. The results show that sustainable tourism exists in the public politics nationwide but it is not a practice exercised by the industry in Baja California. The challenge is urgent and cannot wait. It corresponds to users demanding green products to pressure the actors to move towards the paradigm of sustainable tourism.

JEL: L83, Q01

KEYWORDS: Sustainable Tourism, Laws and Norms, Users and Actors

INTRODUCTION

Tourism is a complex activity that has been studied from different approaches. It has been highlighted by its conceptualization as a social phenomenon, system and industry. It is known as an industry without chimneys since for some time it was thought to be uncontaminated. Currently, it is recognized that its products impact the environment as every other industry, however in a different way (Serrano *et al.*, 2010). Man and his modern life style is the primary cause of unsustainable problems that exist in the world. This is reflected in climate change, which alters the attractiveness of various tourist destinations (Buckley, 2008 quoted by Buckley, 2011). In 2011, a Sustainable Tourism program in Mexico was created. It was an initiative that looks to generate sustainable development of touristic activity, and improve conditions in touristic destinations. This program is based on recognizing the Global Sustainable Tourism Criteria as the minimum to achieve sustainability (Razo, 2012). Sustainable development is a new paradigm that is permeating all productive activities. It is consolidated as a determining variable of competitiveness. This construct is no longer only an economic indicator to adopt a holistic approach. Applied to tourism, it is defined as the ability of a tourist destination to optimize its attractiveness toward residents and nonresidents; offering quality services, innovative and attractive to consumers gaining market share in the national and international context. It ensures that resources provided to tourism are used efficiently and sustainable (Federation Official Diary, 2013a). However, sustainability in tourism is one of the main challenges for management of the sector. Overcrowding leads managers to rethink not only the patterns of development of destinations but also consumption patterns that require cleaner, safer and environmentally responsible destinations (Federation Official Diary, 2013a).

The Worldwide Organization of Tourism (WOT) started the Global Observatories of Sustainable Tourism (GOST) in 2004 to provide policy makers and tourism managers a framework for monitoring environmental, social and economic impacts of tourism destinations. In response, the Ministry of Tourism designed a system of Sustainability Indicators for Tourism to measure the performance of tourism in

relation to the environment (water and solid waste), socio-economic environment (economic benefits of tourism and impact social), tourism (tourism supply and demand) and urban development (urban and environmental planning, urban development and urban comprehensive image). It is a framed measurement of sustainability, which fully conceived the current and future economic, social and environmental impact to meet the needs of visitors, industry, the environment and host communities (Federation Official Diary, 2013a). However, The Travel & Tourism Competitiveness Report 2015 places Mexico in 30th place (out of 141 economies evaluated) with a rating of 4.36. However on environmental sustainability it ranked 126th, which is strategically significant due to the importance of the country's natural resources. It is important to indicate that Pillar 9: Environmental Sustainability (10 indicators) the importance of the natural environment to provide an attractive tourist location cannot be overstated. Wo policies and factors enhancing environmental sustainability are an important competitive advantage ensuring a country's future attractiveness as a destination. This pillar consists of policy indicators such as the stringency and enforcement of the government's environmental regulations and variables assessing the status of water, forest resources and sea beds, proxied by coastal shelf fishing pressure (Crotti & Misrahi, 2015).

Tourism activities use resources, installations and services that affect in long term tourism sustainability (Cornejo, Chávez and Massam, 2013). Thus the importance of promoting effectively managed tourism should contribute to conservation. At the same time, it can be an engine of development for local communities and users. With this background, acknowledging the negative impact that tourism generates in the immediate environment is important. The objective of the present study is to illustrate, by systemic mapping, the instruments by which the government tries to appropriate a change in the whole value chain of the touristic activities. In addition, we present the status of research on the subject in Mexico through the studied articles.

This document is built in five sections The second section focuses on the extant literature. Definitions are reflected in it and refers to studies in the world on the sustainability of tourism. The third section defines the research method, data source and treatment. The fourth section details the results, which are discussed at sight of other authors. Finally, the concluding considerations are presented.

LITERATURE REVIEW

Cortés and Peña (2015, p. 44) quoted Méndez (2012), to indicate that sustainability terms and sostenibilidad (in Spanish they are two different words) have no higher differentiation with respect to their application to development. The difference corresponds to its geographic location (place where the expression is used) or lexicon, but it does not change its main objective. However, from a linguistic criteria, the Royal Spanish Academy (RSA), defines sustainable as: "that can be sustain or defend with reasons"; and sostenible (in Spanish) as "said about a process that can maintain itself, as it does". It is important to highlight that in an art state the Spanish term is used as if it were synonymous. In English it is used as the same construct.
Moo-Canu and Santander-Botello (2014) establish that the economic development model, where tourism practices are immersed, is the main reason for environmental degradation. Thus, they argue that the paradigm of sustainability is utopian and contradicts itself with the economic model. From this it infers that a true impulse of sustainability implies a change of the economic model.

The concern for environmental degradation is growing. In addition, the increase of natural areas in tourism has resulted in the application of indicators to determine whether these areas actually meet the objectives of sustainable development as measured by its four dimensions: economic, environmental, social and institutional (Gutiérrez-Fernández, Cloquell & Ballester, 2012). According to Alonso (2011), the massive tourism affecting beach and sun areas initiates a transformation process in the territorial, urban, ecologic and economic structures. This occurs mainly in the receiving coastal areas. According to Ortiz and Camargo (2010, p. 15) sustainable tourism is a different tourism. They argue it "impregnates in a philosophy to avoid undesirable consequences generated by its implementation, this imply to develop

another ethic of the activity that allows you to be productive from the economic point of view, socially responsible and conscious in the natural". Vasallo.

Cuétara and Frías (2011) point out that sustainable development of tourism must be promoted from acting responsibly with the environment, through promoting a balanced equilibrium that is conceived as a multidimensional and multi-process. In this sense the equity, sustainability and competitiveness trilogy is sustained in ethical, cultural, social, economic, patrimonial and institutional principles. Moo-Canu and Santander-Botello (2014) quote Bien (2012) to argue that sustainable tourism can be applied to any trip, including tourism masses. The goal is to try to reduce their environmental impacts and adverse sociocultural impact. The principal applies to hotels, resorts, community rural tourism, ecotourism, cruises, golf, marines and others. Rojas (2009, p. 150) refers to the WTO to define sustainable tourism as "…that led to management of all resources so that economic, social and aesthetic needs can be maintained while also maintaining cultural integrity, essential biological processes, ecological processes of biodiversity and the systems that support life on the planet".

This construct, involves a new vision of the activity. It presents a new paradigm that has emerged recognizing that various types and components of tourism produce different environmental impacts. Thus a different form of management according to the general differences between transport, accommodation, and components of the activity is required. Differences are need between the desert, rural and urban development levels of the earth; between different climates, soil types, and ecosystems (Buckley, 2011). Serrano *et al* (2010) quote Serrano-Barquín (2006:26), to suggest that "harmonious tourism" as a tourism perspective can impulse development processes locally in tourist destinations. This occurs from an intuitive-rational exploitation of the natural and cultural resources, the social and economic benefit of generations as well as the satisfaction of touristic flows needs. The question remains of how to determinate if a touristic practice is sustainable or not. There are several measurement proposals but no consensus. Highlights include the Global Sustainable Tourism Criteria, covering four areas: a) prove an effective administration and management for sustainability; b) maximize social and economic benefits for local communities; c) reduce negative effects over cultural patrimony, and d) reduce de damage to the local natural environment (WTTC, 2011 en Moo-Canu and Santander-Botello, 2014, p. 116).

The proposals for measuring the constant include indicators linked to the dimensions: environmental, economic and social. Arias and Olaya (2014) refer to indicators of the virtual encyclopedia Tourism Destination Management 2.0, in Traditional Tourism Planning Creation of Tourism Clusters and Destinations Networks (2013) to indicate those evaluating the level of safety and sustainability of the destination. These measures are used to define and quantify the impacts produced by tourist activity (Table 1, line 1). In the same sense Pérez *et al* (2009) define indicators classified along the same dimensions (Table 1, line 2). Arias and Olaya (2014) proposal includes eight indicators, while Pérez *et al* (2009) propose a robust scheme of 24 indicators. In a complementary manner Cabrera, Cabrera and Cuétara (2014) propose a model to assess the sustainability of the destination using only environmental indicators: water consumption, energy consumption, beach water quality, environmental management, impact control and enforcement of environmental legislation and liquid waste management. These resources are valued according to acceptable (yellow) and satisfactory (green) unsatisfactory scale (red). Considering tourism as a system, Brandão (2012, p. 48) points out that it is an open system, "designed on the model of cause and effect, that is the system is oriented teleological to adapt to the environment where it is inserted." It can also be defined as a smooth system for its high level of human content (De la Hoz, Carrillo and Gomez, 2013).

The difference between severe and gentle approaches is described as a shift from considering the external world as the system that can be engineered (severe systems approach) to considering a system of the observer's interaction with the complex real world. It is assumed that in a gentle systems approach the systems includes people that cannot be engineered toward some ideal condition (Cundill et al., 2012).

Table 1: Touristic Sustainability: Measure Indicators

Environmental	Economic	Social
Waste quantity produce and its temporal evolution. Changes in territory use. Seawater quality	Per capita income derivate from service sector. Benefits permanency generated by destiny service sector companies.	Quantity of Jobs created by the touristic sectors. Tourist proportion per inhabitant. Acoustic contamination levels.
Protected natural areas extension in kilometers. Total energy consumption per capita (all sources). Energy consumption percentage from renewable resources. Consumed water volume (liters per tourist). Reutilized water volume. Total quantity of waste picked per person in a year tourism attributable. Recycled glass quantity per person in a zone for a year. Soil erosion. Tourist number for every square meter of site.	Average duration in zone stay. Structure or site number that gather conditions that receive any designation type (historic site, monument, historic garden, among others) per square kilometer. Global satisfaction level of the visitors. Most influx tourist arrival in the month. Rate between number of tourist in the month of most and least influx. Work rate in the high season respect to low season. Job quantity generate by touristic sector. Total number of tourist received. Spend per tourist. Tourist services spectrum that are offer in the destiny. Access routes percentage in good conditions for touristic use.	Number of public documentation centers per inhabitant. Number of sport installation per inhabitant. Number of health center per inhabitant. Number of public use transportation per inhabitant.

The chart illustrates two measure indicators of touristic sustainability. In the first row Arias and Olaya (2014) establish eight indicators, in the environmental aspect they pursue negative aspects of the activity. From the economic standpoint they value the monetary terms. In the social context they have a balance in positive and negative aspects. Pérez et al (2009) proposal is illustrated in the second row, this proposal unites indicators to the 3R's strategy, Reduce, recycle, and reuse in the environmental dimension. In the economic area they highlight inclusion of tourist satisfaction. In the social area they link how local population benefits from infrastructure. Source: own elaboration with Arias and Olaya (2014) and Pérez et al (2009) information.

DATA AND METHODOLOGY

To establish the importance of tourism in Mexico the study examines economic indicators from the National Institute of Statistics and Geography (INEGI). We also conduct documentary research is used to determine the inventory of studies on sustainable tourism conducted in the Mexican territory. The query took place in the databases: Web of Science of Thomson Reuters, EBSCOhost, Emerald, Proquest, Google Scholar and Open Access. Official newspapers and the Official Journal of the Federation (DOF) were also reviewed to identify federal public policies that promote sustainable tourism. We examined the official newspaper of the state of Baja California to identify state policies. Data were analyzed with the soft systems methodology (SSM) and a logical historical approach, given that tourism is a phenomenon influenced by social, cultural and political factors whose development in sustainable niche depends on its momentum through public policies and a paradigm shift in the interests of tourists. With the data in hand, we seek to identifying the existence of public policies promoting sustainability in tourism as well as to present the situation of research on sustainable tourism in Mexico through the articles that study it.

RESULTS AND DISCUSSION

According to the Tourism Satellite Account of Mexico 2013, Tourism Gross Domestic Product (TGDP) held an 8.7% share in the total economy, at current prices for 2013. In the same year, the tourism sector generated around 2.3 million jobs, representing 5.9% of total posts in the country (Geographic and Statistic National Institute, 2015). Through the period 2003-2014 the average TGDP average is 8.9% of the national total. Some 7.5 correspond to services and 1.4 to assets. Figure 1 illustrates how tourism has suffered a 0.9% decline in the period. During the same period, places paid averaged 2.23 million which represents 6% of total capacity in the country. Although, in the period a loss of 0.4% is observed (Geographic and Statistic

National Institute, 2015a). Given this data, we can infer that tourism is an engine of development. But, in relation to other sustainability indicators the tourism satellite account in Mexico does not provide data.

Figure 1: Mexico's TGDP
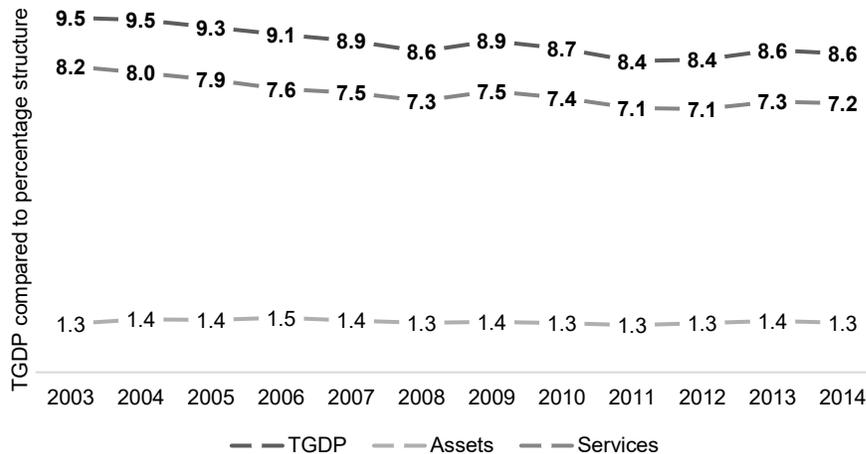
This figure shows TGDP behavior from 2003 to 2014. TGDP has been having loses that are linked to services, with loss in the ascendant period to a percentage point. In the assets case the behavior is practically constant. Source: own elaboration with INEGI data (2015a).

In the promotion and encouragement of sustainable tourism, public policies play a leading role. The government uses various mechanisms including laws, regulations and programs to bring about a change in the sector. We conducted a hierarchal review to characterize the public policy instruments the government is using so that all touristic practice becomes sustainable. These elements are part of a public policy subsystem, which is part of the same tourism system. Table 2 registers six federal laws regulating to the exercise of tourism. It is important to note that all were recently modified to include sustainability criteria and certification, environmental protection and other factors. In addition, a state law in Baja California should be a promoter of change, but does not specify on the issue of sustainable tourism.

Another tool of public policy are programs. Particularly relevant to this study is the Environmental Auditory National Program (PNAA, Spanish acronym) created in 1992 under the initiative of the Federal Attorney for Environmental Protection (Profepa), known as Clean Industry. This program, over time, diversified to include various industrial sectors (trade, services, tourism facilities, municipalities) and small and medium enterprises. This program currently issues three types of certificates: Clean Industry, Environmental Quality and Environmental Quality in Tourism (Profepa, 2013). To obtain the Quality in Tourism certificate, the following areas are checked: water, emissions to air, soil, non-hazardous solid waste, hazardous waste, noise, use of natural resources, environmental risk, environmental management systems and environmental indicators.

The program is a support tool that ensures effective enforcement of legislation, efficiency of production processes, environmental performance and competitiveness. Participation in the program is voluntary. Perhaps because of this factor, only 65 economic units nationwide have agreed to this certificate (Profepa, 2016). This figure shows a corporate culture of sustainability that is detached, focusing on the short term. Sustainability is almost always linked to the generation of profits at the expense of environmental and social. In 2006 National Commission of Natural Protected Areas (CONANP, Spanish acronym) developed a National Strategy for Tourism Sustainable Development and Mexico's Recreation of Protected Areas. The idea was to solicit the participation of all stakeholders in tourism for preserving the natural heritage of Mexico and promote tourism as an engine of development. However, the commission conservationist

approach worked contrary to development of economic activities such as tourism thereby inhibiting the progress of this strategy. On the another hand, Mexican Norms (NMX, Spanish acronym) are drawn up by a national standards body, the Ministry of Economy (SE), under the terms of the Federal Law on Metrology and Standardization. These standards provide for common and repeated use rules and specifications. In sustainable tourism SE has issued three norms as presented in Table 3. It's precise to indicate that the use of one NMX is only mandatory when referred to a Mexican Official Norm (NOM, Spanish acronym).

Table 2: Legislation and Sustainable Tourism

Name/Last Reform	Description
Tourism General Law (June 17 2009)	Looks to establish a political, planning and programing ground of touristic activity in the whole national land, under social, sustainability, competitiveness and balanced development benefits of States, Municipalities, and the Federal District, to short, medium and long term.
Tourism general law regulation (July 6 2015)	Among other establish Sustainable Touristic Development Areas creation, and set up Certification System as the distinctive set, seals and recognitions.
Ecologic balance general law and environmental protection (January 9 2015)	Focus in preservation and restoration of ecologic balance, as well as environmental protection, in land and propitiate sustainable development.
Wild life general law (January 26 2015)	Among other points addresses wild life and habitat conservation and sustainable exploitation in territory. Includes regulation of sport hunting.
Federal law for roads, bridges and motor transport (June 4 2014)	Among other regulates all relative to tourism motor transport.
Harbor law (January 23 2014)	Regulates construction, operation and exploitation work conditions that integrates harbor, as well as terminals, marine and harbor installations. That is to say touristic infrastructure.
Environmental responsibility federal law (June 7 2013)	Regulates environmental responsibility that comes from damages caused to environmental, like compensation and repair of such damages when it's demanded.
Tourism Law of Baja California State (April 3 2009)	Among other establish the promotion ground of Alternative Tourism like State Tourism with its segments and modes like Social Tourism, Health Tourism and Conventions and Business Tourism, establishing tourism practices that propitiate knowledge, preservation, protection, and natural, historic and cultural patrimony strengthening in each region in our State. Explicitly doesn't mention sustainability.

Illustrates Mexican laws related to tourism as an economic activity describing texts that allow to change to sustainable paradigm. Source: own elaboration with information of official publications of the law.

Table 3: NMX Linked to Sustainable Tourism

Mexican Norm (Nmx)	Description
NMX-AA-120-SCFI-2006 Beach quality sustainability requirements and specifications.	Presents two beach modalities: 1) Recreative use and 2) Conservation priority. Both cases establish that sea water quality, solid waste, shore infrastructure, biodiversity, safeness and services, environmental education, environmental management initiatives and contributions needs to be valued.
NMX-AA-133-SCFI-2013 Ecosystem sustainability requirements and specifications.	Proposes to promote ecotourism sustainable performance measures; local capacities and equipment investment strengthens to obtain destiny environmental benefits in favor of natural resources.
NMX-AA-171-SCFI-2014 Lodging establishment's environmental performance requirements and specifications.	Establishes requirements and specifications for environmental performance in subjects like habitat, water, waste, energy, air and better practices in acquisitions and material resources savings, among others.

The chart presents Mexican Norms (NMX) related so sustainable tourism and describes in general its objective function. Source: own elaboration with information of each one NMX.

The NMX listed are for voluntary use. In this sense they are tools of social responsibility, providing a means by which companies show their customers they are a friendly entity with the environment. These NMX illustrate how sustainability it is closely linked to the environmental dimension. Leaving the social side, considering the economic dimension is implicit in companies since its purpose is profit. In this sense,

frequently local people do not obtain benefits from tourism. From the perspective of sustainable human development, the National Development Plan (NDP) 2007-2012, as well as many of the federal agencies, incorporated the issue of climate change through their sector programs. The Tourism Sectorial Program 2007-2012 added eight goals, presenting political concurrence with environmental sustainability, sustainability resources exploitation, environmental regulation strengthening and quality systems strengthening (Tourism Secretary, 2014). Unfortunately, in Mexico, these proposals have a life of six years. Neither the current PND (2013-2018) or the tourism sector have explicit proposals on sustainable tourism. This study has been weaving on the topic of sustainable tourism, according to definitions of various authors, but referred to the various elements of public policy in addressing the issue. In 2006 the NMX-AA-133-SCFI defines sustainable tourism as the tourism that fulfills the following guidelines:

Provide optimal use of environmental resources that are a key element in tourism development, maintaining essential ecological processes and helping to conserve natural resources and biodiversity. Respect socio-cultural authenticity of hosting communities, keep their architectural cultural active and traditional values, and contribute to intercultural understanding and tolerance. Ensure viable long-term economic activities, which report all agents, well distributed socio-economic benefits, including employment opportunities and income generation and social services to host communities, and contribute to reducing poverty.

As of 2009 the previous definition remains in the reforms made to the General Tourism Law. By 2013, in the tourism sectorial Program 2013-2018, the definition is slightly modified. Here it is defined as: sustainable tourism activity that gives an optimal fit to use natural resources for tourism development, helping to keep them in adherence to the laws on the subject; respect the socio-cultural authenticity of host communities, preserving its cultural attractions, traditional and architectural values, and ensures the development of viable economic activities to report socio-economic benefits, including employment opportunities, increased income and social services have for host communities, to help improve living conditions. This definition highlights an evolution in the concept by establishing a legal link explicitly stated and noted the impact on improving living conditions. However, by not referring to indicators it all remains a good intention. In Baja California, the government refers to sustainable tourism as the purpose of tourism activities development, balancing aspects of economic, social, cultural and ecological order in the present and future. It also suggests sustainable exploitation as the use of natural resources so that the functional integrity and load capacities of ecosystems that are part of these resources are respected, for indefinite periods (Baja California State's Congress, 2009).

On the other hand, as companies agree to a quality certification under the norm ISO 9001, Certification and Normalization Mexican Institute (IMNC, Spanish acronym) provides ecotourism certification to companies that practice a responsible tourism in natural areas, which preserve the environment and improve the local people wellbeing. The certification is obtained through NMX-AA-133-SCFI-,013 evaluation, requirements and specifications for sustainability of ecotourism, which establishes requirements to tourist activities and facilities as presented in Table 4. In the same manner, quality is measured through metrics. Ecotourism sustainability is valued. Eight metrics measure touristic activities and five measure the installations. The first measures apply according to the services that the entity bid while the second should always be applied.

The Tourism Secretary (2015) drives the distinctive S. This is a recognition of good sustainable practices in tourism businesses. The program began in 2012 and seeks to strengthen the performance of companies with the addition of two easy to use tools: a diagnosis and a system for measuring energy, water, waste and carbon for more than 25 sectors in the tourism industry. The business spins that are likely to obtain the distinctive S include: lodging establishments, restaurants, airports, convention centers, golf courses, touristic transports. Until June 30th 2015, in Mexico, 56 companies had the S designation, of which 29 were located in Quintana Roo (Tourism Secretary, 2015). It is important to note that the international certification Blue Flag, recognizes distinctive beaches and marinas that have achieved excellence. This excellence occurs in water quality, environmental management and education; security and services; has

standardized protocols and strict selection process, verification and monitoring, and has a significant presence in Mexico. There are 26 Mexican beaches which have Blue Flag designation, of which 11 are located in Quintana Roo (Pronatura Mexico, 2015). Since 2006, IMNC created a similar certification in Mexico, which is obtained through NMX-AA-120-SCFI-2006. This is an eco-label and is not well-known among tourism service providers. As illustrated, the government has created various public policy instruments to promote sustainable tourism. Nevertheless, the results are poor. Below are the findings presented in relation to studies in Mexico on sustainable tourism. The objective is to assess the interest of researchers and academics in the field, i.e. research findings concerning the sub system.

Table 4: Ecotourism Sustainability Requisites

Touristic Activities	Installations
Interpretation: provide personal and non-personal information to the visitor (characteristics, environmental and sociocultural aspects of the site).	Water: Pluvial catchment, efficient use, treatment, saving, and wet and dry latrine use, among other.
Trail: Guide walking or auto guide will be carried out in a trail system previously established.	Wild life: Restoration program, don't deteriorate the habitat. Energy: Non-conventional energy sources, natural light exploitation, bio climate architectonic design.
Environmental education: Have a program that promotes community, visitants, and employee participation in the project.	Urban solid waste: Generation reduction plan, garbage separation and composting.
Signaling: Have visible signs, clear, made with region materials, located strategically respecting the landscape.	Purchasing products: biodegradable and regional products.
Wild life: Activities should not interrupt population or biologic processes of wildlife and fauna.	
Aquatic ecosystem: Observe wild life activity without using products that alter the ecosystem.	
Conservation initiatives: Involve visitors to participate in conservation local plans.	
Cultural impact: Spread the values, demonstrations and local cultural history, always with respect.	

Requisites to access the certification is classified into two types: concerning the activities (includes eight metrics) and the concerning the installations (five metrics). Both are important to guarantee a responsible tourism praxis and a tourist quality experience. Source: Own elaboration with IMNC (2016) information.

Table 5 describes five studies. The first study was published in 2007 where San Martin and Salcedo reflect on the need to move towards sustainability in tourism activities and access to certification as a measure of transparency and credibility. Similarly, Ibáñez (2010) presents a historical analysis of the indicators of tourism sustainability, emphasizing the welfare of the territory's population and wellbeing of ecosystem that represents the tourism product. Meanwhile Madrid (2015, p 1310) argues that Mexico's tourism policy has paid increasing attention to sustainability (at least in theory). This author groups the progress into three phases: a) embryonic phase (1970 -1990) b) training phase (1990 -2000) and c) consolidation phase (2000 -2015). However, the author concludes that "the tangible results of the implementation of sustainability as part of tourism development model the country, are still to be seen".

Two items are derived from the studies examined. The Serrano et al. (2010) study performed a diagnosis in the locality of San Mateo Capulhuac with the aim of developing a proposal for harmonic tourism. The other case takes place in Banderas Bay, Cornejo Chavez & Massam (2013) determine the TEF through ecological costs. This is a quantitative study using indicators which were replicated in other territories where applicable. The results suggest both, public politics level, and studies realize, the state of embryonic development that exists in Mexico on the theme of sustainable tourism. Therefore, there exists an urgent challenge to adopt in businesses throughout the value chain of tourism to incorporate responsible practices with the environment and communities. The Mexican government should assess the development of elements of mandatory public policy. They should focus on hard law, since voluntary activities are soft law. It is a legal phenomenon that has no binding force, but it is not without legal effect or at least certain

legal relevance. Without hard laws, advances in the subject will be poor and negative impacts of tourism can cause irreversible effects.

Table 5: Sustainable Tourism Studies from Mexico

Author	Article	Description	Variables
San Martín and Salcedo (2007)	Tourism, sustainability and certification: a global challenge	Explains the need to apply sustainability in touristic practices, describes main initiatives to evaluate touristic practices and sustainability through Certification Programs.	Companies, services and destinies environmental performance. Product quality. Company's social responsibility.
Ibáñez (2010)	Sustainability and touristic development indicators in Mexico	Presents a state of the art revision about sustainability evaluation methods, acknowledging that sustainable development is obtain through human wellbeing and ecosystem wellbeing.	Human wellbeing Ecosystem wellbeing
Cornejo, Chávez & Massam (2013).	Sustainable Tourism: Whale Watching Footprint in the Bahía de Banderas, México	They develop a study about tourism ecologic footprint (TEF, English acronym) in Marietas island, Banderas Bay. They argue that environmental protection ecologic costs reflect TEF. They reveal that whale observation depends on area and touristic system. They question if tourism protects a species or ecosystem, and how big should TEF be to accomplish protection without affecting the resources.	Tourist origin and transportation Touristic stay durance and raw material consumption. Total tourists, lodging areas, restaurants, and energy consumption. Energy consumption of each vehicle and average calorific power of fossil gas.
Serrano et al (2010)	Harmonic tourism as a sustainable alternative to a community in State of Mexico	They study the San Mateo Capulhuac community with the purpose to propose harmonic touristic development. The goal is to boost the population improvement in life conditions, and the cultural and natural resources proper exploitation.	Community development aspirations and needs. Community identity. Cultural demonstration preservation. Natural resources intuitive-rational exploitation.
Madrid (2015)	Sustainability in Mexican touristic politic	Realizes the sustainability incorporation evolution in Mexican touristic politic in the last 45 years.	Official documents produced from different governmental agencies linked to tourism.

Only five studies about sustainable tourism in (or from) Mexico were found. Three with a general approach, as a country which authors reflect in the problem and design proposal. Two of the studies are applied cases, one in State of Mexico and other in Jalisco. Source: own elaboration with authors information

CONCLUDING COMMENTS

The bibliographic study provides a bleak picture of the model of sustainable tourism in Mexico. The findings allow us to infer the need to develop learning processes at the local level, to promote the development of sustainable capacity. The system of tourism in Mexico presents a duality that is exclusive to us in the country. In terms of sustainability, the economic dimension is very productive. It contributes to GDP and generates a large number of formal jobs. But environmental and social dimensions are invisible. The industry directly and indirectly contributes to pollution of the territories threatening ecosystems. Furthermore, the benefits of the activity do not permeate local communities, whose inhabitants only receive a salary derived from work on any of the links in the chain of tourism. Thus, as Rojas (2009) concludes in Colombia's case, the Mexican government public politic instruments doesn't seem to go beyond an inventory of good intentions. The government, through its agencies, doesn't count with institutional capacity to boost general application of sustainable strategies that are necessary and urgent to implement monitoring and tracking systems that you provide data for effective decision making and feedback systems.

Mexico has no formal environmental education. The education system, in an incipient and superficial way, approaches the subject at a basic level. Thus, it does not have clients that can demand green products and

services. So, the government should include in their strategies environmental education and preparation of all those involved. The main limitation of this study is derived from a literature search on electronic databases. There may be studies published in books or other sources that have not been examined. Future research might investigate eco-labels in tourism, which are promoted as mechanisms for customer choice as a sign of quality. It seems, for Mexican tourists, labels relating to the environment are not important. Certainly the international tourist leans toward a committed and participative tourism with respect to environmental and socio-cultural interests.

Finally, the government should create Sustainable Tourism Development Zones' encouraging investment, employment and land use planning, conserving natural resources for the benefit of the population. Promoting public policies from tourism to implement sustainability in society, sharing the economic benefits of the activity with the native population. Also economic entities, tourists and inhabitants of tourist sites, should recognize in nature a wealth for its scenery, its biodiversity, its flora and fauna. Although they have an economic value, these assets must be looked after, or over time they could disappear. Sustainable tourism guarantees tourism in the future with sites that retain its culture, its natural wealth and a population with quality of life.

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ECONOMIC EFFECTS FROM CHANGE IN TOURISM POLICY ON AN ISLAND ECONOMY

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ABSTRACT

Taiwanese government adjusted its tourism policy toward Chinese people in 2008, hoping it would enhance its economic prosperity and create the employment. Motivated the economic effects generated by the relaxation of the policy were unclear, we have employed both the industry-related spillover model to examine the economic scale and the number of persons employed created, and to investigate the extent of the effect. Our findings were that the economic spillover effects were brief and transient. Nonetheless, it could overcome Taiwan's economic challenges. Only through the sustainable management of the tourism-related industry could long-term economic effects be created.

KEYWORDS: Tourism Policy Adjustments, Aviation Deregulation, Industry-Related Spillover Model, Spillover Effect, Employment Coefficient

JEL: H29, R28, R38

INTRODUCTION

C hina has been reforming and opening up its economy since the mid-1970s, attracting a great amount of international capital. China's annual economic growth rate has surpassed 10%, which is the second to that of the United States. It has already become the world's second largest economy. As its economy has grown, the income of the Chinese people has increased significantly, and the number of Chinese people traveling abroad has increased. The vigorous purchasing power of the Chinese people has drawn substantial amounts of international attention. Currently China has the fastest growing number of international tourists. According to a study by the China Tourism Academy, 65 million Chinese people left the country for traveling during 2011, spending more than US$50 billion for tourism. The China Tourism Academy estimated that the number of international tourists would continue growing up to 78.4 million in 2012, with traveling expenditure reaching US$80 billion.

There are divergent political opinions between China and Taiwan. In the past, Taiwan's traveling policies toward Chinese people have been relatively conservative, substantially restricting the tourism activities of Chinese citizens coming to Taiwan. In spite of this, China and Taiwan have close economic connections. More than 40% of Taiwanese export is dependent on the Chinese market. Beyond our general understanding, Taiwan's economic development is currently restricted by growth in China. Despite the close economic and trade relationship between Taiwan and China, Taiwan has not always been open to Chinese tourists. Generally speaking, Taiwan became open to visiting from Chinese professionals in 1991. There are people with doing economic, athletic, religious and trade exchange activities. Beginning on January 1, 2002, Taiwan has gradually opened up to Chinese exchange students, Chinese citizens living abroad or overseas with permanent local residency, and Chinese citizens traveling overseas for tourism or business visiting and transferring to Taiwan for their tourism. Taiwan did not issue tourist visas to general Chinese citizens until the Taiwanese presidential election of March 2008, withdrawing traveling restrictions and broadening the range of tourism permitted in Taiwan. On December 15, 2008, Taiwan and

China jointly agreed to change their transport policies. During the first phase of aviation deregulation in 2009, China and Taiwan respectively opened 16 and 8 designated cross-strait direct flight routes, including 36 flights per week. In the second phase of aviation deregulation in 2010, the number of designated routes and weekly flights was expanded to 31 and 370, respectively. The third phase of aviation deregulation in 2011 entailed permitting individual visits to Taiwan for Chinese tourists. Concurrently, the number of designated direct routes was extended to 37 and the weekly flights were increased to 540. In the fourth phase of aviation deregulation in 2012, the number of direct routes was enlarged to 46 and the weekly flights were amplified to 616, which fulfilled the Economic Cooperation Framework Agreement(ECFA) that China and Taiwan signed and facilitate cross-strait travel. Table 1 indicates that the number of departures and arrivals of Taiwanese international airlines has gradually decreased after aviation deregulation; however, the number of departures and arrivals of cross-strait airlines has increased annually. A similar

Table 1: Number of International Airlines from 2007 to 2012

Year	International Airlines (Including Hong Kong and Macao	Cross-strait Airlines (Taiwan–China)	International Airlines (Including Hong Kong and Macao	Cross-strait Airlines (Taiwan–China)	International Airlines (Including Hong Kong and Macao	Cross-strait Airlines (Taiwan–China)
	Number of Departures and Arrivals		Tourists(Persons)		Cargo Transport Volume (ton)	
2007	192,610	-	24,431,735	-	1,191,117.64	-
2008	172,469	2,279	22,784,144	418,689	1,033,835.03	1,516.86
2009	149,131	17,741	19,989,679	3,105,867	866,711.17	66,274.22
2010	155,500	33,823	21,910,463	5,826,153	1,017,700.86	146,240.12
2011	160,775	44,562	21,936,344	7,157,484	951,820.24	156,826.26
2012	171,610	58,513	23,923,825	8,943,281	930,654.50	171,423.25
2009/2008	0.86	7.78	0.88	7.42	0.84	43.69

Note: The data is compiled by the Taiwanese Tourism Bureau.

phenomenon is reflected in the trends of international and cross-strait tourism. In Taiwan, the numbers of international-airline departures and arrivals and international tourists decreased by 14% and 12% from 2008 to 2009, respectively; conversely, the numbers of arrivals and departures of cross-strait airlines and cross-strait tourists in 2009 increased 7.78 times and 7.42 times, respectively. By comparison, the change in the cross-strait cargo transport volume was greater. The cross-strait cargo transport volume in 2009 was 43.69 times that in 2008. These figures demonstrate the substantial impact of cross-strait aviation deregulation on tourist numbers and airfreight transport. Those policy adjustments had two goals: the first was to broaden the exchange activities between the people of Taiwan and China, and the second was to create economic benefits for Taiwan. In September 2008, the Lehman Brothers investment bank in the United States filed for bankruptcy and triggered a global financial crisis. It was a severe blow to the Taiwanese economy. Those international economic disturbances accelerated the relaxing of tourism policy toward Chinese people.

According to the statistical data from the Taiwan Tourism Bureau, during the first quarter of 2010, the amount of Chinese tourists visiting Taiwan was already greater than those from other countries. China has become the main source of international tourists in Taiwan. In June 2011, the restrictions toward Chinese people were relaxed once again, with allowing Chinese citizens arriving for individual or personal tourism coming to the island. As the amount of Chinese tourists to Taiwan increases and tourism types diversify, Taiwanese people have had numerous evaluations of and expectations toward the benefits brought by Chinese tourists in Taiwan. The information disseminated by various organizations has resulted in differing claims on and expectations for the economic benefits brought to Taiwan by Chinese tourists.

Prior studies been devoted on the impact of relaxing in Taiwan tourism policy toward the Chinese people on its economy have focused primarily on tourism image, motivation, satisfaction, and itinerary planning.

Additionally, there is also a limited literature investigating the socio-cultural and political levels. Few Studies documented on the effect of adjustment in Taiwan tourism policy to Chinese people on its economy. Motivated by the significant increase Chinese tourists in the overall Taiwanese tourism market and the lack of more complete empirical analyses in previous studies on the economic benefits created by Chinese tourism, we employ the industry-related spillover model to examine the effects of tourism policy adjustments to Chinese tourists on Taiwan's economy.

The economic growth driven by tourism is an attempt to transform Taiwanese policy. Therefore, the impact of the increase in Chinese tourists on the Taiwanese economy is becoming more obvious. In particular, it has had a significant impact on the development of the tourism-related industries. Our study addressed the questions: specifically, how large the adjustments to Chinese tourism policy have an impact on the Taiwanese economy and how much they could provide employment for Taiwan. There are few studies regarding these aspects. Therefore, we conduct an empirical study to obtain better understanding the impact of relaxing in tourism policy on the Taiwanese economy.

The remainder of the paper was organized as follows. Section 2 reviewed the relevant literature. In section 3, we discussed our empirical methodology. Section 4 reported the empirical results and the final section concluded with a brief summary.

LITERATURE REVIEW

China began allowing international traveling in 1983, with the residents of Guangdong being permitted to visit their relatives in Hong Kong. The relative-visiting policy was expanded throughout the entire country in 1984. Overseas relatives, however, were required to be responsible for traveling expenses. Thus, outbound traveling was limited. In 1990, China's foreign exchange policy was changed and Chinese people were allowed to engage in tourism at their own expense. The number of outbound tourists began to increase annually. Therefore, there is a growing body of work on the region during the late 1990s. The literature on Chinese outbound tourism focused on Asian regions, including Hong Kong, Singapore, Malaysia, and Thailand (Wang & Sheldon, 1996; Qiu & Qu, 1996; Qu & Lam, 1997; Cai *et al.*, 1999; Qiu & Lam, 1999). Those studies explored and compared the traveling behaviors and socioeconomic characteristics of Chinese tourists in Singapore, Malaysia and Thailand.

Starting with 2000, there is literature documenting on outbound traveling for China in related with the growth of Chinese economy. (Goh & Law, 2002; Kim *et al.*, 2005). Cai *et al.* (2001) and Jang *et al.* (2003) assessed the tourism goals of Chinese tourists in the United States. Becken(2003) indicated that the largest expenditure for Chinese tourists was made on transportation, followed by accommodation. Shopping was the largest personal consumption expenditure. The majority of outbound tourists believed that Hong Kong was a shopping paradise and shopping was the primary motivation for traveling to Hong Kong. Studies by the United Nations World Tourism Organization (UNWTO) examined the patterns of consumption and tourism markets for Chinese outbound tourists. UNTWO (2003) and UNWTO (2008) documented that shopping was the most popular activity or itinerary for Chinese tourists. More recently, Wang and Wen (2010) investigated the economic benefits brought by Taiwan's issuing or allowance of tourist visas for Chinese after 2008. Wang and Wen (2010) also argued that opening Taiwan tourism market toward Chinese tourists brought positive benefits for the Taiwanese economy. Within the two years right after liberalization, a total of NT$59.6 billion in tourism income had been generated.

Li *et al.* (2010) used an incidental target-market approach and proposed new results for this burgeoning market. The results of Li *et al.* (2010) indicate that approximate 22 million city residents from mainland China were the main origin of outbound travel markets, among which 11.5 million city residents had traveled or planned to travel to tourism regions except Asia. In addition, the study not only evaluates market size and makes recommendations on target cities but also presents an effective research design to identity target markets and customer positioning. Falk (2010) explored the relationship between the number of overnight stays and various measures of snow depth according to panel data including 28 Austrian ski resorts during the periods from 1986/87 to 2005/06 through the dynamic heterogeneous

panel data technique developed by Pesaran *et al.* (1999). Pesaran *et al.* (1999) provided the evidence that there was a long-run relationship between the number of overnight stays, amount of snow depth, weighted real GDP per capita of the major countries of visitor origin, and price index of accommodation services. Pesaran *et al.* (1999) also found that early Easter holidays were significantly and positively related to the demand of winter tourism.

Seetanah (2011) studied the potential contribution of tourism for economic growth and development within the conventional augmented Solow growth model by a panel data of 19 island economies for the years that span from 1990 to 2007.The results of this study reveal that the economic growth of island economies was significantly produced by tourism using generalized method of moments method. Seetanah (2011) also finds that tourism development on island economies could have comparatively higher growth effects on developing and developed countries through comparative analysis. Becken and Lennox (2012) proposed a global general equilibrium model with a purpose-built computable general equilibrium model of New Zealand, and it puts an emphasis on describing supply and demand of the tourism in some details. The results of Becken and Lennox (2012) presented a reduction in actual gross national disposable income of 1.7% for a doubling of oil price and a 9% decrease in the actual value of tourism exports. Moreover, the decrease in tourism demand in New Zealand resulted from segment-specific price increases and various income and exchange rate effects and elasticities. The greatest decrease of tourism demand was caused by the reduction of tourists from the United Kingdom.

Wan (2012) explored the social, economic and environmental consequences of casino gaming in Macao in 2002. The results of this paper show on the community impact of casinos, and provide management and policy implications for destination managers in Macao and other destinations with intentions to develop casinos and gaming-related tourism industry. Mitchell (2012) studied two issues: (1) the emergence of pro-poor tourism as an idea and (2) how the impacts of tourism on local communities around developing world tourist destinations can be measured. This study explains and identifies a research method to value chain approaches which allows researchers to "trace the tourism dollar" in tourist destinations of the developing country. The method with professional experience was indicated that the methodology based on empirical studies is conceptually robust and a practical way of alleviating poverty, and allows researchers and the industry to work and cooperate together effectively in 12 different developing country destinations.

Literature discussed above emphasizes the economic growth and consumption behavior pattern of Chinese overseas travel. Wang and Wen (2010) performed merely the assessment or estimation of preliminary economic effects. Previous studies were not capable of observing the effect of relaxing tourism policy to Chinese citizens on the overall Taiwanese economy. In the present study, we employ the industry-related spillover model and to evaluate or estimate the economic spillover effect created by adjusting a tourism policy. We also used the employment-created model to calculate the employment creation generated by these spillover effects.

Most previous literature studied on the effects for tourism industry in terms of the microeconomic analysis or on the initial macroeconomic evaluation. There is little detailed investigation on the service-related industry. The present study employed the industry-related spillover model, in which it could allow to study on the individual industry as well as to do the comparisons within the whole economy, to investigate the economic effects of a change in the tourism policy on industry-related tourisms. Therefore, researchers regard the industry-related spillover model as a mezzo (macroeconomics) to examine the degree of interaction among the industries. In the present study, we focus on examining the economic effects of relaxing the tourism policy to obtain better understanding the current situation of the tourism industry and to provide the future direction in development of the tourism industry.

Liu *et al*. (2013) employed an industry-related spillover model and employment-created model to examine the economic impact of Chinese inbound tourists on the additional numbers of persons employed, and to investigate the extent of the effects on the tourism related industries. It is concluded that by 2011, the economic spillover effects for the retail sector and accommodations services sector were US$773.49

million and US$438.43 million, respectively. The total spillover effect of US$7,617 million accounted for 0.183% of Taiwan's GDP. Li *et al.* (2013) and Chien *et al.* (2014) found that the employment coefficient, the ratio of earning share, and final demand production inducement dependency are the key factors among the determinants causing the difference in spillover effect between the hospitality and restaurant industries. Hong *et al.* (2014) found that based on the economic spillover effect arising from the aviation deregulation, tourism consumption from Chinese tourists would be crucial to the island economy in future. Taiwan's economy would not be only trade-dependent on China, but also expanding to rely on Chinese tourists' consumption. Lo *et al.* (2014) based on the models established by Leontief (1966) and Miyazawa(2002) and by adding the effective tax rate, which is employed by the Japan National Tourism Organization (2010), the present study measures the indirect tax, the personal income tax, and the corporate income tax resulting from the change in the transport policy. This allows us to get better understanding the tax effects of the change in a transport policy. The empirical results show that the total tax revenue of the aviation deregulation generated for US$1,047.3164 million, equivalent to the total tax revenue of 1.78% in 2011 in a small open economy. The indirect tax revenue, the personal income tax revenue and the corporate income tax revenue accounted for 0.76%, 0.81%, 0.21%, respectively. As for the industrial sector, the tax revenue from the service-related industry is US$939.7126 million, which accounts for up to 89.73% of the total tax revenue under the aviation deregulation. Hong *et al*. (2014) by adding the effective tax rate to the industry-related spillover model showed the tourism spending generated significant tax revenue, accounting for 1.32% of the total tax revenue in 2011 in Taiwan. Chinese tourists' consumption greatly contributed to the island economy. It might imply Taiwan's economy or tax revenue would be not only trade-dependent on China, but it might also rely on the Chinese tourists' consumption.

MODEL DEVELOPMENT

In order to estimate the economic effects of Chinese tourists visiting Taiwan, Chinese tourists' spending content needs to first be defined. As assessing the employment effects generated by Chinese tourists on Taiwan, the employment coefficients of each industry should first be calculated. The estimation covers over the periods from the July 2008, as Taiwan relaxed its tourism policy toward Chinese citizens, to December 2011.According to the statistical data compiled by the Taiwanese Tourism Bureau, Executive Yuan, the number of Chinese tourists in Taiwan were 329,204(2008), 972,123(2009), 1,630,735(2010), 1,784,185(2011), 2,586,428(2012), and 2,874,702(2013). For spending patterns of Chinese tourists, the retail sector (for shopping expenditures) was the most substantial at 50.67% of the total amount. It was followed by accommodation services(29.15%), food services(6.68%), land transport (6.38%), and buying tea leaves(6.33%). Shopping is a priority for Chinese tourists. It is consistent with those of Cai *et al.*(2001), Jang *et al.*(2003), Becken(2003), UNWTO(2003), and UNWTO(2008). Our data were the average daily and total spending amounts for Chinese tourists in past years. We used an average travel time of five days as the calculation basis for total spending (according to the data from the Taiwanese Tourism Bureau, Chinese tourists stayed in Taiwan for an average of five days).

Industry-Related Spillover Model

Based on the industries classified in the industry-related table as having closer relationships with tourists' spending, the tourism-related industries in the present study consist of food services, accommodation services, land transport, telecommunications services, insurance, travel services, arts, entertainment, and leisure services, and retail. In the present study, we estimate the total effects generated on the Taiwanese economy by Chinese tourists. We further investigate the impact for tourism-related industries and uncover the future developmental trends of the Taiwanese leisure and travel industries.

The industry-related spillover model is to estimate the extent of interdependence among the sectors. The spillover processes consist of direct and indirect effects. The indirect spillover effects might include the first, the second, and the third and so on. In the present study, we estimate the first two (Based on the results of the estimates of industry-related model, the third indirect spillover effect is gradually died out. It is trivial for the whole economy. In this study, therefore, we only obtain the estimate the direct, the first

and second spillover effects). We also focus on the industry-related spillover model of competitive import model instead of the competitive industry-related model based on the level of import inclined of the extent of domestic economic aggregate demand (The competitive industry-related model is modeled for the competitive relationship between imported commodities and domestic commodities) (Li, et al., 2013; Liu, et al., 2013; Chien, et al., 2014; Hong, et al., 2013; Hong, et al., 2014; Hong, et al., 2014; Hong, et al., 2014; Lo, et al., 2014).

The supply-demand equilibrium equation of the competitive import type of the industry-related spillover model could be constructed as

$$\sum_{j=1}^{n} x_{ij} + F_i^d + E_i = X_i + M_i, i = 1,2, \cdots n \tag{1}$$

where x_{ij} denotes the per output for industry j resulting from the input of industry i; is the amount of the domestic final demand for industry i and E_i is the amount of the export demand for industry i ; X_i is the amount of production for industry i ; M_i is the amount of import for industry i. We could then rewrite equation (1) to obtain the following,

$$\sum_{j=1}^{n} a_{ij} X_j + F_i^d + E_i = X_i + M_i, i = 1,2, \cdots n \tag{2}$$

where $a_{ij} = x_{ij}/x_j$; a_{ij} is the input coefficient which denotes the input from industry i per output for industry j (i = 1, …, n; j=1,2, …n); x_j represents the total output of industry j and x_{ij} stands for per output for industry j resulting from the input of industry i. The measure of import(M_i) is specified:

$$M_i = m_i(\sum_{j=1}^{n} a_{ij} X_j + F_i^d), i = 1,2, \cdots n \tag{3}$$

From equation (3), the import coefficient could be formulated as

$$m_i = \left. M_i \middle/ (\sum_{j=1}^{n} a_{ij} X_j + F_i^d) \right., i = 1,2, \cdots n \tag{4}$$

Combining equations (2) and (3), we obtained as follows

$$X_i - (1 - m_i) \sum_{j=1}^{n} a_{ij} X_j = (1 - m_i) F_i^d + E_i, i = 1,2, \cdots n \tag{5}$$

In terms of matrix, equation (5), which is the competitive import type of the industry-related spillover model, could be rewritten as

$$X = [I - (I - \overline{M})A]^{-1}[(I - \overline{M})F^d + E] \tag{6}$$

where A is the input coefficient matrix (n×n), A could be given

$$A = \begin{bmatrix} a_{11} & \cdots & a_{1n} \\ \vdots & \ddots & \vdots \\ a_{n1} & \cdots & a_{nn} \end{bmatrix}; \tag{7}$$

I is the identity matrix; $\overline{M}$ represents the diagonal matrix of import coefficient (n×n), $\overline{M}$ is

$$\overline{M} = \begin{bmatrix} m_1 & \cdots & 0 \\ \vdots & \ddots & \vdots \\ 0 & \cdots & m_n \end{bmatrix} \tag{8}$$

$I - \overline{M}$ stands for rate of Taiwan's self-supplying ; $I - \overline{M}$ is specified as

$$I - \overline{M} = \begin{bmatrix} 1 - m_1 & \cdots & 0 \\ \vdots & \ddots & \vdots \\ 0 & \cdots & 1 - m_n \end{bmatrix}; \tag{9}$$

F^d deducted import from the aggregate expenditures is the matrix of Taiwanese final consumption and investment; E denotes the export vector (n×1) at period t, which is specified as

$$E = \begin{bmatrix} E_1 \\ \vdots \\ E_n \end{bmatrix} \tag{10}$$

$[I - (I - \overline{M})A]^{-1}$ is the Leontief inverse matrix, which is so called Leontief multiplier. It measures the extents of the direct and indirect spillover effects of the foreign tourists on the tourism-related industries Assume that there is no impact on Taiwan's export from the consumption of foreign tourists; the industry-related spillover model could be modified as

$$
\begin{aligned}
X &= [I - (I - \overline{M})A]^{-1}[(I - \overline{M})F^d] \\
&= \left[(I - \overline{M})F^d\right] + (I - \overline{M})A\left[(I - \overline{M})F^d\right] + \left[(I - \overline{M})A\right]^2\left[(I - \overline{M})F^d\right] \\
&\quad + \left[(I - \overline{M})A\right]^3\left[(I - \overline{M})F^d\right] + \cdots \\
&= \left[(I - \overline{M})F^d\right] + (I - \overline{M})A\left[(I - \overline{M})F^d\right](I + \left[(I - \overline{M})F^d\right] + \left[(I - \overline{M})A\right]^2 + \cdots) \\
&= \underbrace{\left[(I - \overline{M})F^d\right]}_{\text{Direct Spillover Effects}} + \underbrace{[I - (I - \overline{M})A]^{-1}(I - \overline{M})A\left[(I - \overline{M})F^d\right]}_{\text{Indirect Spillover Effects}}
\end{aligned} \tag{11}
$$

Let Leontief inverse matrix $[I - (I - \overline{M})A]^{-1}$ be Γ^*, equation(11) could be reformulated as

$$X = \underbrace{\left[(I - \overline{M})F^d\right]}_{\text{Direct Spillover Effects}} + \underbrace{\Gamma^*(I - \overline{M})A\left[(I - \overline{M})F^d\right]}_{\text{Indirect Spillover Effects}} \tag{12}$$

Industry-Related Spillover Model

Following equation (12), in the present study we would estimate the direct, the first, the second direct spillover effects. The measures could be constructed

Measurement of the Direct and Indirect Effects

The Direct Effects

The direct effect is the product of change in domestic final demand(δF_i^d) and rate of self-supplying($I - \overline{M}$), that is

$$(I - \overline{M})\delta F_1^d \tag{13}$$

The First Indirect Spillover Effects

Referring to equation (12), the first indirect spillover effect, which is the domestic induced amount of production (δX_1), is measured as

$$\delta X_1 = \Gamma^*[(I - \overline{M})\delta F_1^d] \tag{14}$$

The Second Indirect Spillover Effects

In order to measure the second indirect spillover effects, we calculate that the rate of income of the employed(W^L) measured by the ratio of the income of the employed(w_j^L) to the total input for industry $j(X_j)$ are

$$W^L = [w_1^L w_2^L \cdots w_n^L], w_j^L = \frac{v_j^L}{X_j} \quad , j = 1, 2, \cdots n \tag{15}$$

Combining equations (14) and (15), the induced income of the employed is

$$W^L \delta X_1 \tag{16}$$

The increase in consumption expenditure is

$$\overline{c} W^L \delta X_1 \tag{17}$$

where $\overline{c}$ denotes the Taiwan's average propensity to consumption in 2011

Therefore, the second change in increase in final demand for industry j is yielded

$$\delta F_2^d = C\overline{c}W^L \delta X_1 \tag{18}$$

where

$$C = \begin{bmatrix} c_1 \\ \vdots \\ c_n \end{bmatrix} \begin{bmatrix} F^d_{(c)1} \div (\sum_{k=1}^n F^d_{(c)k}) \\ \vdots \\ F^d_{(c)n} \div (\sum_{k=1}^n F^d_{(c)k}) \end{bmatrix} \tag{19}$$

Accordingly, the second indirect spillover effects could be measured as

$$\delta X_2 = \Gamma^*[(I - \overline{M})\delta F_2^d] \tag{20}$$

Total Economic Spillover Effects

Combined equations(13), (14) and (20), the formula that we could estimate the total economic spillover effects of the consumption expenditures from Chinese tourists on Taiwan's economy could be restated as

$$\underbrace{\text{TESE}}_{\substack{\text{Total Economic} \\ \text{Spillover Effects}}} = \underbrace{(I - \overline{M})\delta F_1^d}_{\substack{\text{Direct Spillover} \\ \text{Effects}}} + \underbrace{\Gamma^*[(I - \overline{M})\delta F_1^d]}_{\substack{\text{First Indirect} \\ \text{Spillover Effects}}} + \underbrace{\Gamma^*[(I - \overline{M})\delta F_2^d]}_{\substack{\text{Second Indirect} \\ \text{Spillover Effects}}} \tag{21}$$

The estimating procedures of industry-related spillover model could be demonstrated concisely as Figure 1.

Measurement of the Persons Employed

Plugging the rate of induced income of employment(W_j^L) and the rate of gross induced added value(W_j^G) into equation(21), the induced income of employment and the gross induced added value could be measured as follows:

$$W^G = [w_1^G w_2^G \cdots w_n^G], w_j^G = \frac{v_j^G}{X_j} \ , j = 1,2,\cdots n \qquad (22)$$

where v_j^G is the gross added value in the industry j.

Plugging the rate of gross added value(w_j^G) in equation(22) into equation(21), The total gross induced added value(TV) is formulated as equation(23), consisting of the direct gross added value, the first and the second indirect gross added value.

$$\underbrace{TV}_{\substack{\text{Total Gross Induced} \\ \text{Added Value}}} = \underbrace{w_j^G(I - \overline{M})\delta F_1^d}_{\substack{\text{Direct} \\ \text{Gross Induced} \\ \text{Added Value}}} + \underbrace{w_j^G \Gamma^*[(I - \overline{M})\delta F_1^d]}_{\substack{\text{First Indirect} \\ \text{Gross} \\ \text{Induced Added Value}}} + \underbrace{w_j^G \Gamma^*[(I - \overline{M})\delta F_2^d]}_{\substack{\text{Second Indirect} \\ \text{Gross} \\ \text{Induced Added Value}}} \qquad (23)$$

Combined equations(15) and (21), the formula for total induced income of employment(TE) that we could estimate the direct and indirect induced income of employment of the consumption expenditures from Chinese tourists on Taiwan's economy could be restated as

$$\underbrace{TE}_{\substack{\text{Total Induced} \\ \text{Income of} \\ \text{Employment}}} = \underbrace{w_j^L(I - \overline{M})\delta F_1^d}_{\substack{\text{Direct} \\ \text{Income of} \\ \text{Employment}}} + \underbrace{w_j^L \Gamma^*[(I - \overline{M})\delta F_1^d]}_{\substack{\text{First Indirect Induced} \\ \text{Income of} \\ \text{Employment}}} + \underbrace{w_j^L \Gamma^*[(I - \overline{M})\delta F_2^d]}_{\substack{\text{Second Indirect Induced} \\ \text{Income of} \\ \text{Employment}}} \qquad (24)$$

EMPIRICAL RESULTS

The empirical analysis in this section is divided into two sections. The first section presents the estimates of the overall economic spillover effects and the second section is to estimate the economic spillover effects in tourism-related industries. We use the employment coefficients of each industry to estimate the amount of persons employed created.

Spillover Effects

The results in Table 2 illustrate that the total spending of Chinese tourists in Taiwan as the initially relaxing tourism policy to Chinese people was US$295.60 million (direct effects). The first economic spillover effects added US$160.40 million and the second economic spillover effects increased the total figure to US$165.80 million. The domestically generated total economic spillover effects added a further US$440.22 million. Subsequently, following the rapid growth in Chinese tourist numbers, the total economic spillover effects triggered by direct consumption also increased significantly. Total economic spillover effects in 2009 and 2010 were US$1,546.32million and US$2,712.27million, respectively. This reached US$4,702.79 million in 2013. Consequently, the amount of employments was increased by 5,362(2008), 18,833(2009), 33,034(2010), 35,549(2011), 51,533(2012) and 57,277(2013).

Income inducements and crude value added inducements for employment income increased from US$18.988 million and US$346.08 million (2008) to US$2,028.45 million and US$3,697.01 million(2013). Since Taiwan relaxed its tourism policies toward Chinese tourists, employment income inducements have increased by a total of US$7,139.18 million. Crude value added inducements also increased by a total of US$13,011.72 million. Additionally, a total of 201,588employments were created. To Taiwan's current economic downturn, the economic benefits brought by the vigorous spending power

of Chinese tourists are extremely crucial. These benefits might have moderated the rise of unemployment in recent years.

Table 2: Economic Effects Generated by Chinese Tourists

Period	(1) Total Spillover Effects	(2) Induced Income of Employment	(3) Gross Induced Added Value	(4) Increase in Employment (Persons)
2008	44,022	18,988	34,608	5,362
2009	154,632	66,697	121,561	18,833
2010	271,227	116,988	213,220	33,034
2011	291,879	125,896	229,455	35,549
2012	423,120	182,504	332,627	51,533
2013	470,279	202,845	369,701	57,277
Total	1,655,159	713,918	1,301,172	201,588

Notes: 1. The unit of amount is ten thousands US dollars per capita. 2. The amount for year 2008 is covered for the periods from July to December.

Economic Effects of Tourism-Related Industries

Table 3 provides the estimates of the annual economic spillover effects for the tourism-related industries over past years. Overall, purchasing in the retail and accommodation services in hotels held had the highest part for the amount of Chinese tourist spending. Therefore, it generated greater economic spillover effects. Economic spillover effects in tourism-related industries in 2008 were US$232.19 million. The retail sector was the greatest one of these (US$116.67 million), followed by accommodation services (US$66.13 million). By 2013, the economic spillover effects for the retail sector and accommodations services sector remained the largest at US$1,246.26 million and US$1,024.03 million, respectively. The cumulative total economic spillover effects for these two sectors among all tourism-related industries were 50.25% and 28.48%, with the amounts of US$4,386.25 million and US$2,803.84 million, respectively. The total economic spillover effects for all tourism-related industries were US$9,086.41 million. The economic spillover effects for telecommunications services, insurance services, and arts, entertainment, and leisure services sectors were smaller. Their cumulative amounts since liberalization were US$272.43 million, US$162.65 million, and US$72.65 million, respectively. In the 1980s, there were changes in Taiwan's economic structure with the liberalization and internationalization of its market. The proportion of total product held by the manufacturing industry has

Table 3: The Economic Spillover Effects Generated by Tourism-Related Industries

Period	(1)	(2)	(3)	(4)	(5)	(6)	(7)	Total
2008	1,972	6,613	1,721	642	432	171	11,667	23,219
2009	6,927	23,227	6,046	2,257	1,520	602	40,978	81,557
2010	12,151	40,741	10,604	3,959	2,666	1,056	71,877	143,053
2011	13,076	43,843	11,411	4,260	2,868	1,136	77,349	153,943
2012	18,956	63,557	16,542	6,175	4,158	1,647	112,128	223,162
2013	21,068	102,403	18,386	9,950	4,621	2,653	124,626	283,707
Total	74,150	280,384	64,709	27,243	16,265	7,265	438,625	908,641

Notes: 1. The unit of amount is ten thousands US dollars per capita. 2. The amount for year 2008 is covered for the periods from July to December. 3. (1) Food Services Sector; (2) Accommodation Services Sector; (3)Land Transportation Sector; (4)Telecommunication Service Sector; (5)Insurance Sector; (6)Art, Entertainment, and Leisure Services Sector; (7)Retail Sector

gradually decreased, whereas those in the service industry experienced growth. The production of tourism-related industries grew substantially as the incomes increased. The economic spillover effects for tourism-related industries of adjustment in tourism policy accounted for 52.74% of the total economic spillover effect.

Table 4 presented the results of the employment creation in tourism-related industries. The impact on the employment market indicated similarly significant results. The persons employed created in tourism-related industries accounted for 66.87% of all employment created. In 2008, only 3,588

Table 4: Employment Creation in Tourism-Related Industries

Period	(1)	(2)	(3)	(4)	(5)	(6)	(7)	Total
2008	298	1,474	188	24	58	7	1,537	3,588
2009	1,047	5,178	659	84	206	21	5,399	12,594
2010	1,835	9,082	1,155	148	360	38	9,470	22,089
2011	1,975	9,774	1,244	159	388	41	10,191	23,771
2012	2,863	14,169	1,803	230	562	59	14,773	34,461
2013	3,182	15,748	2,004	256	625	66	16,420	38,302
Total	11,200	55,425	7,054	902	2,200	232	57,790	134,805

Notes: 1. The unit of amount is persons. 2. The amount for year 2008 is covered for the periods from July to December. 3. (1)Food Services Sector; (2)Accommodation Services Sector; (3)Land Transportation Sector; (4)Telecommunication Service Sector; (5)Insurance Sector; (6)Art, Entertainment, and Leisure Services Sector; (7)Retail Sector.

persons employed were created. However, more than 38,000 persons employed were created by 2013, a growth rate of 600%. For the industrial sector, the most persons were employed in both the retail sector and accommodations services sectors. Among the 134,805 persons employed created during the sample period, these two sectors added 57,790(42.87%) and 55,425(41.12%) persons employed, respectively.

CONCLUDING REMARKS

Its economic growth is easily influenced by international prosperity, since Taiwan is a relatively small trade-oriented economy. In particular, encountering the 2008 financial crisis, exports declined and the unemployment rate rose significantly. Its domestic economy remained in a downturn in Taiwan. Accordingly, the government adjusted the tourism policy toward Chinese tourists, hoping that it would enhance its economic prosperity and create employment opportunities. However, the economic effects generated by the tourism policy adjustment on Taiwanese economy were unclear. Therefore, we have employed both the industry-related spillover model and the employment-created model to estimate the economic scale and the persons employed created of relaxing tourism policy toward Chinese people, and to investigate the extent of the effects within tourism-related industries.

US$16,551.59 million in total economic spillover effects has been created. Among these effects, employment income inducements and crude value added inducements increased by US$7,139.18 million and US$13,011.72 million, respectively. A total of 201,588 persons employed have been created. It alleviated the pressure of continually increasing unemployment rate in Taiwan. Economic spillover effects in the tourism-related industries have been substantial, with a total economic spillover effect of US$9,086.41 million. There are 52.74% of overall economic spillover effects. The retail sector's US$4,386.25 million and accommodation services' US$2,803.84 were the greatest. There were 134,805 persons employed in tourism-related industries. The most employments were created in both the retail and accommodations services sectors, with 57,790 and 55,425, respectively.

As the mentioned above, even though the change in the tourism policy toward Chinese citizens brings the economic benefits and creates a great amount of persons employed for Taiwan, we concern more whether the benefits are sustainable. The earlier economic development in Taiwan was mainly driven by an increase in the capital investments, which is an investment-dependent type. However, gradually the primary sector and the secondary sector of industries shrank with economic development. Instead, the tertiary sector of industry increases dramatically and now accounts for the 70% of Taiwan's industrial structure, which plays an important role on the economic development. Especially right after the world financial tsunami in 2008, Taiwan might reconsider the new direction in industrial development and switch the gear from the investment-dependent and the export-dependent types into the service industry consumption one. Therefore, we could not overemphasize the role of tourism-related industries on the economic development.

With the economic development, the output and employment of service industry has accounted for more than the half of the aggregate production. Our finding in the present study suggested the change in the tourism policy could lead to the enormous benefits of the economy and employment for Taiwan. Could only the relaxing in tourism policy toward Chinese tourists sustain tourism-related industries in Taiwan? The answer could be little positive since the international political situation and international economic environment often play a key role on the industry development of the country. The industrial structure would make a change as those environmental conditions are various. Therefore, Taiwan should make an appropriate adjustment in policy to develop tourism industry. We encounter the following challenges: (1)There are tourists from other countries around the world who have patterns of consumption being different from those. (2)Could the consumption patterns remain unchanged in the future? (3)Service quality provided in Taiwan also needs to make adjustments while tourists' preferences change or tourists have higher income and education levels. The sustainable tourism industry should be able to meet the consumer needs; otherwise the effect of tourism policy adjustments might be not significant. Moreover, the tourism industry in Taiwan would not only need to improve service quality, but also it should provide more services to consumers in the future. In other words, the tourism services have to satisfy demands of "the shopping-type" tourists, and these industries could also offer more different tourism services to the diverse kinds of tourists such as "the leisure type", "the leisure and shopping type" or " the economy type". The economic spillover effects generated by the relaxation of tourism policy were brief and transient. It could not fundamentally overcome Taiwan's economic challenges. Only through the sustainable management of the tourism-related industry could long-run economic effects be created. Taiwan should continue to improve the quality of the tourism sector. The overall depth of the tourism-related industry should also be strengthened.

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THE IMPLEMENTATION OF CONJOINT ANALYSIS TO MEASURE THE ATTRIBUTES OF XCARET PARK

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ABSTRACT

Tourism businesses offer a variety of products and services. Consumers have a wide range of products to choose from. Entrepreneurs wish to identify products or services that are most preferred. Because Xcaret Park has a variety of recreational activities, we wish to identify which are favored by the consumer to determine the best service strategies. The objective of this research is to find which park itineraries consumers, residents of Cancun and Playa del Carmen, prefer. A quantitative study was performed, using conjoint analysis, which measures the relative value of every attribute of a product or service. By this method, we determine the optimal combination of attributes of choice for consumers, with the intent to establish competitive strategies for services.

JEL: M, M3, M31

KEYWORD: Strategic, Service, Tourist, Preference, Conjoint Analysis

INTRODUCTION

Quintana Roo is a state in Mexico that receives more than two million tourists every year (SECTUR, 2016). It is well known for its natural beauty, archeological zones, vacation destinations, night life and gastronomy. One of Cancun's attractions is the eco archeological Xcaret Park, which offers shows, gastronomy and a diversity of flora and fauna. Xcaret is located beside the sea in the Riviera Maya, near Cancun. It has attractions for all types of clients and it is entirely a family park, distinguished by the conservation of the Mexican culture (Xcaret, 2015). Xcaret is characterized by unique and unforgettable tourist experiences for its clients, often exceeding their expectations in products, services and quality. It receives more than a million visitors each year from which 42.2% are domestic, 27.1% from Central and South America and the Caribbean, 13.4% are from United States and 17.3% from the rest of the world (Santaolaya, 2012). Xcaret offers a wide variety of services, making it necessary to ask: Which is the best set of products or services to choose from? To create more competitive and accurate strategies, the objective of this investigation is to identify which products or services consumers, residents from Cancun and Playa del Carmen, prefer from the Xcaret Park. The study is organized in the following way: In first section we discuss the relevant literature related to basic aspects of tourism, products and services. Next we discuss the conjoint methodology used in the analysis. Next, we present results of the study. We close the paper with some conclusions and suggestions for future research.

LITERATURE REVIEW

Tourism is one of the largest driving economic forces in the world. It is multifaceted and geographically complex, with diversified products and services that foster competition. The challenge is to recognize value and understand consumer behavior with the intention of optimizing service and product offerings (Dominique y Barbosa, 2012). Tourism is a social and economic phenomenon. It consists of the movement of people through time and space. The quantity of people working in tourism and its ample geographical

distribution defines tourism as a socioeconomic phenomenon of vital importance to society (Pasquotto, Milton, Monfort, De Oliveira, 2012). Tourism has great potential in Mexico due to generous weather that allows Mexico to receive travelers year around. It has a well-known gastronomical diversity. Destinations with sun and beach are known internationally in part because they are included in the UNESCO Worldwide Heritage List (BANCOMEXT, 2013).

Mexico has ideal places for green and adventure tourism that respond to a growing worldwide demand for these sort of services (BANCOMEXT, 2013). Mexico has the best raw materials for this type of tourism. This market is characterized by clients that enjoy nature and wish to experience new emotions (Rocha, 2007). The diversity of products and services in this sector allow the consumer to have a wider diversity of choices, which makes it necessary to better understand consumer behavior with the intent of optimizing the services offer (Dominique y Barbosa, 2012). Products can be defined as anything that can be offered in a market for attention, acquisition, use or consumption that could satisfy a wish or need. This includes physical objects, services, people, places, organizations and ideas (Kotler y Armstrong, 2003). A tourism product compromises the resources contained in the arriving space that fulfill needs impossible to satisfy at home. This makes it necessary to move or travel to live and enjoy these resources as a tourist experience. It also involves the role of instrumental, complementary and auxiliary resources (González 2009).

Services are economic activities offered from one party to another in exchange for money, time and effort. Clients wish to obtain value by accessing goods, professional abilities, premises, networks and systems. Even though, generally they do not acquire the property of the physical elements involved (Lovelock, 2004). Walker, Boyd, Mullins y Larréche (2002) note that services are essentially intangible activities or benefits that one party can offer to another. Marketing has developed to promote the exchange of physical goods where it is easier to fix a price, develop a product, promote it and distribute it. It is the service's own characteristics which make it difficult to develop diversified marketing strategies and to apply the most important marketing tools to services, specifically to tourism services (Meroño y Bueno, 2014). Due to the growing supply of goods and services, before any type of marketing can affect consumers they must be exposed to it. Exposure refers to the process through which a consumer comes across stimuli. Marketing stimuli are messages or information about the attributes of the product, service or brand that influence at the moment of choosing. Exposure is crucial to influence the consumer's thoughts and feelings (Hoyer y Maclnnis, 2010). In most of today's markets it is practically impossible to satisfy every consumer with a single product or service. Exposure reflects if the consumer meets with stimuli. Attention reflects how much mental activity is payed to the stimuli. A certain amount of attention is necessary for the information to be perceived so the feelings of the person are activated (Hoyer y Maclnnis, 2010).

After being exposed to a stimuli and dedicating at least a little attention, the possibility of being perceived is measurable. Perception occurs when stimuli are registered by one of the five senses: sight, hearing, taste, smell and touch (Hoyer y Maclnnis, 2010). In the context of service, the provision, or meeting of client and corporation, is the origin of value that builds into satisfaction (Ravald y Grönroos, 1996) and its subsequent consequences (Moliner, Gil y Ruiz, 2009)**.** Some research proposes a cognitive and affective model of client satisfaction that integrates psychological variables. This allows a market analysis to identify visitor profiles and their choices of recreation in natural spaces (Bingé y Andreu, 2004; Osorio, y cols. 2011). Several authors propose inclusion of emotions in the idea of client satisfaction. This is done because the majority of services have, as a base, the experience, participation or adventures of the client (Bingé y Andreu, 2004; Osorio y cols. 2011).

Consumer preferences transfer tastes and the possibility of election between several options. It is therefore fundamental that organizations establish strategies to capture the consumer's attention. Doing so positively influences the decision of buying, based on the knowledge of consumer's tastes. It is necessary to create value for the client to have profitable relations (Kotler, Bowen, Makens, Garcia and Flores, 2011) through

an action plan that develops and maintains a mixture of strategies that produces satisfactory exchanges with consumers (Lamb, Hair, and Mc Daniels, 2011).

DATA AND METHODOLOGY

A descriptive quantitative analysis was done, with the goal of describing market characteristics and functions (Malhotra, 2008). Central measures like fashion, mean and median were calculated as generated by pure data analysis (Hair, Bush and Ortinau, 2004). Frequencies, which are mathematical distributions that count the answers associated with different values from a variable were determined (Malhotra, 2008). Finally, a conjoint analysis was performed to determine the relative importance that consumers assign to outstanding attributes, and the utility that they assign to the levels of attributes (Malhotra, 2008). This is a multivariate, robust, simple and flexible technique which allows the evaluation and analysis of the expressed consumer's preferences for services (Varela & Braña, 1996; Varela, Rial & García, 2003; Picón, Varela & Braña, 2006; Ferreira, Rial, Picón & Varela, 2009).

The conceptual frame to evaluate a subject's preferences is utility, a measure of overall preference. The more useful a product or service is the more attractive it will be for consumers, and the higher the probability the product or service will be chosen by consumers. Through utility, it is possible to quantify and ponder every level of attribute in the final buying decision of a product (Ferreira, 2011). The conjoint analysis consists of information about the preference structure that clients manifest for the different characteristics of a product or service. These preferences are directly related to benefits consumers expect from a product's attributes (Picón y Varela, 2000). Conjoint analysis allows businesses to work out and quantify the hidden rules people use to make choices between different products and services, and to quantify the values they place on different features or components parts of the offer (Conjoint analysis, s/f). The analysis is based on offers and best options. It helps us understand precisely what consumers want, and evaluate the different parts of the product or service. The goal is to maximize the value from products or services the business offers (Conjoint analysis, s/f). Conjoint analysis starts by breaking a product or service down into its constituent parts (called attributes and levels). Then the profess involves testing combinations of these parts to identify customers preferences. This study uses statistical analysis to work out the value, or utility score, of each part of the product or service in terms of its contribution to customer decisions.

The first stage in conjoint analysis is to create a set of product profiles (possible combinations of attributes and levels) to produce a set of options from which customers are then asked to choose. At the moment of choosing the number of attributes and levels, a balance between activities is looked for. Information overflow and simplification on both ends of the balance are taken into account, in to select three attributes with seven levels in each. The orthogonal procedure generated a fractioned factorial design which selected 11 profiles form all possible combinations. Study subjects were asked to order items in each of the park's activities according to their preference. Subjects must also answer a series of closed questions to obtain information about their demographic, psychographic and socioeconomic characteristics. The research was done using a questionnaire with 17 questions from which six were on an ordinal scale, in which numbers are assigned to objects to indicate the relative extension of a characteristic. Thus it is possible to determine if a product has more or less the same characteristics as another (Malhotra, 2008). The other 11 questions were on an interval scale, which includes not only the assigned properties and the order of scale, but also the length property. All the answers from the scale have a known absolute difference between points (Hair, Bush, and Ortinau, 2004). The sample was not probabilistic. The sampling technique did not use random selective procedures, but is based on the personal judgement of the investigator. In this case 309 people were questioned from which 235 were Cancun residents and 73 were Playa del Carmen residents. The questionnaire was applied by students from science summer schools (Dolphin Program and The Mexican Science Academy). Every interview took approximately five minutes and was made from the 10th to the 27th of July 2015.

RESULTS AND DISCUSSION

The results show that 76.3% of residents were from Cancun and 23.7% were from Playa del Carmen. Some 50.6% were women and 49.4% were men. The average age of the participants was 29 years. The minimum age was 15 years old and the maximum was 64 years. From the total of participants 83.4% have visited the Xcaret Park; while 16.6% have not visited the park. From the 83.4% that have visited the park, 43.8% have visited it only once a year, 26.3% have visited it twice and 13.3% have visited it more than three times in a year. The conjoint analysis was carried out in two different stages. The first sage consisted on an octagonal matrix, a sub group of all the possible combinations that allows the simulation of partial values for all principal effects. The final number of remaining profiles from all the possible combinations of levels allows participants to be able to classify or grade all of them in a way that has meaning, as shown on Table 1.

Tabla 1: Octagonal Matrix Profiles

Octagonal Matrix Profiles
Attend artistic and cultural activities - Taste international Food - Enjoy the Flora
Attend artistic and cultural activities - Taste international Food - Enjoy the Flora
Attend artistic and cultural activities –taste food in the snack – Enjoy the Flora
Attend artistic and cultural activities – taste food in the snack – Enjoy the Fauna
Attend artistic and cultural activities – Taste Mexican regional food – Enjoy the Flora
Take part in water activities- Taste international Food - Enjoy the Fauna
Take part in water activities - Taste international Food - Enjoy the Flora
Take part in water activities – taste food in the snack – Enjoy the Flora
Take part in water activities – taste food in the snack – Enjoy the Fauna
Take part in water activities – Taste Mexican regional food – Enjoy the Flora
Take part in water activities – Taste Mexican regional food – Enjoy the Fauna

This table shows the eleven octagonal matrix obtained through the Statistical Package for the Social Sciences (SPSS). The interview consisted on the interviewed putting in order from the 1to 11 the profiles marked on the table, one being the highest preference and 11 the lowest preference.

The second part consisted of interviewing the 309 residents about the profiles obtained from the octagonal matrix. The results are presented in Table 2. Higher values of utility show a higher preference. This means that residents prefer water activities (0.166), tasting international food (0.193) and watching the fauna (0.063).

Table 2: Utility Range

Attribute	Level	Utility Estimation
Activities	Water	0.166
	Artistic and cultural	-0.166
Restaurants	International	**0.193**
	Snack	-0.155
	Mexican Regional	-0.038
Natural Attractions	Flora	-0.063
	Fauna	**0.063**

The utility range (form higher to lower) for each factor gives a measure of the importance that a determined factor is relevant to the global preference. Factors that show higher ranges of utility take a more important role than those who with a lower range. Restaurants with international food show a greater preference (0.193), followed by aquatic activities (0.166) and finally natural attractions and fauna (0.063).

The conjoint analysis also showed importance values, relative measures of each denominated factor or importance points. Values are measured using the utility range for each factor separated and divided by the sum of the utility ranges of all factors. The values are shown in percentages and have the property of adding up 100, as shown in Table 3.

Table 3: Importance Values

Attributes	Importance Value
Activities (water, cultural, atistic)	26.896
Restaurants	49.488
Natural Attractions	23.616

Importance means from a determined factor relevant to global preference. Values are calculated for each value separately and divided by the sum of the ranges of utility of all the factors, adding 100. These results show that restaurants have a high value of importance (49.488), followed by aquatic, cultural and artistic activities (26.896) and finally by natural attractions (23.616).

CONCLUSION

The goal of this research was to understand the preferred consumer´s itinerary (residents from Cancún and Playa del Carmen) in Xcaret Park, using a quantitative approach with the technique of conjoint analysis. This technique allows measurement of the relative value of each of product or service attribute. This in turn permits determination of the best combination of choice attributes for consumers. The study's variables were determined in reference to aquatic, artistic, cultural and ecological activities, in addition to restaurant services offered by Xcaret Park to visitors. A descriptive quantitative analysis was undertaken using central tendency measures. Conjoint analysis produced eleven types of possible profiles that consumers would be able to choose from. Xcaret Park is one of the main attractions of the State of Quintana Roo, in Mexico. It offers diverse possibilities for adventure and green tourism like water activities, artistic, cultural and ecological activities, etc. To be able to determine the variables from the study these activities were considered. Eleven types of profiles that the consumer can choose from stand out were obtained from the octagonal matrix. Some 80% of the people interviewed had visited the park.

The results show that clients prefer the following aspects: a) The results show that 26% feel attracted to water activities; b) restaurants, especially international food and beverages is decisive for the clients. Some 49% of the participants chose it as a main aspect; and c) natural attractions, essentially related to the fauna. From this aspect we can deduct that it is important for the client, because there is a constant concern on their part to look after and preserve nature. This is not surprising as participants are residents). This is related with the cognitive-emotional model, in which options chosen in the park by the sample of this study are related with affective and sensory experiences, particularly with pleasure. A cognitive evaluation of the service experience was also undertaken. Knowing the ideal combination of attributes, marketing placement, or product or service placement, can be done. Doing so will encourage the organization to evaluate how to increase those qualified attributes. The business's concern lies in offering a number of services and goods that will be attractive for the consumers. Being able to find these preferences can help identify more assertive publicity and promotions, where the message captures attention through relevant information for the clients.

The knowledge of client's preferences will help position products, services and brands in a way that connects the company and the consumer. Such knowledge can help the efficiency of resources. In the same way knowing the client's perception allows us to generate instruments that make it possible to measure the client's acceptance of new or substitute products or services. In sum, the analysis of representative attributes of a company is a primary input to consider when evaluating factors that impact an organization, to be able to design the necessary strategies to increase market share. The restrictions faced in this project were related with the definition of profiles. In the beginning, they were disaggregated. This caused a much larger list of profiles (more than 1,000 combinations). Such an amount is impractical for the gathering of information. From this study related investigations can be carried out with image, placement and length investigations to determine possible changes relevant to consumer's preferences and tastes. Psychological studies about consumers can be carried out with the goal of trying to understand buying conduct and deepen research about the perception of clients to better plan the marketing strategy of the organization.

APPENDIX

The present survey is done with academic purposes; thank you for your participation and honesty

	Identification:			Date:	Interviewer:	
1	Sex:	F	M	2	Age	

Identification: Date: _____   Interviewer: _____
1. Sex: F ( ) M ( )   2. Age: _____   3. Place of residence: Cancun ( )   Playa del Carmen ( )
4. Order from 1 to 11 the itinerary that you prefer when visiting Xcaret Park.
Attend artistic and cultural activities - Taste international Food - Enjoy the Flora
Attend artistic and cultural activities - Taste international Food - Enjoy the Flora
Attend artistic and cultural activities –taste food in the snack – Enjoy the Flora
Attend artistic and cultural activities – taste food in the snack – Enjoy the Fauna
Attend artistic and cultural activities – Taste Mexican regional food – Enjoy the Flora
Take part in water activities- Taste international Food - Enjoy the Fauna
Take part in water activities - Taste international Food - Enjoy the Flora
Take part in water activities – taste food in the snack – Enjoy the Flora
Take part in water activities – taste food in the snack – Enjoy the Fauna
Take part in water activities – Taste Mexican regional food – Enjoy the Flora
Take part in water activities – Taste Mexican regional food – Enjoy the Fauna
Frequency:
5. Have you visited Xcaret Park?:   Yes ( ) No ( )
6. With what frequency do you visit Xcaret Park every year?   0   1   2   3 o More
Thanks ☺

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CRITICAL SUCCESS FACTORS OF BLACK FINANCIAL ADVISORS IN THE BROKERAGE INDUSTRY

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ABSTRACT

Critical success factor analysis has been used by managers in numerous professions: IT, knowledge sharing, organization development and training, Catholic schools, and the Atlantic Coast Conference to determine those factors that were critical for success. In 2010, the Bureau of Labor Statistics reported that there were approximately 466,000 financial advisors and financial analysts, of whom less than 7% were Black. Successful Black personal financial advisors employ activities that ensure they meet the expectations of both employer and clients. This qualitative study utilized Stroman's critical success factor category (CSFC) analysis to identify 243 critical success factors in eight areas: global or industry-related, external, internal, temporal or enduring, risk abatement, performance, cultural, and marketing, as defined by 15 successful Black personal financial advisors. A structural interview guide was used to determine the five most critical factors: organizational structure and support, work ethic and business processes, market analysis/target market, communications, and compliance activities. The researcher recommends further application of CSFC analysis on the financial advisor profession, on women financial advisors, and on successful Black women in the banking industry.

INTRODUCTION

Critical success factors (CSFs) are viewed as those activities that when properly conducted will have a positive impact on the success of a firm in a particular industry (Amberg, Fischl, & Wiener, 2005). The use of critical success factor analysis can also be applied to individuals in order to identify those activities that are necessary for success within a particular occupation. Several methods have been proposed to identify critical success factors. These techniques include "environment scanning, industry structure analysis, industrial expert's opinions, competitors' analysis, best practice analysis, assessment of the company's internal feeling or judgment, and gathered data or profit impact of market strategy" (Eid, Trueman, & Ahmed, 2002, p. 111). This study utilized critical success factor analysis using the industrial expert opinion technique in order to determine critical success factors of successful Black personal financial advisors. First proposed in 1961, the use of critical success factor analysis, within the information systems arena, was used to determine the information needs of upper management (Daniel, 1961). By 2001, the definition of critical success factor analysis was expanded for broader application to identify skills and resources for an individual to be successful in a given market (Grunert & Ellegaard, 1992). It is this final description in which critical success factors (CSFs) were utilized in this study.

Within the brokerage industry, there are varying criteria for success. However, there are factors that are included by all firms, such as assets under management, length of service, and revenue generated.

Consequently, success as a financial advisor is determined by the accomplishment of several factors: production, assets under management, and length of service in the industry. The personal financial advisor's attainment of a combination of these variables determines promotion to the level of vice president or above in the financial services industry. For this study, career success was defined by the achievement of the vice president title or above.

According to the Bureau of Labor Statistics the number of personal financial advisors is expected to increase more than any other occupation it is projected the number of financial analysts and advisors from 223,400 in 2012 to 283,700 by 2022. This increase has prompted financial services firms to implement a variety of workforce diversity initiatives, to attract talent. These firms recognize that clients expect to see individuals who look like them when conducting business with large financial institutions. Consequently, minorities within these institutions must hold more than entry-level positions. Firms with management representation that closely mirrors U.S. demographics send a clear message that anyone can reach leadership ranks (Trebilcock, 2007). However, the number of Black personal financial advisors at major brokerage firms still remains at approximately 2% (McGeehan, 2006). Paikert (2014) states that at independent advisory firms, the number drops to between 1% and 2%.

The majority of literature addressing career success portrays success as being a simple process of linking personal traits/characteristics with workplace requirements (Kahnweiler, 2006b). The problem addressed in this study was the limited research concerning the critical success factors of Black personal financial advisors. The implementation of diversity initiatives continues to experience challenges with regards to recruiting and retaining minorities (U.S. Government Accountability Office [GAO], 2008). McKay and Avery (2005) found that brokerage firm participation in various forms of diversity recruitment may not be enough to ensure retention of Black personal financial advisors, due to organizational realities such as "poor advancement opportunities, exclusion from key job assignments and general discriminatory treatment" (p. 332). The research questions for this study were: 1.)What are the critical success factors within the critical success factor categories (CSFCs) as defined by Black personal financial advisors in the financial services industry? And, 2.)What are the five most frequently identified critical success factors within the eight critical success factor categories (CSFCs) as defined by Black personal financial advisors? The results show that critical success factor analysis can be applied to personal financial advisors. Also, the results provide the five most important CSFs within the eight CSFCs. The balance of this article addresses the relevant literature, data collection and analysis, results conclusions and recommendations and finally concluding comments, in this order.

LITERATURE REVIEW

A 2008 GAO report stated that the financial services industry plays a key role in the U.S. economy by providing employment (over 3 million persons), credit to individuals and businesses, and protection from certain financial risk. Even with the size of the financial services industry, the percent of minorities employed (15.5%) is significantly lower than Whites (84.5%). To illustrate the role of financial markets in the world's economy, Bogle (2008) stated that the "world's GDP is about $60 trillion, while the global financial derivatives is estimated at $600 trillion, approximately 10 times all the net goods and services produced by the entire world" (p. 37). The brokerage industry has typically been described as a White-male-dominated industry. In an October 2005 *Black Enterprise* article, Elton Ndoma-Ogor (one of the founders of MBA JumpStart), stated, "when you walk into an investment bank or trading floor, you can count on one hand the number of minorities" (as cited in T. M. Robinson, 2005, p. 1). The dominance of White men in the brokerage industry presents a challenge in that persons of color must conform to organizational norms formed by White men in order to survive (Giscombe & Mattis, 2002). To facilitate the entrance and retention of women and minorities into the financial services industry, companies have implemented diversity programs.

Given that the most successful personal financial advisors are employed by major corporations, they can be more specifically defined as corporate entrepreneurs. Christensen (2004) defined *corporate entrepreneurship* as a "process whereby an individual or a group creates a new venture within an existing organization, revitalizes and renews an organization or innovates" (p. 305). Brazeal, Schenkel, and Azriel (2008) defined corporate entrepreneurship as "the use of proactive behaviors to stimulate innovation" (p. 10). This definition is appropriate for the personal financial advisor who must conduct business within the confines of a larger organizational context. Career success can be impacted by numerous factors: "organizational culture and structural, attitudinal, and personal barriers" (Palmer & Johnson-Bailey, 2005, p. 11). Green (2003) agreed with this position, but argued that a major impediment from a cultural perspective is subtle discrimination, incorporated into the procedures and practices of the organization.

Discrimination in the Brokerage Industry

There have been numerous lawsuits filed against major brokerage firms in the United States. American Express, Gruntal Corp., Lew Lieberman, Merrill Lynch, Morgan Stanley, Olde Discount Brokerage, Smith Barney, US Bancorp, and Piper Jaffrey all had class-action lawsuits filed against them between 1993 and 2002 (Selmi, 2005). For years the brokerage industry was insulated from litigation regarding discrimination because employees were required by the New York Stock Exchange and the National Association of Securities Dealers to settle such cases through arbitration (Mulligan, 2001). This requirement was challenged with a class-action lawsuit filed against Smith Barney in 1996 by more than 1,900 women alleging the firm discriminated against women with regards to hiring, assignments, pay, and promotions, and permitted pervasive sexual harassment in some of its branches. The class-action status allowed members of the plaintiff class to avoid mandatory arbitration proceedings. Most of the cases were settled successfully and Smith Barney was required to spend $15 million toward various diversity initiatives (Selmi, 2005). In 2000, another lawsuit was brought against Smith Barney, by four ethnic minority employees. The suit alleged that Smith Barney paid ethnic minority employees desperate wages, denied salary increases and promotions, and created a hostile work environment.

Merrill Lynch was sued by female brokers in 1976 for sex discrimination and ordered to implement initiatives to hire more female financial advisors. In 1996, the company was again the focus of a class-action discrimination suit, this time alleging that women were systematically discriminated against with regards to pay and promotions, specifically due to the subjective manner in which business opportunities were funneled to male financial advisors. The merger between Bank of America and Merrill Lynch has once again placed the largest U.S. brokerage firm as the subject of a lawsuit. In 2008, Black and women advisors alleged that the retention package being offered provides a more generous retention package to White men than to women and minorities (Kelly, 2008). Only a few of the lawsuits levied against brokerage firms have been discussed in this study; however, a consistent factor among them is that minority groups seek equal pay and equal opportunities for advancement. To overcome this, brokerage firms have begun in earnest to implement diversity initiatives and training programs that enable minorities to advance within the organization. Identifying critical success factors for Black personal financial advisors may promote the development of training programs and diversity initiatives, hopefully reducing the number of discrimination lawsuits in the industry.

Critical Success Factor Analysis

 Dwyer, Hill, and Martin (2000) defined *critical success factors* as the "skills, tasks and/or behaviors that influence an employee's performance" (p. 151). Critical success factor analysis has been used in numerous industries to determine those areas in which management must concentrate or identify as areas that should be isolated in order to move the organization forward. Prior to the development of CSF methods, Rockart (1979) identified four possible means of disseminating information to top executives: total study, null approach, key indicators, and by-product. Rockart (1979) stated that "critical success factors are the limited

number of areas in which if results are satisfactory will ensure successful competitive performance for the organization" (p. 85) and must be tied to the goals of the organization (Cherian et al., 2008). Critical success factors require constant monitoring and changes due to the changes in the organization. There are four prime sources of CSFs: structure, competitive, environment, and temporal (Rockart, 1979). Structure factors are those things that are determined by the characteristics of the industry. Competitive strategy refers to such things as market niche, location, distribution of key resources, and managerial support. Environmental factors refer to areas associated with the economy, political factors, and demographic issues. Temporal factors are those items that are critical for a period of time (i.e., staffing issues, loss of management, etc.; Stein & Voehl, 1997). Work conducted by Amberg et al. (2005) extended previous research regarding CSFs by determining that CSFs have different dimensions. Critical success factors can be hierarchal versus group, temporary versus ongoing, internal versus external, building versus monitoring, strategic versus tactical, or perceived versus actual (Amberg et al., 2005).

Social Capital Theory

 Social capital theory is "the ability of actors to secure benefits by virtue of membership in social networks or other social structures" (Portes, as cited in Akdere, 2005, p. 1). Social capital provides individuals access to resources that can enhance the probability of success. From a business perspective, *social capital* refers to "resources such as information, ideas, business opportunities, financial capital, power, emotional support, goodwill, trust and cooperation" (Baker, as cited in Akdere, 2005, p. 3). Access to social capital provides individuals with a competitive advantage only if information is not readily available (Burt, 2007). Harris et al. found that workplace social capital support through mentoring, collegial support, and task support predicted job tenure. Social capital theory links employees with information. Viewing social capital from a structural perspective focuses on relationships and connections between actors, such as friendship and trust. Per Kase and Zupan (2007), the structural lens results in "opportunities for access to diverse resources and information, and to enjoying greater autonomy due to less strict normative control" (p. 217). According to Kase and Zupan (2007), organizations that are knowledge-intensive provide an informational environment that helps employees solve complex and often ambiguous problems that significantly contribute to job performance. The access to knowledge was highlighted in lawsuits as being critical to opportunities for success in the brokerage industry. However, within the financial services sector, competition for fewer positions has eroded the traditional model of social capital (Tempest, McKinlay, & Starkey, 2004). Tempest et al. determined that there exists a limited number of studies that evaluate how individual careers can benefit from social capital. The researchers argued that the "traditional financial services career is associated with 'strong and unified' organizational social capital that encourages cooperation at the expense of innovation" (p. 1524).

Implications of the Literature

 A review of the literature indicated that EEO laws and diversity initiatives alone are ineffective for eliminating disparities in the workplace. Organizations and individuals must work in conjunction to facilitate career success. The brokerage industry is just one of many that have experienced financial assessments due to the lack of advancement of women and minorities. The literature indicated that there is a definite need for additional information with regards to critical success factors within the personal financial services industry. Additional career factor analysis could be instrumental in resolving retention issues that are prevalent in the brokerage industry. Although there have been numerous diversity initiatives, there remain areas in which scholarly research may have a valuable impact. The literature review indicated that an evaluation of factors affecting career success can be determined through the use of critical success factor research.

METHODOLOGY

The sample for this study consisted of 15 Black personal financial advisors who have obtained the position of vice president or above in the brokerage industry. These personal financial advisors were considered highly successful based on assets under management, revenue generated, and length of service in the industry. In order to obtain the desired number of participants, the researcher employed a nonprobability sampling technique, collecting names from the public documents that list the corporate officers. The study was conducted using theoretical sampling, which allows for the selecting and studying of a homogeneous sample of individuals (Creswell, 2007) such as Black personal financial advisors. Invitations to participate were sent to 20 potential financial advisors. The demographics of the respondents is provided in Table 1 and their qualifications are outlined in Table 2.

Table 1: Demographics of Respondents

	Occupation and Industry	Length of Service	Age
001	Vice president, Investments	14	49
002	Vice president, Investments	10	54
003	Vice president, Investments	14	53
004	Vice president, Wealth management	11	46
005	Assist vice president, Investments	5	33
006	Regional manager	14	39
007	Senior vice president, Investment strategist	25	49
008	Vice president, Investments	20	61
009	Assistant principal	30	71
010	Vice president, Investments	11	40
011	Vice president, Investments	8	44
012	Vice president, Investments	9	39
013	Vice president, Investments	12	39
014	Vice president, Investments	25	56
015	Regional president	25	53

This table indicates the demographic of respondents. In the brokerage industry title is an indication of success. Positions ranged from Assistant Vice-President to Regional President.

Table 2: Qualifications of Respondents

Participant	Licenses	Certifications
001	Series 7, 63, 65, Life and Health Insurance, Long-Term Care	None
002	Series 7, 66, 63, Life and Health Insurance	None
003	Series 7, 63, 6, 65, and Insurance	None
004	Series 7, 66, Life and Health Insurance	Certified Financial Planner
005	Series 7, 66, and Insurance	None
006	Series 7, 65, 63, 09, and 10	None
007	Series 7	Certified Financial Planner and Registered Financial Planner
008	None	None
009	None	Certified Financial Planner
010	Series 7, 63, 65, Life and Health, Long-Term Care	None
011	Series 7, 65, and Insurance	Certified Financial Planner
012	Series 7, 63, and 9	None
013	Series 7, 65, Life and Health Insurance	None
014	Series 7 and 24	CPA and Certified Financial Planner
015	Series 7, 9, and 10	None

This table highlights the qualifications of the sample population based upon licenses and certifications held. Licenses and certifications allows representatives to sell the various products offered such as mutual funds, annuities, insurance, long-term care, stocks and bonds.

The introduction to the study was accomplished through an invitation to participate. Each respondent was given the opportunity to express his or her understanding and role in the study. Once participants had signed and returned the Informed Consent letter, the researcher made arrangements to interview each individual respondent using the structured interview guide, for data collection. To protect participants, the researcher assigned identification numbers to all documents regarding participants. The interview guide was designed as an expansion of the literature from Pinto and Slevin (1987) (as cited in Stroman, 2007), Dobbins (2002),

Warriner (2005), and Stroman (2007). The resulting CSFC categories extended Rockart's (1979) research, and addressed external factors such as political, environmental, cultural, and external relationships.

The researcher modified Stroman's (2007) structured interview guide for the study of personal financial advisors. The modifications included specific language that defines success, eliminated categories that were unrelated to being a personal financial advisor, and added categories that are relevant to investigating the personal financial services industry. The new categories were cultural and marketing influences. The CSFCs for this study of personal financial advisors were as follows: (1.) Global or Industry-Related, (2.) External Influences, (3.) Internal Influences, (4.) Temporal and Enduring, (5.) Risk Abatement, (6.) Performance, (7.) Cultural Influences, and (8.) Marketing Influences

DATA COLLECTION AND ANALYSIS

The population for this case study consisted of 15 Black personal financial advisors at the vice president level (or above), employed or previously employed at a major U.S. brokerage firms. The group consisted of 2 women and 13 men. Respondents represented seven different major brokerage firms and capital management companies. All persons interviewed were practicing on the East Coast of the United States. The purpose of the structured interview was to request potential CSFs from each of the 15 Black personal financial advisors. After the data collection interviews, the information was transcribed to an electronic word processing format for accuracy, coding, and analysis. Then each interview was analyzed to determine the CSFs. The analysis was a four-part process administered to each respondent's category data. The researcher: (1) Compiled a list of all the factors for each category; (2) Determined whether the factors were used in the proper context related to the particular category: (3) Counted the number of times a factor appeared for each category and (4) Sorted and ranked the factors in descending order for each category. Conversations with participants were recorded and transcribed for accuracy. Consent of the participants was obtained prior to tape recording of the interview. A professional stenographer was hired to transcribe the information for analysis.

The researcher sought to identify critical success factors of Black personal financial advisors at major brokerage firms. The data were coded by category and analyzed. Analysis for this study was accomplished by counting the factors named by the 15-person sample. The researcher compiled a list of all the factors for each category, determined whether the factors were used in the proper context related to the particular study, counted the number of times a factor appeared for a category, sorted, and ranked in descending order the factors for each category. This study utilized a cross-referral, indexing, abstraction, and pagination (Miles & Huberman, 1994) to ensure the proper presentation of data. The determination of the CSF for each category was completed by contextual examination of the statements. Each interview resulted in potential CSFs in each of the eight CSFCs. Applying CSFC analysis, the filtration process resulted in the reduction of factors to indicate the relative importance, or criticalness, of the stated activity. Table 3 provides the results of this analysis.

Table 3: Potential Critical Success Factors

CSFC	CSF
Global or Industry	38
External	31
Internal	33
Temporal and Enduring	18
Risk Abatement	31
Performance	31
Organizational	30
Marketing	31
Total	243

This table illustrates the CSF by CSFC. By applying CSFC analysis, the filtration process resulted in the reduction of factors to indicate the relative importance, or criticalness, of the stated activity.

RESULTS, CONCLUSIONS, AND RECOMMENDATIONS

The answers to the research questions were obtained by gathering data from 15 successful Black personal financial advisors. The researcher developed an eight-category model, designed from Stroman's critical success factor category analysis, and utilized a structured interview guide to solicit feedback. The participants provided 243 responses. Due to the fact that each interview provided appropriate responses, it supports the position that CSFCs can be applied to the personal financial advisor profession. This research appears to be the first in which critical success factor category analysis was applied to successful Black personal financial advisors. The five most frequently identified critical success factors in the eight CSFCs were: (1.) Organization structure and support, (2.) Work ethic and business processes, (3.) Market analysis/target market, (4.) Communications, and (5.) Compliance activities.

Table 12: CSF Occurrence Listing

Factor	CSF Summary	Category	f
Organization structure and support	Sales assistant, back-office support, business partners, management support, products and distribution channels	G, E, I. T, R, P, C, M	63
Work ethic and business processes	Consistency of practice activities, referral generation, client/asset retention, value proposition, honesty, integrity, passion and professional image	G, E, I, T, R, P, C, M	63
Market analysis/target market	Identification of clients, client financial needs, providing products and services that meet client expectations	G, E, T, R, P, M	35
Communications	Openness, trust, how information is disseminated and the medium by which it is transmitted	G, E, I, R, P, C, M	21
Compliance activities	Profiling of clients, documentation, monitoring, disclosure and suitability of recommendations	G, E, I, R, M	16
Qualifications and training	Academic and continuing education courses, activities engaged in to stay current on changes in the brokerage industry	G, I, R, P, C	15
Stock market sentiment	Economy, positive outlook regarding investing in the stock market	G, E, R, P	11
Technology	Access to hardware, programs and software necessary to facilitate efficient business operations	E, I, T, C	10
Diversity	Diverse workforce and clients base on culture, age, race	G, C	9

Note. G = Global or Industry-Related, E = External Influences, I = Internal Influences, T = Temporal and Enduring, R = Risk Abatement, P = Performance, C = Cultural Influences, M = Marketing Influences. This table represents the most significant critical success factors by category as identified by 15 Black personal financial advisors.

CONCLUSION

The main research questions were "What are the critical success factors within the critical success factor categories (CSFCs) as defined by Black personal financial advisors in the financial services industry?" and "What are the five most frequently identified critical success factors within the eight critical success factor categories (CSFCs) as defined by Black personal financial advisors?" These questions were answered by applying CSFC theory and analysis to the responses provided by 15 successful Black personal financial advisors. The research resulted in five critical success factors, which supports using CSFC analysis as a method to determine success strategies in the personal financial advisor profession. The results suggest that the essential factors to success as a Black personal financial advisor are dependent upon the resources and support provided by the advisor's firm and having a personal work ethic that produces business processes that lead to consistent results. The results of this study support the arguments presented in discrimination cases that have been filed by women and minorities in the financial services and brokerage industries stating that organizational support is essential for success. Access to resources and support from the organization in such areas as management, clerical, training, funding, and product availability are critical to being successful. Time spent handling administrative issues distract the Black personal financial advisor from essential business development activities. Given the results of this study, financial institutions must

continue to evaluate resource allocation and implement measures to ensure that employees are receiving the necessary resources to be successful.

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EXPORT VARIETY AND INTRA-INDUSTRY TRADE: THEORETICAL AND EMPIRICAL EVIDENCE

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ABSTRACT

This paper theoretically and empirically investigates the relationship between the number of product varieties and the extent of intra-industry trade (IIT). IIT provides more trade opportunities for countries in which differentiated products are produced. The model presented shows that the extent of bilateral IIT is higher the smaller the gap in the number of export varieties between two countries. The empirical analysis of Japan and twenty-five countries provides support for the theoretical model presented in this paper. The theory also shows that similar number of export varieties between two countries, that is, more IIT can be a tool to redress trade imbalance between two countries. The policy implication of the results is that promoting higher product variety will increase the opportunity for IIT regardless of country specific effects.

JEL: F00, F10, F14, F19

KEYWORDS: Export Variety, Trade, Intra-Industry Trade

INTRODUCTION

This paper theoretically and empirically investigates the relationship between the number of product varieties and the extent of intra-industry trade (IIT). IIT provides more trade opportunities for countries in which differentiated products are produced, and has become to play a key role in the world in concert with the global economic integration. The model presented shows that the extent of bilateral IIT is higher the closer the number of export varieties between two countries. The theory also shows that more IIT can play a role in redressing trade imbalance between two countries. The empirical analysis of Japan and twenty-five countries for the electrical and optical equipment industry provides support for the theoretical model presented in this paper, and shows that more export variety is associated with more IIT regardless of country specific effects. The remainder of the paper is organized as follows. The next section discusses earlier literature in the field. Data and Methodology section describes the data used in this paper and the theoretical model developed in the paper. The empirical results are presented and discussed in the following section. The paper closes with some concluding comments.

LITERATURE REVIEW

Product variety plays a key role in the theories of monopolistic competition and trade. The theoretical model of monopolistic competition established by a series of early works such as Dixit and Stiglitz (1977) and Krugman (1979). After the establishment of monopolistic competition model, a lot of research that shows the importance of product variety has been done. Hummels and Klenow (2005) and Schott (2004) found that product variety plays an important role in trade. Broda and Weinstein (2006) showed the "gains from variety" by analyzing the U.S. imports. Productivity growth is of great interest to the world in order to maintain the sustainability of growth. Several studies found the link between export variety and productivity. Feenstra et al (1999) investigated South Korea and Taiwan, and by Funke and Ruhwedel (2001a, 2001b, 2002) analyzed the OECD and the East Asian countries. Feenstra and Kee (2008) investigated 48 countries from 1980 to 2000, and the confirmed the positive correlation between export variety and productivity growth. Oguro (2014) reevaluated the relationship between export variety and productivity for exports from 25 countries, which are the subject countries in this paper, to Japan.

Export variety often cannot simply be counted since the product categories of data are modified from time to time. This modification occurs in the Harmonized Commodity Description Coding System (HS) of the United Nations Commodity Trade Statistics Database (Comtrade database), which is used in this paper, as well. In addition, the most detailed data available for the HS Comtrade database are 6-digit-based. Feenstra and Kee (2004) provide the measurement of product variety in trade. However, there exist studies that calculate product variety by counting such as Gagnon (2007), Funke and Ruhwedel (2005), Frensch and Wittich (2009). This paper is the first investigation that shows the link between product variety and intra-industry trade. However, there exist studies that investigate intra-industry trade under the framework of monopolistic competition such as Melitz (2003), Oguro, Fukao, and Khatri (2008), and Oguro (2011).

DATA AND METHODOLOGY

Table 1 shows subject countries analyzed in this research. Twenty-five countries are selected based on the Industry-specific Real Effective Exchange Rate database produced by International Macroeconomics Research Program at The Research Institute of Economy, Trade and Industry (RIETI). This paper empirically analyzes Japan and the twenty-five countries shown in Table 1.

Table 1: Subject Countries

No.	Country	Code	No.	Country	Code
1	Australia	AUS	14	Malaysia	MYS
2	Belgium	BLX	15	Netherlands	NLD
3	Canada	CAN	16	Norway	NOR
4	China	CHN	17	Philippines	PHL
5	Germany	DEU	18	Russian Federation	RUS
6	Spain	ESP	19	Singapore	SGP
7	France	FRA	20	Sweden	SWE
8	Greece	GRC	21	Thailand	THA
9	Indonesia	IDN	22	Turkey	TUR
10	India	IND	23	United Kingdom	UK
11	Ireland	IRL	24	USA	USA
12	Italy	ITA	25	South Africa	ZAF
13	Rep. of Korea	KOR			

Source: http://www.rieti.go.jp/users/eeri/ Table 1 shows subject countries analyzed in this research. This paper empirically analyzes Japan and the twenty-five countries.

The value of exports data are taken from the Harmonized Commodity Description Coding System (HS) 1996 of the United Nations Commodity Trade Statistics Database (Comtrade database). The degree of IIT for each trading pair for the industry is calculated using the HS 1996 6-digit-based Comtrade database, which is the most detailed data available. The HS1996 6-digit-based extent-of-IIT data for each pair of countries are aggregated into the industry weighted by trade values. The discussion in this paper is limited to the electrical and optical equipment industry. This paper, at first, adapts and summarizes the measure method of product variety developed by Feenstra and Kee (2004). In the next step, the paper provides an extension of Feenstra and Kee (2004) model, and provides the theoretical relationship between intra-industry trade and product variety, which is the contribution of the paper. Assume that country c （c = 1, ..., C） produces various varieties.　The set of goods that is produced in country c in year t is I_t^c C {1,2,3, ...}.　The quantity of product varieties i （i $\in I_t^c$） is q_{it}^c （$q_{it}^c > 0$）, and the vector of goods produced in country c in period t is denoted by $\mathbf{q}_t^c > \mathbf{0}$.　The total output of country c, Q_t^c, is characterized by the following CES function. (The studies of import variety such as Feenstra (1994) and Broda and Weinstien (2006) assume σ>1.)

$$Q_t^c = f(\mathbf{q}_t^c, \ I_t^c) = \left(\sum_{i \in \ I_t^c} a_i \, (q_{it}^c)^{(\sigma-1)/\sigma} \right)^{\sigma/(\sigma-1)} \tag{1}$$

$a_n > 0$ $\qquad\qquad c = 1, \dots, C$

$-\infty < \sigma < 0$ ：elasticity of substitution among product varieties

The total production of the economy is constrained by the following transformation curve.

$$F[f(q_t^c,\ I_t^c),\ V_t^c] = 0 \tag{2}$$

$V_t^c = (v_{1t}^c, v_{2t}^c, \dots, v_{Mt}^c) > 0$ ：the endowment vector of country c in year t

Each country c obtains the value of output $P_t^c Q_t^c$ under the assumption of perfect competition and equation (1). P_t^c is denoted by the CES function of the prices of all product varieties as follows.

$$P_t^c \equiv c(p_t^c,\ I_t^c) = \left(\sum_{i \in\, I_t^c} b_i (p_{it}^c)^{1-\sigma} \right)^{1/(1-\sigma)} \tag{3}$$

$b_i = a_i^\sigma > 0$ $\qquad\qquad c = 1, \dots, C$ $\qquad p_t^c > 0$ ：domestic price vector of each coutry c

$$\frac{P_t^{c_1}}{P_t^{c_2}} = \prod_{i \in I_t} \left(\frac{p_{it}^{c_1}}{p_{it}^{c_2}} \right)^{w_{it}(I_t)} \left(\frac{\lambda_t^{c_1}(I_t)}{\lambda_t^{c_2}(I_t)} \right)^{1/(\sigma-1)} \qquad c_1, c_2 = 1, \dots, C \qquad\qquad I_t \equiv (\ I_t^{c_1} \cap I_t^{c_2}) \neq \emptyset \tag{4}$$

Equation (4) is equal to the ratio of the CES cost functions between countries c_1 and c_2. (See Feenstra (1994), Diewert (1976), Sato (1976), and Vartia (1976) for details.) The weights $w_{it}(I_t)$ in equation (4) is the revenue shares as follows.

$$w_{it}(I_t) \equiv \left(\frac{s_{it}^{c_1}(I_t) - s_{it}^{c_2}(I_t)}{\ln s_{it}^{c_1}(I_t) - \ln s_{it}^{c_2}(I_t)} \right) \Big/ \sum_{i \in I_t} \left(\frac{s_{it}^{c_1}(I_t) - s_{it}^{c_2}(I_t)}{\ln s_{it}^{c_1}(I_t) - \ln s_{it}^{c_2}(I_t)} \right) \tag{5}$$

$c_1, c_2 = 1, \dots, C$

$$s_{it}^c(I_t) \equiv p_{it}^c q_{it}^c \Big/ \sum_{i \in I_t} p_{it}^c q_{it}^c \tag{6}$$

$c = c_1, c_2$

$$\lambda_t^c(I_t) = \frac{\sum_{i \in I_t} p_{it}^c q_{it}^c}{\sum_{i \in I_t^c} p_{it}^c q_{it}^c} = 1 - \frac{\sum_{i \in I_t^c, i \notin I_t} p_{it}^c q_{it}^c}{\sum_{i \in I_t^c} p_{it}^c q_{it}^c} \tag{7}$$

$c = c_1, c_2$

The term, $\left(\lambda_t^{c_1}(I_t) / \lambda_t^{c_2}(I_t) \right)^{1/(\sigma-1)}$, in equation (4) shows changes in product variety developed by

Feenstra and Kee (2004).

The complete set of the export varieties exported from the world (*) to the world (*) is $\mathbf{I}_t^* = \cup_{c=1}^{C} \mathbf{I}_t^c$, and the total export value of product variety i is $p_{it}^* q_{it}^*$. Comparing exports from country c to the world (*) and exports from the world (*) to the world (*), the common set of goods exported $\mathbf{I}_t$ is ($\mathbf{I}_t^c \cap \mathbf{I}_t^*$) = $\mathbf{I}_t^c$. Thus, the equations (8) and (9) are derived from equation (7).

$$\lambda_t^{c_1}(\mathbf{I}_t) \equiv \lambda_t^c(\mathbf{I}_t) = \lambda_t^c(\mathbf{I}_t^c) = \frac{\sum_{i \in \mathbf{I}_t} p_{it}^c q_{it}^c}{\sum_{i \in \mathbf{I}_t^c} p_{it}^c q_{it}^c} = \frac{\sum_{i \in \mathbf{I}_t^c} p_{it}^c q_{it}^c}{\sum_{i \in \mathbf{I}_t^c} p_{it}^c q_{it}^c} = 1 \tag{8}$$

$$\lambda_t^{c_2}(\mathbf{I}_t) \equiv \lambda_t^*(\mathbf{I}_t) = \lambda_t^*(\mathbf{I}_t^c) = \frac{\sum_{i \in \mathbf{I}_t} p_{it}^* q_{it}^*}{\sum_{i \in \mathbf{I}_t^*} p_{it}^* q_{it}^*} = \frac{\sum_{i \in \mathbf{I}_t^c} p_{it}^* q_{it}^*}{\sum_{i \in \mathbf{I}_t^*} p_{it}^* q_{it}^*} = 1 - \frac{\sum_{i \in \mathbf{I}_t^*, i \notin \mathbf{I}_t^c} p_{it}^* q_{it}^*}{\sum_{i \in \mathbf{I}_t^*} p_{it}^* q_{it}^*} \tag{9}$$

$c = 1, \dots, C$

$\left(\lambda_t^{c_1}(\mathbf{I}_t)/\lambda_t^{c_2}(\mathbf{I}_t)\right)^{1/(\sigma-1)} \equiv (\lambda_t^c(\mathbf{I}_t)/\lambda_t^*(\mathbf{I}_t))^{1/(\sigma-1)}$ in equation (4) can be rewritten as follows.

$$\left(\frac{\lambda_t^c(\mathbf{I}_t^c)}{\lambda_t^*(\mathbf{I}_t^c)}\right)^{1/(\sigma-1)} = \left(\frac{1}{\lambda_t^*(\mathbf{I}_t^c)}\right)^{1/(\sigma-1)} = (\lambda_t^*(\mathbf{I}_t^c))^{1/(1-\sigma)} \tag{10}$$

$c = 1, \dots, C$

Therefore, export variety of country c can be measured as the export value from country c to the world (*) relative to the export value from the world (*) to the world (*), which is called Feenstra and Kee (2004) method. This paper measures the number of export varieties of each country c extending Feenstra and Kee (2004) empirical method as in equation (11).

$$\frac{\text{Value of exports from country c to the world } (*)}{\text{Value of exports from 26 subject countries to the world } (*)} \tag{11}$$

In this paper, it is implicitly assumed that a certain portion η of the aggregate production is exported. The assumption is not explicitly explained in Feenstra and Kee (2004). This paper defines the degree of intra-industry trade (IIT) between countries a and b for product variety i as the value of trade overlap as in equation (12). (Several previous studies such as Fukao, Ishido and Ito (2003); Greenaway, Hine and Milner (1995); Fontagné, Freudenberg and Péridy (1997); Oguro, Fukao and Khatri (2008); and Oguro (2011) use the same definition of IIT. Another famous IIT measure is Grubel and Lloyd (1975) index.)

$$IIT_{it}^{ab} = \frac{Min(EX_{it}^{ab}, EX_{it}^{ba})}{Max(EX_{it}^{ab}, EX_{it}^{ba})} \equiv \frac{Min(\sum_{i\in I_t^a} p_{it}^{ab} q_{it}^{ab}, \sum_{i\in I_t^b} p_{it}^{ba} q_{it}^{ba})}{Max(\sum_{i\in I_t^a} p_{it}^{ab} q_{it}^{ab}, \sum_{i\in I_t^b} p_{it}^{ba} q_{it}^{ba})} \qquad (12)$$

$$a, b = 1, \dots, C$$

EX_{it}^{ab} ($= \sum_{i\in I_t^a} p_{it}^{ab} q_{it}^{ab}$) shows the value of exports from country a to country b, and EX_{it}^{ba} ($= \sum_{i\in I_t^b} p_{it}^{ba} q_{it}^{ba}$) shows the value of exports from country b to country a. IIT_{it}^{ab} takes a value between 0 and 1. IIT_{it}^{ab} is equal to zero when there is no IIT between country a and country b, whereas IIT_{it}^{ab} becomes one when the value of trade overlap is exactly the same between two countries. This paper now shows the relationship between IIT and product variety. Equation (12) can be developed as follows assuming $EX_{it}^{ab} < EX_{it}^{ba}$ and using equations (8) and (10). The paper defines exports from one country to another country as exports from an exporting country to the world times an importer's share in the world market as shown in equation (13). Equation (13) can be rewritten as equation (14) using two countries' export variety.

$$IIT_{it}^{ab}$$

$$= \left(\frac{\text{Value of exports from coutry a to country b}}{\text{Value of exports from coutry b to country a}}\right)$$

$$= \left(\frac{EX_{it}^{ab}}{EX_{it}^{ba}}\right)$$

$$\equiv \left[\frac{(\text{Value of exports from coutry a to the world } (*)) \cdot (\text{country b's share in the world market})}{(\text{Value of exports from coutry b to the world } (*)) \cdot (\text{country a's share in the world market})}\right] \quad (13)$$

$$\equiv \left[\frac{(\text{Value of exports from coutry a to the world } (*)) \cdot (\text{country b's share in the world market})}{(\text{Value of exports from coutry b to the world } (*)) \cdot (\text{country a's share in the world market})}\right]$$

$$\equiv \left[\frac{EX_{it}^{a*} \cdot \left(\frac{\text{Value of exports from the world } (*) \text{ to country b}}{\text{Value of exports from the world } (*) \text{ to the world } (*)}\right)}{EX_{it}^{b*} \cdot \left(\frac{\text{Value of exports from the world } (*) \text{ to country a}}{\text{Value of exports from the world } (*) \text{ to the world } (*)}\right)}\right] = \left[\frac{EX_{it}^{a*} \cdot \left(\frac{EX_{it}^{*b}}{EX_{it}^{**}}\right)}{EX_{it}^{b*} \cdot \left(\frac{EX_{it}^{*a}}{EX_{it}^{**}}\right)}\right]$$

$$= \left[\frac{\left(\frac{EX_{it}^{a*}}{EX_{it}^{**}}\right) \cdot \left(EX_{it}^{*b}\right)}{\left(\frac{EX_{it}^{b*}}{EX_{it}^{**}}\right) \cdot \left(EX_{it}^{*a}\right)}\right]$$

$$= \left[\frac{(\text{country a's export variety}) \cdot \left(EX_{it}^{*b}\right)}{(\text{country b's export variety}) \cdot \left(EX_{it}^{*a}\right)}\right] \qquad (14)$$

$$= \left[\frac{\left(EX_{it}^{a*}\right) \cdot \left(EX_{it}^{*b}\right)}{\left(EX_{it}^{b*}\right) \cdot \left(EX_{it}^{*a}\right)}\right]$$

$$= \left[\frac{\left(\frac{\sum_{i \in I_t^a} p_{it}^* q_{it}^*}{\sum_{i \in I_t^*} p_{it}^* q_{it}^*} \right) \cdot \left(\sum_{i \in I_t^*} p_{it}^{*b} q_{it}^{*b} \right)}{\left(\frac{\sum_{i \in I_t^b} p_{it}^* q_{it}^*}{\sum_{i \in I_t^*} p_{it}^* q_{it}^*} \right) \cdot \left(\sum_{i \in I_t^*} p_{it}^{*a} q_{it}^{*a} \right)} \right] = \left[\frac{\left(\sum_{i \in I_t^a} p_{it}^* q_{it}^* \right) \cdot \left(\sum_{i \in I_t^*} p_{it}^{*b} q_{it}^{*b} \right)}{\left(\sum_{i \in I_t^b} p_{it}^* q_{it}^* \right) \cdot \left(\sum_{i \in I_t^*} p_{it}^{*a} q_{it}^{*a} \right)} \right] \qquad (15)$$

$$a, b = 1, \dots , C$$

Partial derivatives of equation (14) with respect to country a's export variety are positive (Equation (16)). Thus, the extent of IIT between countries a and b is higher the higher the export variety of country a. That is, the theoretical model presented shows that IIT_{it}^{ab} approaches one as the number of export varieties between two countries gets closer.

$$\frac{\partial IIT_{it}^{ab}}{\partial (\text{country a's export variety})} > 0 \qquad (16)$$

Consider the case $IIT_{it}^{ab} = 1$ using equation (15). Equation (17) is the expanded form of equation (15).

$$\frac{\left(\frac{\sum_{i \in I_t^a} p_{it}^* q_{it}^*}{\sum_{i \in I_t^*} p_{it}^* q_{it}^*} \right)}{\left(\frac{\sum_{i \in I_t^b} p_{it}^* q_{it}^*}{\sum_{i \in I_t^*} p_{it}^* q_{it}^*} \right)} = \frac{\sum_{i \in I_t^*} p_{it}^{*a} q_{it}^{*a}}{\sum_{i \in I_t^*} p_{it}^{*b} q_{it}^{*b}} = \frac{\sum_{i \in I_t^a} p_{it}^* q_{it}^*}{\sum_{i \in I_t^b} p_{it}^* q_{it}^*} \qquad (17)$$

$$a, b = 1, \dots , C$$

$$\frac{\text{country a's export variety}}{\text{country b's export variety}}$$

$$= \frac{\text{Value of exports from the world } (*) \text{ to country a}}{\text{Value of exports from the world } (*) \text{ to country b}} = \frac{(EX_{it}^{*a})}{(EX_{it}^{*b})}$$

$$= \frac{\text{Value of exports from coutry a to the world } (*)}{\text{Value of exports from coutry b to the world } (*)} = \frac{(EX_{it}^{a*})}{(EX_{it}^{b*})} \qquad (18)$$

Equations (17) and (18) show that the theory developed in this paper also suggests that similar number of export varieties between two countries, that is, more IIT can be a tool to redress trade imbalance between two countries.

RESULTS

Figure 1 shows the number of product varieties of Japan's and the twenty-five countries' exports in the electrical and optical equipment industry in 2012. The number of export varieties is measured using equation (11), that is, the value of exports from country c to the world (*) relative to the value of exports from the twenty-six countries to the world (*). Equation (11) is the empirical measure, which is the application of equation (10). The value of exports data are taken from the HS 1996 of Comtrade database. China has the largest number of export varieties. Japan is the fourth largest among the twenty-six countries.
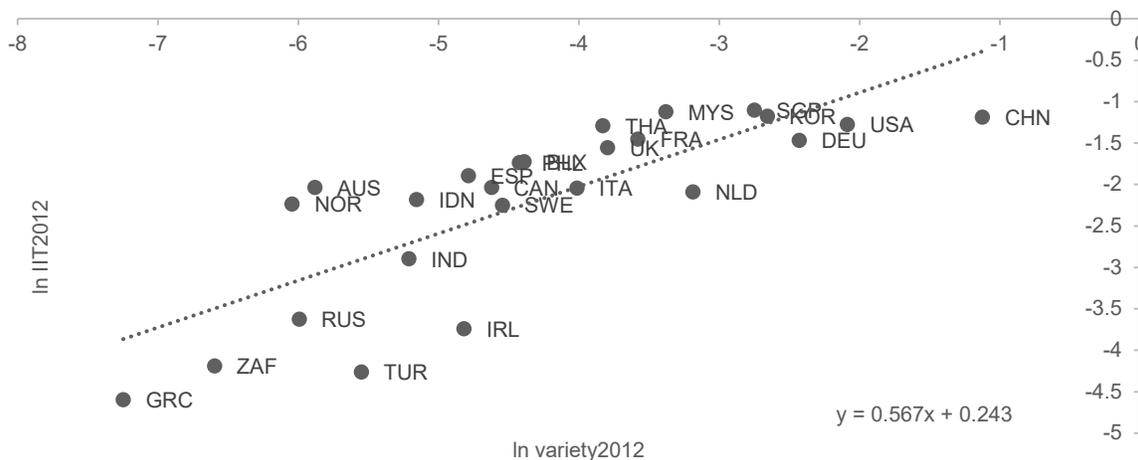
Figure 1:   Export Variety (Electrical and Optical Equipment, 2012)
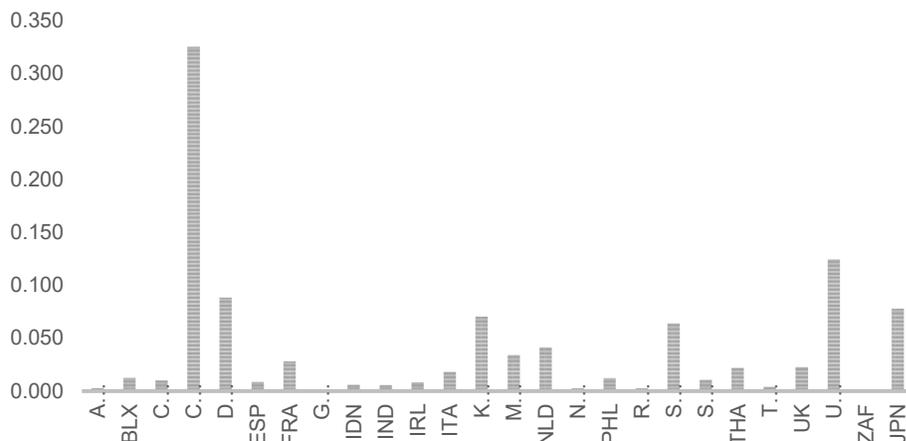
Data source: Comtrade HS 1996 This figure shows the number of product varieties of Japan's and the twenty-five countries' exports in the electrical and optical equipment industry in 2012. The number of export varieties is measured using equation (11).

Figure 2 shows the plot of the logarithm of export variety and the logarithm of IIT in 2012 for the electrical and optical equipment industry. IIT is measured as the bilateral trade between Japan and one of the twenty-five countries using equation (12). The degree of IIT for each trading pair for the industry is calculated using the HS 1996 6-digit-based Comtrade database, which is the most detailed data available. The HS1996 6-digit-based extent-of-IIT data for each pair of countries are aggregated into the industry weighted by trade values.

Figure 2: Plot of Export Variety and Intra-Industry Trade (IIT) (Electrical and Optical Equipment, 2012)

Data source: HS 1996 6-digit-based Comtrade database This figure shows the plot of the logarithm of export variety and the logarithm of IIT in 2012 for the electrical and optical equipment industry. IIT is measured as the bilateral trade between Japan and one of the twenty-five countries using equation (12). The results confirm the theoretical model, especially equation (16), since it demonstrates the positive correlation between the number of export varieties and IIT.

Table 2 shows the results of the OLS estimation of the data in Figure 2. This paper simply regresses the logarithm of IIT on the logarithm of export variety. The estimated coefficient of *ln IIT2012* is positive as expected, and is significantly different from zero at 1 percent level.   Therefore, a one percent increase in the number of export varieties results in a 0.567 percent increase in the degree of IIT in 2012 for the electrical and optical equipment industry. The results of Figure 2 and Table 2 confirm the theoretical model, especially equation (16), since it demonstrates the positive correlation between the number of export

varieties and IIT regardless of country specific effects.

Table 2: Result of OLS (Electrical and Optical Equipment, 2012)

Dependent Variable: ln IIT2012	
ln variety2012	0.567 ***
	(6.23)
Constant	0.243
	(0.59)
Number of obs	25
R^2	0.628
Adj. R^2	0.612
***: significant at 1% level	
( ): t value	

This table shows the results of the OLS estimation of the data in Figure 2. The estimated coefficient of ln IIT2012 is positive as expected, and is significantly different from zero at 1 percent level. A one percent increase in the number of export varieties results in a 0.567 percent increase in the degree of IIT in 2012 for the electrical and optical equipment industry.

CONCLUDING COMMENTS

The objective of this paper is to discuss the relationship between the number of product varieties and the extent of intra-industry trade (IIT). The paper adapts the measure method of product variety developed by Feenstra and Kee (2004), and provides an extension of Feenstra and Kee (2004) model to derive the theoretical relationship between intra-industry trade and product variety, which is the contribution of the paper. In the empirical analysis, the value of exports data are taken from the Harmonized Commodity Description Coding System (HS) 1996 of the United Nations Commodity Trade Statistics Database (Comtrade database). The degree of IIT for each trading pair for the industry is calculated using the HS 1996 6-digit-based Comtrade database, which is the most detailed data available. The model presented in this paper shows that the extent of bilateral IIT is higher the smaller the gap in the number of export varieties between two countries. The theory also shows that similar number of export varieties between two countries, that is, more IIT can be a tool to redress trade imbalance between two countries. The empirical analysis of Japan and twenty-five countries provides support for the theoretical model presented in this paper. That is, more export variety is associated with more IIT. The policy implication of the results is that promoting higher product variety will increase the opportunity for IIT regardless of country specific effects. The discussion in this paper is limited to Japan and twenty-five countries for the electrical and optical equipment industry in 2012. The additional investigation for different industries and years remains a fertile area for future research.

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FACTORS AFFECTING ADOPTION OF DIGITAL BUSINESS: EVIDENCE FROM AUSTRALIA

Qiuyan Fan, Western Sydney University, Australia

ABSTRACT

Small and medium-size enterprises are a significant part of the Australian economy. Understanding how Small and medium-size enterprises can effectively adopt digital strategies to facilitate their growth will have positive implications for the national economy. Research has found that Small and medium-size enterprises with a high level of digital engagement are more profitable, survive longer and grow larger (Deloitte Access Economics, 2013). However, a recent research survey shows only 16% of Australian Small and medium-size enterprises with a high level of digital engagement and the vast majority of Small and medium-size enterprises are not fully engaging with digital strategies (Deloitte Access Economics, 2013). Small businesses are at risk of missing opportunities that the digital economy opens up. While there are considerable studies on small business going online in the research literature, few studies have focused on the adoption of digital business in Greater Western Sydney. This paper attempts to address this lack by examining the level of digital engagement in Small and medium-size enterprises in Greater Western Sydney using a qualitative approach. This research analyses and identifies factors affecting adoption of digital business in Small and medium-size enterprises. The findings of this research suggest that the current state of local digital businesses in Greater Western Sydney can be best viewed as little more than using emails or providing basic information and services online. The factors affecting digital business adoption include lack of understanding of relevance of digital business to their organisations, absence of digital strategies, lack of skills and perceived cost and risk of change. Most local small businesses in Greater Western Sydney appear to be slow to advance their efforts to engage in the digital economy. This research recommends that Small and medium-size enterprises in Greater Western Sydney need a proactive approach to developing effective digital strategies.

JEL: O32

KEYWORDS: SME, Digital Business

INTRODUCTION

Small and medium-size enterprises (SMEs) are a significant part of the Australian economy as they make up the majority of Australian businesses. In Australia the Commonwealth Scientific and Industrial Research Organisation (CSIRO) defines the SMEs business category by the number of full-time employees. This definition includes: micro enterprise have 1-4 employees, small enterprises have 5-19 employees, and medium enterprises have 20-200 employees (CSIRO, 2008). As of 2014 there are over 2 million active SMEs with a contribution of about 48% to national economy. SMEs play a vital role in the Australian economy because they are employing 70% of the Australian workforce and remain the key players in making the Australian economy more competitive in the global marketplace (Kapurubandara, Hol & Ginige, 2010). Understanding how SMEs can effectively adopt digital strategies to facilitate their growth will have positive implications for the national economy. Research has found that SMEs with a high level of digital engagement are more profitable, survive longer and grow larger (Deloitte Access Economics, 2013). However, a recent research survey shows only 16% of Australian SMEs with a high level of digital engagement and the vast majority of SMEs are not fully engaging with

digital strategies (Deloitte Access Economics, 2013). Small businesses are at risk of missing opportunities that the digital economy opens up. While there are considerable studies on small business going online in the research literature, few studies have focused on the adoption of digital business in Greater Western Sydney (GWS). This paper aims to address this lack by analysing and identifying the factors affecting adoption of digital business in SMEs in GWS using a qualitative approach.

For the purpose of this research, digital business is defined as the use of digital technologies to enable major business improvements such as enhancing customer experience, streamlining operations or creating new business models (Chaffey, 2015). Digital business is an opportunity that no organisation regardless of size should ignore. It is crucially important for small businesses to understand the potential and impact of advanced digital business as digitally engaged businesses are more likely to grow and remain competitive in the future.

The rest of the paper is organized as follows: Firstly, I give an overview of digital business adoption among SMEs through the literature review section. Then I describe the research methodology that I used to address the research problem. I then discuss the relevant issues and present the findings of this research. I conclude the paper and discuss directions for future research in the final section.

LITERATURE REVIEW

There have been a number of studies concerned with SMEs digital business adoption (Rosli & Noor Azizi, 2009; Damaskopoulos & Evgeniou, 2003; Drew,2003; Pearson & Grandon,2005; Jeona, Han & Lee,2006; Molla, Heeks & Balcells,2006; Al-Qirim,2006; Johnston & Wright,2004; Saffu, Walker & Hinson,2008). These studies showed how different factors affect digital adoption amongst SMEs in different settings.

Grandon & Pearson (2004a) found that the commitment of top management, the level of IT knowledge they have, and their attitude to innovation greatly influenced the adoption of e-commerce. In a study of Korean SMEs by Jeona, Han & Lee (2006), they suggested that the CEO's knowledge of IT/e-business and positive attitudes toward innovation were one of the major determining factors of digital business adoption.

Al-Qirim (2006) indicates that business size and the necessary capital and resources appear to limit SMEs' ability to adopt digital technologies while Johnston & Wright (2004) argue that smaller size allow SMEs to be more flexible to change. Molla, Heeks & Balcells (2006) suggest that SMEs are more ready to make internal changes to processes and structures that are needed to deliver the benefits of e-commerce. The studies by Grandon & Pearson (2004b) on the adoption factors of US SMEs and Sutanonpaiboon & Pearson (2006) on e-commerce adoption of Thailand SMEs show that SMEs that are ready to adopt do have the necessary financial and technological resources to support the implementation of e-commerce.

Johnston & Wright (2004) in a study of the e-business capability of SMEs in various countries found that customer pressures are one of the most significant drivers. The reason for this is because SMEs were forced to adopt e-business in order for their system to become compatible with that of their customers. In another study by Drew (2003) of e-commerce adoption by SMEs in England, the key factors identified were customers demanding to deal on the internet, pressures from suppliers, and the need to keep up with existing competitors. However the results of this study contrast that of Ching & Ellis (2004). Ching & Ellis (2004) surveyed 84 SMEs in Hong Kong and found that pressure from customers motivated Hong Kong SMEs to adopt e-commerce, but pressure from suppliers and competitor rivalry had little impact on the adoption decision.

A study of 100 Ghana SMEs by Saffu, Walker & Hinson (2008) suggested that e-commerce adoption was higher when the business practices are compatible with the infrastructure of e-commerce. On the other

hand, Maguire, Koh & Magrys (2007) in a study of e-business adoption in SMEs, found that the lack of skilled personnel was a major barrier for the low level of e-commerce adoption in the business sectors researched. Other barriers to SMEs digital business adoption include security and privacy concerns, cost of digital business implementation and lack of digital strategy and relevant resources and skilled staff to implement digital business (MacGregor & Vrazalic, 2008, Maguire, Koh & Magrys, 2007).

METHODOLOGY

This research is based on a study of four small businesses employing people between 6 and 25 in GWS. To identify the factors affecting digital business adoption in SMEs in GWS, a qualitative case study approach is employed in this research. Drawing on a publicly available database of the SMEs located in GWS, businesses were initially approached with an invitation to participate in the study. The four businesses were selected due to its size, geographic location and their willingness to participate in the study. For this qualitative study, data was collected through face-to-face interviews of business owners or managers and unstructured observation. The topics discussed at the interview included drivers and barriers to digital business adoption and business strategy to adopt digital technology or overcome their barriers.

In-depth semi- structured interviewing of 4 business owners or managers was carried out in 2013. The semi-structured interviews lasting about 50 minutes each session were digitally recorded and transcribed. Semi-structured interviewing is a fairly flexible structure that allows some probing to be done. The researcher can ask additional follow up questions for further explanation and clarification. Semi-structured interviews increases the comparability of the data collected due to the use of a semi-structured interview guide, which helps show relationships and common reoccurring themes between the answers (Flick, 2002). In addition to semi- structured interviews, unstructured observations were used to gather additional data on participant behaviour and the workplace environment in which they operate concerning the usage of digital technologies. A research diary or field notes were used to carry out unstructured observations.

The data from the interviews and the field notes were analyzed and interpreted using categorizing, coding, and contextualization techniques to look for patterns and themes both within and across the businesses. The research presents its data analysis through a combination of the literature and themes emerging from the in-depth interviews and the unstructured observation during the interviews.

RESULTS AND DISCUSSIONS

This research reveals that adoption of digital business is rather limited in the participating organisations. The level of digital business adoption can be best viewed as using emails or providing basic information and services online according to the managers or business owners interviewed. During the interviews different aspects were often mentioned by the interviewees as having a significant impact on their ability to adopt digital business. Based on the analysis of the data, the aspects perceived as important include perceived costs and risk and benefits. Business adoption tends to be driven by benefits and restricted by perceived cost and risk of change (Chaffey, 2015). The managers or business owners interviewed were uncertain about the financial returns from investments in digital systems. This uncertainty was exacerbated by a lack of cost and benefits analysis on their investment and reasonable knowledge about digital system setup and running costs. Lack of understanding of relevance of digital business to their organisations has been identified as a major barrier by the managers interviewed. Their limited understanding of the business implications of digital business and digital business models make them reluctant to take further actions. Therefore, they often take a 'Wait and See' approach in digital business adoption for their organisations.

Security, privacy and legal issues were commonly perceived barriers. The perception of these risks resulted in limited adoption of digital business in these companies.

Lack of skilled staff and confidence in digital business adoption has also become a major issue for these companies interviewed. The current low level of digital engagement further highlights these concerns.

The four business owners and managers interviewed reported that their business has yet to adopt strategic use of digital technologies to enhance business processes. It appeared that they were unaware that competitive advantages came not from technology but from how it is integrated into business processes and practices. Digital business adoption is clearly a strategic business issue rather than a technical issue. As observed by Porter 15 years ago, 'the key question is not whether to deploy Internet technology – companies have no choice if they want to stay competitive – but how to deploy it.' (Porter, 2001). It is noted that this view still remains relevant today to many SMEs for adopting digital business. It is important for SMEs to take a strategic approach to be ready for the digital future.

CONCLUSION

SMEs are a major and important part of the Australian economy in terms of making contribution to Gross Domestic Product (GDP) and employment. However, SMEs have been slow in the uptake of digital business despite its benefits, due to various barriers. The aim of this research is to investigate the key factors affecting digital business adoption among SMEs in GWS using a qualitative approach. The data obtained from the interviews were analysed inductively. The findings of this research suggest that the current state of digital businesses adoption in SMEs in GWS can be best viewed as little more than using emails or providing basic information and services online. The factors affecting digital business adoption identified from this research include lack of understanding of benefits to their business, absence of digital strategy to bring transformative change to business, lack of skills and perceived cost and risk of change. These results are consistent with the factors identified in the previous studies presented in the literature review section. The research findings indicate that the local small businesses in GWS appear to be slow to advance their efforts to engage in the digital economy. This research recommends that SMEs in GWS need to take a proactive approach to developing effective digital strategies as companies that do not have a coherent digital business strategy with clearly defined objectives are less likely to engage more efficiently with suppliers and expand and better serve their customer base in a fast changing digital environment. Future studies could investigate further on strategic issues regarding digital adoption in SMEs. This study intended to lay the groundwork for a future research on the topic. Once the factors have been established, how to overcome barriers to digital business adoption in SMEs needs further investigation in a future study.

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AN EMPIRICAL EXAMINATION OF FACEBOOK USE BY HISPANICS AND NON-HISPANICS

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ABSTRACT

Social media has become a communications platform for brands to interact with customers. Few studies have tested how more than 50 million US Hispanics use social media. This paper investigates how Hispanics interact with social media, such as Facebook, and examines how Hispanics spend more on products or services after seeing advertising. Using an exploratory survey to collect data from Facebook users, we consider consumer behaviors, including a comparison of those who say they bought more after seeing the ads with those who did not buy more after seeing the ads. The authors determine whether the use of the Facebook ads increases the propensity to purchase products. We compare those who self-select as Hispanic vs. non-Hispanic, and consider the language preferences. Lastly, we make recommendations after analyzing the findings and describe what marketers need to know about Hispanics and social media.

JEL: M31, M37

KEYWORDS: Social Media; Facebook; Consumer Behavior; Purchase Behavior

INTRODUCTION

Our experiences in Hispanic Marketing span many decades and we have been looking at how Marketing to Hispanics in the United States was changing. We wanted to explore how social media strategies were adapting to today's digital marketplace. Worldwide, Facebook users total 1.6 billion users currently. Many of the users engage on mobile devices and that includes shopping behaviors. In the US, there are currently more than 50 million Hispanics, which represents $1.5 trillion in buying power. For this study, the research questions considered Hispanics' use of Facebook vs. non-Hispanics, including determining whether Hispanics are more actively engaged in Facebook than non-Hispanics. We wanted to know which activities Hispanics prefer on Facebook. What topics interest them the most? Does the viewing of Facebook ads increase the likelihood of purchasing products for Hispanics? What trends are emerging? Is there a pattern to the trends? What should marketers know about Hispanics and social media? We have organized this paper to give the reader a background in current literature, followed by our findings from primary research and analysis. We conclude the report with suggestions for marketers to improve their results for this important growing market segment

LITERATURE REVIEW

Media is a channel through which content gets delivered. The most common channels are television, newspapers, and the Internet, which is the most interactive of all media. Social media is defined as interactive marketing channels that consist of more than just Web sites and include blogs and micro blogs, feeds, video, wikis, viral marketing, and social networking, communities. Social media marketing gives customers a public voice and role by creating engagement. Marketers create opportunities and accountability as groups and individuals share, sell and discuss goods and information on these platforms (Carroll, 2014). Young people are seen as earlier adopters of social media more than older people. Young

adults are more likely than older adults to use social media (Duggan, 2013). Certain demographic groups tend to use more social media platforms. Hispanics, women and African Americans show high interest in sites such as Twitter, Instagram, and Pinterest (Duggan, 2013).

What is Hispanic marketing? Many studies refer to Hispanics and acculturation into the U.S. economy when they discuss Hispanic marketing. What does acculturation have to do with social media? Perhaps it is a way that we learn about our culture, our families, our history, and make the important connections with our world (Corona & McCabe, 2012). Segmentation is the process of dividing the potential market into smaller groups with common needs, interests and motives and then creating implementation strategies to target these common priorities (Kotler, 2016). The authors are looking at the market segment of U.S. Hispanics, and want to know if they are likely to buy products or services after being exposed to advertising in social media, such as Facebook. Half the growth of the U.S. population from 2000-2010 has come from Hispanics, and they are the largest minority in the United States. It is predicted that by 2020, 17% of the U.S. residents will be of Hispanic origin. In size, it is the ninth largest market if they were a separate nation (Gonzalez, 2013). The median age of U.S. Hispanics is 27, compared with a median age of 42 for non-Hispanic whites. Fusionistas are the Hispanic millennials. They are a fusion of both American and Latino. They watch fútbol and football. More than half live in three states: California, Texas and Florida. Sub-segments include: Mexican, Puerto Rican, Cuban, Salvadoran, Dominican, Guatemalan, and Colombian (Kotler, 2016). Hispanics have less access to landline service as they are more likely younger and own mobile devices. They are more active with mobile technology and social media than the general population, and tend to stay connected to friends and family because it is important to stay in touch (Brock, 2011).

Although this is a relatively new topic for marketers, social media and branding has been studied in detail (Wallace, Buil, and De Chernatony 2012). Facebook offers restricted channels to communicate within a specific platform about personal status and activities, comments, and profiles. Facebook provides the opportunity for interactive communication via text, links, music, video and pictures (Sinn & Syn, 2014). These discussions are involving events, family, friends, and opinions, which become a digital conversation. Facebook could be a recording of what the users see as real life or would like to think it is (Sinn & Syn, 2014). Companies use platforms like Facebook or Twitter to market products, services, and even other companies. Different types of social media appeal to different age groups, values and lifestyles (Wallace, Walker, Lopez, & Jones 2009). Demographics such as age, gender, income, marital status and academic level could influence what they view on the Internet. This can help brands determine which social media sites are best for advertising. They found that purchasing decisions were influenced by word of mouth, banner ads and buzz marketing.

Brands are aware of how trust is built through social media, because in general, people are suspicious of traditional advertising (Wang, Yu & Wei, 2012). Social media platforms such as Facebook allow for sharing comments, likes and the expression of opinion and emotion. Trustworthy friends or friends of your followers' comments can influence your preferences. Friending on Facebook and brand advocacy (Wallace, Buil and DeChernatony, 2012) explored the relationships between social networks, brands and brand advocacy. By testing what users liked on Facebook, they searched for relevance between social interactions and brands, both in online and offline behavior. Social media allows for personal digital connections to be made between customers and brands. As networks evolve around family, friends, and customers, more opportunities to interact digitally are created (Schmidt & Ralph, 2011). The propensity to purchase is associated with peer pressure. Zhu, Dholakia, Chen and Algesheimer (2012) considered characteristics of buyers of high value purchases, including financial services. In their findings, they saw a relationship of user decisions based on the advice and support of their social network followers. Considering word of mouth and its influence on users of social media, the popular Web site platforms have the greatest potential for increasing the value of a brand (Park & Kim, 2008 and Park & Lee, 2009). With 1.6 billion users, Facebook has the most popular platform thus far. One reason for its popularity is that it chronicles the everyday lives of users through personal documentation (Sinn & Synn, 2014).

Cultural orientation and value systems can be influenced using social media (Li & Tsai, 2015). A comparison between English and Spanish social media usage and their impact on U.S. Hispanics was studied. English social media influenced Hispanics' views on American culture, while Spanish language social media reinforced their cultural roots. Li and Tsai studied how U.S. Hispanics used social media in ways different from non-Hispanics. McCabe and Corona (2011) used Scarborough Research data from California to determine the behaviors of U.S. Hispanic consumers regarding recycling and how marketers could best approach these customers via marketing and media channels, including social media channels.

Many Latinos speak English as their first language and for those who use digital media, Fulgoni and Lella (2014) look at the language patterns and frequency of their social media activities. There are common errors that advertising specialists make, including the assumption that the most effective way to reach Hispanic consumers is via Spanish language media. The success of the campaign can depend on the demographic segment, product and messaging goals, as well as the type of media used for the campaign. Brock (2011) discusses how brands need to be aware of the different segments of the Hispanic market. Analysts use both demographic and psychographic segmentation, along social channels, including first-generation immigrants vs. second-generation native-borns, and English speakers vs. Spanish speakers vs. Spanglish speakers. Due to the ability to target narrow segments, social media may promise easier access to influencers within these different segments for marketers.

Hispanics selected what media they use to get information about green products and services, with higher response rates for electronic news versus print or magazines. They slightly prefer TV over the Web and then radio is the third choice. Non-Hispanics prefer the Web, then newspapers and magazines, then TV, then radio is the fourth choice. Nearly 70% of those Hispanics responding overall indicated a preference for TV to get their information. The findings about Facebook's popularity for green products and services with both Hispanics and non-Hispanics are very similar, at nearly one third of respondents (McCabe, Corona & Weaver 2013). Social media is a lot more than just words. Pinterest and Instagram users like photographs more, and these platforms are more popular with Hispanics (Conrad, 2016). Nearly 34% of Hispanics use Instagram, which is owned by Facebook, compared to 21% of non-Hispanic adult Internet users. Social networking platforms are very popular places for young U.S. Hispanics to chat and share music (Valdez, 2008). Hispanic youth spend more than 32 hours per week engaged in media and technology, often on more than one device at a time. Gomez (2016) proposes two very distinct sub-segments of the Hispanic market. The first segment is growing rapidly, as young U.S.-born Hispanics are entering adulthood every day, and a second segment is related to birthrate and immigration, which is growing, but just not as fast. Acculturation is neither fast nor linear in terms of growth, however there is a large opportunity for marketers to court the non-acculturated U.S. Hispanic market.

DATA AND METHODOLOGY

The 16-question online survey was drafted and tested. We created collectors and shared the links with our friends, family and colleagues, mostly in the San Diego region. Our survey was mailed during a two-month period in 2016. There were 259 responses analyzed, found via email, Facebook, Linkedin, and personal relationships. We were able to compare 196 responding users who identified as Hispanic or White (non-Hispanic). We customized the raw data into a comparison of the Hispanic vs. non-Hispanic behaviors and motivations regarding ads and products bought after seeing the ads on Facebook. We held focus groups with the Hispanic Marketing Special Interest group, a part of the San Diego American Marketing Association, on March 9, 2016 to discuss our initial findings.

RESULTS

Half of the respondents (52%) open Facebook at least 1-5 times per day. Twenty-five percent open 6-10 times per day, and 16% 11-15 times per day. The average time spent on Facebook is 15-30 minutes a day.

A key finding was that more than 74% of our respondents are active on Facebook more than 15 minutes a day. Half of our respondents use Facebook more than a half hour a day, which would indicate regular active participation. Eighty-five percent of respondents have been using Facebook for more than 3 years, and 60% have been using Facebook longer than five years. Our respondents included: 76 Hispanics (38%), and 36 were Spanish speakers first. Eighteen, or 33%, completed graduate school. Fifty-six percent of respondents were non-Hispanic/Caucasian. Of the categories identified in advance, their favorite product to look for on Facebook involved travel, followed by food. The favorite activity on Facebook was news of family, followed by photos and news. The actions they make most frequently are "Like," "comment," and "share." Their least likely activity was to visit a Web site. When asked if they respond to ads, we found that more than half do respond to ads, which is what advertising firms will want to see in the future. A comparison of Hispanic to non-Hispanic data follows. In Table 1, we learn from the responses that travel and food are the two most popular products of interest, and that non-Hispanics cared more about travel than Hispanics. Hispanics were more interested in food, fashion, and electronics. In the "comments" section, we learned that many respondents do not like to look for products on Facebook. Note: multiple responses were received here.

Table 1: What Kind of Products Are you Most Interested in Seeing on Facebook?

	Travel	Food	Fashion	Electronics	Services	Sports
Hispanic %	51	48	31	29	23	23
Non-Hispanic %	61	45	21	20	21	25
Total respondents	111	90	49	46	43	47

This table shows percentages for responses. The columns show percentages of segments of Hispanics vs. Non-Hispanics in six product categories, representing what products they are most interested in seeing advertisied on Facebook. The second and third rows show the percentage of each group who gave a response. The fourth row shows the total of respondentsfor each category. The results add up to more than 100 because many people selected more than one response.

Table 2 shows us that Hispanics are more willing to look for new products than Non-Hispanics. Thirty-six percent of Hispanics are willing to look for new products, vs. 30% of Non-Hispanics. The largest distinction was among "Products I like" with 23% of Hispanics and 32% of non-Hispanic mentioned the types of ads they notice.

Table 2: What Kind of Advertising Have you Noticed on Facebook?

	None	Products I Like	New Products	Other	Total Respondents
Hispanic %	17	23	36	23	
Non-Hispanic %	17	32	39	26	
Total respondents	33	50	64	49	196

This table shows percentages for responses. The columns represent the categories of products and the rows 2 and 3 represent the percentage of those responding. The fourth column shows the total number of respondents.

Table 3 shows us that Hispanics and non-Hispanics are equally likely to never click on advertised products seen on Facebook. Forty-nine percent of Hispanics responded never clicking on advertised products, as opposed to 48% of non-Hispanics. On the other hand, 40% of those responding admit to clicking on ads on the Facebook platform.

Table 3: how often do you Click on Advertised Products or Services on Facebook?

	Never	1-2 Times a Month	3-5 Times a Month	6-10 Times a Month	Other	Total Respondents
Hispanic %	49	43	4	4	0	
Non-Hispanic %	48	40	10	1	1	
Total respondents	95	81	15	4	1	196

This table shows percentages for responses. The columns represent the frequency reported and the 2nd and 3rd rows represent the percentages of responses. The fourth row is the total number of responses.

Table 4 shows that fewer Hispanics are buying products on Facebook than non-Hispanics. Sixty-eight percent of the Hispanics surveyed answered that they never buy products on Facebook, while 55% of non-Hispanics never claim that activity. In other words, 45% of non-Hispanics are buying products on Facebook, while 32% of Hispanics are buying products. When asked if they have bought one or two items, Hispanics' rate of purchase is 29% while non-Hispanics' rate is 39%.

Table 4: How Many Products or Services Did you Buy after Seeing Ads on Facebook?

	None	1-2	3-5	6-10	More	Total Respondents
Hispanic %	68	29	1	1	1	
Non-Hispanic %	55	39	5	0	2	
Total respondents	117	68	7	1	3	196

This table shows percentages for responses. The columns represent the frequency reported and the 2nd and 3rd rows represent the percentages of responses. The fourth row is the total number of responses.

CONCLUDING COMMENTS

The goal of this research was to see how Hispanics interact with Facebook differently from non-Hispanics, if at all, with the purpose of identifying specific patterns that may be used by marketers seeking to reach this segment. We were available to identify similarities and differences among the two groups through our primary research instrument, a questionnaire: 1.) The top categories for marketers to attract Hispanic Facebook users are travel, food, fashion and electronics, 2.) Hispanics are more willing to look for new products on Facebook than non-Hispanics, 3.) Hispanics and non-Hispanics are equally responding to clicking on advertised products on Facebook, and 4.) Hispanics are buying fewer products than non-Hispanics on Facebook after viewing ads.

What a marketer can learn from this research is that they have an active audience of customers on Facebook who want to learn about products and services offered, and are willing to respond by clicking for more information. However, Hispanics are not as likely to purchase these products or services on the platform. Therefore, marketers need to be trained to pay closer attention to the updates they are using, and how they can better connect to the U.S. Hispanic shopper who is not yet ready to buy, but still very interested in knowing more about the available products and services. These findings reveal recommendations for businesses marketing to U.S. Hispanics: a) Increase the use of Facebook Pages for dissemination of product news to Hispanics, b) Use content related to travel, food, fashion, and electronics among Hispanics to stimulate interest and connections to this culture, c) Hispanics respond to Facebook ads the same as non-Hispanics. Therefore, the potential for Facebook advertising is great since Hispanics are using Facebook the same or in greater percentages than non-Hispanics, and d) Hispanics are slightly more open to ads of new products than non-Hispanics, so if you reach out with new products, they may be well received, whether they notice the ads or not. We recommend that in future research, t-tests for differences in means should be considered to find out if the differences noted are statistically significant, which was a limitation of this research. In summary, this study offers key important insights into the future of Hispanic marketing. We plan to continue our research, expanding to find a larger sample population so we can determine more specific trends for Hispanic Marketing in Social Media.

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INFORMATIONAL AND FUNCTIONAL EXPORT BARRIERS FACED BY SMALL AND MEDIUM ENTERPRISES IN EMERGING ECONOMY

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ABSTRACT

The performance of small and medium enterprises is very important for both the economic and the social development of most emerging markets. Although Small and medium firms account for a large number of the industrial firms in emerging markets, their involvement in export related activities is considerably smaller. However, in view of the dynamics of the current global business environment, small and medium firms need to prepare themselves better to take advantage of trade liberalization and borderless economies. Hence it is very important for us to determine the factors that hinder emerging market small and medium firms from exporting their products abroad We used qualitative methods to explore our research topic and interviewed managers and CEOs of 49 small and medium firms in diverse industries of Pakistan. Data were collected in 2014. Our research confirms the internal and external barriers highlighted by earlier research. However, we noticed that there is a dearth of inter-organizational collaboration among the firms. This dimension has not been captured in the internal and external barriers approach. The existing literature on networks stresses the importance of inter-organizational relationships and networks among firms in general and specifically among small and medium firms. The emerging market small and medium firms must collaborate with each other, both in terms of operational resources and handling large export orders, if they want to enter in the competitive export markets. The government can also help such firms by encouraging the formation of export production networks.

INTRODUCTION

Globalization of the world has been caused by various factors including trade liberalization, deregulation of industries, reduction of tariff and non-tariff barriers, reginal economic integrations, advances in information and communication technologies. The world has become interdependent and interconnected and there has been tremendous increase in worldwide trade in last three decades. Export driven strategy of economic development has proved its merits due to the enormous success of Asian countries like Japan, South Korea, Taiwan, Singapore, Hong Kong, and China lately. Japan was the first country after World War II to adopt the export led strategy and it became the member of the elite club of developed countries long time ago. South Korea has been making a transition from a third world developing country to a developed country in last two decade. It has shown the highest export growth of all the Asian Tigers and after Japan it is the only country to have established its own successful brands and product distribution networks in North America and around the world. China, on the other hand, has achieved astounding export growth in the 1990s, despite being a poor third world country.

Yet Pakistan is unable to replicate the success of its Asian neighbours. In fact, Pakistani exports have declined in 2014-15 as compared to previous year. The performance of small and medium enterprises (SMEs) is very important for both the economic and the social development of most emerging markets. Although SMEs account for a large number of the industrial firms in emerging markets, their involvement in export related activities is considerably smaller. However, in view of the dynamics of the current global business environment, SMEs need to prepare themselves better to take advantage of trade liberalization and borderless economies. Hence it is very important for us to determine the factors that hinder Pakistani SMEs from exporting their products abroad.

It is already established in the literature that SMEs face a myriad of internal and external export barriers (Sudarevic and Radojevic, 2014; Leonidou, *et al.*, 2010). The internal barriers include informational, functional and marketing while the external barriers include procedural, governmental, task, and environmental. Nevertheless, the empirical verification of these barriers is primarily limited to SMEs in the developed world.

Firm's inability to assess the nature and extent of barriers to exporting can lead to firm's failure in foreign markets and can cause financial loss. It can also breed negativity about exporting among current and potential exporters (Bilkey, 1978). It is therefore important to focus on the export barriers faced by companies in Pakistan. This would help us in determining the specific nature and type of problems faced by Pakistani exporters. Thus, the objective of this research is to discern specific informational and functional problems and obstacles faced by small and medium firms in Pakistan while exporting their products to rest of the world. Understanding these export obstacles can benefit a number of stakeholders. Small business managers/owners can take appropriate actions to minimize their impact, particularly internal barriers which are relatively easier to overcome. Government policymakers can develop export promotion programs to provide assistance to exporters. Business academicians can offer educational programs to enhance knowledge, understanding and capacity building of small and medium size exporters.

The remainder of the paper is divided into four sections. The introduction is preceded by a literature review which highlights relevant previous studies and addresses the existent gaps in research. The methodology section explains how the research was designed and data was collected. Subsequently the research findings are first presented in detail and then discussed with regards to relevance. Lastly the limitations of the study are highlighted and some directions for future research are given.

LITERATURE REVIEW

The empirical research on export barriers started in mid 1960s but it experienced acceleration in 1980s, in line with more focus on globalization and as both academic and practitioners tried to understand what hampers firm's efforts to export their products overseas (Leonidou, 1995). The research in this domain initially started from USA but it caught the interest of researchers from other developed and developing countries. A large majority of these studies focused on small and medium-sized firms rather than large firms (Leonidou, 1995). It is thus implied that small and medium enterprises (SMEs) are more likely to face these barriers due to resource constraint, lack of managerial experience, in adequate organizational structures, and fewer human resources capabilities.

Barriers to export refer to all those constraints that hinder the firm's ability to initiate, to develop, or to sustain business operations in foreign markets. These barriers create scepticism among managers of small firm about exporting, develop negative attitude among many exporters and deteriorate performance of such firms (Leonidou, 2004; Leonidou and Katsikeas, 1996). Building on a classification proposed by Leonidou (1995), Morgan (1997) categorized barriers into internal and external and further classified them as domestic and foreign. Later on the basis of a systematic review of 32 studies conducted during

the period of 1960 - 2000, Leonidou (2004) categorised 39 export barriers into three *internal* (functional, informational and Marketing) and four *external* (procedural, governmental, task and environmental) categories that are perceived differently by *non-exporters, current exporters* and *ex-exporters*. A number of empirical studies have been conducted in the past using this classification scheme. A classification of export barriers is given below in Table 1.

It was also found that the experience, knowledge and resources of managers contribute to the severity of barriers perceived by exporting firms (Sullivan and Baurschmidth, 1989). It was determined that much can be done internally to reduce the anticipated impact of export barriers by using the most appropriate decision making style. For example setting targets and successively meeting these targets will in turn reduce the impact of trade barriers (Shoham and Albaum, 1995). It has also been suggested in the literature that some of the barriers such as resource constraints, marketing barriers, knowledge and experience barriers, and export-procedure barriers are "export stage dependent" (Kahiya and Dean, 2016).

Table 1: Classification of Export Barriers

Internal	External
Functional	**Environmental**
Lack of managerial time to deal with exports	Economics
Availability of trained personnel for export business	Political-legal
Insufficient working capital for exports	Socio-cultural
Marketing	**Governmental**
Product, Price, Promotion, Logistics	Lack of home government assistance
	Bureaucratic requirements/complex export regulations
Informational	**Task**
Limited information to locate/analyze foreign markets	Competition in foreign market
Unable to identify foreign business opportunities	
Inability to contact the overseas market	
	Procedural
	Unfamiliar exporting procedures
	Slow collection of payments from abroad

Source: Adapted from Leonidou (2004)

Tesfem and Lutz (2006) classified barriers into company, product, and industry, export market and micro environmental barriers. It is interesting to notice yet again that the focus is on external trade barriers. The only consideration with respect to internal barriers relates to marketing and its components i.e. product, price, distributions, logistics, Promotion. Since external barriers are more macro in nature, it is not possible for SMEs to influence them. Internal barriers are micro in nature and it is possible for individual organization to minimize those barriers with some assistance from government and industry associations. Thus the focus of our research is on internal barriers, in particular information and functional, which are discussed next.

According to Morgan and Katsikeas (1997) informational barriers refer to problems in identifying, selecting and contacting markets due to informational inefficiencies. In this study we are focusing on three major information barriers – limited information to locate/analyze foreign markets, inability to identify foreign business opportunities, and inability to contact the overseas market (Leonidou, 2004).
Functional barriers relate to inefficiencies of the various enterprise functions such as human resources, production, and finance, with regard to exporting (Vozikis and Mescon, 1985). This category contains three barriers related to limitations in managerial time, inadequacies in export personnel, and shortages of working capital (Leonidou, 2004).

DATA AND METHODOLOGY

This study uses qualitative research to collect data from respondents. Based on extensive literature reviews an interview guide was designed which contained questions to address barriers to exports these businesses faced. A sample of 49 heterogeneous small and medium enterprises (SMEs) was selected for this purpose. SME were defined as having an employee base of less than 1000. Once the questionnaires was finalized, in-depth interviews of the management were conducted to gain insight into the subject. Semi-Structured interviews were personally conducted by trained researchers. The respondents were the export manager, Managing Director, proprietor, the marketing manager, or other suitably knowledgeable executives. The respondents were free to give any additional insights that they felt necessary. The length of the interview was almost an hour and the respondents were informed that the interview would be taped for accuracy purposes, but their identities would be kept confidential.

The data was first transcribed, then organized into spreadsheets and finally analyzed. The qualitative analysis of data comprises classification of responses into categories, identification of major themes, and interpretation of findings in the light of existing academic literature. All firms in the sample were first classified by generic industry groups based on the export product and then qualitatively analyzed based on industry specifics. These industries included Engineering (including Paper, Petro-Chemicals and Plastic, Textiles, Food, IT, Sports & Surgical Leather, Footwear, Carpet and Furniture). The main themes pertaining to export barriers were identified within each industry and more generic theme were also identified and compared with previous studies.

RESULTS AND DISCUSSION

The findings of qualitative research for information and functional barriers are given below:

<u>Informational Barriers</u>

Informational barriers refer to problems in identifying, selecting, and contacting international markets due to Information inefficiencies (Leonidou, 2004). The findings related to informational barriers are discussed below.

Respondents were asked if they actually had access to sufficient information for analysis of foreign opportunities. Sufficiency was defined as constituent of both accuracy and adequacy of quantity. Even if the firm undertakes intensive and detailed methods for analyzing foreign opportunities, the quality and availability of data can be significant hurdle.

Lack of sufficiency of information was perceived by a few industries in particular. In the plastic and petrochemical industry a number of respondents felt that the information wasn't adequately sufficient to cater to their needs. The furniture industry is faced with different issues. It is a relatively new industry exporting at a very low scale. It gathers information through word of mouth and internet alone, which is not sufficient for any kind of expansion. A respondent from the furniture industry reported *"If we go after the big buyers, we wouldn't have the capacity to meet their demands. We do not have enough resources to manufacture in bulk without the surety of orders. Even when we get big orders, we cannot build the capacity that quickly."* So it's not just an informational issue but a functional one as well. Lastly, the respondents of the paper industry felt that they did not have sufficient information about the global export opportunities and would like to know more so that they could expand businesses but they did not know where to look for further information.

It was observed that, the internet was the main source of information to a majority of the subjects. The main issue mentioned in this regard was the inaccuracy of information. It was highlighted that internet

data was not always updated and therefore could lead to misinterpretation. Misinterpretation in turn can lead to improper planning which could have dire impacts on future business viability. The second most popular source of trade data retrieval was participation in trade fairs. It is a common conception among respondents that the government is not doing much in this area and more trade fairs and similar events should be organized so as to aid import and exports. Lastly, the third most important source of information was via personal contacts. The limitation of these is that they can only be employed by firms who have been in the business for a reasonable period of time, and therefore pose a barrier to firms new to exports. Identification of foreign business opportunities is crucial to the viability of any organization. It aids in gauging future prospects as well as preparing ahead. Six types of channels were employed by the SME sample to analyse business markets in order of popularity. They include web portal and Internet, trade fairs and exhibitions, contacts personal visits and old customers, distributors and wholesalers, word of mouth, agents and offices in different countries.

Some others include trade magazines, yellow pages, TDAP (trade Development Authority of Pakistan) databank. The most popular and widely used was the internet. Efficient utilization of Internet-based resources like marketplaces, website, B2B portals, and other tools allowed these exporters to locate right connections, build up affiliations and associations, increase revenue, and promote their goods. It was for these reasons that almost all exporters used Internet aggressively to enhance their export potential. Effectively all industries except furniture carpets and sports, rely heavily on this mode to prompt up sales and identify foreign opportunities. The second most widely used source includes trade fairs and exhibitions. Trade fairs (trade show, trade exhibition or expo) are organized so that companies in a specific industry can showcase and demonstrate their latest products, service, study activities of rivals and examine recent market trends and opportunities. These are very popular among almost all industries. A number of benefits were cited by the respondents who mentioned its use. Primarily they provide contact to a large number of prospective customers at a single point in time and place. It also provides immediate feedback on commodities and price and provides the opportunity to gain knowledge of markets, products, trends and any competition. They also help in identifying new market opportunities. Trade fairs were employed by textile, IT, sports, engineering, food, carpet and surgical goods industry. Not all industries have access to trade fairs despite their numerous benefits. Many small firms do not have access to trade fairs due to the higher cost associated with its participation.

Thirdly contacts, personal visits and old customers' listings and databases were employed by petrochemical, engineering, food, leather and paper industry. Other means were less popular or less consistent among these industries. It is interesting to note that the larger the industry becomes the more means of information they employ. The larger export industries like engineering and textile employ the maximum avenues for gaining information about the business opportunities abroad, in contrast to smaller and less experienced industries. For example, furniture industry is comparatively new industry in the exports field so the industry does not identify the buyers instead the buyers are attracted through word of mouth or references. Once opportunities have been identified, it is important for a business to establish communication with the target client effectively. This calls for a reliable means of communication. The main modes used to contact overseas customers were similar to those used to identify business opportunities abroad. The difference is in the popularity of different channels employed. The major channels employed included personal meetings, internet, emails, subcontracting, technological partnerships, wholesaler's indenters and trade fairs.

The most popular among these was internet, including emails, web portals and B2B search engines. They were employed by almost all industries except carpets, sports and food. The carpet industry contacts the customers through travelling and meeting in person. Footwear industry is approached by the customers directly and the communication is established through emails and other channels. Textile, being a large industry, employs a mix of approaches to establish contact with customers. Its encompasses contacts through conventions, exhibitions, trade fairs, overseas offices, listing in manufacturers lists, exploring the

market through overseas visits, electronic means of communication, active engagement with exporters and importers. Seminars and publications are also important sources of establishing the first contacts. Buying agents are another source of contacting the customers.

A number of hurdles prevent many industries from actively contacting customers. Although internet has reduced the impact of geographical distance, still limited exposure to listing of potential customers pose hindrance in establishing contact for smaller industries like footwear and carpets etc. Once again size of the industry emerges as a dominant barrier. Still other industries, like furniture, lag behind on the pretext of taking a half-hearted approach toward carrying out systematic research in overseas market. This passivity plays a role in the stunted growth of export promotion for such industries.

Functional Barriers

Functional barriers relate to inefficiencies of the various enterprise functions such as human resources, production, and finance, with regard to exporting (Vozikis and Mescon, 1985). The findings related to functional barriers are discussed below.

Respondents were asked if the senior management had sufficient time and resources to spend on export activities. A significant thirty percent responded negatively. On taking a more detailed look at the reasons provided, a number of interesting trends came up. The management style of executives assumes great importance in carrying out day to day business. The analysis shows majority of respondents get involved in export related activities because they think it is vital for their business growth. Some others however remain busy in other activities or hire personnel for export related activities. The analysis shows that experience in export business carries a lot of weight. The respondents having experience ranging from 5 to more than 20 years involve themselves in export related activities and manage their business properly. On the other hand respondents who do not find time have much less experience. The respondents who answered who spend less time and resources on exports are predominantly from business like engineering, surgical, furniture, carpet/rugs and IT etc. These kinds of exports are technology intensive and exports potential in these areas have recently been explored. The respondents from relatively smaller firms seem to be engaged more in all kinds of activities and give little time to their export related activities. Their businesses seem just taking off but not established. On the other hand the respondents who give more time to these activities seem well established and experienced.

The respondents more experienced in export are managing time and resources properly. They divide the responsibilities successfully amongst various level of business leaving enough time to devote on core business needs i.e. exports. The respondents who do not find time for export related activities either have separate department for that purpose or find it hard to manage business affairs properly. The data revealed that almost all the exporters have also been conducting local business and it started much earlier than their exports business. So it depends on the strategy of respondents whether they give priority to their local or export business. The data reveals that the respondents who find time for their export related activities certainly give priority to export segment of their business. Respondents were asked if they had trained workforce available for exports. It was observed that out of 49 exporters who participated in the survey, one third of them had issues with the recruitment or availability of trained work force. This issue was then further scrutinized by analyzing their responses.

The industry specific analysis gave a very different perspective. It appears that the Engineering sector is very much satisfied with the availability of skilled labour. This may primarily be due to the reason that they hire qualified engineers and associate engineers from established institutes and it may also reflect that they can hire trained labour from their competitors or give on job training to fresh graduates.

Food sector gives a very split verdict, it seems that it is only new high tech units which are facing problem as they are unable to find skilled labour. *"Since the machinery is being imported, as such trained human management is not available in Pakistan. There is need of Government institutions for long term planning to produce technical expertise who could meet the challenge of science & technology era"* said one of the interviewed managers. Units operating on old technologies are not facing such problems. Similarly petrochemical, leather and textile units are not facing any such problem most probably for the same reason.

On the contrary industries like sports goods manufacturers and surgical units, where more than machinery, it is the craftsmanship of the worker which matters, are facing problem of skilled labour. The primary reason for this is lack of technical training institutions where youth could obtain such skills. One of the respondents reported that *"Low wages of labour (in a bid to remain competitive in the wake of international competition) are forcing youth to take up other professions"*.

Working capital is a measure of how well an organization meets its short term obligations with ease. It is, therefore, essential for the day to day operations of the organization and forms the crux of its functionality. The firms in the sample were enquired about the sufficiency of working capital in the organization. Almost one fourth of them reported insufficiency and said that better availability of working capital would enhance their export operations. Numerous reasons were cited for this lack of working capital. The main reason was the increased cost of credit, non-availability of funding, and high collateral requirements. One of the respondents said *"Shortage of credit from the market and tightening monitoring policy from the government is resulting in increased cost of borrowing"*. It was observed that this lack of liquidity was more pronounced in relatively smaller units because they did not have the resources to cater to the collateral or high interest requirements. Similarly, industries which manufacture products that need storage, such as paper, experience working capital problems. Their capital is locked in in higher inventory costs, which leads to longer operating cycles.

An industry wise analysis illustrates that the most serious lack of working capital is experienced by engineering and surgical industry. One third of respondents in the engineering and surgical industry claimed insufficiency. According to one of the respondents *"We need almost 100 percent increases in present working capital"*. Although these industries are well established, the anomaly was attributed to the structure of the business. These businesses face capital intensive production process which shifts a major part of financing to the manufacturing process, thus leaving less funding for working capital. A summary of findings is given below in Table 2.

Discussion of Results

The preceding analysis has established adequately that the small and medium enterprises (SMEs) path to internationalization is beset by a significant degree by obstacles of dissimilar degree pertaining to information and functions. The size of the business and the type of the industry plays its role in factoring the degree of the effect that particular export barrier has on it business. Regarding informational barriers it can be stated that the smaller and less formalized organizations, primarily due to resource constraints, lack proper evaluative structure for exports, and geographical distance poses greater barrier to contacting customers. For these firms, there also remains a lack of awareness regarding 'How to find' sufficient export data to expand business. It is also observed that firms from larger and well established industries are well at ease to employ a wider variety of channels to gauge export opportunities which is contrary to the situation of relatively smaller business export units. Moreover, inaccuracy of export data predominantly stems from the inaccuracy of internet based information, the most widely employed tool, which reduces its reliability.

Table 2: Summary of Research Findings

Informational Barriers	Functional Barriers
Limited Information to Locate Foreign Markets	***Lack of Managerial Time to Deal with Exports***
Plastic, petrochemical and furniture industry face more problems.	Involvement of top management in export is crucial for success.
Information on Interest is not always updated.	Managers of bigger and experienced companies spend more time on exporting.
Personal contact is mot import source but used only by experienced companies.	Managers who consider export important for their business allocate more time.
Unable to Identify Foreign Business Opportunities	***Unavailability of Trained Personnel***
Internet-based resources like marketplaces, website, and B2B portals, etc. are crucial for most industries to locate right connections and promote goods.	One third of firms had issues with the recruitment or availability of trained work force.
Trade fairs are also very popular as they provide contact to a large number of prospective customers at a single point in time and also provide immediate feedback about products and prices.	Engineering sectors is satisfied but food sector with new technology faces problems.
Smaller firms do not have access to trade fairs due to the higher cost associated with participation.	Lack of technical training institutions for craftsman causes shortage for sports goods manufacturers and surgical units.
Inability to Contact Overseas Customers	***Insufficient Working Capital***
Personal meetings, Internet, emails, subcontracting, technological partnerships, wholesaler's indenters and trade fairs are used to contact buyers.	Most firms find it difficult to get working capital due to increased cost of credit, non-availability of funding, and high collateral requirements.
Seminars and publications are also important sources of establishing the first contacts.	Smaller units face more problems due to lack of resources.
Buying agents are another source of contacting the customers.	Firms facing higher inventory and warehousing costs such as paper experience working capital problems.

This table provides a summary of the research findings in this paper.

With respect to functional barriers it is seen that the amount of time management spends on exports, the skill of workforce and insufficiency of working capital act as export barriers. The former is affected in turn by the management philosophy, experience, industry and size of business, division of responsibilities and prioritization of business segments. Alarmingly, there exists a high level of structural unemployment at high tech units with newly adopted technology. Even the availability of skilled labor is a problem due to lower wages, forcing manpower to look for alternatives. The lack of training institutions also deserves due mention. Lastly, the high cost of finance poses the biggest hurdle, causing significant working capital issues in smaller organizations. It is also seen that organizations in the business of manufacturing with excessive storage costs face more problems pertaining to working capital adequacy. These export barriers, firm specific and are internal to the firm, are as important in inhibiting an organizations export performance as external barriers and thereby deserve, in the least, equivocal academic attention.

The results build on several of the studies on export barriers conducted earlier. In line with Leonidou (2004), we also found that management experience and the development level of the industry is a significant factor in determining the severity of barrier faced by its management. Sullivan and Baverschmidth (1989) also concluded from a comparative study between European and U.S paper industry that experienced and committed exporters view many of the operational complexities as manageable rather than overwhelming challenges. Our study confirms that the firms belonging to well established industries or those that have been in the business for significant period of time perceive these informational and functional barriers to a lesser extent than do organizations with little or no experience. Thus, the knowledge of business gained overtime and the familiarity with various limitations to exports prepares these managers on how to handle and tackle them well and they thereby perceive such constraints as less of a threat compared to those with comparatively less experience and exposure. This also confirms the finding of Johansson and Vahlne (1977) who theorized that the most important obstacles to internationalization are lack of managerial knowledge, resources and disinterest in foreign market opportunities. This fact was demonstrated by the furniture industry's lethargic efforts to seek out foreign opportunities. It must be noticed, however, that one of the supposition while studying informational barriers was that firms that have separate organized units for exports outperform other

organizations, after adjusting for the size of the firm. The reason for this is the additional formalized attention focussed on exports translates into better export performance results (Leonidou, *et al.*, 2002). Therefore lack of such formalized structures was given due consideration as a significant trade barrier and it was found that the presence of such a barrier relates to the relative size of the organization and the type of industry. Moreover the study supports the findings pertaining to internal barriers that a firm faces highlighted by Ali (2006) that small firms usually face internal barriers to export which arise from within the organization. Therefore this study has its contribution in establishing that validity of the applicability of internal informational and functional barriers to small and medium enterprise in emerging markets and how the intensity of the effect of such barriers is dependent of type of industry and relative size of the organization. The study also confirms the proposition presented by Bagchi-Sen (1999) that important internal barriers faced by Small and medium enterprises include management time, operating capital, and lack of in house expertise. In addition to the aforementioned, this study points out that formalized evaluative unit for export performance, accuracy and sufficiency of export data and ability to identify and contact customer, if hindered can erect significant barriers to trade, especially in context of emerging markets and developing economies.

The study also, highlights a number of significant insights which were either missing in earlier research or contrary to certain previous notions on certain accounts. Few findings emerge which are contrary to prior generic belief that much can be done internally to reduce the anticipated impact of barriers pertaining to lack of training. The existing research contends that such barriers can be eliminated by setting targets to periodically train employee by setting up training institutions within the organization (Shoham and Albaum, 1995). In the context of emerging markets, specifically small and medium enterprise have access to limited resource capital which is a requisite for setting up such training structures. As can be seen by the responses from the study, the only way for firms operating in emerging economies to counter such barriers would be with the help of government. Uniquely, in the emerging market context, lack of skilled labor, although internal, is the result of an external interplay of forces, which include, reduction in real wages in certain sectors causing a substitution effect for workforce to switch to other high paying industries. Thereby leaving these already less established industries shrinking further.

The findings of this study are useful to exporters who could make changes to the internal functioning of the company as well as provide important guidelines to their employees to make best of marketing effort. However, more importantly the findings can aid government agencies to formulate export promotion policies which could expand export business for small and medium enterprise and reduce export barriers. The effectiveness of export promotion programs targeting SMEs was experienced by Malaysian government (Ayob and Freixanet, 2014).

CONCLUDING COMMENTS

The objective of this research is to determine the factors that hinder emerging market small and medium enterprises (SMEs) from exporting their products abroad. It also chronicles the activities performed by exporters to perform their functions. We used qualitative methods and conducted in-depth interviews of managers and CEOs of 49 SME firms in diverse industries of Pakistan.

It was found that exporting is driven by technology. Internet was the main source of information; marketplaces, websites and B2B portal were used to form connections and promote goods and emails were used to establish contact. However, information on Internet was not always updated. Trade fairs provided immediate feedback about products and prices and served as a conduit to contact a large number of customers at one place. However, smaller firms didn't participate due to higher fees. Involvement of top management is crucial for success of exports but only experienced managers of bigger firms understand this aspect. The non-availability of skilled personnel is faced more by firms needing craftsmen

due to shortage of technical training institutions. Smaller firms find it difficult to get working capital due to increased cost of credit, non-availability of funding, and high collateral requirements.

There are a number of issues surrounding the research that are limiting the generalizability of the research. Firstly, the research was based on small and medium enterprise only and covers only a limited number of industries. Moreover, the sample was random, but a stratified random sampling or sampling based on industry weightage would have been more representative. Also, the research was focussed primarily on current exporters, when some good representation of potential and ex exporters would have additionally been better. This implies a high probability of survivorship bias as only current exporters have been taken into account, thereby the reasons (potential barriers) which hinder firms to expand globally or which deterred exporting firms to halt global operations could not be considered.

Further research is needed with a relatively more representative sample of small, medium and large firms. And a supporting framework of quantitative analysis would aid in gauging the influence of economy wide export barrier in the emerging market context. Moreover, research should address the fact that do informational and functions problems pose hindrance to entrepreneurial globalization. Focus should be on export development in the emerging markets alongside export barriers.

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