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PREFACE

Ask someone to tell you the story of the blind men and the elephant, and they'll tell you a tale of six men, each of whom touched a different part of an elephant, unable to see what their hands were resting on. Asked to describe what they had touched, the man who felt the side of the elephant said, "I touched a wall," and the man who felt the elephant's tusk said, "I touched a spear." The six men argued among themselves-- was it a snake, a cow, a piece of rope? Only when they worked together, sharing their different ideas and experiences, were they able to discover the truth.

Gardy & Brinkman, 2003

The National Academies defines interdisciplinary research as “a mode of research by teams or individuals that integrates information, data, techniques, tools, perspectives, concepts, and/or theories from two or more disciplines or bodies of specialized knowledge to advance fundamental understanding or to solve problems whose solutions are beyond the scope of a single discipline or area of research practice.” The fields of business and economics are very suitable for interdisciplinary research. For this reason, we decided to create an international conference to feature business and economics research that spans more than one discipline. We are very happy to present to you the proceedings of the fourth International Interdisciplinary Business-Economics Advancement Conference. In these proceedings, please find 81 papers or abstracts from 20 different countries in different fields of business. We thank our contributors and reviewers for making IIBA a truly global conference. The provided USB-stick also includes the abstracts and full papers along with the conference program.

The IIBA Conference aims to bring together researchers, scientists, scholars and scholar students to exchange and share their experiences, new ideas, and research results regarding all aspects of Business and Economics, and to discuss the practical challenges encountered in the field as well as the solutions adopted. We are proud to be sponsored in the United States by the University of South Florida Sarasota-Manatee. We extend our gratitude also to our Scientific Relations Coordinator, Mr. Muhittin Cavusoglu for his great contributions to the success of the Conference and creation of these proceedings.

Most importantly, we would again like to thank all of our authors and reviewers for their contributions, without which the IIBA Conference literally would not be possible.

Co-Editors

Prof. Dr. Cihan Cobanoglu

Prof. Dr. Serdar Ongan

May 2015

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The Moderator effect of Consumers' Regulatory Focus on the Relationship between e-Servicescapes, Satisfaction and Behavioral Intention

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Abstract

The emergence of the Internet has redefined to physical environment and has created the virtual service environment; in other words, e-servicescapes. E-servicescapes defines how consumers feel when they visit a web site which in itself is pretty important for such service businesses. E-servicescape in tourism companies (i.e. hotels, food and beverage companies, airlines) is especially important, since a web site provides customers with diverse opportunities to preview the property before they actually visit the location. Based on Stimulus-Organism-Response (S-O-R) and Regulatory Focus Theory, in this study explores the relationships of e-servicescapes (design, ambient and social factors), satisfaction and behavioral intentions. Further, the aim of this study is to determine whether individual differences (prevention focused or promotion focused) have a moderator effect on the relationship between e-servicescape, satisfaction and behavioral intentions. The data was collected from 220 online consumer who used to online food order website. Exploratory and confirmatory factor analyses, partial least squares (PLS) approach were employed to analyze the data.

Keywords: e-servicescape, regulatory focus, satisfaction, behavioral intention.



Carbon Emission Flow in Power Industry and Provincial CO₂ Emissions in China

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Abstract

Accurate calculation of CO₂ emissions in every province in China is the basis for the development of regional energy policies. Based on the carbon emission flow in networks theory, this paper proposes an approach to recalculate provincial CO₂ emissions from the perspective of final secondary energy consumption. This approach attributes CO₂ emissions to final energy consumers after considering cross-provincial secondary energy trading, especially cross-provincial electric power trading in the regional power grid. Given the uneven distribution of energy resources and the imbalance of energy consumption between regions, cross-provincial secondary energy trading in China is significant, especially in the power industry. By adopting the approach proposed in this paper, provincial carbon intensity and corresponding energy policy can be modified to make energy end users pay rather than the primary producer.

Keywords: CO₂ emissions; cross-provincial secondary energy trading; carbon emission flow; regional grid structure.

The Impact of Revised Wage Rate on firm's Competitiveness in the Ready Made Garment Sector of Bangladesh: Case study Comparison between Large Companies vs SME garment manufacturers

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Abstract

The objective of the paper was to critically analyse the impact of revised minimum wage rate on the competitiveness of different size garment manufacturers in Bangladesh. In doing so the paper adopted a case study approach and incorporated data from multiple case study companies. Notably, the paper aims to cover three main areas: industry conditions and its implications on profitability, the critical resources which are giving the large case study firms a competitive advantage and finally the impact of institutional change brought about by the Rana Plaza incident on different case study firms. Using relevant literature from these three areas the paper proposed 3 hypotheses which were in turn tested and re-developed by using the primary data collected from case study companies. The findings from the research highlighted that the profitability of the garment industry became particularly low only after the imposition of minimum wage; however the profitability in mid-market segment is still comparatively higher. The study also identified the two critical resources that are helping the large case study firms to strategize better in relation to tackling the impact of minimum wage, which were “Industrial Engineering Department” and “Vertically Integrated Supply Chain”. Finally the study identified the change in institutional paradigm and stringent monitoring brought about by Rana Plaza incident had a more significant impact for the SME's due to issues such as decoupling which were much easier to pursue previously. Finally the paper also outlined some strategies which SME case study firms could adopt in order to minimize the impact of minimum wage. Notably, the revised minimum wage increase was only implemented from December 31st 2013 and there hasn't been much academic work in relation to the context; therefore the study aims to provide a first-hand overview of the situation prevailing after the minimum wage which could be in turn used for further research in the area.

Keywords: competitiveness, Ready Made Garment, Small and Medium Enterprise (SME), Wage rate, Case Study

Organizational Health in Service Industries

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Abstract

The rapid change in the economy and technology of the world has changed the competition condition in all industries. The coming economic era will require businesses to think about cost, quality, resiliency, velocity and novelty in ways that they have never consider before. Across the globe, leading edge service businesses are adopting a dual focus on organizational health. Give importance to organizational health of the businesses is about having properties and qualities today that create the conditions for high performance tomorrow. Besides, organizational health has its share to contributing to the understanding of healthy behaviors within working environments and identifying parameters that can be cause of health problems. Because the need to raise awareness of this health problems in organization are emphasized worldwide with the aim of adopting direct measures to protect employees' hygiene, safety and advance their mental health cost-effectively for organizations. Healthy organizations typically have a culture which promotes trust, openness and engagement and enables continuous learning and improvement. In a changing internal and external environment, the profitability of a hotel is increasingly dependent on the extent to which an organization and its members are able to transform and adapt to these changing circumstances more effectively than their competitors. The "fittest" employee is who has the ability to adjust adequately to these rapid changes and can remain undistracted from external factors. Furthermore such a person manages to cope with negative effects of stress. In short, organizational health directly increases the productivity and profitability of the businesses. In this study, the concept of Organizational Health in Service Industries was investigated because of the importance and sensitivity.

Keywords: Organizational health; employee satisfaction; employee efficacy; employee morale; employee stress.

Literature Review

The literature presents two perspectives, both considered valid of the degree of organizational health (Birkinshaw et al., 2008): 'new to the state of the art', which means there is new to the adopting organization. Both perspectives view organizational health as a significant improvement in past management activities and competences designed to favour a closer alignment with the competitive environment. Organizational health refers to the generation or adoption of management processes, practices, structures or techniques that are new to the company and affect its performance in terms of innovation, productivity and competitiveness (Birkinshaw et al., 2008). Therefore, organizational health involves:

changes in the way of doing the work is involving a departure from traditional processes and in techniques. The literature shows a consensus that these changes can constitute one of the main sources of competitive advantage for firms, given that they are context-specific, complex, ambiguous and hard to replicate.

Organizational health concept seeks to improve performance and productivity through improved alignment. Organizational health reflects two perspectives (Nickson, 2007: 228-232). The first one is organizational performance, based on the organization performing as an interacting system and other one is employee well-being in term of employee satisfaction (Campbell et al.,2007). The positive organization climate on has been defined as one which the individuals and groups that comprise it reach homeostasis or equilibrium in their capacity for growth (Bruhn and Chesney, 1994).

The culture of an organization influences employee behavior. Organizational culture is established widely by the leaders of an organization. When leaders change, the culture also changes. Changes in employees also modify an organization's culture. A healthy culture is more team-oriented than territorial. This culture is competitive enough but these organizations provide freedom to negotiate boundaries in order to accomplish organizational as opposed to individual goals. Every employee in a healthy organization is an investment and helps strengthen the entire (Frankel, 1992). Some measures of organization health are productivity, morale and loyalty. Task-effective organizations tend to be healthy for their members. Efficient task performance is rewarding and increase confidence and self-esteem. Healthy organizations don't wait for change. They initiate change, encourage change and renewal. As a result change usually can be directed and the effects of change can be controlled.

Organizational leaders should make their values and expectations explicit. Employees know what is expected of them and know how they can contribute to the organization's goal. The essential factor of management style is to embody the environment of workplace. Collaborative decision making, participative management, delegation of authority and responsibility and the encouragement of feedback by the leadership send employees the message that they are valued, trusted and the chance to try again. The leaders plan prioritization and monitor their progress toward achieving goals. Organizational health has characteristics that distinguish it from product innovations. On the one hand, management innovations are basically introduced to improve the efficiency of the organization's internal administrative processes, while the goods or services tries to satisfy external demands (Walker et al., 2010).

Employees directly contribute to maintaining a organization when they are valued and feel in control and effective at their jobs. Employees feel invested in an organization when they feel free to take risks and can contribute ideas for the organization's improvement. Employees are encouraged to be creative, to learn new skills and to assume greater responsibilities. This is reinforced when employees are given feedback on their performance and employee rewards are made explicit. The reward system in healthy organization implies restitution, valuing the work of employees, developing programs like



child care, flex time etc. both the organization and personnel needs (Jackson, 2005; Barker and Gower, 2010).

The literature emphasizes the role of human capital as an antecedent of knowledge creation and innovation. A high level of knowledge, abilities and skills favors' better use of information, rapid learning, and the effective application of what was learnt, all of which contribute positively to innovation (Little et al, 2007). Similarly, employees with high levels of knowledge will probably be more receptive to new ideas and changes (Boeker,1997). Furthermore, high levels of human capital are associated with more tacit knowledge, familiarity and efficiency, which reduce the perception of risk and favor change (Bruno et al., 2008). In addition, when employees have high levels of knowledge, the combination and exchange of this knowledge will be more productive, creating more knowledge (Smith et al, 2005). Thus, organizations with better human capital can improve their capacity to handle the complex processes that accompany change and create new knowledge (Smith et al.,2005).

Without organizational health, organizations can reflect, for example, lack of direction and accountability; misalignment of priorities; and poor coordination in and between systems and processes causing both costly inefficiencies and ineffectiveness. This organization can also demonstrate low employee commitment and disengagement as reflected in the costs of dissatisfaction, damaging conflicts, suppressed resentment, unnecessary absence, turnover (Rosen and Berger, 1992; Frankel, 1992).

The organizational structure and culture can be influenced by the personality of the leader. But all neurotic organizations are not run by neurotic leaders. However, the personality of leaders can create pathological symptoms at the whole organization. The negligence and lack of provident care cause to inflexibility and intolerance of change within the organizational climate and this can make the organization ill. Because of the neglected and increase of over time, the organizations become incapacitated. The symptoms of ill organization can be observed easily by outside of an organization than within (Jackson, 2005).

If employees take minimal risks and do only what is necessary to do their jobs, a culture of mistrust can be in control of a majority in an organization. This kind of atmosphere puts people on guard to protect their zone and creates a defensive climate. Because of the lack loyalty to others and to the organization, criticisms and grievances are increased. Employee comments about the organization, their jobs and the leadership (Frankel, 1992; Rosen and Berger, 1992; Jackson, 2005). If the organization serve the psychological needs of leaders who need to satisfy their own egos and ignore the realities of an organization, this organization becomes worst. These leaders reward employees who cater to their needs and are vindictive toward employees who do not. Also they do not permit line officer in an organization to do their job without close supervision. In this organization, leaders may continue to exert tight control while advocating empowerment or total quality management (Campbell et al., 2007). Employee behavior is often the most obvious way to diagnose in this organization. If employees have the attitudes of anger, apathy low morale, pessimism and passive aggressiveness, this organization may not be . Also employees show little

loyalty toward the organization, little enthusiasm for their work in unhealthy organizations (Rosen and Berger, 1992).

According to many authority this elements mentioned organizational health more frequently than others:

Leadership: The leaders in this organization must manage the change effectively. Corporate restricting affects the employees and leadership is measured by the leaders' ability to secure their employees' commitment and motivation and to develop their employees' skills. Effective leaders think strategically and communicate organizational values in credible terms. Also they create a climate of mutual trust and respect and encourage their employees' initiative (Lifson, 1984; Little et al., 2007).

Employee commitment: It is important for managers and staff to share the same values. When the employees understand the organization' mission, representation, goals, they support its strategic orientation and leadership style, they proud to identify with the company. They feel involved in operations and work as a team towards the success of the organization. High level of trust increase employee morale, promote innovation and taking risk. This helps the organization manage change effectively (Barker and Gower, 2010).

Rewards and recognition: Employees at all levels want to feel appreciated. Praise or to thank makes them feel valued and improve organizational health. Organizations are searching for innovative ways to motivate and reward staff (Morley and Heraty; 1995).

Communication: No organization can survive, without good communication. Communication must be transparent, timely and complete. It must be present at all levels of the organization so that information is shared from top to bottom. Employees need to feel free to discuss matters and make suggestions (Morley and Heraty, 1995).

Competence and skill development: Organizations acquire skilled workers through skill-specific recruitment programs and in-house training. Staff renewal must be an ongoing concern as skill requirements change continuously. To keep up with the competition and with technological advances, managers provide opportunities for ongoing training and more diversified career paths for employees. Employees follow scientific and technological developments to improve their performance (Barker and Gower, 2010).

Teamwork: teamwork means that the organization recognizes the importance of its human resources. With teamwork and distributed decision making, employees feel that they are making a meaningful contribution to the organization (Hargie et al., 2002).

Ability to adapt: An open management style supports the people who are affected by the changes. The organization needs to have all stakeholders participating in the change process, either by agreeing to change or by helping to implement change. Managers must involve all employees in developing strategies that make it possible to achieve corporate objectives. (Barker and Gower, 2010).

Methodology

It is expected that there are an important relation between worker and business demographics characteristics and the organizational health of hotels businesses. Thus, our research shows whether there are differences between demographics factors and the rating of the organizational health of hotels.

The purpose of this study was to investigate features of effective hotels in Konya, Turkey. In this research, the situations of the organizational health of hotel business certified by Ministry of Tourism were put forward. Based on an exploratory study, primary data collection method was used basically. To measure the organizational health, 20 items scale Rosen and Berger (1992) was used. The questionnaire consists of all closed questions. For developing the questionnaire's questions, nominal, ordinal and interval scales were used.

Population and Limitations of the Research

The subject population of this study was 14 hotels located in Konya, Turkey. The research was conducted on 200 employees. These hotels were preferred because they are upscale hotel businesses in this area. The other reason is that these hotels do their activities professionally. There are several limitations in this study. First, certain hotels in Konya were selected for the research. Second, limited individual and organizational demographic data were selected (e.g., individual: age, gender, educational level, position, Organizational: total guest rooms). Third, a narrower scale was used in this study. A broader scale should be used for measure the organizational health.

Analysis of Research Data

Descriptive statistics, t-tests and ANOVA analysis were used to analyze the employee survey data from the study. Analysis of variance (ANOVA) was used to analyze differences in current position, length of time employed in current hotel, education level, age and gender ratings to examine whether significant differences existed among the hotels. The data were transferred into SPSS statistical package for analysis. Statistics were computed using the SPSS for Windows. Descriptive statistics including frequencies and means, standard deviations, and variances were computed for all variables.

Findings and Assessments

Present research states that the situations of effectiveness of the hotel businesses predict that whether the hotels have healthy or not. Thus, the perceptions of workers were evaluated. For this evaluation, some demographic characteristics were used. In the light of these considerations, the relationship between demographic characteristics and the organizational health was tested. Test results are shown in second part: about hotels and individuals. The hotels' operating period ranged from 1 year to over 29 years with the mean of 13 years. The information about hotels' the number of stars is given in table 1. Hotels in the present research have a minimum size of employee are 4 and a maximum size of 185. Thus, hotels were classified into three categories: small sized business, medium-sized business and large-scale business (see table 2). It was determined that the hotels' guest rooms ranged from 28 rooms to 278 rooms. Hotels are divided into three categories according to their room numbers (small-sized, medium-sized and Large-Scaled). Data findings of these categories are shown in Table Y. Furthermore, it was investigated Hotels'

beds number. Results show that hotels' beds numbers ranged from 60 beds to 554 beds with the mean of 240 beds (see table 3).

Table 1: The Profile of the Hotels

	Frequency	Percent
3*	42	21,0
4*	118	59,0
5*	28	14,0
Boutique	12	6,0
Total	200	100,0

Table 2: The Hotel Size According to the Number of Employees

	Frequency	Percent
Small Business (1-49 persons)	122	61,0
Medium-Sized Business (50-149 persons)	50	25,0
Large-Scale Business (150 and over persons)	28	14,0
Total	200	100,0

Table 3: The Hotel Size According to the Number of Room

	Frequency	Percent
Small Business (1-49 Rooms)	42	21,0
Medium-Sized Business (50-149 Rooms)	104	52,0
Large-Scale Business (150 and over rooms)	54	27,0
Total	200	100,0

The majority of respondents participating in the study were employed in the front-office (43 %) and food and beverage departments (25 %). A total 152 males (76 %) and 48 females (24 %) participated in this study. The subjects' ages ranged from 16 years to over 55 years. 78 respondents (39 %) Bachelor's degree from two-year or four-year colleges. The length of the employment ranged from a minimum of less than a year to a maximum of seven years and over. Results are shown in tables 4.

Table 4: Participants' Demographic Data

	Frequency	Percent
CURRENT POSITION		
Senior Manager	20	10,0
Mid-Level Manager	36	18,0
Personnel	144	72,0
LENGTH of EMPLOYMENT		
Less than One Year	52	26,0
1-3 years	66	33,0
4-6 years	50	25,0
7 years and over	32	16,0
EDUCATION LEVEL		
Primary School	36	18,0
Middle School	66	33,0
University	78	39,0
Graduate Education	20	10,0

AGE		
16-25	68	34,0
26-35	80	40,0
36-45	30	15,0
46-54	12	6,0
55 and over	10	5,0
GENDER		
Males	152	76,0
Females	48	24,0
DUTIES AND JOB TITLES		
Purchasing	16	8,0
Human Resources	8	4,0
Food and Beverage	50	25,0
Front Office	86	43,0
Accounting Unit	18	9,0
General Manager	6	3,0
Housekeeping	16	8,0
Total	200	100,0

In this exploratory study, it is investigated that whether the organizational health of the hotels in Konya changes according to the demographic data or not. Perceived the organizational health was hypothesized to differ based upon demographic characteristics of employees and hotel businesses. The research hypotheses tested in this Project provide the importance and sensitivity of the organizational health. Based upon the review of literature and the study objectives, the following hypothesizes were tested:

- H1:** There will be significant differences between employees' perception of the organizational health and the profile (number of stars) of hotels
- H2:** There will be significant differences between employees' perception of the organizational health and the number of employee
- H3:** There will be significant differences between employees' perception of the organizational health and employee position
- H4:** There will be significant differences between employees' perception of the organizational health and the length of employment
- H5:** There will be significant differences between employees' perception of the organizational health and the educational level of employee
- H6:** There will be significant differences between employees' perception of the organizational health and the gender of employee.

Employees and supervisors provided demographic information and completed the organizational health scale. A demographic section was included at the top of the questionnaire. This section was divided into two parts: general information about hotels and employees. The first part (about hotels) consisted of the number of stars in the business, total number of employees, guest rooms, hotel beds and year of establishment. The second part (about employees) included: position, length of employment, education level, age and gender. The qualitative data obtained from this questionnaire was used to explore differences in organizational health among hotels. Data were collected from fourteen hotels

located in Konya, Turkey. A total 220 (62.8 %) of 350 questionnaires were completed and returned to the researchers. Twenty questionnaires were not used in the data analysis because they were completed failed by employees. Thus, this left a total available sample of 200 (152 males, 48 females) for this study. The employees responding to the questionnaire included general managers, branch managers, assistant branch managers and employees (senior manager, mid-level manager, personnel). A total department is purchasing, human resources, food and beverage, front office, accounting unit, senior manager, and housekeeping. Employees and supervisors were asked to rate their overall the organizational health (20-items scale) using a 5-point Likert scale ranging from (1) never to (5) always. To measure the employees' perception of the Hotels' organizational health, the researchers utilized the Rosen and Berger (1992) and Altun (2001) and Gül (2007) scales and adjusted the scale to measure the OH of Hotels in Konya. The data were transferred into SPSS statistical package for analysis. Statistics were computed using the SPSS for Windows 16.0. Data related to Cronbach Alpha and general evaluations of the OH scale are shown in Table 5.

Table 5: General Assessment and Cronbach Alpha of the Organizational Health Scale

	Mean	Std. Deviation	Items	Cronbach Alpha
The Total of Organizational Health Scale	4,14	0,68	21	0,926

(i) n=200, (ii) 5-point Likert scale (1) strongly disagree (5) strongly agree (iii) The values of Cronbach Alpha indicates that the score of the scale can be calculated on total scores.

To test the hypothesizes H1, H2, H3, H4, ANOVA tests were applied. To test the final hypothesize, Independent Samples Test was used.

Table 6: The Organizational Health Perception According to Hotel Profile

	N	Organizational Health Perception Scale	
		Total	Std. Deviation
3*	42	4,28	,44
4*	118	4,10	,77
5*	28	4,11	,56
Boutique	12	4,12	,66

(i) n=200, (ii) Anova test shows $F=0,352$ and $Sig=0,788$.

Hypothesis primary stated that there will be significant differences between employees' perception of the organizational health and the profile (number of stars) of hotels. ANOVA was used to analyze differences between the organizational health and the profile of hotels. Therefore, this hypothesis was not supported ($F=0,352$ and $Sig=0,788$). Higher level of the organizational health did not relate to the profile of hotels.

Table 7: The Organizational Health Perceptions According to the Hotels' Size of Their Number of Employees

	n	The Total of OH Scale	
		Mean	Std. Deviation
Small-Sized Business (1-49 Persons)	122	4,17	,65
Medium-Sized Business (50-149 Persons)	50	4,10	,82
Large-Scale Business (150 and over)	28	4,11	,56

(i) n=200, (ii) Anova test shows $F=0,113$ and $Sig=0,893$.

Hypothesis two asserted that there will be significant differences between employees' perception of the organizational health and the number of employees. ANOVA was utilized to detect any significant difference between the organizational health perception and employees' number. The hypothesis was not supported by the data ($F=0,113$ and $Sig=0,893$).

Table 8: Perception of Organizational Health According to the Participants' Position

	n	The Total of OH Scale	
		Mean	Std. Deviation
Senior	20	4,19	,65
Mid-Level	36	4,28	,47
Personnel	144	4,11	,73

(i) n=200, (ii) Anova test shows $F=0,515$ ve $Sig=0,599$.

Hypothesis three suggested that there will be significant differences between employees' perception of the organizational health and employee position. To determine whether there are differences or not, ANOVA test was run. ANOVA test shows that there are no differences between the perception of HO and the employee position. For this reason, this hypothesis was not confirmed ($F=0,515$ and $Sig=0,599$).

Table 9: The Perception of Organizational Health According to the Length of Employment

	n	The Total of OH Scale	
		Mean	Std. Deviation
Less than one year	52	4,11	,73
1-3 years	66	4,17	,71
4-6 years	50	4,04	,73
7 years and over	32	4,32	,40

(i) n=200, (ii) Anova test shows $F=0,563$ and $Sig=0,641$.

The forth hypothesis proposed in this study is that there will be significant differences between employees' perception of the organizational health and the length of employment. The results of ANOVA test shows that there were no differences between the perception of organizational health and the length of employment. Hypothesis four was rejected ($F=0,563$ ve $Sig=0,641$).

Table 10: The Perception of Organizational Health According to the Educational Level of Employees

	n	The Total of OH Scale	
		Mean	Std. Deviation
Primary School	36	4,29	,519
Middle School	66	4,03	,75
University	78	4,25	,65
Graduate Education	20	4,03	,72

(i) n=200, (ii) Anova test shows $F=0,979$ and $Sig=0,406$.

The fifth hypothesis proposed in this study is that there will be significant differences between employees' perception of the organizational health and the educational level of employee. To the ANOVA test, results showed that there were no differences between the perception of organizational health and the educational level. Hypothesis five was not supported by the data ($F=0,979$ and $Sig=0,406$).

Table 11: The Perception of Organizational Health According to the Gender of Employees

	Males (n=152)		Females (n=48)		Independent Samples Test	
	Mean	Std. Deviation	Mean	Std. Deviation	T	Sig.
The Total of the Perception of OH Scale	4,16	0,71	4,10	0,57	0,354	0,724

The final hypothesis proposed in this study is that there will be significant differences between employees' perception of the organizational health and the gender of employee. Independent Samples Test shows that there were no differences between the perception of organizational health and the gender of employees. The final hypothesis was also not supported ($,724$).

Conclusions

In the Turkish economy, the service sector have a critical aspects. More importantly, one of the most important factors to provide this development is hospitality industry. Organizations in this industry are making efforts to improve their inside and outside characteristics. To achieve this purpose, organizations pay attentions to some factors such as open communications, employee involvement, learning and renewal, valued diversity, family and work life balance, meaningful work, environmental protection, teamwork, leadership, etc. These factors are related to the organizational health of businesses. The features of businesses have an impact on employees' perception of the organization. One of the outcomes of the features of business is employee performance. Therefore, it is important to understand what predicts employee performance in organization environment. In conclusion, the research presented here contributes to knowledge on organizational health.

The focus of this issue has been on the link between demographic factors of employee and hotel business and the situations of the organizational health of the hotels. Hence, six hypothesizes were put forward. It was expected that there would be significantly

differences between employees' perception of organizational health and some demographic features (the profile of hotels 'number of stars', number of employee, employee position, the length of employment, the education level and gender). H1 stated that there were no relation between the organizational health and the profile of hotels. Results indicated that three, four or five stars hotels don't determine the rating of worker's perceptions of organizational health of the hotels. H2 asserted that there is a relationship between the number of employee hotels owned and the perception of organizational health. But analysis outcomes show that there is not a ratio between the number of employee and organizational health perceptions. H3 stated that there would be significant differences between employee position and organizational health perception. However, whatever the position the staff have, there weren't found relationship between senior manager, mid-level manager, personnel and the perception of organizational health. The authority person has doesn't impact his perception of organizational health. Employees' working length may be short or long. It may have an impact on organizational health and effectiveness. But, H4 wasn't support this argument. Person's education level may be high or low. It can be said that his level of education affects his level of perception of organizational health. It may be considered that the person who have higher education have negative assessments about the degree of organizational health in hotel businesses. Yet, H5 wasn't supported. The sex of the staff may effects many factors. It can be said that women assess the situations more sensitive than men, which may affect their level of perceptions of organizational health. But, H6 didn't support this argument. In summer, all of them were not supported. Consequently, the results suggested that there were no differences between the perception of the organizational health and demographic data about hotels and employees. The research stated that the majority of hotels had high scores of the organizational health. But these high scores of organizational health are not determined by the demographic characteristics.

A significant limitation of this study is that this study only investigated whether the differences between the organizational health and some demographic information about hotels and employees. The researchers suggest that employees evaluate the organizational health of hotels. This study contributes to the literature by emphasizing the organizational health as an important factor between employees' morale and hotel success. Employee perceptions of the organizational health allow them to understand what is important to the organization and lead to the development of individual perceptions of climate.

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Determinants of Adoption of Clean Energy Source: The Case of Biogas in India

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Abstract

Biomass is an important source of energy supply in rural India and altogether they supply 75 percent of the domestic energy in India. Biogas is an important alternative to firewood and Government of India has taken several policy measures to encourage the adoption of biogas plant across India since 1962. But the picture is not encouraging. The study proposes to find out factors which affect biogas adoption in rural areas on the basis of a nationwide data set. Using firthlogit, the study finds that income of households, number of animal in a household, size of land holding and education level affect biogas adoption positively and significantly. Demographic factors such as family size have not been found to important impact on biogas plant adoption. But social grouping based on caste negatively affect biogas adoption. The study concludes that community biogas plant and media may be effective in creating an enabling environment for biogas adoption in India.

Keywords: biogas, firthlogit, India human development study

Introduction

Biomass is an important source of energy supply in rural India and altogether they supply 75% of the domestic energy in India (Prasad, 2013). Nearly two thirds of Indian households use fuels such as firewood, dung cake, charcoal, agricultural residue for their cooking need (Census, 2011). Cooking with traditional solid fuels on open flames or traditional cooking stoves may result in exposure to extremely damaging toxic pollutants (Duflo et al., 2008). As a result it may affect different ages of people such as women and children disproportionately. Indoor air pollution caused by inefficient biomass combustion may result in low birth weight, increased infant and perinatal mortality, pulmonary tuberculosis, nasopharyngeal and laryngeal cancer, cataract, and, specifically in respect of the use of coal, with lung cancer (Bruce et al., 2007; Hankey et al., 2015).

Some of these problems associated with biomass combustion can be ameliorated with the use of biogas. Biogas disaster produces a gas flow that is about 60-70% methane gas which, when burned in a simple cooking stove, is likely to produce minimal levels of respirable particulate and much reduced quantities of CO (Semple, 2014). Hamburg et al. (1999) finds

in an experiment conducted in Henan Province, People's Republic of China that Sulfur dioxide levels in cooking areas where coal and stalks were used were found to average about four times higher than for biogas. The author recommends biogas for ameliorating indoor air pollution. Studies have reported that use of biogas may result in reduction in reported cases of eye infection, headache, cough and other respiratory diseases along with blood pressure (Katuwal et al., 2009; Neupane et al., 2015) finds that biogas use may reduce the risk of cardiovascular diseases among older female cook.

The literature has shown that biogas has some other benefits as well. Use of biogas may reduce expenditure on energy (Xionhua et al., 2007; Laramee et al., 2013, Bedi et al., 2015). Adoption of biogas has the potential to increase employment on large scale (Mwakaje, 2008). In case of India Lohan et al. (2014) finds that biogas may be very helpful in colder region like Kashmir provided it is technically superior to fit the geographic and climatic condition of the region. Raha et al. (2014) find that biogas is able to provide sufficient amount of fuel for cooking in a few villages of Assam, India. There are evidences in India that biogas use reduce the quantity of fuelwood use for cooking, kerosene for lighting and diesel fuel displaced through the use of a biogas fuelled dual-fuel engine for motive power (Sinha et al., 1990; Kandpal et al. (1991).

The responsibility of biogas proliferation was assigned to Khadi and Village Industries Commission (KVIC) in 1962. Subsequently, the government of India introduced the National Program on Biogas Development (NPBD) in 1981 under the auspices of the Ministry of Non-Conventional Energy Sources (MNES) with an aim to bring energy access to rural areas for household cooking using cattle dung and other biomass wastes. In 2005, the MNES was renamed the Ministry of New and Renewable Energy (MNRE) and the NPBD was renamed the National Biogas and Manure Management Programme (NBMMP). The recent estimates show that almost 47.5 Lakh biogas plants have already been installed in the country upto 31st March, 2014. During the year 2014-15, a target of setting up 1,10,000 biogas plants has been set. The Ministry provides subsidy for family type biogas plants at different rates depending on location and social groups (MNRE, 2015).

In spite of having so much positive gain from biogas plant the adoption rate in India is not encouraging. India Human Development Survey (IHDS) in 2004-05 finds that only 167 sample household possesses biogas plant out of 27,010 sample household in rural areas of India. The obvious question that arises in such a circumstance is about the effectiveness of policy measures. But it is not necessary that problem always lies with the policy. Similar to other household level interventions, biogas plants face a range of constraints and barriers to their introduction and continued use. The need to have suitable land for installation of the equipment and a number of animals for the supply of waste is a significant barrier for the very poorest in many communities, while the upfront purchase costs of materials for the digesters can also represent a considerable fraction of household income (Semple, 2014). Besides demography of the household is a critical factor to determine biogas adoption decision as manpower is needed to maintain the biogas plant.

Therefore, the present study proposes to find out factors which affect biogas adoption in rural areas on the basis of a nationwide survey. To the best of our knowledge no study has

been conducted at national level in India to study the determinants of biogas adoption. Using firthlogit the study finds that socio economic factors play dominant role in adoption of biogas technology.

Methodology

Data source

The present study uses the IHDS of 2004-05. It is a nationally representative, multi-topic survey comprising 27,010 rural and 13,126 urban households. The sample was drawn using stratified random sampling and they are spread across 1,503 villages and 971 urban blocks (NCAER, 2014). This data set is cross sectional and has been prepared jointly by a team of representatives of the University of Maryland (UM) and the National Council of Applied Economic Research (NCAER), New Delhi. The survey has covered 33 states and union territories out of thirty five during that year in India. Therefore, it can be said that it is a nationally representative survey.

The study reveals that 167 rural households use biogas and the highest number of households comes from Madhya Pradesh. It might happen because it is one of the largest states in terms of population and area. Moreover, a report of Government of India (GOI) shows that 100 percent target has been achieved in Madhya Pradesh during 1999-2000 before the commencement of the survey (GOI, 2002). The study takes into consideration the rural households and discards all missing values related to biogas use. Therefore, the study covers only 13,317 households.

Variables determining adoption of disaster

Adoption of technology at household level is a complicated process. Therefore, explanatory variables used in the adoption process have often lacked a firm theoretical basis. Besides economic incentives there are possibly other issues like social, personal, physical, and institutional factors (Walekhwa et al., 2009). The variables that the proposed study takes into account to explain the variation in adoption of biogas has been mentioned in table 2 with the expected signs. The variable selection is based on review of existing literature ((Walekawa et al., 2009, Kabir et al., 2013, UKAID, 2012, Bond, 2011, Luthra et al. 2015, Schmidt et al., 2014, Soland et al, 2013).

Income: Adoption of any technology involves cost. The higher position of biogas in energy ladder hypothesis implies that as its adoption has a correlation with rise in income (Gosens et al., 2013). Therefore, household with larger income may be expected to have greater probability to adopt biogas disaster compared to poorer counterpart.

Number of livestock: Animal excreta are an important fuel for the biogas plant. Although in theory any type of biomass can be degraded to biogas, cattle dung is especially suitable as a substrate due to the presence of methanogenic bacteria in the stomachs of ruminants. It has been reported rural households in India require four to five cattle to feed a 2 m³ biogas plant, around the smallest available (Bond, 2011).

Land area owned: Land area owned by the household was expected to have a positive effect on the decision to adopt biogas. For a biogas unit to run effectively and efficiently, animal units and fodder components need to be close to each other. For this to occur, a household must have a minimum land area threshold that can accommodate them.

Education: The number of years of education of household head is expected to have a positive relationship with adoption of new technology. More educated household heads are more exposed to information and aware of indoor air pollution. They are more likely to adopt biogas than their less educated counterpart.

Social group: Almost every society in the world has social grouping. In this system some are more privileged and some are less. The less privileged class lags behind. In the context of India social grouping has been made on the basis of birth. Generally the scheduled caste (SC) and scheduled tribe (ST) are deprived and backward. Besides, the government gives higher subsidy to these groups of people for biomass adoption (NABARD, 2014). Therefore, social groups have been taken into consideration to control for heterogeneity that arises in society.

Awareness level: Awareness level increase if a person is exposed to media. Newspaper, radio, magazine, television are some of the medias that create awareness about latest technology (Luthra et al., 2014). Lack of adequate awareness may result in lack of interest in a particular technology.

Family size: Size of household was expected to influence the adoption decision either positively or negatively. A large family often has a large number of working members and thus more labour for routine biogas operation and maintenance activities. Therefore, with sufficient number of animal and area size a bigger family is more likely to adopt biogas than smaller family.

Child ratio: it shows the age composition of the family. A big family with many children and a few adults are less likely to adopt biogas due to non-availability of labor supply.

Empirical model

In this study we want to study the factors that affect the adoption decision of biogas which takes value '1' for adoption and '0' for non adoption. As a result the dependent variable is categorical and logistic regression. In this kind of regression, the dependent variable is a logit which is the natural lag of the odds (Kabir et al., 2013). Thus,

$$\ln\left(\frac{p}{1-p}\right) = \alpha + \beta X \quad (1)$$

Here, the probability of occurring the adaptation is p and

$$p = \frac{e^{\alpha + \beta X}}{1 + e^{\alpha + \beta X}} \quad (2)$$

Where e is the base of the natural logarithm and α , β are parameters to be estimated. X is the vector of household characteristics. The empirical model to be estimated is as follows

$$P_r(Y) = \frac{1}{1 + e^{-(\alpha + \beta X)}} \quad (3)$$

Y is the logit of the dependent variable. Such estimation techniques apply MLE but in our case the occurrence of adaptation is a rare case which is 167 out of 13,317. Therefore, we use penalized likelihood ratio. Firthlogit analysis is being conducted by using STATA 13.

Table 1: Description of Variables Included in the Analysis

Variable	Type	Description	Expected sign
Income_log	Continuous	Monthly income of the household	+
Education_log	Continuous	Highest education among adult household measured in terms of year	+
Livestock_log	Continuous	Number of cows,	+
Area_log	Continuous	Land holdings measured in Bigha	+
Awareness	Categorical	Measured in terms of exposure to any type of media including radio, television, newspaper (1=exposed, 0=otherwise)	+
Caste	Categorical	Whether belongs to scheduled caste or scheduled tribe (1=SC/ST, 0=otherwise)	-
Bank_account	Categorical	Household with a bank account (1=household has a bank account, 0=otherwise)	+
Children_HHsize_ratio	Continuous	Number of children in the family/total family members	-

The study takes into account only the rural areas as the incidence of biogas adoption is only nine in number in urban areas. Dummy variables have been created for social groups, bank account and awareness. The data gives information about exposure of the male, female and kinds to newspaper, radio, television. We take into account the exposure of the male member as they are the decision maker in the family. If the male is exposed to at least one media, then it is assumed that he is aware of the real world.

Results and discussion

From the descriptive statistics shown in table 2 it is clear that biogas adopters are relatively affluent. They have higher income, more animals and larger size of land holding. They are more aware of the negative consequences of smoke that may arise due to firewood combustion.

Table 2: Descriptive Statistics of Households

Variables	Household with biogas plant (mean value)	Household without biogas plant (mean value)	Total
Highest adult education	10.59	6.87	6.92
Household size	7.20	5.83	5.85
Area owned (Bigha*)	57.11	27.11	27.49
Monthly fuel expenditure including electricity	302.75	166.91	168.60
Expenditure on electricity	295.38	141.81	144.35
Mean value of animal size	5.26	4.38	2.85
Media	73.051	75.853	75.821
Chulha_harmful	70.65	65.17	65.2%
Annual total income	128600.00	44485.00	45539.47

SC/ST	10.77	27.69	27.50
Children_HHsize_ratio	0.31	0.28	0.28

* Bigha= 0.4005 acres

Source: Author's calculation

It has been found from literature review that biogas plant should not have higher expenditure on fuels but it has been found from the data set that they spend more on fuel and electricity. The decomposition has shown that they spend less on cooking fuel but more on electricity which is a superior fuel. In comparison to other forward castes there are few SC/ST people who adopt biogas. From the results (Table 3) it is clear that biogas adoption is affected by the economic condition of the household. This is clear from the fact that all variables representing economic condition have been found to be significant. The first variable representing economic condition is income. A household with more income has more likelihood to adopt biogas. This is natural and the energy ladder hypothesis explains the same. As a household become richer and richer s/he shifts from inferior fuel to superior fuel. The second variable is the number of animals in the household. Larger number of animal positively and significantly affects biogas adoption. As the animal waste production increases there is more fresh input for the plant and increases gas production of superior quality. The third variable is the size of land holding. The results show that biogas adoption is significantly and positively affected by biogas adoption. This positive causal relationship is an expected one.

Table 3: Firthlogit Estimates of Factor Affecting Bio Gas Adaption

Explanatory variable	coefficient
Bank account_dummy: 1 if yes, 0 otherwise	0.164 (0.176)
Log_animal	0.560*** (0.108)
Log_monthly income	0.258 *** (0.088)
Log_adult education	1.047*** (0.268)
Children_HHsize ratio	-0.560 (0.531)
Caste_dummy: 1 if SC/ST, 0 otherwise	-0.527* (0.276)
Log_family size	-0.039 (0.224)
Media_dummy: 1 if exposure to media, 0 otherwise	-0.321* (0.189)
Log_area	0.273*** (0.058)
Constant	-9.144*** (0.830)
Penalized log likelihood = -631.31, Wald chi2 = 133.93 <0.00	

Figures in parenthesis represent standard error

**** and * indicate statistically significant at 1% and 10% level respectively*

Dependent variable is adaption of bio gas (1 if yes, 0 otherwise)

It has been hypothesized that level of education positively affects biogas adoption. The study shows that higher education level of the male in the family positively and significantly affects biogas adoption. As the level of education increases knowledge grows and people may think about alternative technology. Besides, rise in the level of education may increase the potential to earn more income and accordingly it increases the probability that a household adopt biogas.

While talking about the comparison between less privileged and forward groups in the society it has been found that in spite of special packages the SC/ST people are less likely

to adopt biogas. Several factors may be responsible for this. The mean value of highest adult education of SC/ST categories has been found to be 5.23 years which is much lower than mean value for all categories of respondents as reported in table 2. The same applies to the size of cattle, area owned and income [mean cattle size=2.72, income=Rs.30771.11 and area owned=17.428 (in bigha)]. They are less exposed to media as well. Therefore, this social group is less likely to adopt biogas due to insufficient amount of assets in spite of subsidy. Further, according to Nesmith, (1991), biogas technology appears to be associated with status and wealth, and was observed most commonly in top income groups in a study in West Bengal, eastern India. (This association with wealth may well be a hindrance to the wider dissemination of biogas technology amongst groups who may view themselves as perhaps not fully entitled to it).

Media has not been found to be a significant variable and it is contrary to our hypothesis. Rather media has been found to play a negative role in biogas adoption. In the extreme cases it is possible only when media does not give coverage to issues related to rural energy needs and biogas adoption. Nag et al. (2005) has mentioned that exposure to biogas promotion through media may be useful for uptake. Similarly, family size has not been found to generate any significant and positive impact on biogas adoption. This is contrary to our hypothesis. But it has been found that the average size of family is larger than non-adopters. Similarly, the ratio of children to total family size has not been found to be a significant variable. It shows that age composition has nothing to do with adoption of biogas in India. It might be possible because in rural areas labour is easily available in short notice.

Conclusion

This paper addresses the factors of biogas adoption in rural India. It adds to the literature because it provides comparative picture by taking into consideration a larger sample size from different parts of India. The findings of the study clearly show that socio economic factors play important role in biogas adoption behavior. But demographic factors have not been found to be important as family size does not have any impact on biogas plant adoption. The study has clearly shown that biogas plant owners are economically stronger. Therefore, the government should take more aggressive schemes to set up more biogas plant so that the under privileged class may make best use of the opportunity. In this direction community biogas plant may be more effective where households without cattle may also participate by contributing labour hours for maintaining the plant. In this regard media should play an important role. It has been found from the data set that more than 70 percent of the respondents have exposure to media. This is an advantage to reach and inform people about the positive benefits of biogas plant. There is need to highlight the success stories in other parts of country or abroad (Walekha et al., 2009). There is no doubt that most policy measures emphasis on up gradation of technology and finance mechanism. But this case from India has clearly demonstrated that mere policy measures may not produce positive results. Rather there should be emphasis to create an enabling environment so that people become aware of benefits of the technology and the incentives given by government. In this regard formation of committee at grass root level in the leadership of village headman may be effective.

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Spillover Effects of the US Financial Crisis on Asian Equity Markets

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Abstract

A prominent feature of the 2008 financial crisis is that the crisis started in the US financial sector and rapidly spread, spilling over into other sectors of the economy as well as other countries. As a result, there are collapses of the financial institutions, stock market crashes, liquidity problem on the credit market. Furthermore, this crisis affected economies as well as financial markets in the world. The equity prices in the world, for instance, dropped more than 20% in three months following September 15, 2008. Capital market integration or contagion has been one of the important issues in international finance that interest both international investors and policymakers. In fact, knowing the level of market integration allows investors to improve their portfolio performance through diversification with less correlated assets, and helps the policymakers to plan adequate policies for internal capital markets in the event of global economic and financial crisis. Asian equity markets have become attractive to international investors given that they have high prospects for economic growth. In this paper, we focus on the Newly Industrialized Economies –Hong Kong, Korea, Singapore, and Taiwan - and China. These economies experienced a rapid industrialization with a potential growth of not only the quantity but also the quality of their products, reaching international markets. China, the second largest economy, is also included in the study due to its spectacular growth performance over the last two decades. In addition to higher growth rates, these economies play an increasingly influential role in the global financial system with their rapidly developing financial markets. As a result, it is interesting to examine how these markets are affected during the current global financial crisis. In view of the increasing interest for information on the degree of stock markets integration in the aftermath of the 2008 financial crisis, the objective of this study is to investigate the transmission of the US financial crisis to financial markets in China, Hong-Kong, Korea, Singapore, Taiwan, analyzing before and during the 2008 financial crisis period. In particular, the study aims to empirically examine whether the cross-market linkages between these markets change due to the crisis over the period of January 2006 to March 2009 using daily data. This paper employs unconditional correlation coefficients and DCC - GARCH model to answer the above question. It is very important to understand and monitor the dynamics of correlation between the US and Asian markets for portfolio decisions and asset allocations for international investors as well as for policy makers to maintain financial stability. The results show that there is no regime shift in mean equation of the correlation coefficient during the financial crisis. It may imply there are no mean spillover effects of the US financial crisis on the NIEs stock markets except the case of Singapore. However, there are volatility spillover effects of the financial crisis sparked in 2008 from the US and NIEs markets.

Keywords: contagion, spillover effects, DCC-GARCH, the US financial crisis



IFRS Regulation and M&A Synergy

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Abstract

This study examines the effect of the mandatory adoption of IFRS on M&A synergy in 17 European countries. Using market-perceived M&A benefits as a proxy for M&A synergy, we find that for cross-border M&As between publicly-listed acquirer and target firms, the acquirers' M&A synergies increase after IFRS adoption when both parties are from countries with high implementation credibility, and decrease when the target firms are from countries with low implementation credibility. Acquirers' synergies also decrease for cross-border and within-country M&As between public acquirers and private target firms. Synergistic gains for target firms and total M&As are consistent with those of acquirers. The results suggest that a lack of credible IFRS implementation in the targets' home countries and decreased information comparability between public and private firms negatively affect M&A benefits.

Keywords: IFRS adoption; M&A synergy; implementation credibility.



It's About Time: Effects of the Affordable Care Act Dependent Coverage Mandate on Time Use among Young Adults

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Abstract

One of the main purposes of the Patient Protection and Affordable Care Act (ACA) is to enable Americans to make more productive use of their time. This is apparent in the rationale given for the ACA's extension of dependent care coverage, which requires employer-sponsored insurance plans that cover the children of insured workers to continue to cover these dependents until they turn 26. In the Federal Register, the Administration states that providing health insurance for these dependents should "decrease the cost-shifting of uncompensated care onto those with coverage, increase the receipt of preventive health care and *provide more timely access* to high quality care" (italics added). In addition, it will permit "greater job mobility...as their health coverage will no longer be tied to their own jobs or student status". A number of studies have examined the effect of the dependent care coverage provision on uninsurance, health, and healthcare utilization among young adults and their labor supply. None that we are aware of has directly examined effects on time use. If, as suggested by prior work, the provision reduced the amount of time young adults work, the question arises, what have these adults done with the extra time? A related question is whether the change made them better off. We use the American Time Use Survey from 2003-2013 to answer these two main questions, providing several contributions to the literature on the ACA. First, we present the most accurate estimates of the effect of the dependent care provision on time spent working. Second, we are the first to examine the effects on time use other than working, such as going to school, obtaining medical care, and pursuing leisure-activities. Third, we measure how the provision has affected young adults' self-reported levels of stress, happiness, sadness, sense of accomplishment, and tiredness, collectively called "Subjective Well-Being". While measuring effects of gaining insurance on young adults' *objective* well-being (i.e., health and finances) are certainly necessary, an equally valid question and component into benefit calculus relates to whether the beneficiaries of the law themselves think it has improved their lives. Models are based on difference-in-differences (DD) and DDD frameworks, comparing conditional trends in outcomes among affected young adults and among states that already had similar provisions prior to the ACA with alternate sets of control observations. We ascertain that the pre-policy trends between the treatment and control groups are balanced, and subject the estimates to various specification checks. Preliminary results suggest that the ACA's dependent coverage provision has reduced job-lock, as well as the duration of the average doctor's visit among persons ages 19-25. The latter effect partly reflects a substitution from hospital ER utilization to greater routine physician care. The extra time has been re-allocated into socializing, and to a lesser extent, into education and job search. Availability of insurance and change in work time appear to have increased young adults' subjective well-being, enabling them to spend time on activities they view as more meaningful than those they did before insurance became available.

Keywords: affordable care act; healthcare; labor supply; time use; well-being; medical care



South Africa's Broad Based Black Economic Empowerment Initiative: A Tool for Fostering Diversity or Not

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Abstract

This research examines the contribution of the Broad Based Black Economic Empowerment (BBBEE) Act to fostering diversity within organisations in South Africa. Preliminary findings through in-depth review of literature revealed that, despite the fact that the objectives of this Act being similar to the primary aim of diversity management, there are numerous controversies behind this Act about its operationality in achieving its aim and its possible contribution in reinforcing discrimination resulting from societal power shift. Hence, the backlash effect on beneficiaries of the Act and reverse discrimination on the non-PDI's (previously disadvantaged individuals). This drove the researcher to evaluate the Broad Based Black Economic Empowerment initiative as a diversity initiative that has gone beyond managing diversity to fostering diversity. It therefore, introduces a framework for fostering diversity which will be used as a guideline in developing the Fostering Diversity Index questionnaire. This is part one of two investigative studies which will be establishing a relationship between the BBBEE and diversity management, explaining the possible disconnect between government regulations and internal affairs of organisations as well as introducing the framework of fostering diversity. It hopes to evaluate the BBBEE Act's if it is productive, counterproductive or neutral with regards to fostering diversity

Keywords: broad based black economic empowerment; fostering diversity; managing diversity



Using Kano's Model to Explore the Minimum-demand of LCC Airline Service

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Abstract

In this study, we classified the minimum-demand service elements for low-cost airline (LCC) passengers by Kano's model, to narrow down LCC's finance. In order to focus on LCC users, 426 questionnaires was surveyed only in two short-distance routes airports, TSA International Airport and KHH International Airport. Two major suggestions are listed as follows. First, Delayed frequency, ticket booking procedures and the meals offering are in quadrant II, these are basic and most important factors for LCC, means that if the airline companies provide optional services above-mentioned for travelers, it will increase travelers' satisfaction. Secondly, the entertainment equipment offer, number of lavatories, checking luggage, and luggage lost insurance are in quadrant I. These factors will help LCC lower down dissatisfaction.

Keywords: LCC airline service, Kano's model, minimum-demand

eMarketing Adoption in Tourism and Hospitality Industry in London: Industry Analysis and Some Narratives

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Abstract

eMarketing is a set of methodologies used for marketing products or services on online channels. This article outlines a shift of marketing principles, including conventional to more technology centric methods to decode the online business world. Theoretically, eMarketing eliminates geographical boundary led limitations as being totally '*global*' by narrowing down risks of traditional marketing. Newer forms of technology are continuously embraced in eMarketing as an effective representation of online marketing strategies. The acceptance and substantial expansion of eMarketing promotes user awareness as it is taken as a benefit from online marketing. The shift from traditional to online marketing platforms is viewed as a giant improvement in technological advancements in recent years. London is a cosmopolitan city that attracts visitors from all over the world and creates genuine scopes for tourism and hospitality business expansion. Visitors will differentiate in terms of selecting culinary and gastronomic experiences. Their choices and preferences also vary symmetrically. This study particularly concentrates on the Diffusion of Innovation (DOI) Theory of Everett Rogers (1962), where specific stages of an innovation have been defined and identified. This qualitative study is aimed at outlining the dynamics of eMarketing in tourism and hospitality in London. The five stages of DOI are: innovators, early adopters, early majority, late majority and laggards. Industry report reviews that personal observations and interviews with visitors are the dominant data collection method. Results outline that eMarketing is a productive outcome of internet that supports diverse technological innovations amongst nearly all consumer segments. Thus, this is convincing that eMarketing continues to evolve over the years through the adoption of more advanced technological innovations. Results show that internet is the most crucial mean to help exist, promote and expand a tourism and hospitality business enterprise. Internet effectively aims at reaching target customer bases and attaining their loyalty. This is important to ensure that a tourism and hospitality business enterprise is getting the maximum outcomes from eMarketing, even in complex and interactive market settings in London. The proper use of eMarketing does not solely rely on already professional expertise but also acquire and enhance through more practices and interactions with consumer bases. Therefore, the study identifies eMarketing in tourism and hospitality industries in London staying as the Early Majority Stage.

Keywords: tourism, e-marketing, technology



Distortions in Oil Contract Allocation and Environmental Outcomes in the Presence of Corrupt Behavior

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Abstract

The paper examines how corruption can distort crude oil contract awards and environmental outcome. It provides a generalized model that can be used in any oil-producing country to understand the various distortions that may arise when the principal government officer (bureaucrat) is corrupt. The theoretical model suggests that the *H*-type oil company wins the contract in the first-best case (a benchmark case where there is no corruption and the oil contractor decides who produces and by how much). In second-best case where the uncorrupt government official is assumed not to have control over the choice of output, the *H*-or *L*-type oil firm wins depending on the environmental damage caused by oil exploration. In this case, the government gets a higher share of the profit but with a higher environmental damage if the contract is awarded to the *H*-type and gets a lower share of the profit with lower environmental damage should the low type win the contract. The government official gets zero if the contract is awarded to anyone. So, the choice of who wins the contract will essentially depend on the government environmental concern. The following three points provides a vivid summary in the presence of corruption: (1) corruption essentially lowers the weight on environmental damage or raises the weight on the firm profit; (2) higher corruption would mean *H*-type is more likely to be chosen and (3) crude oil production is more responsive to price when corruption is higher. Using monthly time series data from February 1994 to December 2008, results show that any positive shock in the crude oil price would imply an increase in production, much so when corruption is higher.

Keywords: crude oil production, environmental priority, corrupt behavior, government's share of profit



Essays in Behavioral Economics Factors Affecting the Labor Supply of Registered Nurses 2008-2013

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Abstract

The demand for healthcare professionals such as registered nurses (RNs) is derived from the society's overall demand for healthcare and it is expected to increase over the next decade in United States as a result of mainly population related factors such as population growth and aging of the baby boom generation and government policies of supporting the expansion of the health insurance coverage. Three main aspects make the RNs labor market interesting to policy makers. Firstly, United States has been dealing with a shortage of nurses for several decades at various degrees. Secondly, medical care has become increasingly expensive and total medical expenditure is increasing proportional to GDP. Thirdly the vast majority of nurses are woman, therefore the RNs market is interesting in terms of analyzing female labor supply in general. A considerable amount of economic research had been devoted to understanding the shortage and predicting the labor supply of nurses. National Sample Survey of Registered Nurses (NSSRN) has been conducted from 1980 to 2008 by the Department of Health and Human Services (DHHS) and the Health Resources and Services Administration (HSRA) every 4 years. The NSSRN had been the primary data source of many economic research to analyze labor market of RN's until 2008. In this study, American Community Survey (ACS) is used to analyze labor supply of RNs. The authors aim to compare the results obtain from ACS with the previous study results done by using NSSRN data. This paper presents estimations the RN's labor supply determinants in 2008, 2010 and 2013. The factors cause RNs work or not work decision and how many hours they allocate to work is investigated through selection modeling. The RNs preference of work hours is described by labor supply elasticity of wage. Selection bias is corrected for and separate equations are used for participation and labor supply. The importance of environmental factors will also be discussed as well as their effectiveness as a tool to predict the labor supply.

Keywords: health economics, labor economics, labor supply, registered nurses



Research on Tourism in India: Analysis of Journal Publications

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Abstract

Tourism in India has emerged as a major catalyst in sustainable development because of its strong forward and backward linkages with other prominent sectors of economy. It earned US\$ 17737 million foreign exchange in 2012 with a 7.1% annual growth rate (Government of India, 2013). This growth motivated researchers, policy makers and professionals for better understanding of tourism industry in country. Unfortunately for international audience, there is no research journal that focuses solely on Indian tourism. In view of this importance, present article reviewed the literature of Indian tourism and hospitality from 1981 to 2012. This paper provides an overview of 168 papers appeared in major academic databases Content analysis includes information about 1) journals and its publisher 2) Themes and Disciplines 3) Performance of institutions and universities 4) Authorship 5) Coverage of Research Regions 6) Types of tourism and 7) Methodological Discourse. The findings indicate that research themes have become more diversified and productivity of universities and institutes located in India is continuously increasing. A trend of multiple authorship and more advanced methodological techniques has been found.

Key words: tourism; research; databases; content analysis; India.



Re-examining the Impact of Hotel Complimentary Offers with Spatial Panel Approach

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Abstract

Many hotels package complimentary offers such as free breakfast, parking, and Wi-Fi access with the room under a single price. These supplementary offers may not be the main determining factor for hotel choice, but are considered to inflate the room rates. Recent trend in the lodging industry suggests that complimentary offers may play the role as big selling points for hotels. Therefore, not providing complimentary offers could yield competitive disadvantage for a hotel compared with hotels that do offer these benefits. Despite the extensive use of complimentary offers as a marketing tool, the effects of complimentary offers on hotel performances have received little attention from researchers. Previous research in the hotel industry have found that occupancy rate, revenue per available room (RevPar), and average daily room rates (ADR) are effective measures to examine hotel performances. This study will examine the impact of complimentary offers on hotel's occupancy rate, RevPar, and ADR, using data for 850 hotels in Houston, Texas. A single hedonic equation model with ordinary least squares (OLS) analysis will be used to estimate the effects of complimentary offers on hotel performances. By estimating complimentary offers as well as cross-price responses among hotels differentiated in many dimensions such as location, quality, amenities, and size, this study is expected to provide evidence for the significant role of complimentary offers in hotel price competition. With the model developed in this study, hotel operators can examine whether their complimentary offers produce positive returns on hotel performances.

Keywords: complimentary offers, hedonic pricing method, spatial panel approach, price competition, differentiation



How Millennials Utilize Social Media Websites to Select Luxury Hotels

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Abstract

Social media websites are becoming an important marketing tool in the luxury hotel industry segment. Meanwhile, Millennials, the heavy users of social media websites among all age groups, utilize the social media websites as an important decision-making tool. Millennials will become the major market for luxury hotels in the near future. In order to attract this group, luxury hotels need to capitalize on various social media websites. The purpose of this study is to investigate how Millennial's travel needs are addressed on these social media website by the luxury hoteliers.

Keywords: social media website, luxury hotel, Millennials



Analyzing Current Trends of Wineries' Involvements with Social Media

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Abstract

Social media has increased rapidly in the last decade and continues to grow in popularity. In the wine industry, social media is currently becoming a significant factor. Social media is a great advertising tool for wine marketers to engage with wine consumers in the world. Although the importance of social media involvement in the wine industry is broadly acknowledged, current research should focus on trends of social media involvement by wineries. The purpose of this study is to investigate the level of social media involvement by wineries, based on current statistical trends. Using the online source (www.vintank.com) for secondary data, this study will analyze online traffic towards top 50 wineries, specifically the number of likes on Facebook, along with the number of tweets and followers on Twitter. Mainly, this website shows social media involvement ratios based on the number of fans and followers during a certain time period, therefore a longitudinal study is well-suitable to conduct the trend analysis in the wine industry. According to this analysis, this study will show the current trends of involvement on social media, and determine the social media health brands possess in the wine industry. In particular, the wine industry will be able to see a single glance of current trends and adopt strategies of social media engagement and involvement in the wine industry.

Keywords: wine industry, winery marketing, social media



Using Social Media as a Recruitment Tool: Views of Students at a Hospitality Program

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Abstract

In the last decade, the importance of online marketing has grown in higher education. Social media is an increasingly important online platform, offering numerous marketing tools that allow institutions to interact directly with prospective students. Despite the rising importance of social media in college recruitment, college administrators do not always know how to effectively utilize this tool. In order to utilize social media as an effective tool in recruitment, administrators need to understand how prospective students use social media. With the aim of furthering this understanding, this study investigates how prospective college students at a university utilize social media to navigate the decision making process in selecting adequate hospitality programs. The data will be collected in spring 2015, at a large public southwestern university in the United States. The respondents will be 250 college students who are currently enrolled in the hospitality management program at this university. The findings of this research study may suggest better methods to utilize social media as an effective marketing and recruitment tool for colleges and universities. Moreover, this study will reveal that social media will give opportunities to demonstrate genuine students' voices about their own experiences or opinions in the selection process of a hospitality program. These findings reinforce that with deep social media engagements, prospective students will have a strong tendency to utilize social media as a decision making tool when choosing a hospitality program. At the same time, social media will give an opportunity for hospitality programs to address prospective students' specific needs and wants in the recruitment process.

Keywords: social media, recruitment, higher education, marketing

Exploring the Boutique Hotel Guest Experience

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Abstract

The growing internet usage stemming from the development and enlargement of technology created a different communication platform between consumers and brands and user e-reviews on the internet became more important than ever. Another emerging issue that determines the success of organizations is their ability to create positive experiences to their customers. Tourism in general and hospitality industry in particular are experience intensive services. Small hotels serving in the hospitality industry relatively have limited physical facilities and capacity, yet they are expected to compete with their branded and larger competitors offering various amenities in their facilities. The boutique hotels in Istanbul have been able to create such positive guest experiences and charge much higher rates than industry average. Therefore studying the characteristics of guest experiences created by boutique hotels is important in order to reveal components of experiential value. The aim of this study is to explain the importance of classification of internet e-reviews in the context of boutique hotels in Turkey. Although guest e-reviews and their impact on guest experiences are important, little attention has been paid in the literature. In this study, the importance of guest e-reviews in terms of accommodation establishments will be explained through a qualitative phenomenology by analysing guest comments posted on tripadvisor. The comments posted by guests in social media are considered as experiences since they are remembered after the stay and are worth to be shared with others. Being memorable and worth to share with others are typical characteristics of customer experiences. The collected data after this netnographic study is content analysed. A typology of these reviews and implications are offered.

Keywords: boutique hotels, customer experience, guest e-reviews, electronic word of mouth.

Introduction

By the vertiginous development of technology the number of web users has grown rapidly. Internet has also seen as an alternative distribution and marketing channel by organizations. As Palumbo and Herbig (1998) stated, it offers organizations inexpensive, and sophisticated tools for advertising, taking and placing orders, promoting their philosophies, and communicating with their customers all over the world. For Harridge (2004), it's a new type of marketing strategy because of its differences from traditional. Web sites as a relative new communication mediums between businesses and customers

give chance to users not only reading comments but also create them. Being able to access to information at any time, first-hand shared experiences and low cost are the prominent features of internet.

Information technologies has been effective especially in the tourism industry (Karamustafa & Öz, 2010). Touristic product is consisted by the combination of numerous factors such as accommodation, transportation, food and beverage and is also time-sensitive and required to coordinate with each other (Bayram, 2008). Although internet is a new communication and alternative distribution channels used by travellers and travel suppliers, it has a vital importance for the tourism sector (Law, Leung, & Wong, 2004). Canatan(2011), states that the rate of people who make the reservation on internet increasing and also sixty five percent of people making research before they go to holiday. According to Uygur (2007), benefits of the internet to users can be divided into three groups:

- **Easiness:** Internet users have freedom to make a reservation at the time they want without any place and time limitation.
- **Information:** Users can easily get information about the goods or services they want to purchase anytime and compare them with other companies goods and services.
- **Price:** When users buy goods or services via the internet, they may think that they will face lower prices. Additionally, they can make price comparisons with other goods or services in the same group.

In a hotel business if the quality of services don't satisfy the customers those unsatisfied customers usually complain (Barlow & Moller, 1998). The disruptions of services are reflected by the customers as a complaint are considered as an opportunity to improve the quality of service and the elimination of faults (Kozak, 2007).

Importance of customer reviews

If complaints are well managed then those can be considered as a useful guide for organizations. Complaints are evaluated as an opportunity to help to rectify the relationship between customers and business (Kozak, 2007). After determining the reasons of customer complaints business managers can make some changes for better customer satisfaction with diverse methods such as the creation of new products or improvement of products and services that cause complaints and in-service training in order to improve employees' productivity. Customers' positive reviews can also contribute to businesses to attract the potential customers. Therefore the investigation of word of mouth is necessary particularly in hospitality (Kozak, 2007).

E-wom (electronic word of mouth) in tourism

Through easy accessible resources such as internet, customers have ability to make research about goods and services before to purchase any products or services. For this reason, internet became one of the emerging efficient e-Wom tools (Jeong & Jeon, 2008). Internet has also become important for the tourism sector as in other sectors due to increasing education and knowledge levels of individuals, unlimited knowledge that can be shared through the internet from anywhere and anytime, customer e-reviews can be analyzed by the relevant businesses and potential customers easily. In the intangible service industries such as tourism, the encountered problems like the difficulty of setting standards

and creating customer satisfaction, the importance of customer e-review as a part of e-WOM has increased (Litvin, Goldsmith & Pan, 2008). In addition, intangible products have risk for customers because they cannot be evaluated before consumption. As a result, individuals collect information before making their purchase decision (Sarışık & Özbay, 2012).

Purchasing decision is an unrepeatable and a sensitive process that also can be affected by the opinions of other consumers. For instance, consumers to determine the destinations go for the holiday pay attention to other customers e-reviews via internet. Thus, people have opportunity to reduce the risk of encountering unexpected situations. (Kwon, Bae, & Phelan, 2011).

Nowadays, tourists often use the internet at the stage of travel planning. The belief that websites contains information about travel are beneficial leads to tourists to visit those before they visit destination. According to Ye, Law, Gu and Chen's (2011) research seventy four percent of respondents travelling for the leisure make plans by considering the e-reviews of other clients and the quantity of travels has been affected by e-reviews represent the ten billion dollars.

Tripadvisor as an e-Wom tool

TripAdvisor is a website serving the international travellers to help them improve their travel experience and help for their holiday plans. It connects 60 million visitors to a direct booking tools monthly, it has 44 million members, hosting more than 150 million visitors review, and the importance of TripAdvisor for travellers as well as businesses is becoming more powerful. E-reviews made by the users with the publication on the site may give direction to many people's travel plans. Therefore, tourism businesses desire to be integrated with TripAdvisor, in order to sustain and protect the brand values, should take into account the negative reviews made about them besides the positive ones (TripAdvisor, 2014).

If businesses do not consider negative e-reviews, guests will feel ignored and "snowball" effect may emerge. Thus companies should pay attention to comments about their services otherwise the company's brand image might suffer and this can affect market share and revenues over time. In order to avoid adverse effects businesses should closely monitor negative and positive e-reviews made by users on websites such as TripAdvisor and respond to these e-reviews. Particularly satisfied customers make an effective contribution for businesses through social media (e-WOM).

Another importance of TripAdvisor's for accommodation businesses is *Travelers' Choice Awards*, established in 2002. Travelers' Choice Awards are "*The highest honor TripAdvisor can bestow. The only travel industry awards based on millions of reviews and opinions from travelers around the world...*" (TripAdvisor, 2014). This award is given on various topics such as satisfaction, quality, service, accommodation, travel routes "best of the best" are selected with this awards (TripAdvisor, 2014).

Description of Research Unit: Boutique Hotels

According to Turkish Ministry of Culture and Tourism, boutique hotels are defined as hotels that have at least ten rooms and represent local authenticity with its architectural design, decoration and tools in the context of services and offers high quality and customized services with trained staff (Resmi Gazete, 2011). The boutique hotels become popular among travellers with high spending who look for individualized services rather than a jakuzi in the room. Although today the number of boutique hotels approached five hundred in Turkey, this number is expected to be increase rapidly (TUROB, 2006).

Method

In this study, qualitative approach was used and individual experiences that are shared on social media were content analyzed through procedures of phenomenology. Due to the nature of phenomenology; it examines people's experiences, responses to events or concepts and/or perceptions to diverse situations. In the list of 'Travellers' Choose Top – 25 Turkey' e-reviews made about boutique hotels on TripAdvisor has been categorized and the importance of e-reviews for boutique hotels is emphasised.

Sample

The sample in this research was selected, among the users that commented on boutique hotels in the list of "Travellers' Choose Top 25 – Türkiye" which TripAdvisor website had published between 2013 November and 2014 November, only the e-reviews of those who have "Top Contributor" title have been examined. In this context, 170 guest's e-reviews are evaluated. The criteria in determining the users is of having more than 50 comments, and being a "Top Contributor".

Results

A total of 170 different user's e-reviews are examined and 6 main topics are identified. In the next section, the findings of the research are presented within the framework of title. In the research, users and boutique hotels are named as user 1,2,3,... and (boutique) hotel 1,2,3... in order to protect their anonymity.

Location

In order to take advantage of touristic services, customers have to go to where the product is served. In contrast to other sectors distribution channel works reverse due to inseparability feature of touristic products (Kozak, 2014). As a result of Ertugral's (1998) research in 4 and 5 star hotels in Istanbul, accommodation enterprises are separated from other businesses due to components like "touristic attractiveness" and "having the characteristics of the regions".

As a result of findings obtained from examined e-reviews, it was observed that there is connection between holiday experiences of hotel guests' and the hotel's location. By he examination of 151 positive comments, some traits such as being located near to touristic attractions, being accessible by various transportation means, being away from the intensity of the traffic, located in a quiet area and having a unique view of the city affect accommodation experience positively.

For example, for (Hotel 1) “*The boutique hotel is very centrally located, less than 10 minutes walking distance from the Blue Mosque, 20 minutes from the Grand Bazaar. The area was very safe to walk*” (User 1) expression was used. For (Hotel 2), “*Location is perfect, in the historic center.*” (User 2) was used.

Rooms

When hotel rooms are designed for the accommodation enterprises it is important to use materials that will be able to complete the image they want to create in the minds of customers and compatible with each other (Yıldırım, Akalın, & Çağatay, 2008) as well as building design, the importance of having original interior design and comfort, image and some other factors of designing process of the hotel rooms are important and should be considered.

Wakefield and Baker (1998) has divided to categories based on various physical properties of general atmosphere of places and they have stated that these categories have effects on the customers staying longer such as being pleased and excited.

150 positive comments about the rooms reveal that the guests staying in the hotel pay attention to width and design of the hotel rooms and diversity and quality of the materials used.

For example, it’s commented for (Hotel 3) by (User 3), “*The rooms are very interesting. They are very spacious especially the bathrooms with marble and large Jacuzzi tubs.*”. (User 3) considered the quality of materials as a positive impact on guests. It’s commented for (Hotel 4) by (User 4), “*I had a cave room, which exceeded my already high expectations as I had reviewed the property on tripadvisor and other media publications. They even had an iPod with lovely music loaded on it in the room*”. Based on the statement of (User 4) we may say that small details are also important to satisfy the expectations of guests.

Presentation of food and beverage

Tourists willingness to taste local food is an important motivator (Buyruk & Şahin, 2002). The quality, presentation and the variety of food and beverage in the hotel were evaluated in different ways by different guests. This result is obtained as the result of 147 positive and 17 negative comments.

For instance, the comment for (Hotel 5) is made by (User 5); “*The breakfast at the rooftop restaurant was very good*”, and (User 6) also commented “*The breakfast terrace is a great way to start the day with sunshine...*”; (User 7) commented for same hotel “*Breakfast is a problem. The room itself is fine and a very pleasant place to eat. The cold stuff is all very good although a bit limited so if you are staying for several days it would get a bit boring. However, the hot foods are dire. Firstly they are not kept hot - a single small candle beneath a large dish is not good enough. Secondly the egg dish can be terrible!*”.

Service

Production and consumption often occur simultaneously in service industry. This is a condition that prevents inspection of product quality (Çabuk, İnan, & Mutlu, 2007). It is relatively more difficult to create quality standards than the physical product due to feature of intangible and simultaneous consumption of services. It also makes it difficult to standardize due to the human element is an integral part of the service. For instance, the motivation of the employees that providing services and their capabilities varies time to time which leads to changes in consumer perception of quality (Öztürk, 2003). Keaveney (1995) examined customers' behavior preference to another enterprise in the service industry and he stated that behavior of employees has a significant impact on customers and as a result of the behavior and attitudes of employees customers may choose other enterprises.

Akan (1995) has made a survey to understand the dimensions of service quality in 4 and 5 star hotels in Istanbul and as results of this study he has revealed that there are seven factors affects the service quality. These factors has been listed as employees' kindness and skills, abilities, being able to communicate, physical abilities, being able to understand and get to know customers, speed of service, problem solving ability and reservation speed and accuracy.

In relation to the guests' reviews about services they had purchased, 164 positive and 4 negative comments reported. Positive reviews are about warm welcome, free refreshments, quick check-in and check-out procedures, friendly, attentive and helpful attitude of employees. Negative reviews are about too late preparation of orders in à la carte from expected time restaurant and delays of airport transfers.

For example, reviews for (Hotel 1) like, “*We loved the hotel. The staff were exceptional particularly.*” (User 8); “*Staff is very professional and English speaking and always willing to help.*”(User 9). Another review is “*The staff was very attentive and helpful, always greeting the guests with a smile. When we arrived at the hotel, we were given a briefing about what to see and do in Istanbul.*” (User 10).

Cleanliness

In the hospitality facilities common areas can increase the possibility of spreading of bacteria. For this reason to comply with hygiene conditions during service offering and fulfilling the duties of housekeeping department is crucial in order to create a healthy environment (Kozak & Dönüş, 2005).

Housekeeping department in hotel business works for providing a clean atmosphere appropriate to hygienic conditions that tourists can feel themselves peaceful, comfortable and in safe (Schneider, Tucker, & Scoviak, 1999). Some factors such as the quality of the materials used in the decoration of rooms and cleanliness of rooms may contribute to ensure satisfaction and have a positive impact on the customers of accommodation businesses (Dasher & Neimeier, 1984).

E-reviews related to cleanliness perception of guests are examined and 49 positive and no negative comments are found. We can summarize the findings about the cleanliness in three categories as cleanliness of lobby, the common areas and the rooms. Details about the cleanliness of rooms can be listed as cleanliness of sheets, pillow covers, minibars, wardrobes, nightstands and whether curtains are ironed or dusty. Also some findings reflect that cleanliness, fragrant and spotless are important issues for customers.

For example, it's commented for (Hotel 6) by (User 11): *'The bathroom was also to a high standard with one of the most powerful showers I have ever experienced. This plus the main bedroom was cleaned well every day and fresh towels and bedding supplied also daily.'* (Otel it's commented also for (Hotel 3) by (User 12):, *'The hotel is immaculately clean, the rooms are very good sized, modern and clean. The bathroom might be a bit small, but everything worked well, good water pressure, and again everything very clean.'*

Prices

The price is one of the most important criterion to determine the rate of profit of accommodation businesses. While making decision about the price it is essential to find the balance between tourists desire and businesses necessities. In this context, if the price is far above the level of the tourists may pay, tourist will not opt this hotel in this case and it will decrease profitability (Çetiner, 2002). Price is one of the most important factor sin customers decision-making process (Petrick J. , 1999). It should be noted that a satisfied customer is not always loyal for brand.

In this study 170 different e-reviews analyzed and 11 e-reviews about prices were found. Comments were about high prices in the boutique hotel but those comments also reveal that this high price can be tolerated if high quality services are provided.

In comments made especially for boutique hotels in Istanbul's historical peninsula, guests stated that prices in restaurants and souvenir shops are high. However, comments also reflect that those prices are worth for provided services.

For example, for (Hotel 7), *'Is not a cheap hotel but I would definitely recommend it if it fits with your budget.'* (User 13); *'It's not a cheap hotel but for a special occasion worth the price for all the pampering you get. First class experience.. worth every penny!'* (User 14) comment was used.

Conclusion

Based on the obtained data, the proximity of facilities to touristic attractions, as well as accessibility and being able to find transportation means easily, to be built in a quiet and secure location are attractive factors for tourists who staying in boutique hotels. In addition, if hotel employees can give information about where tourists want to go, foreign language skills and their ability to communicate create positive effect on tourists.

Yıldırım, Akalın, & Çağatay, (2008) stated that physical properties such as design, editing, visual effects, place, atmosphere have positive impacts during the process of customer evaluation of service they purchased. Also Bitner (1992) divided service environment into

three groups as atmosphere, space design, signs and symbols in his study. The hotels in this study used high quality materials, free nuts plates in the corridors, or free wi-fi which were reflected in guest comments on tripadvisor.

Food and beverage choices differ among tourists however regardless of their cultural background and trip motivation all tourists are curious about local food. The findings confirm that guests staying in a boutique hotel attaches importance to physical features of some areas such as restaurants. It is also observed that the lack of food service can be ignored. Various tastes and different local food were also mentioned by travellers.

The quality of service is also important in order to meet customer expectations and create customer satisfaction. The research results show that the a warm welcome, free refreshments, courtesy and humour and helpfulness of the staff had positive impact on customer' satisfaction.

The cleanliness and hygiene factors must be handled carefully by hotels to create a safe and healthy environment. As a result of the study, the cleanliness of the materials used in the room and common areas, cleanliness of bathroom have a positive impact on customer satisfaction. To ensure clean, quiet, hygienic, comfortable and reliable service will provide customer satisfaction.

This study aims to categorize guest e-reviews based on their own experiences in boutique hotels but does not emphasises the importance of these categories or the effects of these categories on consumers' behaviour. Further quantitative researches can reveal the importance of these factors, the relationship between loyalty and satisfaction based on the categories presented in this study. Further research may also focus to provide solutions to enterprises about the negative e-reviews and thus provide important feedback.

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Network Characteristics of Collaborative Marketing Efforts at Hospitality Business

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Abstract

The studies conducted showed that in destinations in competitive and complicated environments such as tourism, businesses often develop collaborative relationships in order to gain rivalry advantages and consequently benefit from network advantages of businesses operating destinations. Collaboration is defined as the key strategy for tourism destinations and managements to be used for short resources and for meaningful and holistic experiences to meet tourists' needs. Especially, in tourism sector, where byzantine structure exists among businesses, businesses addicted to each other in creating total experience increase the importance of collaboration. Because of this importance, collaboration at tourism destinations has been a topic investigated frequently since 90s. However, most of these studies focused on collaboration among destinations and businesses at destinations with a more static and autonomous point of view. Today, it is a general-accepted approach where the activities of businesses are influenced by the social context where also the other businesses are embedded. Therefore, it is accepted that using methods focusing on interaction creating a certain structure and framework is appropriate to examine the collaboration between a destination and its actors such as the network approach. Nevertheless, it is observed that although the number of studies focusing on social network approach for collaboration at tourism sector, the number of studies are still limited. Hence, the aim of the study is to analyze the collaborative network among hospitality businesses, public institutions and non-governmental organizations in Eskisehir, which is developing in terms of tourism, within the scope of marketing efforts of businesses operating in tourism sector. In this study, the general collaborative network among hospitality business and other tourism business (catering and travel agencies), public institutions related with the sector, associations and NOG examined. Ucinet and Netdraw were used for developing and visualizing social network. Degree-centrality and betweenness centrality were employed to analyze the data.

Key words: collaborative marketing, social network, hospitality business.

Introduction

Collaboration has become a quite important topic in today's dynamic and hyper competitive market environment. Collaborations was defined as a key strategy for tourism management for the use of scarce sources with holistically and individually meaningful experiences to meet the needs of tourists (Zach and Racherla, 2011: 28). Petit (1975: 53)

defined collaboration as “the will of an individual to work together with other individuals for an aim”. Wood and Gray (1991: 146) defined collaboration as “ a group of autonomous stakeholder of a problem domain engaging in an interactive process, using shared rules, norms and structures to act or decide on issues related to the domain”. The advantages of improving collaboration relationship between destination stakeholders are stated as avoiding the cost of long term conflicts among the interest groups (Arnaboldi & Spiller, 2011), improving the adherence campaigns which support the socio-economic growth in the region (Saxena, 2005), using natural resources and providing a definite adherence degree (Selin, 1993), benefiting from various actors’ resources (Arnaboldi & Spiller, 2011) and reaching a wide-range of information stock, providing much more experience and extra job opportunities (Wang & Xiang, 2007; Selin, 1993).

In addition to these, it is pointed that the reason of the increasing interest for collaboration at tourism are ,as a basic factor, organizations’ and destinations’ sharing information, specialty, capital, and other resources and creating competition advantage by gathering these together (Fyall & Garrod, 2005). Go and Govers (2000) claim that partnerships including collaboration between private and public sector at destinations are a prerequisite for sustaining the power of a destination to be able to compete. The World Travel and Tourism Council stated that there is a need to support the network between public and private sector strongly to be able to succeed competitive tourism and travel improvement effectively (WTTC, 2001). According to Jancsik and Mayer (2010), the role of network has become very significant within the sector. Besides comparative and competitive advantages, researchers state that “network advantage” has come into prominence. Network advantage is defined as the competition of a network for another network. According to this network advantage, it is supposed that tourism businesses defined as actors which have much more amount of networks and more powerful networks will be more successful in competing (Madarasz & Papp, 2013). Similarly, Huxham (1993) stated that businesses can obtain collaborative advantage by collaborating with other businesses in case they are not able to reach their goals on their own or reach their goals at all by using the term “collaboration advantage”. Huxham (1993: 603) indicated that collaboration advantage is related to creating synergy among the organizations collaborating. Collaboration advantage can be defined as the synergy generated as a result of working together with other organizations for goals or aims which the business is not able to reach with its own resources (Huxham, 1993: 603).

Fyall and Garrod (2005) pointed out that collaboration between organizations between stakeholders and public-private sector partnerships is a popular strategy for destination marketing organizations and their interest groups. According to the traditional organizations theory statement, the nodes in the network are non-profit and public institutions, and networks, on the other hand, are defined as financial sources, physical facilities, customers or consumers and flow of funds described as service delivery. Thus, networks emerge as purposeful social systems aiming at coordination of source series which are different from each other for presenting a specific service type targeted at specific social problems (Araujo & Easton, 1996). Fyall and Garrod (2005) applied this point of view at collaborative relationship discussions at tourism industry. In this sense, collaborative destination marketing facilities include activities such as information

collection, product development, product marketing and promotion, visitor management, training and employment facilities, creating network and promoting stakeholder support. Schianetz et. al. (2007) defined collaboration in terms of tourism as informal collaboration. On the other hand, Jamal and Getz (1995:188) indicated that the concept of field of interest for organizations is significant to understand collaboration. The collaborative relationship among the individual organizations is explained in two basic point of views in general. One of them is static approaches which consist of resource dependence theories (Pfeffer & Salancik, 1978), cost of transaction (Williamson, 1991) and strategic management theories and which focus on the relationship only between two organizations. However, these theories ignore the relationships among all the other organizations and institutions taking place in the sector. Also, despite the basic differences, almost all the approaches refer to specific mutual topics such as social interaction, social relationships, collaboration, collective action, trust and solidarity (Provan et. al., 2007: 480-481); nevertheless, their boundaries can be examined restrictedly because of their static structures. The second approach is social network theory which is accepted as one of the most appropriate approaches for analyzing the complex structure of tourism destinations (Baggio, 2013). The aim of the study is to analyze the collaborative network among hospitality businesses, public institutions and non-governmental organizations in Eskisehir, which is developing in terms of tourism, within the scope of marketing efforts of businesses operating in tourism sector.

Social Network Theory

In tourism sector, destinations include a large number of businesses independent from each other; however, while evaluating a destination, tourists tend to evaluate it as a whole (Baggio, 2013). On the other hand, at destinations, during the production of the whole products, each business should be in coordination and collaboration with the other businesses since at the end total experience is presented by the destination on its own (Zach & Racherla, 2011:28). Therefore, the complexity of tourism destinations and business cannot be explained with economical actions, autonomous product, classic and neo-classic economy theories seen as actors based on unitary and profit and marketing theories (Shih, 2006). In addition to these, in terms of tourism, there are quite limited number of studies on the dynamic process of collaborative marketing at destination level (Wang, 2008; Fyall & Garrod, 2005; Saxena, 2005). According to Wang and Fesenmaier (2007), although the ratio of collaboration and cooperation at tourism is high, only few theories explaining the basic processes at collaborative destination marketing were developed. At this point, the concept embeddedness provides a beneficial theoretical starting point to understand the evolution of a business network (Halinen & Törnroos, 1998). Networks are examined as structures displaying commonly dynamic and constant change (Johnston, Peters & Gassenheimer, 2006; Freytag & Ritter, 2005). Mattison (2002: 11) puts forward that external effects structure an important part of marketing at individual operation network. A change in a relationship depends on the change of other relationships. This network effect is a quite vital impetus for market dynamics. For this reason, there is a need for a dynamic approach to understand and examine the relationships in a network and how these relationships develop in time (Ravald & Grönroos, 1996; Ritter & Gemünden, 2003; Ritter, Wilkinson & Jonhston, 2004; Morton et al. 2004). A tourism destination can be thought as a social network with a group of players affecting each other an actor (an organization)

having a relation with another (Shih, 2006). Therefore, social network theory is seen as the most appropriate approach to examine these relationships. Social network theory, as basis, focuses on interactions creating a specific structure and framework instead of individual behaviors, beliefs and attitudes. When it is accepted that the performances of individual organizations depend on other organizations' behaviors, the view that the performance of a tourism destination is based not only on specific peculiarities and qualifications of a destination itself but also on the connections among the various players (Chiappa & Presenza, 2013: 2). Examining collaborative structure at tourism destinations which is a formation including complex and embedded various types of businesses needs a more complex and dynamic method such as social network theory and social analysis (Baggio et al. 2010; March & Wilkinson, 2009; Scott et al., 2008). Social network theory puts forward that the strategic actions of organizations are influenced by the social context where the organizations and other organizations are embedded. In this sense, it includes relationships within the organization and among the organizations. Social network approach presents a powerful mathematical modelling device (Araujo & Easton, 1996). In tourism context, Shih (2006) used social network approach which is a technical method measuring the connections among the nodes and is a quantitative method examining indicators and network characteristics to show the structural models of systems connected to each other. Scott et al. (2008) investigated the structural characteristics of networks among organizations within destinations via network analysis. Presenza and Cipolina (2010) studied the collaborative structure of tourism stakeholders' marketing and management activities in Molise region, Italy, by using social network analysis. Grama and Baggio (2013) used social network approach to examine the structural and dynamic characteristics of Sibiu destination. Researchers performed complete analysis of Sibiu destination which is different from the other studies usually focusing on small samples having a small number of actors and linkages.

Social network theory is interested in the relationships within the social structure and presents a powerful mathematical modelling tool (Araujo & Easton, 1996). It includes various measuring and analysis tools to analyze and understand relational data. Relational data shows the relationship between the actors and components and the value of this relationship (Durland & Fredericks, 2006). As basis, social network theory is based on graph theory. Graphs are used to for networks mathematical display. It is expressed mathematically as following:

$$G = (V, E) \tag{1}$$

Networks and graphs are displayed with (G), vertices with V , and edges with E . However, network analysis does not consist of only graphs and mathematic formulas. Networks can be related to different topics according to the values represented by the nodes and connections which form the network. For instance, nodes, people, are the most commonly known examples of social network whose connections are relationships. During social network analysis various measures are used to analyze a network. The first of them is the network size which is expressed as number by nodes between the businesses n , and lines l . Relationships can be reciprocal or directed, positive or negative. One of the basic applications of SNA is defining the important nodes in the network. The most important or prominent nodes generally occupy strategic locations within a network. The overall

distribution of ties and their local concentration are important parameters and indicators of cohesion, which is a property of the whole network (Haythornthwaite, 1996). This measure displays the probability of the powerful social relationships among the network members, and the probability of network members reaching similar resources and information. Measures of cohesion, such as density and centralization, indicate the extent to which all members of a population interact with all others. The density of a network is the number of lines in a simple network, expressed as a proportion of the maximum possible number of lines (Gürsakal, 2009; Scott, et al., 2008). The excessiveness of the number of connections existing between the nodes in a network shows the density of that network. Network centrality refers to the position that an organization has within the network, as a consequence of the power it achieves through the network and is not connected to personal attributes (Scot et al., 2008). Network centrality is important because it helps researchers to assess the central role played by an individual organization within a network, which in turn influences the effectiveness of coordinating the network itself (Chiappa & Presenza, 2013: 4). Basically, there are three types of centrality measures: degree centrality, betweenness centrality and proximity centrality. Degree centrality is equal to the number of connections of an actor with another (Lewis, 2009:25). At degree centrality, the member or actors having the most connection number is generally the most active person and can be the member having the most advantageous position in the network (Delil, 2013). Another centrality measure which is called 'betweenness' is defined as the existence degree of an actor among the other actors. It shows to what extent a node is in direct connection with nodes which do not have a direct connection to each other. Betweenness centrality is an important indicator of the excessive information change within a network or the control of flow of resources (Knoke & Yang, 2008: 68). High betweenness centrality measure shows a hierarchical network structure where one or few nodes take place within the network showing more centrality tendency compared to other nodes (Ying & Xiao, 2011).

Methodology

This study was conducted to analyze the collaborative network among the other hospitality businesses and destination stakeholders (private and public) at marketing efforts of hospitality businesses at Eskişehir tourism destination. According to Turkish Ministry of Culture and Tourism, 54 hospitality businesses with tourism business operating permit and municipality certificate are in service. Since the main population was small, complete inventory was carried out and on total 36 hospitality businesses were reached. Field research was conducted as data collection method in the study. The data of the study were collected through face to face survey technique with the managers of the hospitality businesses. The survey form in the study consists of three parts. In the first part, general information such as the type of the organization answering the survey, the field of facility and the department of the manager interviewed take place. The second part includes expressions related to organizations' marketing efforts which they collaborate and to the obstacles faced about this topic. In the third part, the participants are asked to state the degree of their relationships with other institutions and organizations to determine the collaborative connections within the network. During the data collection, "roster-call" method was used while the interviews were carried out with the managers. Roster-call method aims to collect full network data-as opposed to ego network data-on a pre-defined population of actors. In this method, each of the actors of the population is provided with

a list of actors of the population. It is preferred that the list includes all the actors in the population. However, making a choice from a pre-listed actors in the roster can cause bias for organizations. For each of the pre-listed actors in the roster, the respondent actor has to indicate whether or not he had a relationship of a pre-defined type. In addition, the respondents is asked to recall all other actors they had this type of relationship with and add them to the list. This method ensures the identification of the complete network as long as all population actors take part in the survey. In addition, the 'recall' part of the method makes it possible for the respondents to add external linkages (Ter Wal & Boschma, 2009: 746).

Descriptive analysis was carried out by using the program SPSS 20.0 to measure the collaborative marketing efforts, their attitudes towards collaboration and obstacles among the hospitality business participants, other hospitality businesses and destination stakeholders. The collected data were entered to Excel to be able to analyze the collaborative networks among the institutions and data matrix for the collaborative network was prepared. While the data matrix was prepared, the rows were the hospitality businesses completing the survey, and the column was structured as a double one thesis-subject matrix where hospitality businesses and destination stakeholders (private-public) took place. In this matrix, if there is collaboration between the i th hospitality business with the j th destination stakeholder, it is defined as $x_{ij}=1$, and vice versa it is defined as $x_{ij}=0$. Moreover, to examine and visualize the network structural characteristics of the prepared data matrix UCINET and NetDraw software were used. To analyze the structural characteristics of the collaborative links, network density, degree centrality and betweenness centrality measures were used.

Empirical Findings

Descriptive Findings

In the light of the obtained data from the hospitality businesses, it was determined that 36 hospitality business were in collaboration with 53 actors (on total 89 actors). As seen in Table 1, it is showed that the other hospitality business at the hospitality business destination (H), travel agencies (TA), commercial and tourism organizations (CI), local authority (CA), university (U) and municipalities (LA) are in collaboration. While only ten of these stakeholders among the travel agencies were local travel agencies, 24 travel agencies were travel agencies which had national and international level of facilities. In addition, eight of the travel agencies do not have any offices in Eskişehir. Chamber of commerce, national and international tourism associations and other sectoral associations take place in the field defined as association. Local authorities such as Governorship, Provincial Directorate of Culture and Tourism, District Governorship which hospitality businesses are in collaboration with were defined with six actors. Although there are two universities in Eskişehir, hospitality businesses stated that they are in collaboration with four universities of which two universities are from Ankara, the neighbor of Eskişehir. Also, Metropolitan Municipality and two county municipalities (Odunpazarı and Tepebaşı Municipalities) were stated as actors in collaboration with hospitality businesses.

Table 1: Hospitality Businesses and Other Stakeholders

<i>Actors</i>	<i>n</i>
Hospitality businesses	36
Travel Agencies	24
Associations (Chamber of commerce and other tourism associations)	16
Local authorities	6
University	4
Municipality	3
<i>Total</i>	<i>89</i>

When the marketing efforts which hospitality businesses are in collaboration with were examined, raising awareness, advertising work and branding efforts were defined as the most collaborated marketing efforts. Also, attending commercial exhibitions together, preparing joint advertising works, acting together to decrease the catalogue costs were stated as other marketing efforts which are mostly collaborated for. Especially, because of the excessive demands of the local tourist groups for weekends, sharing customers among the businesses was pointed out as another marketing effort because of the demands above the capacity.

The biggest obstacle for collaboration by hospitality businesses is shown as “the lack of collaboration understanding”. Inter-organization mistrust, competition, the size and quality of the business, bureaucracy unwieldiness, getting ahead of personal interest for organizational vision, lack of finance/time resources, lack of qualified human resource and basic dissent were stated as the other obstacles for collaborative relationships.

General Network Findings

Collaborative network includes 15.980% of the total number of probable relationships for marketing activities. Since the network index was in the range of 0-1 (0-100%), it was determined that the value of the network density obtained was rather low, and there was low cohesion level among the actors. The diameter at network was determined as 6 feet. In Figure 1, the general view of the collaboration network created by among the hospitality businesses and the other hospitality businesses and destination stakeholders can be seen. Except H9, H10, H11, H19 and H20 in Figure 1 are isolated actors which do not have any collaborative relationship with any of the hospitality business and other stakeholders outside of the network.

The findings of degree centrality of collaborative network are displayed in Table 2. As seen in the table, Commerce Chamber (Actor CI1) has the highest out-degree. Regardless of what information was given and to whom the information was given, this actor can be considered as the most influential actor in the entire network. In Figure 1, Commerce Chamber (CI1) is the most known and recognized in the network as seen from the number of in-degree. Then, the second one is Provincial Directorate of Culture and Tourism (CA2) having the highest in-degree actor. This indicates the willingness of sharing information from other actors in the network with these actors. According to the obtained findings, local authority, commerce and tourism associations, universities and municipalities play a more special role in constructing collaborative relationships compared to the other actors in the network (travel agencies and other hospitality businesses). When the distribution of

centrality is examined in the network, it is found that the average degree of actors in the network is 2.569, which is quite low.

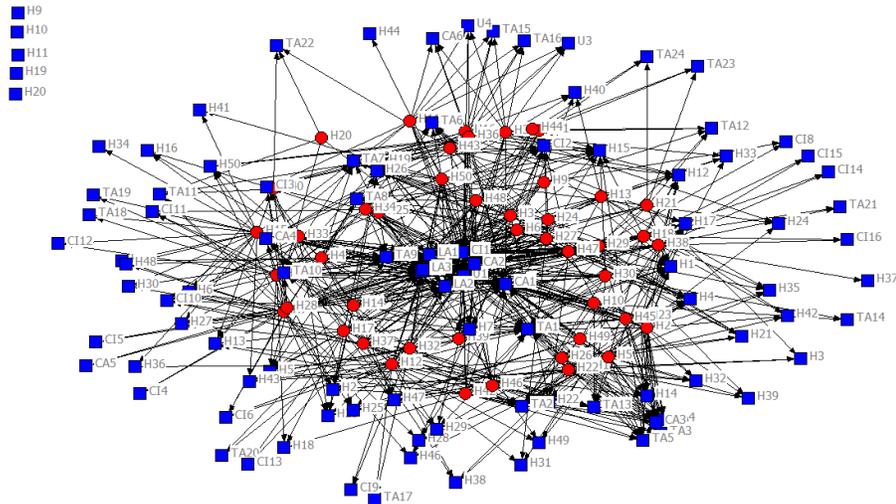


Figure 1: Overall Network Graph Relative to Marketing Activity

This figure means that on average each actor had only two relationships with others. Max and Min values show the largest and smallest number of relationships. The maximum number of connection to the outside (OutDegree) in this network is 18, which is possessed by Commerce Chamber (CI1), while the minimum number of connection to the outside is zero. This means that there are actors who have absolutely no connection to the outside, only receiving without giving information to another party. For incoming relationship (InDegree), the maximum value is 18, while the minimum value is zero. This means that there are actors who only give information but do not receive information from the other party. From OutDegree and InDegree, the range of minimum and maximum values for InDegree is somewhat higher than the range of the minimum and maximum values for OutDegree. This suggests that in this network, actors prefer to receive rather than give information. In other words, the number of actors who receive information is more than the number of actors who give information.

Table 2: Degree Centrality (Top five Actors)

<i>Actor</i>	<i>OutDegree</i>	<i>InDegree</i>
CI1-Commerce Chamber	218.000	8.000
CA2- Provincial Directorate of Culture and Tourism,	217.000	1.000
U1-Anadolu University	216.000	0.000
LA3-Eskişehir Metropolitan Municipality	214.000	1.000
LA1-Odunpazarı Municipality	204.000	2.000
<i>Descriptive Statistics</i>		
	<i>OutDegree</i>	<i>InDegree</i>
Mean	2.569	2.569
Sd	3.862	1.477
Variance	11.189	4.179
Minimum	0.000	0.000
Maximum	18.000	18.000

Network Centralization (outdegree)= 15.843%

Network Centralization (indegree)= 6.957%

When network centralization was analyzed by using betweenness arbitrary, it could be seen that Commerce Chamber (CI1) has the highest betweenness centrality, and then comes Provincial Directorate of Culture and Tourism, Anadolu University, Eskişehir Governorship and Odunpazarı Municipality in Table 3. According to betweenness centrality, it can be observed that tourism associations and local authorities, municipalities and universities are stakeholders playing a central role. When the descriptive statistics were examined, it can be seen that the maximum and minimum betweenness centrality in the network vary from 0 to 216.092, coefficient of variation (standard deviation divided by the mean) equals to 1.63. Despite the large variations in the values of betweenness centrality, the value of the overall network centralization is very low (3.83%). Depending on this, it can be stated that more than half of ties occur without the help of mediation.

Table 3: Freeman Betweenness Centrality (Top five Actors)

<i>Actors</i>	<i>Betweenness</i>	<i>nBetweenness</i>
CI1-Commerce Chamber	216.092	4.279
CA2- Provincial Directorate of Culture and Tourism	200.252	3.965
U1-Anadolu University	173.978	3.445
LA1-Odunpazarı Municipality	131.503	2.604
CA1-Governorship	120.685	2.390
<i>Descriptive Statistics</i>		
	<i>Betweenness</i>	<i>nBetweenness</i>
Mean	24.676	0.489
Sd	40.284	0.798
Variance	1622.803	0.636
Minimum	0.000	0.000
Maximum	216.092	4.279
<i>Network Centralization Index= 3.83%</i>		

Network Findings of Collaboration among Hospitality Businesses

When the collaborative network set among the hospitality businesses were analyzed, network density was determined as 10.2%. When the determined network density for general collaborative network is compared (15.980%), it may be said that the collaborative network set among hospitality businesses is rarer, and the cohesion level among the actors is low. When all the active actors in the network were examined (out-degree), it can be seen that they are all local, three-star and boutique hotels, except two hospitality businesses. For incoming relationship (InDegree), the maximum value is 12, while the minimum value is zero. Similar to the general collaborative network, hospitality businesses act only as informative actors in their collaborative relationships; however, they do not get information from the other stakeholders. When the betweenness values are observed, it can be seen that the three actors (H4, H15, H1) have the highest centrality measure. Based on this, it may be stated that these three actors are the key actors which are active at high level in the whole network and that they act as a bridge among the other hospitality businesses.

Table 4: Collaborative Network among the Hospitality Businesses

<i>Type</i>	<i>Actors</i>	<i>Outdegree</i>	<i>Indegree</i>	<i>nBetweenness</i>
3 star	H4	12.000	12.00	13.304
Boutique	H15	12.000	8.000	12.710
Boutique	H7	11.000	10.000	7.774
3 star	H5	11.000	10.000	7.000
Boutique	H1	10.000	12.000	10.878
<i>Descriptive Statistics</i>				
	Mean	4.918	4.057	2.479
	Sd	3.206	3.349	3.243
	Variance	10.279	11.218	10.516
	Min	0.000	0.000	0.000
	Max.	12.000	12.000	13.304
	<i>Network Centralization</i>			<i>Network Centralization</i>
	15.061%			11.05%

Conclusion

The aim of the study was to analyze the current collaborative relationships and structure between other hospitality business and destination stakeholders (private/public) at marketing efforts of hospitality businesses in Eskişehir as a specific destination. It was determined that raising more awareness of hospitality businesses on destinations, commercial work and branding efforts of destinations were marketing efforts which have the most collaboration. The most important obstacles on collaboration were found as lack of collaboration understanding, inter-organization mistrust and competition. According to the findings related to collaborative network, collaborative network at destination level was defined as a sparse network with low level density value. Degree distribution findings, local authorities, commercial and tourism associations, universities and municipalities played a more special and important role in constructing collaborative relationships compared to travel agencies and other hospitality businesses. It was found that especially the collaborative network among the hospitality businesses is a scattered network having a lower density compared to the general collaborative network which includes the other destination stakeholders. When the hospitality businesses' collaborative network was investigated distinctively, it was found that three star hotels and boutique hotels were the most active actors in the whole network. These findings are in line with the findings of other studies. Chiappa and Presenza (2013) Costa defined the collaborative network as rare in marketing and management activities of Smeralda Gallura destination. Furthermore, they stated that public sector has a more important role in collaboration compared to private sector. The concept collaboration gains a distinct importance in fields defined as embedded social network both in public and private institutions, stakeholder clusters related to each other like tourism destinations (Baggio et. al., 2010; Scott et. al., 2008). As prior researches has underlined, a high degree of coordination and collaboration is one of the main factors for effectiveness and efficacy in destination governance, as well as in branding strategy and positioning (Chiappa, 2010, 2013; Wang & Xiang, 2007). Therefore, it is believed that it is important to develop collaborative understanding in destinations analyzed in the study, especially to emphasize the importance of collaboration in gaining competitive advantage among private sector stakeholders and in increasing productivity. This study has some limitations. Findings of the study are limited only to Eskişehir destination. Also, in the study, relationships among only single actors were analyzed methodologically, the groups

and substructures in the destination were not analyzed. Future research is needed to analyze the case study in greater depth, using different approaches.

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E-Complaints in Fast Food Sectors in Turkey: Social Network Analysis on a Website as Virtual Complaint Environment

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Abstract

Complaint is defined as an act of reflecting a dissatisfying situation to other side. Consumers act differently while they are expressing their dissatisfaction. Consumer complaints constitute an important feedback mechanism for companies. Thanks to these feedbacks, the firms get a chance to correct the mistake in the process of production and to produce a more satisfying product. Consumers express their complaints about the dissatisfying processes through feedback to the firm, expressing them to their friends, or resentment. With the developments in the Internet technology, it is seen that complaints have become widespread. Consumers let more people know about their complaints by expressing them in the internet environment. Therefore, the firms should attach importance to e-complaints and tolerate the dissatisfaction of their consumers. Although there are some studies about consumer complaints in the tourism area, there are not any studies about fast-food agencies. For this reason, it is aimed to categorize the fast-food agencies in www.sikayetvar.com.

Keywords: customer complaints, e-complaints, fast food sector.

Introduction

In competitive and complex environments, businesses frequently improve formal or informal relationships. Consumer complaints constitute an important feedback mechanism for companies to monitor consumer satisfaction from their products and services (Sarı et. al., 2013; 561). Complaint shows up when there is a problem or there is an inconsistency between the consumer's expectations from a product and the product's intended use. One of the first conditions of consumer retention and long-term relationships with the consumers is satisfaction. Complaint is defined as expressing the dissatisfaction after the product trial to the third-parties or to the institutions (Lovelock & Wright, 1999). However, the relationships may not always develop as the expectation of the firm, and there can be consumers who are facing problems. The firms should satisfy the consumers by solving their problems. A service which doesn't satisfy the consumer expectations and dissatisfaction with the product and the consumers' reporting their dissatisfaction to the firm or their friends result in two possible consequences. When the consumer expresses his dissatisfaction to the firm, it creates an opportunity for the firm to clear up the dissatisfaction and serve the consumers better. Besides that, the consumer's expressing the

dissatisfaction will create a bad image for potential consumers. Therefore, complaint is an important and remarkable subject for all firms.

A lot of studies have been conducted on consumer complaints. Especially in the studies on tourism industry, the consumer complaints are examined and analyzed (Litvin et. al., 2008; Boo & Kim, 2013; Sparks & Browing, 2010; Kozak, 2007; Sujithamrak & Lam, 2005; Zheng et. al., 2009). The purpose of this study is to describe the complaints about fast-food categories and their relations with the brand on complaint websites which are important channels in gathering consumer problems and reporting to fast-food agencies. Also, e-complaints make inferences about the complaint management of the firms against the e-complaints. For this reason, sikayetvar.com is chosen because this website, which is active in Turkey, has high number of institutional members and complaints. On this website, the fast-food agency which has the most complaints were identified. Accordingly, fifteen fast-food agencies were identified.

Consumer Complaints

Today's customers are better educated, more sophisticated, more demanding, and are willing to pay for services that meet or exceed their expectations (Sujithamrak & Lam, 2005: 290). There are many definitions about complaints. One of these definitions is that complaint can be defined as "an action taken by an individual which involves communicating something negative regarding a product or service". According to another definition, complaint is a reporting process of the consumers who is not satisfied of a product or service. These consumers can report their complaints to the firm and their friends. Consumers who directly report their complaints to the firm should define firm's problems (Pinto & Mansfield, 2012). However, consumers are not always reporting their complaints to the firm. In such case, complaints are shared with friends. It is important to report complaints to the firm instead of sharing with friends for consumers who are not satisfied since the firm will have the opportunity of reviewing the quality of service and products as a result of the complaints. If the firm uses the opportunity and finds satisfactory solutions, consumer satisfaction will increase. However, if the firm cannot find satisfactory solutions, purchases may stop or this situation may affect consumers' friends in a negative way (Bariş, 2008: 61-68). Customers' attitudes toward complaining, and the probability of achieving a successful outcome through complaining, have; therefore, been the main focus of research relating to customer-complaint behavior (Petzer et. al., 2014: 39). In their studies, Boo and Kim (2013) stated that negative word of mouth affects the potential consumers more than positive word of mouth. Complaints may provide greatest value to the companies which are especially in service industry (Sarı et. al., 2013; 561). Service failure severity has a significant influence on customers' attitudes towards complaining and complaint behaviors. It is important for organizations to afford customers the opportunity to complain – whenever a service failure occurs since depending on the severity there of, service failures could lead to dissatisfaction, negative word-of-mouth, anger and resentment on the part of customers, customers switching to competitors, or even retaliation (Petzer et. al., 2014: 39). For services, complaints are more related with employees who play an active role in production process rather than products. A product which is purchased to satisfy any human need is expected to satisfy the expectations. If it cannot satisfy the expectations, dissatisfaction occurs. Complaints come true when these

dissatisfactions are reported by different channels. Given that customer complaint behavior and the subsequent resolution of a complaint play such a critical role in customer satisfaction and retention, retailers are increasingly expanding their customers' opportunities to complain, by offering innovative channels to voice their complaints, such as online complaining (Robertson, 2012:146). Researches show that the consumers whose problems are solved by employees are more satisfied than consumers who does not face with any problem (Hoffman & Bateson, 2011).

More recently the Internet has provided various "new" ways to air a grievance, especially when little might have been done at the point of service failure. These grievances may be shared on websites where other consumers go to search and evaluate potential tourism purchases, such as accommodation. Such actions are akin to the consumer complaining behavior of negative word-of-mouth WOM but done quite publicly (Sparks & Browning, 2010, 798). There are three main characteristics of information presented on Internet forums. First, the information has greater credibility than marketer-generated information. Second, the information from the Internet forums may be more relevant to customers. It has been found that the perception that a source is similar to the receiver can lead to an increased persuasive influence. Third, the information from the Internet forums generates greater empathy among readers. The information is provided through stories of personal experiences, which cause the readers to empathize with the feeling of the writer and create vicarious experience. Previous research shows potential customers pay more attention to word-of-mouth (WOM) because it is generated by people who are perceived as having no self-interest in promoting a product. Traditional WOM has proven to play a major role influencing customer buying decisions (Zheng et. al., 2009; 719). In the studies which are conducted before the development of the internet technologies discussed, Singh (1988) examined the complaints in three categories. These categories are reporting the complaint directly to the place where the service is purchased. First, consumers make an application to complain directly to the firm if they are not satisfied. Second, consumers tell their problems or dissatisfactions to the people around them. Third, consumers boycott personally to express their dissatisfaction and complaints about a brand or other services which are related to that brand that they purchased by not purchasing anymore (Singh, 1988: 95). By development of the internet technologies, it has been seen that there are some changes in consumer complaints. Especially the complaints that are made on the internet show that the second category which is mentioned by Singh (1988) is developed and become common. However, as distinct from Singh's (1988) study, people can share their problems with not only their friends and families but also any person who is related with a service or product. The Internet provides consumers with an anonymous and easily accessible channel for negative WOM through airing viewpoints and/or making complaints known to others (Sparks & Browning, 2010: 798). Consumers and relationships are very important for firms that give services because that makes them to sell. If the relationship breakdown occurs between both sides, market loses too (Kozak, 2007: 139). Thanks to the developments of technology, today's consumers are more informed about services and products, and also they reach information easily. The Internet enables consumers to share these experiences widely, whether positive or negative, with other potential customers and to offer their own consumption-related advice by engaging in e-WOM (Boo & Kim, 2013: 24). Beside this, today's consumer is a part of production in the process of consuming and

uses the media. Thanks to the internet, consumers improve themselves in terms of expressing themselves in virtual platform, creating sense of belongings, sharing and cooperation. Technological development offers consumers an opportunity of communicating in wide area network by the internet and social network. Internet changed the consumer behavior incredibly. Researches show that consumer behavior is affected by the internet especially after purchasing (Neale et. al., 2006; Rust & Lemon, 2001). In social media, every consumer creates their own channels, complains and shares the problems about the brands with everyone. This makes consumer complaints management important for institutions. Now, even one consumer's complaints in social media cause crisis for even giant brands in hours (Altun, 2012). In this respect, complaints forums and websites give opportunity for consumers to create their own complaints and firms to answer these complaints. Complaints which are reported to the complaint websites allow people to get informed and learn the experiences of others who already bought a product and complains about that. These people who have not purchase anything yet, also learns the firm's solutions for those complaints. In this point, firms should care about these websites. In this kind of website, firms should answer the complaints about their products and find fast solutions for them by contacting the consumer (Alabay, 2012). These websites can be created by non-profit people who are called third party, also official institutions. They are also created by consumers who want to share their own problems by giving information and brand name. One of these websites is sikayetvar.com. In today's world, complaint websites which allow communicating via the internet gives the opportunity for consumers to report complaints and for firms to answer and find solutions to these complaints. (Doğru et. al., 2014).

Methodology

The survey data have been gathered by scanning the complaints about fast-food agencies in www.sikayetvar.com in May, 2015. The survey data have been gathered by scanning the complaints about cell phones in www.sikayetvar.com in May, 2015. At this time, the number of the complaints about fast-food agencies is 15.262. Complaint topics are based on the complaint topics in the site. In this direction, the complaint topics are defined as spoilage, order/delivery, product range, product-hygiene, quality-taste, cooking quality, portion, duration of service, presentation/service, serving materials, wrong product, call center, online services, web content, price and payment, campaign, staff behavior, ad/sms. In order to analyze the data of the research, a two-mode data matrix which has fast-food businesses in columns and complaint topics in rows is prepared. Social network analysis is performed with analyze programs such as Netdraw and UCINET 6.0 to find out the fast-food businesses, social network topology and features of the complaint topics. The topology which is constituted by businesses and complaint topics, and the positions of complaint topics which is defined in topology is identified with the help of the matrix. In order to reveal the similarity of the data matrix of fast-food businesses and complaint topics, correspondence analysis is performed. The correspondence analysis in social network analysis is a practical tool, especially for evaluating the structural similarities in 2-dimensional maps (Borgatti & Everett, 1997).

Empirical Findings

When network visual which is prepared considering the complaint topics and the fast-food businesses which are included to the research is studied, it is seen that the firms such as Burger King, Domino’s Pizza which have the widest network in terms of home delivery and the number of branches in Turkey are centered upon the left side of the network. These businesses, especially comparing to the other businesses, are busy about order/delivery, call center, use of internet. Therefore, it is thought that they have a lot of complaints about late delivery, online services, campaigns, SMS, and call center. On the contrary, the local businesses such as Simit Sarayi, Citir Usta Tavuk Dunyasi which have a sparse network in contrast with chain business such as Arby’s and Sbarro are centered upon the right side of the network.

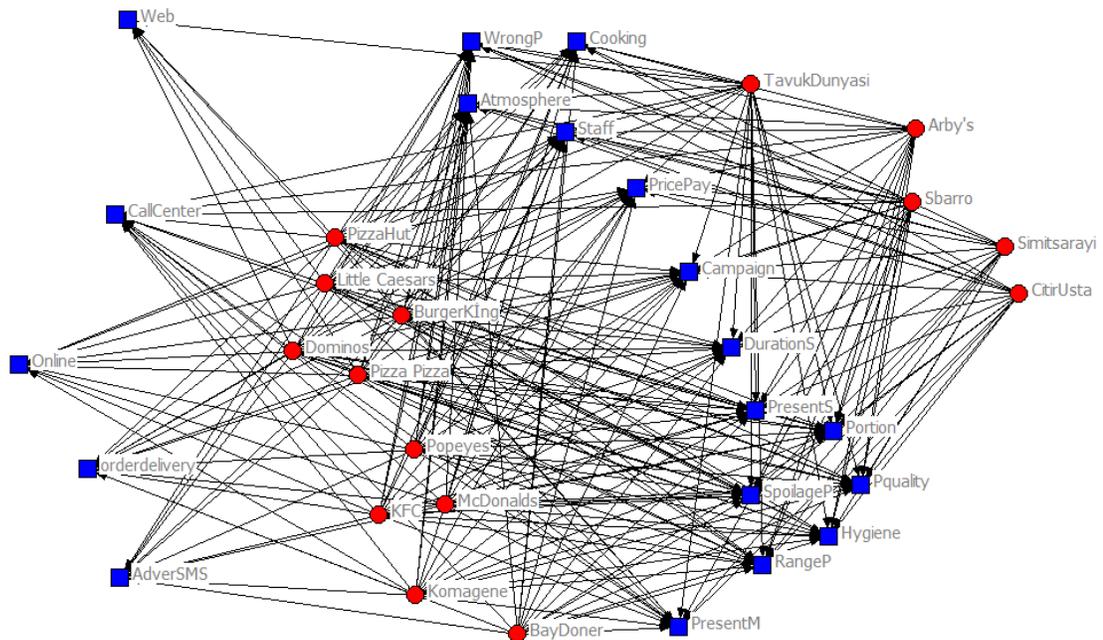


Figure 1: Network of Fast-food Business-Complaint Topics

When the correspondence analysis is performed to the fast-food businesses according to the number of complaints, it is seen that the businesses such as Burger King, Domino’s Pizza, McDonalds, Pizza Pizza, Pizza Hut, Little Caesars, KFC are defined as the businesses with high-rate of complaint (Figure 2). Popeyes and Bay Doner have average-rate complaint and Citir Usta, Sbarro, Tavuk Dunyasi, Simit Sarayi, Komagene are low-rate complaint businesses.

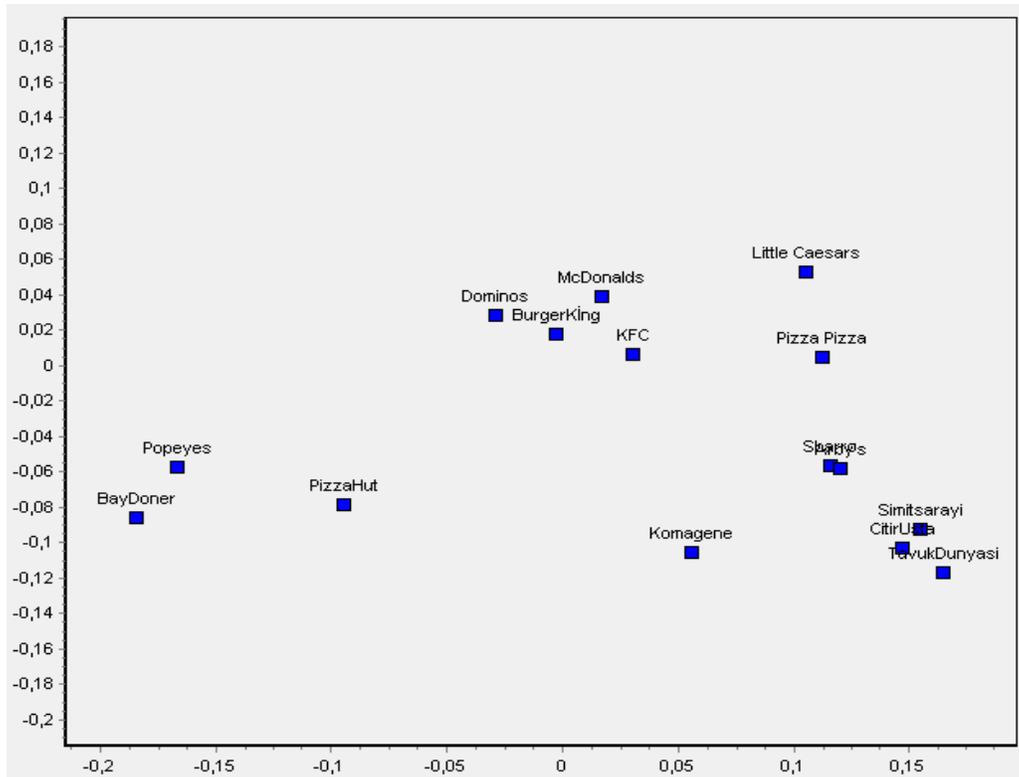


Figure 2: Correspondence Analysis

The complaint management analysis is performed considering the number of complaints which the fast-food businesses receive and the number of complaints they answered (Table 1). When the businesses are evaluated, Domino's Pizza has the most complaints. In total, Domino's Pizza answered only 225 of the complaints. According to the number of complaints-answered complaints ratio, Domino's Pizza's rank in complaint management is 5th. Even though Burger King has 2493 complaints, they only answered 2,6 %. Therefore, their rank is 11nd. Even though Bay Doner has 132 complaints, they are 1st in ranking because they answered 20 complaints. The detailed information about the rest of the businesses is in the table below.

Table 1: Complaint Management of the Fast Food Business

Enterprise	Total Complaints	Answered Complaints	Ratio	Rank
Dominos Pizza	3536	225	6,36	5
Burger King	2493	65	2,6	11
McDonald's	518	17	3,28	8
Little Ceasars	587	56	9,54	2
Pizza Pizza	354	14	3,95	7
KFC	283	2	0,70	15
Popeyes	169	2	1,18	13
Bay Doner	132	20	15,15	1
Pizza Hut	132	1	0,75	14
Tavuk Dunyasi	97	4	4,12	6
Simit Sarayi	90	6	6,66	4
Sbarro	69	1	1,44	12

Arby's	34	1	2,94	9
Komagene	35	1	2,85	10
Citir Usta	36	3	8,3	3

Conclusion

Today, consumer feedback is an important mechanism for the businesses. The businesses need the consumer feedbacks for satisfying the expectations and clearing the troubles in the process. Therefore, the consumers need to convey their dissatisfaction to the enterprise or friends. With the developing technology and the social media's gaining importance in human life, the complaints spread more quickly to a wider area. The purpose of this study is to describe the complaint topics which are under the fast-food category in complaint sites which are important channel for gathering consumer problems and reporting them to the fast-food businesses, and their relations with the enterprise. The purpose, also, is to make inferences about the complaint management of the firms against the e-complaints. According to the findings, the businesses which have widest home delivery network, and use technology more frequently such as Burger King, Domino's Pizza receive more complaints about late delivery, call center, online services and campaigns. On the contrary, the local businesses such as Simit Sarayi, Citir Usta Tavuk Dunyasi which have a narrow network in contrast with chain businesses such as Arby's and Sbarro receive complaints mostly about the atmosphere, hygiene, staff behavior and quality of the products. When it comes to the complaint management, it is seen that the businesses which are included to the study have answered few complaints although they have received more complaints. For this reason, it can be said that the success level of the businesses in complaint management is low. The basic limitedness of the study is that data has been gathered from only one complaint site and only the fifteen most complaint receiving businesses. Therefore, it is not possible to generalize the findings of the study.

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The Impact of Risk Management on the Financial Performance of SMEs in Resource Constrained Countries

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Abstract

Due to emerging business projects, and intense competition, risks are increasing and risk management is becoming an integral part for the success of almost every organization, specifically SMEs because of their high-risk projects undertaken. Most SMEs lack a risk management policy and therefore deal with risk systematically. The argument presented, is that there is lack of an efficient model to manage all risks at the same time. There is a need to depart from the eclectic approach to risk management theory and attempt construction of a new, comprehensive theoretical model, which would cover all of the empirically identified determinants of risk management. This paper will highlight a cheaper model that could be adopted by SMES towards making financially sound decisions by looking at how risk management will enable efficient financial performance in SMEs. The research will further bring to light some of the risky areas that could be of vital importance if monitored to enhance financial performance. The study is going to look at a sample of 25 SMEs in the country and the selection used is both cluster and stratified sampling. Data will be collected using both primary (survey questionnaires) and secondary data which will be guided by research objectives.

Keywords: small medium sized companies, risk management, financial performance, resource constrained



The Effects of Devaluation on Trade Balance: Evidence from Turkey

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Abstract

This paper studies the effectiveness of devaluation in correcting persistent and rising trade deficits in Turkey. Absorption, elasticity, and monetary approaches are compared using quarterly data from 1987 to 2013. Before estimation, time-series properties of the data are diagnosed for stationarity, and all series are found to be integrated of order 1. The model is then estimated in first difference form with an error correction term, with lags of real exchange rate added to test for the J-curve effect. The results show a statistically significant negative effect on trade balance immediately after devaluation, which turns to positive after one quarter thus indicating the presence of the J-curve effect. Domestic income in the absorption model carries a significant negative sign while foreign income has no significant effect on trade balance. Both domestic and foreign money supply variables fail to yield statistically significant results. Thus elasticity approach dominates the absorption and monetary approaches in explaining the effects of devaluation on Turkey's trade balance.

Keywords: devaluation, trade balance, Turkey, J-curve, error correction model



Commuting in Organizational Context

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Abstract

People take commuting into consideration upon decisions about a job opportunity. If already employed; travelling long distances to work and spending too much money is tolerated for a reason. Commuting is one of the most disliked activities, even more than the work itself. It is often inevitable and it has different consequences for every individual, depending on their income level and their organizational and family status. But to this day, it is often studied under the scope of city planning, transportation and housing domains and there is relatively less attention to it from an organizational behavior perspective. This study aims to discuss the concept of commuting in organizational perspective and to study the effects of commuting time and commuting costs on the levels of job satisfaction and withdrawal behavior. Commuting costs and commuting time are hypothesized to be positively related to withdrawal and negatively related to job satisfaction. Along with the direct relationships, job satisfaction is hypothesized to mediate the positive relationship between both high costs and long commutes and withdrawal behavior.

Keywords: commuting; job satisfaction; withdrawal.

Multidimensional Approach to the Role of Internal Business Factors in Internationalization of Manufacturing SMEs

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Abstract

Internationalization represents an expansion of economic activity beyond the boundaries of domicile economy and includes export and import activities. Because it allows lowering costs by accessing a new suppliers or increase revenues by accessing new markets, it represents an opportunity for gaining competitive advantage for small and medium enterprises on both domestic and foreign markets. This paper empirically analysis effects of internal business factors on internationalization of SMEs, both export and import activities. Model is based on strategic approach to internationalization and it shows influence of internal business factors: firm size, enterprise age, business activity, innovation and personal characteristics of entrepreneurs/managers on internationalization of SMEs. In order to test the hypotheses the empirical research was conducted among manufacturing SMEs in Croatia. Evaluation of metric characteristics of applied measurement scales is carried out in order to assess the reliability, convergent and discriminant validity of used measurement scales. Testing converged and discriminant validity of a applied measurement scales is conducted by exploratory factor analysis with varimax rotation of factors. Standard methods of multiple linear regression are used and all independent variables entered into the regression equation simultaneously in order to explore the relationship between the entire set of independent variables and the dependent variable. Results of conducted analysis shows that internal business factors: innovation, personal characteristic of entrepreneur/manager and enterprise characteristics, are in positive relationship with the internationalization of the small and medium sized company. Thus, it can be concluded that from the aspect of innovation, positive impact on the internationalization achieve new products, the use of new processes and operations in high-tech industries. These results are in accordance with the second group of theories which examines the role of innovation in the process of internationalization based on technological innovation by focusing primarily on product innovation, or in our case the internationalization is in the largest segment affected by the development of new products and processes which are a basic feature of the high-tech industry. The largest positive impact from the aspect of personal characteristic of entrepreneur/manager achieves their age which is often reflected in the work experience of the entrepreneur/manager. This is in accordance with the results of previous studies that have shown that the basic indicator of gained knowledge and experience is often the age of entrepreneur or manager. As previously said, older entrepreneurs have more business experience and this experience gives them enough confidence to expand their business to foreign market or to engage with foreign suppliers. Entrepreneur's education did not shown as significant variable and this is in accordance with characteristics of Croatian entrepreneurs who are middle aged men with finished high school. It is interesting to point out that although this research was conducted in a developing country from non-English speaking area knowledge of foreign languages did not shown as significant variable. Characteristics of enterprise show that the probability that the company will achieve international business activities is higher for larger companies. Structure of Croatian economy in not characterized by high tech activities specific for born global companies it can be said that in this case size do matter.

Keywords: internationalization, internal business factors, entrepreneur, strategy, SMEs



Improving Undergraduate Supply Chain Management Programs to Prepare Students for Supply Chain Management Positions in Industry

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Abstract

Undergraduate business education has come under significant criticism in this decade for attracting large number of students but poorly educating them. According to David Glenn (2011) “the family of majors under the business umbrella — including finance, accounting, marketing, management and “general business” — accounts for just over 20 percent, or more than 325,000, of all bachelor’s degrees awarded annually in the United States, making it the most popular field of study.” He also adds that “... in management and marketing, no strong consensus has emerged about what students ought to learn or how they ought to learn it...” In this paper we present results of a survey of business students of Elmhurst College taken in 2009, which revealed a woeful lack of awareness of the field of supply chain management among the business students. Using the results of this survey and after conducting a review of literature dealing with the curriculum and content of undergraduate supply chain majors, the program at Elmhurst College was modified and communication elements added to make the business students more aware of the field of Supply Chain Management early in their curriculum. Subsequently another survey was conducted in 2012 covering Supply Management Professionals in Industry. This survey was designed to help understand the nature of technical knowledge, competencies and skills that employers were expecting in early-career Supply Chain Management professionals. In this paper we discuss the findings of this survey, which showed that Forecasting, Inventory Planning, Transportation Management and Contract Management were the top-ranked areas for technical competence, and Excel Analysis Skills, Oral Presentation Skills, and Writing Skills were the top three skills desired by employers of Supply Chain Management Professionals. This paper also discusses other findings from this survey, and recommends changes that can be made to undergraduate Supply Chain Management Programs to meet the needs of industry and prepare students for a fruitful career in Supply Chain Management.

Keywords: supply chain management programs; undergraduate business education; competencies; skills; supply chain curriculum



Using Local Food in Istanbul's Marketing as a Tourist Destination

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Abstract

Local food not only complements tourism experience but it is sometimes the main motivation to travel to a destination. Gastronomy tourists are even regarded as a separate market segment by some travel organizations. Therefore local food culture has become an important marketing tool for destinations as well. This study focuses on representation of food in official promotional material of Istanbul as a major international destination. It was found that local food was not highlighted as a main activity but a supplementary experience.

Keywords: local food, Istanbul, destination marketing, destination planning, gastronomy tourism, culinary

Introduction

Food is a physical need that needs to be satisfied during a trip. Food consumption also provides positive experiences such as pleasure, social interaction, and entertainment. Although travellers' choice of food at a destination might differ, trying authentic food is a desired activity for travelers (Ryan, 1997). According to Hu and Ritchie (1993) food ranks among significant attributes with climate, accommodation and scenery when tourists decide on the attractiveness of a destination.

The relationship between tourism and food has been labeled as culinary tourism, gastronomy tourism, wine tourism and tasting tourism to refer to the importance of food especially for some travellers (Hjalager & Richards, 2002; Boniface, 2003; Hall et al., 2003; Henderson, 2009). Existing research on food is focused on choice and preferences of travellers (Mak et al., 2012; Chang et al., 2010; Kim et al., 2009; Torres, 2002). However use of local food in destination marketing has overlooked. Despite its importance, use of local food in official destination marketing is still new phenomena and requires further attention. This case study explores utilization of local food in marketing Istanbul as a destination by Turkish Ministry of Culture and Tourism (TMCT) and related Destination Management Office (DMO).

Literature Review

Local food refers to food where ingredients and producers are local and served at the destination (Sims, 2009). Food tourism which is also referred to as gastronomy, culinary and gourmet tourism can be defined as travels that are motivated primarily by tasting local food, attending food festivals and experiencing local gastronomy (Hall and Sharples, 2003; Okumus et al., 2007). However food is also a significant factor for tourists traveling for

other primary motivations. Boyne et al. (2003) for example group tourists into different categories ranging from tourists who have no interest in local food to tourists who search and solely travel to experience local food. Previous studies also confirmed majority of tourists perceive local food as an important factor that influence their holiday enjoyment (Okumus et al. 2007).

Local food is an important element of a destinations' identity (Bessiere, 1998). Food represents geography, climate, history, culture and cuisine. Identification and promotion of iconic food products that are associated with the destination can be a powerful marketing tool (Sims, 2009). Turkish cuisine is among popular ethnic cuisines in Western countries among French, Italian, Greek, Chinese, Japanese, Indian and Thai food (Cohen & Avieli, 2004). Characteristics and history of Turkish food and Istanbul's importance as a melting pot for Turkish kitchen are explored in the next section.

Turkish Food

Quality of local food is stressed as one of the significant reasons for return visits to Turkey (Yuksel, 2001). There are several factors that affect Turkey to be a attractive and rich in variety of food. First Turkish people have had interaction with different cultures in the past. Asian, Indian, Middle-Eastern, European and African Cuisines influenced Turkish culinary. Another reason was that the Ottoman Empire who reigned in Anatolia for 700 years, was controlling an important part of Europe, North Africa and Gulf as well as of the Silk Road, which was the main trade route between East and West. The tradesmen using this route were provided free accommodation up to three days in lodging facilities called Caranserais (O'Gorman, 2009). The trade and the interaction it created with hosts also enriched Turkish food, ingredients, preparation, preservation and cooking styles.

Today 124 food items in Turkey are patented and some of these are listed in UNESCO World heritage such as Turkish Coffee, Mesir Macunu (desert) and Ceremonial Keskek (main course with lamb and rice) (UNESCO, 2015). Turkish kebabs, stuffed vegetables (dolma) and baklavas are other internationally renown local food offered in Turkey. Various studies acknowledge gastronomy in Turkey as an important attraction and acknowledge her as a culinary destination (Baloglu & Mungaloglu, 2001; Kozak, 2001; Okumus et al., 2007; Yuksel, 2001). Istanbul is the center of trade for centuries, the city served as the capital to two empires (East Roman and Ottoman). Currently hosting 17 million inhabitants, many Anatolian natives chose to live in Istanbul because of the employment opportunities the city provides. Therefore both national and regional food from across Turkey can be found in Istanbul.

However there are concerns whether Istanbul is able to effectively use local food in destination marketing. Official tourism promotional strategies with a large budget (50 million USD for 2014) have also been criticized to be short sighted, unprofessional, inconsistent and focused on general beach attributes (e.g. 3s tourism, quality of physical facilities, representing blondes as locals) rather than unique characteristics (e.g. culture, heritage, traditions) (TurizmGuncel, 2015; Turizmdebusabah, 2015a; Turizmdebusabah,

2015b). This study aims to assess the utilization of local food in promotion of Istanbul as the main tourist destination of Turkey.

Methodology

The objective of this case study is to explore use of local gastronomy in destination promotion utilizing a content analysis of brochures printed and distributed by Istanbul DMO (Istanbul Directorate of Culture and Tourism). Web page of tourism ministry and Istanbul DMO was also analyzed. Turkey have been welcoming more than 36 million tourists in an increasing pace (from 13 million in 2002) (TMCT, 2015), she also offers a unique gastronomy with a variety of ingredients, cooking styles and different tastes. Turkish food and restaurants are also popular in various tourist generating countries, acknowledged as a distinct culinary. Istanbul is a major destination of Turkey offering various attractions for a total of 12 million leisure and business travelers. Therefore Istanbul can be considered a suitable destination that would use gastronomy as a competitive advantage and utilize food effectively in marketing strategies.

Because this study is an exploratory case study qualitative analysis of brochure and web page contents were deemed more appropriate. A coding scheme was first developed based on literature, then printed official promotional material in English from Turkish Tourism Ministry were requested. Internet site of the tourism ministry were also evaluated. A total of 317 pages of printed material, 83 internet pages and 7 promotional videos were content analyzed. The content were coded based on the scheme initially established. The frequency, dimensions and intensity were also noted. Based on the analysis, each author interpreted their individual coding and discussed their thoughts collectively until a consensus is reached and depicted as research findings.

Findings

Printed material refers to all physical brochures of Istanbul, electronic material on the other hand refers to the official web sites and CDs of TCTM. All food related content was also grouped under regional, national and international. Atmosphere was also mentioned in text and depicted in images, these were also categorized as scenery (e.g. sun-set, heritage, sea shore), people (e.g. couples, tourists and locals, social interaction) and entertainment (e.g. belly dancers, night life). The food represented were also divided under raw food (e.g. fruits, vegetables, nuts), ingredients (e.g. spices, dried vegetables, wheat), Entrees (e.g. mezees, starter, appetizers), main Courses (e.g. fish, kebab), Deserts (e.g. baklava, Turkish delight) and drinks (e.g. Turkish tea, Turkish coffee, ayran, wine, Raki, beer)

While local food is emphasized in some brochures as an activity it received just 5% of the content. Another observation is that no special section was dedicated to local food. Although there are several brochures and videos about other tourism types (e.g. culture, heritage, MICE, golf), there were no brochures dedicated to gastronomy tourism. The food related content was mostly placed under cultural attractions and activities. The information was very limited and written in a general manner.

It was also observed that there are some problems concerning the translation of content at TMCT official web site. It is obvious that the content is translated from Turkish and uploaded from different sources written by different authors instead of being written in English from the beginning in a consistent manner with professional standards. This also raises the question whether the content should also be adapted to different tourist motivations and cultures of potential visitors. The food related content on the web page was also presented mostly in text, limited use of images also made it harder to get involved with the content.

Several promotional images under the concept of “The home of” were also listed in tourism ministry web site. Among 75 images 6 were dedicated to food. These were baklava (desert), chestnut desert, Turkish coffee, Turkish tea (twice), figs, hazelnut were represented. However these are either deserts, simple drinks or raw food. There was no mention of entrees or main courses, which reflect the variety and quality of local gastronomy. The problem seems to lie in offering food as an intangible heritage rather than a tangible product and an important tourist activity.

Conclusions

This study after a content analysis of promotional materials investigates the use of local food in destination marketing of Istanbul, Turkey as a case study. Although food was used in the promotional materials of Istanbul it was expressed in a limited space and considered under cultural dimension rather than a sub-segment or an activity with its own merit.

Although local food is well known in small geographic regions, the awareness in national and international level is quite limited. The local tastes should also be used in marketing of Istanbul and sub-destinations, like Italian do to Pasta and French to Wine. A gastronomy map of Istanbul is needed in order to provide an overview of indigenous food and best places to have them. Based on the map various gastronomy routes can be established and culinary tours might be offered. Another major issue is the web site of Istanbul DMO, it was almost shocking to see only 3 pages of content were translated into English (general information, contact details and the CV of the director). The important role of DMOs in promotion is well recognized in the industry. In the era of decentralization in tourism marketing the role of local DMOs is even greater.

Another successful tool for marketing destinations are events. Food festivals, special events, workshops, cooking classes are important activities in facilitation of local food tourism. There are various examples that prove these events are able to attract thousands of visitors generating billions of dollars, such as Street Food Festival in San Francisco, Truffle Festival in Alba among various others. However this does not mean that the local food should be altered. On the contrary if local food is altered to suit tourists taste, and important part of the image is also lost. Therefore regional unique food related events should be encouraged and marketed internationally.

Limitations and future study

One of the limitations of the research is that it concentrates on Istanbul as the study site. Although Istanbul is an important destination for international visitors, and ranked among top ten city destinations in the world, gastronomic experiences it offers might be considered unique. Istanbul in particular and Turkey in general as an international tourism destination have a rich and diverse gastronomy. Thus future research done in different destinations might offer different results.

This study although determines certain gaps, there is still a need to analyze ideal dimensions of presenting food in destination brochures. An empirical research designed to understand the perspectives of both culinary tourists and tourists with other motivations would provide interesting findings in the future. These might provide important information for official representation of the destination in different markets.

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Serious Optimism to Boost Combinatoric Innovation

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Abstract

To address current and future problems, challenges and opportunities, we have to look for new solutions to be found in the extra cognitive space that emerges when combining knowledge and creativity from different sources. We therefore introduce ‘Combinatoric Innovation’, a methodological approach to achieve a process of combination, by connecting ideas and experiences. Combinatoric Innovation differs from Open Innovation. The latter focuses on the targeted acquisition of knowledge to address identified issues and/or opportunities. With Combinatoric Innovation, it works the other way round: The starting point is not the problem but the question: ‘What could we do together?’. We will discuss some characteristics of environments that foster Combinatoric Innovation, focussing on four ‘spaces’: *Social/Cultural*, *Virtual/Digital* and *Physical/Real*. In particular we will look at environments with positive energy for Combinatoric Innovation, so-called ‘O-zones’, based on *Serious Optimism*. The serious component is two-fold: First we want to find well-argued interventions that lead to more positive thinking and second, this optimism should be causally related to enhanced performance/output. The ‘International Institute for Serious Optimism’, founded in The Netherlands and Norway (www.iiso.eu), has the Mission to support the transformation of environments in so-called ‘O-zones’, with a high ‘O-factor’ (O=Optimism). A concrete example is the acceptance and of and learning from (brilliant) failures. In an ‘O-zone’ people are not discouraged to try something that might be valuable but has some risks. Entrepreneurs should not be punished for their failures, but they should be applauded for sharing and using their lessons learned!

Keywords: combinatoric innovation, positive environments, serious optimism, brilliant failures, complexity

The Analysis of Traffic Accidents with a Business Intelligence Approach: An Application in Turkey

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Abstract

Traffic accidents are one of the main causes of economic and social losses, especially in developing countries. Among studies aiming to reduce losses from accidents by determining their causes, those which analyze existing accidents are the most numerous. A traffic accident, by its nature, consists of many factors. Therefore, the data stored in the accident database is both multidimensional and voluminous. A Business intelligence approach provides significant facilities for analyzing such multidimensional and sizable data. Business intelligence includes every technology, methodology and process which is used to transform data to knowledge that decision makers need. A review of studies analyzing traffic accidents shows that many information systems have been developed with different technologies and different methods. A Business intelligence approach for analyzing the traffic accidents provides a general framework for every method and technique. The aim of this study is to research the usage of business intelligence in the analysis of traffic accidents via the case of Turkey. The system which is developed with a business intelligence approach enables the quick and easy identification of traffic accidents' causes and prevention of accidents while effectively using financial resources. Thus, economic losses can be reduced.

Keywords: business intelligence; traffic accidents; economics

Introduction

Worldwide, an estimated 1.2 million people are killed in road crashes each year and as many as 50 million are injured (WHO, 2004). In Turkey, every year, more than 3000 people are killed and 200 thousand people are injured in traffic accidents (Çoruh et al., 2014:70).

These accidents carry many economic costs such as damage of freight, losses of labor force, reduced productivity. Deaths and injuries dramatically effect families' standard of living, especially in developing countries, as well as causing physical suffering and psychological problems for victims. All these socioeconomic losses significantly affect the economy and the welfare of a country (Erdoğan, 2006; Baguley, 2001).

The studies aiming to prevent losses from accidents focus on identifying effective factors on accident occurrence, but the result of accidents analysis based on expertise are subjective because the experts who are interested in traffic accidents have different knowledge and aims (Özkan, 2006:7).

Traffic accidents should be analyzed with a multidisciplinary approach because every traffic accident is specific in terms of environmental (road and weather conditions), location and human factors. There are also potential relationships between accidents and factors which go unnoticed. Therefore, it can be said that traffic accidents should be examined and analyzed from different aspects.

The data sets collected from traffic accidents are huge, multidimensional, and heterogeneous (Ayramo et al., 2009:1). An enhanced system is needed to analyze these kinds of data sets. Innovations in information technologies facilitated the development of an enhanced system, thus, the concept of business intelligence emerged and began to be used in different fields like traffic accident analysis.

In this study the analysis of traffic accidents with a business intelligence approach is presented as an application in Turkey. In the first part of the study, business intelligence is defined. In the following section previous studies in literature are presented and in light of these studies the analysis of traffic accidents with a business intelligence approach is given. Finally, the development of an application in Turkey for analyzing traffic accidents with a business intelligence approach is evaluated as a system architecture.

Business Intelligence

Innovations in information technologies facilitated the development and establishment of a decision support system which transforms data into knowledge for decision makers, thus creating the concept of business intelligence

Having analyzed the information technology (IT) market, Howard Dresner, referred to business intelligence as a kind of “umbrella” that covers numerous methods, technologies, and applications oriented to real business decision support in an enterprise (Surma,2011:7). Business intelligence framework basically consists of three components: Source systems, data warehouse, reporting and analysis tools.

Source systems are the systems in which the data is created and stored. Generally, they are called transaction systems. The data is pulled from transaction systems and loaded into a data warehouse through the Extract Transform Load (ETL) process. The loaded data in the data warehouse is analyzed by various analysis tools and techniques. Multidimensional analysis like OLAP (Online Analytical Processing), data mining applications or ad hoc reporting applications are carried out via data warehouse.

OLAP is an analysis technique which allows the evaluation of enterprise-held data from not only a single perspective but also many different points of view (Erdemir, 2009:16). According to Pantelic et al. (2012:399), the advantages of OLAP are: high performances in execution of complex enquiries, competitive processing, the ability to include data from different sources, use of a language especially designed for data analysis, no special computer knowledge being needed for working with OLAP; OLAP users are usually experts exclusively in their own field.

The “cube” concept is utilized when describing OLAP (Erdemir, 2009:29). A data cube provides the data to be modelled and displayed as multidimensional (Çağıltay, 2010:137). For the structure of an OLAP cube, dimensional model is used in a data warehouse rather than relational model, which is used in a transactional system. Relational model is useful for operational needs but not suitable for analytical queries which are supported by OLAP (Erickson, 2009).

Dimensional data modeling consists of dimension tables and one or more fact tables. This structure is called a “Star Schema”. A fact table contains the numeric measures produced by an operational measurement event in the real world (Kimball&Ross, 2013:4). Dimension tables store records which are not measures themselves, but related to the numeric measures in the fact table.

Traffic Information Systems and Analysis of Traffic Accidents

Studies aiming to develop an information system for analyzing traffic accidents date back to 1970s. After enterprises began to use computers for their business, some initiatives were carried out for processing traffic accident data, especially in developing countries traffic accident databases have begun to be established.

In 1975, Fatality Analysis Reporting System (FARS) was developed by National Highway Traffic Safety Administration (NHTSA) in the United States. FARS contains data on all fatal road accidents within the 50 states and data was developed by National Center for Statistics and Analysis (Yannis et al., 1997).

In 1980s, with the development of microcomputers, Microcomputer Accident Analysis Package (MAAP) was developed by the Overseas Unit of the Transport and Road Research Laboratory (TRRL) in the United Kingdom as a road safety research project especially for developing countries which had very poor and non-computerized accident data. (Hills&Elliott, 1986; Baguley, 2001).

After the 1980s, with an increase in international transportation as the result of global economic development, studies for establishing international accident databases started. In 1988, The International Road Traffic and Accident Database was established through the OECD Road Transport Research Program (<http://internationaltransportforum.org/irtadpublic/pdf/09brochure.pdf>, 26.04.2015). At the same time studies on Community Road Accident Database (CARE) started by the European Commission. Pilot operation of the CARE database continued until 1996. As of 1999, with the production of multidimensional reports of the system, it has been fully utilized (<http://www.unece.org/fileadmin/DAM/trans/doc/2011/wp6/ECE-TRANS-WP6-2011-pres08e.pdf>, 26.04.2015).

Innovations in database technology in 1990s, supported the development of geographic information systems (GIS). The integration of GIS and accident databases, is used to determine the black spots of traffic accident locations and to develop density maps.

GIS is a technology that allows the joint processing and management spatial and non-spatial data. Spatial data, which is necessary for GIS is the data about the assets like bridge, road etc. is data which can be shown on a map. Non-spatial data is the data which supports the spatial data like dates, hours, weather etc. (Sönmez and Sarı, 2004). Traffic accident data has both a spatial aspect and a non-spatial aspect. Therefore, for an accurate analysis of traffic accidents, these two aspects should be considered together. For this reason, generally a traffic information system for analyzing traffic accidents is associated with GIS. In literature review, studies on developing a geographic information system or studies about integration of GIS and a traffic information system are also observed. In some of the previous studies on the integration of GIS and a traffic information system, the business intelligence approach was utilized. These studies integrate GIS and a data warehouse or GIS and OLAP.

Ruengsorn et al. (2001), established the GIS road accident database for Khon Kaen Province, the northeastern part of Thailand. The study was intended to use the hospital's injury surveillance data (which is a part of the National Trauma Management System) for developing the database system. For recording accident locations, a digital map of Khon Kaen was developed. As a result of this study, all information about accidents can be stored and the hazardous locations in Khon Kaen can be identified as well as the visualization of any accident location.

Liang et al. (2005) studied “Traffic Accident Application Using Geographic Information System”. In this study a GIS based application was developed for visualizing accident locations, making statistical analyses on traffic accident data, identifying the locations where the most accidents are carried out etc. University Putra Malaysia (UPM) was selected as a study area. The Accident Report from UPM's security unit was used as an accident data source. For GIS, spatial data was gathered from the map of UPM and some process was done like geo-referencing.

Hirasawa and Asano (2003) from the Traffic Engineering Division Civil Engineering Research Institute of Hokkaido in Japan also developed a GIS-based traffic accident analysis system in which digital maps are linked with data of traffic accidents, roads and weather. In the study, Arc View GIS ver. 3.2 software and databases of digital road maps, traffic accidents, roads, traffic volume and weather were integrated. As a result of the study, the hazardous locations were identified, types of traffic accidents and fatality rates were analyzed via digital maps in terms of location and weather for the traffic accidents occurred between 1990 and 2000.

Unlike the studies above, Kowtanapanich et al. (2007) used business intelligence to develop the comprehensive GIS-based traffic accident database system in the selected study area—Khon Kaen, Thailand. They aimed to load the data gathered from three different source systems (hospital-based data, police data and the road inventory data as GIS data) to a data warehouse using the ETL process.

Wang et al. (2010) also used business intelligence in their study more comprehensively than Kowtanapanich et al. (2007). Wang et al. (2010) studied “An application of data

warehouse technique in intelligent vehicle monitoring system”. In the study, the data warehouse architecture is presented in detail with the design of fact and dimension tables. The study establishes a model of a system which is divided into four parts: data sources, data storage and management, front-end application. Data sources are three different source systems: Geographical coordinate database, road information database, traffic accident information database. The data gathered from these three source systems are loaded into a data warehouse through the ETL process. Then, the consolidated data is integrated through the OLAP server of the system in order to make multidimensional analyses. In the front-end applications, data query and analysis, data mining, connection with GIS can be done through the OLAP server or data warehouse.

There are also some studies in literature which especially focus on OLAP technology. Shekhar et al. (2002) constructed a web-based system called “*CubeView*” for traffic data visualization in which the traffic data was modelled as multi-dimensional. In the study raw data gathered from The Minneapolis-St.Paul(Twin-Cities) traffic archival is loaded into a data warehouse through the ETL process which provides the multidimensional views, the Online Analytical Processing(OLAP) operations, and data mining applications. The results of the analysis or applications are displayed as maps or charts. Pantelic et al. (2012) proposed an integrated traffic accident database model within the BERTAAD Project (Belgrade Road and Traffic Accident and Analytical Database) which is based on OLAP.

Besides the system development studies, there are some theoretical studies which focus on multidimensional modeling and traffic accident data. Song-Bai et al. (2008) wrote “The Research of Multidimensional Association Rule in Traffic Accidents”. Moreno and Arango (2009) wrote “Supporting the change in the degree of containment in a multidimensional model”. They presented a case study related to car accidents.

The literature review about business intelligence approach and the analysis of traffic accidents revealed that business intelligence is utilized partially in previous studies. Studies mostly focus on establishing a data warehouse or OLAP cube in general. Data query and analysis, data mining, GIS integration are considered as separate applications.

On the other hand, when the studies carried out in Turkey are considered, it can be seen that in the studies traffic accidents which occurred in a period of time in several cities in Turkey were analyzed by geographic information systems or statistical analysis methods (Özkan, 2011). Even if there are some studies about the development of a system for analyzing traffic accidents, they are not business intelligence systems. They are generally studies about developing a software or a web application based on a relational traffic accident database. Erdoğan (2006) studied “Traffic Accident Database” for archiving accident reports in digital platform and analyzing them easily. Alkan (2007) developed “Traffic accident analysis program”. Geçer et al. (2013) suggested a web-based decision support system for analyzing traffic accidents.

Analysis of Traffic Accidents with a Business Intelligence Approach

Worldwide, statistical methods and techniques are used for analyzing traffic accidents most frequently (Durduran et al., 2011). While highly sophisticated statistical and mathematical

models can be built, the validity of modelling results still lies critically on the availability and quality of accident data (Loo, 2006:879). According to Pantelic (2012:1), “the data coming from the police, insurance companies, health authorities and other relevant authorities need to be processed and adapted to the form of the data from the central database. This method produces comprehensive and quality data on traffic accidents, compared to when the database is ‘filled’ by only one source, for example the police”.

Quality of accident data is provided in business intelligence approach by ETL process. During ETL, data is gathered, cleaned, transformed, controlled and then loaded into a data warehouse. Thus all data analysis, data mining techniques and all other methods in regard to data can be carried out efficiently.

Although traffic accidents are a major problem in Turkey and effect the economy of the country significantly, in our literature review it is seen that there is not any system in Turkey which utilizes business intelligence approach for analyzing traffic accidents. Based on the literature review, we present a system architecture for analyzing traffic accidents with a business intelligence approach in Turkey. The architecture has been shown in Figure 1:

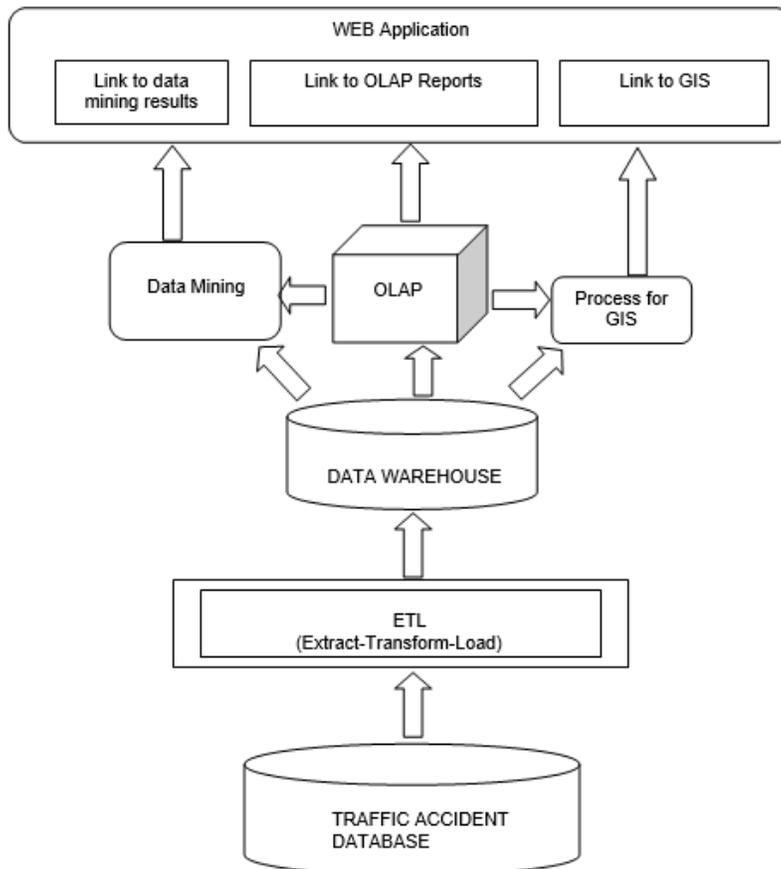


Figure 1: System Architecture

The system based on the architecture will use all components of business intelligence (OLAP, data mining, GIS connections, ad hoc reporting, query and data analysis etc.) through a web application unlike the previous studies in literature.

Data gathered from one or more systems is loaded into a data warehouse by ETL. Any analysis can be made via OLAP cubes or a data warehouse. Connection with GIS can be done through the data warehouse or an OLAP cube can be connected to GIS. This is the flexibility of the system based on the presented architecture.

Conclusion

This paper presents the analysis of traffic accident with a business intelligence approach through an application in Turkey.

It has been recognized that the most effective means towards accident reduction lies in a systematic and scientific approach based on use of accurate and reliable traffic accident data. However, the quantity and quality of important data for the analysis are not always sufficient (Liang et al., 2005:3575). Database availability and up-to-datedness is extremely important for scientific and professional research, because that research helps define certain dependencies that can affect the choice of traffic safety improvement measures (Pantelic, 2012:1). At that point, business intelligence provides significant solutions. This study presents a system architecture based on a business intelligence approach which utilizes all components of business intelligence.

An application which will be developed through the proposed system architecture can be intelligent by learning from the dynamic data analysis of traffic accidents. Also it can serve as an early warning system by comparing the results of the analysis and the determined parameters. Besides this, through GIS integration, identifying black spots, creating density maps will also be possible. Using OLAP reports, connection with GIS, displaying all results which will be obtained by various analysis will be accessed through a web-based application. The analysis will be done through the application by user interfaces. Thus the reduction of traffic accidents and economic losses is being targeted with the creation of a flexible and an integrated system in Turkey.

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The Effects of Economic Policy Uncertainty Indexes on Stock Market Returns: Case of Borsa Istanbul

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Abstract

Economic policy uncertainty is one of the most important indicator that effects economies. Changes in this indicator give signals to foreign and domestic market participants about the economies. Consequently, interactions between economic policy uncertainty indexes of countries are also should be followed by the market participants. In the study, volatility spillovers between BIST100 Index return and Economic Policy Uncertainty Indexes of Canada, China, France, Germany, Italy, Spain, England and USA are analysed with causality in variance test based upon 2008 Global Crisis. Results of the study show that changes in Economic Policy Uncertainty Indexes of some European countries cause changes in BIST100 Index return volatility after the 2008 Global Crisis.

Keywords: economic policy, uncertainty indexes, stock market, borsa Istanbul

Introduction

Volatility spillover which is a result of integration of financial markets, occurs especially when the information flow is not straight. If there are volatility spillover effects then prices changes are not only related with internal dynamics but also related with the changes that occur in the other financial markets. On the other hand, increase in the number of foreign investors increase the volatility of prices and cause instability in the market (Holmes ve Wong 2001).

In recent years, integration of markets and volatility spillovers increased as a result of globalisation. This situation decrease opportunity of providing high returns with the diversification, especially for the global investors.

However, political developments that occur in a country effect global economy directly and undirectly. The degree of the effect changes depend on the size of the economy and the relationships with the other economies. On the other hand, political uncertainty effect stock markets when it is considered from the point of foreign investors.

Uncertainty of economic policies and relationships between the countries show the importance of analyzing volatility spillovers. In this context, in the study, it is aimed to determine if the economic policy uncertainty of selected countries effect Turkish stock market return or not.

Literature Review

Studies that analyses the negative effects of policy uncertainty on economy increased considerably after 2008 Global Crisis. These studies mostly examine effects of policy uncertainty on oil price and macroeconomic variables like growth, inflation and unemployment. These studies show that when uncertainty increase companies postpone investment and employee recruitment desicions.

Colombo (2013) investigated the effects of USA economic policy uncertainty shocks on macroeconomic variables of Eurozone with structural VAR model. In the study economic policy uncertainty index, price index and business cycle data between 1999-2008 were used and model results indicated that USA uncertainty shocks caused decrease in European industrial production and prices.

Rodrik (1991) and Julio and Yook (2012) analyzed the negative relationship between policy uncertainty and investment desicions. Kang, Lee and Ratti (2014) examined the effects of economic policy uncertainty on firm level investments with annual data between 1985-2010 by means of regression and error correction model. Empirical results showed that economic policy uncertainty effected firms' investment desicions. It was also concluded that effects of uncertainty were higher in recessions.

Wanga, Chenb and Huang (2014) studied on the effects of economic policy uncertainty on corporate investments of Chinese listed companies. In the study, quarterly financial statement data between 2003-2012 and Chinese Economic Policy Uncertainty Index data were used. Regression model results revealed that when the degree of economic policy uncertainty was higher, firms standed to lower their investment and firms which have higher return on invested capital used more internal finance

Policy uncertainty affects stock returns as well as macroeconomic variables. Pástor and Veronesi (2012), Ozoguz (2009) and Dzielinski (2011) examined negative relationships between economic policy uncertainty and stock returns by means of different econometric models. As for Sum (2012) and (Balcilar, et al.. 2013), they assessed relationships between economic policy uncertainty and stock returns on country basis.

Antonakakis, Chatziantoniou ve Filis (2013) analyzed co-movements of S&P500 implied volatility index, S&P500 returns and policy uncertainty index with time varying correlations obtained from DCC model. The data between 1993-2011 was used and the results revealed that correlations between the series were time-varying and sensitive to oil demand shocks and USA recessions.

Sum (2013) investigated the relationships between economic policy uncertainty indexes of USA and Europe. The data between 1993-2011 and cointegration test was used in the study

and results showed that there was a long term equilibrium relationship in economic policy uncertainty between the United States and Europe.

In conclusion, when the literature is examined it is seen that there has been a lack of studies analyzing the relationships between Economic Policy Uncertainty Indexes and stock returns on the basis of different markets, econometric models and indexes. In this context, in the study, changes in volatility structure of Turkish stock market is analyzed associated with Economic Policy Uncertainty Indexes on the basis of 2008 Global Crisis.

Methodology and Data

In the study, country based Economic Policy Uncertainty Indexes which increase the volatility of Turkish stock market (BIST100) returns are investigated. The main hypothesis of the study is Economic Policy Uncertainty that occurs in selected countries, changes BIST100 Index return on the basis of 2008 Global Crisis. On the basis of this hypothesis, it is aimed to be found out the countries that are the sources of spillovers. In accordance with this purpose causality in variance test which is developed by Hafner and Herwartz (2006) is used in the study.

Hafner and Herwartz's test of variance causality depends on the calculation of univariate GARCH models. The null hypothesis, which states that there is no causality in variance, is described as the following;

$$H_0 = Var(\varepsilon_{it} | F_{t-1}^{(j)}) = Var(\varepsilon_{it} | F_{t-1}) \quad J = 1, \dots, N, i \neq j \quad (1)$$

$F_t^j = F_t \setminus \sigma(\varepsilon_{jt}, t < t$ and ε_{it} denote error terms of GARCH model. Model used to test null hypothesis is;

$$\varepsilon_{it} = \varepsilon_{it} \sqrt{\sigma_{it}^2 g_t}, \quad g_t = 1 + z_{jt}' \pi, \quad z_{jt} = (\varepsilon_{jt-1}^2, \sigma_{jt-1}^2) \quad (2)$$

$\sigma_{it}^2 = \omega_i + \alpha_i \varepsilon_{i,t-1}^2 + \beta_i \sigma_{i,t-1}^2$ conditional variance, ε_{it} denote standardised errors of GARCH model.

In the study, monthly BIST100 Index return and Economic Policy Uncertainty Index data of Canada, China, France, Germany, Italy, Spain, England and USA between 2001- 2014 are used. Economic Policy Uncertainty Index which is developed by Baker, Bloom, ve Davis (2012) is calculated based on the news which is about the "uncertainty", 'policy', 'tax', 'spending', 'regulation', 'central bank', 'budget', and 'deficit' on the newspapers. All the data is gathered from <http://www.policyuncertainty.com/> and <http://www.tcmb.gov.tr/> and analyzed with Eviews 8.0 Software.

The findings

Graphics and descriptive statistics of the series and unconditional correlations are investigated before analyzing the volatility spillovers based on the null hypothesis and graphics of the series are given in Figure 1.

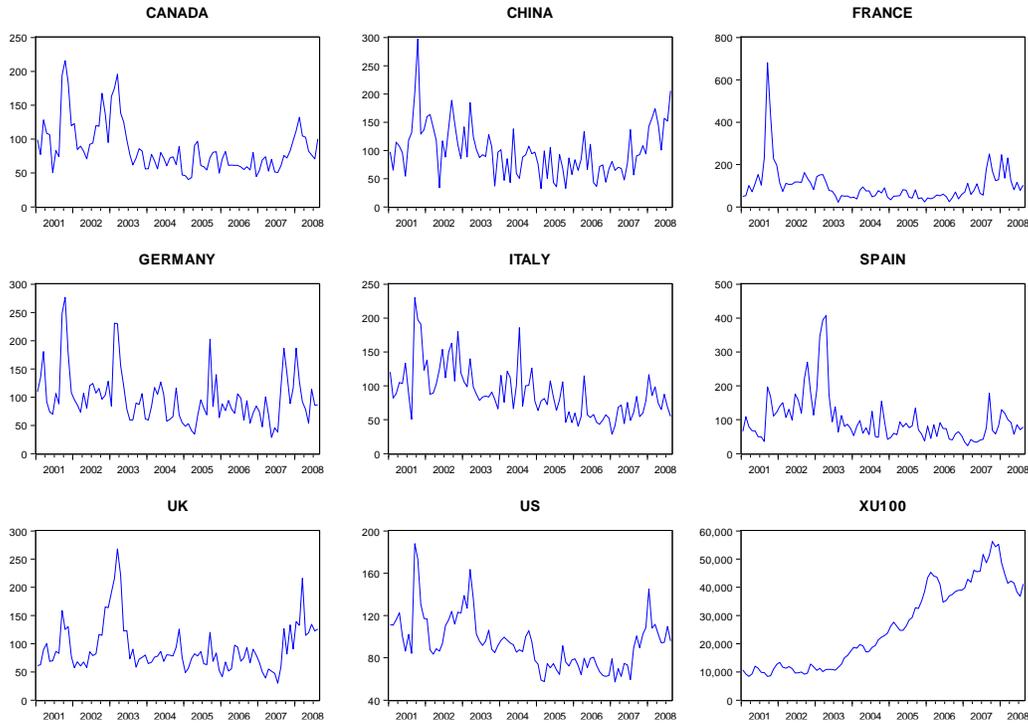


Figure 1: Period's Graphics

It can be seen from Figure 1. that Economic Policy Uncertainty Indexes are volatile between 2001-2008. But indexes are more volatile sometimes except China, Germany and Italy. There is an increase trend as for XU100.

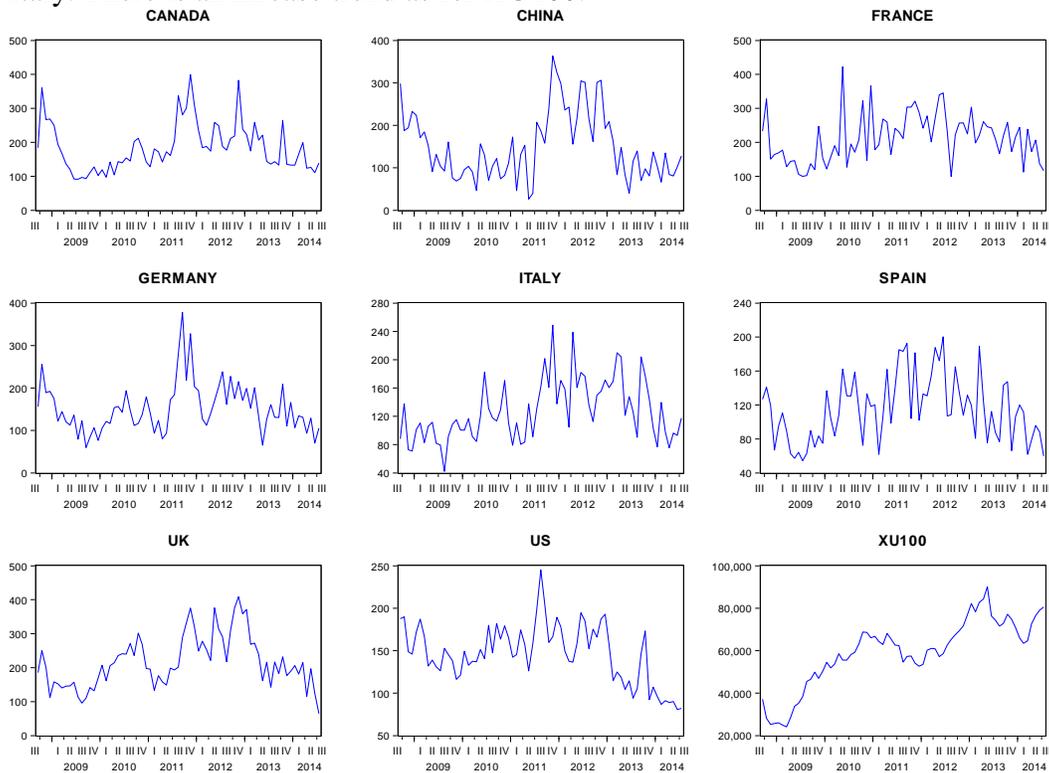


Figure 2: Period's Graphics

Economic Policy Uncertainty Indexes are still volatile between 2008-2014 as 1. Period. However, Economic Policy Uncertainty Indexes are in a similar volatility structure in 2. Period. On the other hand, there is an increase trend for XU100 as 1. Period. Descriptive statistics of the series are given in Table 1 as of periods.

Table 1: Descriptive Statistics

1. Period							
	Mean	Median	Maximum	Minimum	Std. Dev.	Skewness	Kurtosis
Canada	86.8	77.1	215.9	40.4	36.7	1.5	5.2
China	100.1	93.4	297.2	32.6	45.7	1.1	5.6
France	100.6	77.6	681.6	21.9	88	3.9	23.9
Germany	99.1	88.4	276.7	28.4	46.9	1.6	5.9
Italy	90.6	83.4	230	28.5	38.3	1.2	4.7
Spain	99.7	80.1	407.4	23.3	70.3	2.4	9.9
UK	92.4	79.8	268.2	30.1	42.8	1.7	6.5
US	94.5	91.7	188.1	57.2	25	1.1	5
Xu100	25921.7	22629.5	56261.7	8392.2	14738.4	0.4	1.7
2. Period							
	Mean	Median	Maximum	Minimum	Std. Dev.	Skewness	Kurtosis
Canada	184.6	172.5	399.8	91.3	70.8	1.1	3.8
China	150.4	134.9	363.5	26.1	79.2	0.8	2.8
France	212.2	210.1	422.7	99.4	71.1	0.5	2.9
Germany	152.1	139.8	377.8	59.6	58	1.3	5.7
Italy	127.7	117.4	248.9	42.1	42.6	0.7	3.1
Spain	114.6	110.5	200.3	54.4	38.5	0.4	2.3
UK	216	205.7	408.7	65	76.2	0.6	2.8
US	146.7	147.3	245.1	80.7	34.3	0	2.8
Xu100	59330.6	62434.5	90094.6	24113.9	16017.9	-0.6	2.9

As it is seen in Table 1., means of the series are positive for 1. Period and 2. Period. In 1. Period high kurtosis values of series indicate that big shocks are probable and this situation cause the distribution move away from normality. Table 2. shows the unconditional correlations between series as of periods.

Table 2: Unconditional Correlation Results

1. Period									
	Canada	China	France	Germany	Italy	Spain	UK	US	Xu100
Canada	1.00								
China	0.65	1.00							
France	0.64	0.59	1.00						
Germany	0.70	0.47	0.66	1.00					
Italy	0.62	0.46	0.58	0.50	1.00				
Spain	0.71	0.42	0.36	0.61	0.49	1.00			
UK	0.68	0.46	0.43	0.57	0.37	0.72	1.00		
US	0.84	0.66	0.69	0.73	0.70	0.66	0.69	1.00	
Xu100	-0.43	-0.22	-0.14	-0.23	-0.59	-0.43	-0.19	-0.47	1.00
2. Period									
	Canada	China	France	Germany	Italy	Spain	UK	US	Xu100
Canada	1.00								
China	0.63	1.00							
France	0.52	0.36	1.00						

Germany	0.74	0.53	0.46	1.00					
Italy	0.51	0.29	0.43	0.51	1.00				
Spain	0.45	0.34	0.52	0.57	0.57	1.00			
UK	0.63	0.54	0.60	0.59	0.60	0.54	1.00		
US	0.57	0.51	0.35	0.60	0.26	0.53	0.45	1.00	
Xu100	-0.04	-0.22	0.24	-0.08	0.35	0.15	0.28	-0.32	1.00

It can be seen from Table 2. that unconditional correlations between BIST100 Index return and Economic Policy Uncertainty Indexes of Canada, China, France, Germany, Italy, Spain, England and USA are changing as of periods. Correlations are negative between BIST100 Index return and all of the Economic Policy Uncertainty Indexes for 1. Period. But as for 2. Period, correlations are positive between BIST100 Index return and Economic Policy Uncertainty Indexes of France, Italy, Spain and England. This results indicate that the crises which occurred in Europe after 2008 Global Crisis changed the uncertainty of some of European countries and their relationships between BIST100.

Volatility spillovers analyzed to test the hypothesis of the study after descriptive statistics of the series and unconditional correlations are investigated. Results of causality in variance test are shown in Table 3.

Table 3. Results for causality in variance test

1. Period		2. Period	
Canada EPUI \neq > BIST100	(0.356)	Canada EPUI \neq > BIST100	(0.419)
BIST100 \neq > Canada EPUI	(0.735)	BIST100 \neq > Canada EPUI	(0.235)
China EPUI \neq > BIST100	(0.375)	China EPUI $=$ > BIST100	(0.279)
BIST100 \neq > China EPUI	(0.227)	BIST100 \neq > China EPUI	(0.758)
France EPUI \neq > BIST100	(0.426)	France EPUI \neq > BIST100	(0.233)
BIST100 \neq > France EPUI	(0.418)	BIST100 \neq > France EPUI	(0.683)
Germany EPUI \neq > BIST100	(0.503)	Germany EPUI $=$ > BIST100	(0.082)*
BIST100 \neq > Germany EPUI	(0.828)	BIST100 \neq > Germany EPUI	(0.390)
Italy EPUI \neq > BIST100	(0.255)	Italy EPUI $=$ > BIST100	(0.075)*
BIST100 \neq > Italy EPUI	(0.447)	BIST100 \neq > Italy EPUI	(0.138)
Spain EPUI \neq > BIST100	(0.843)	Spain EPUI $=$ > BIST100	(0.043)*
BIST100 \neq > Spain EPUI	(0.454)	BIST100 \neq > Spain EPUI	(0.366)
UK EPUI \neq > BIST100	(0.759)	UK EPUI \neq > BIST100	(0.332)
BIST100 \neq > UK EPUI	(0.926)	BIST100 \neq > UK EPUI	(0.759)
US EPUI \neq > BIST100	(0.404)	US EPUI \neq > BIST100	(0.402)
BIST100 \neq > US EPUI	(0.578)	BIST100 \neq > US EPUI	(0.539)

As it is seen in Table 3. there are no volatility spillovers between BIST100 Index return and Economic Policy Uncertainty Indexes as of 1. Period. But there are unidirectional volatility spillovers from Economic Policy Uncertainty Indexes of Germany, Italy and Spain to BIST100 Index return. This results indicate that increase in economic uncertainty of Germany, Italy and Spain due to crises which occurred in Europe after 2008 Global Crisis with increases in the volatility of BIST100 Index return.

Summary and Conclusions

In the study, which aims to determine the country based Economic Policy Uncertainty Indexes that cause changes in BIST100 Index return, Economic Policy Uncertainty Indexes

of Canada, China, France, Germany, Italy, Spain, England and USA are investigated on the basis of 2008 Global Crisis. When the series of study are analyzed, it is seen that all of the Economic Policy Uncertainty Indexes are volatile as of periods.

When the unconditional correlation structures are analyzed, it is seen that correlations between BIST100 Index return and selected Economic Policy Uncertainty Indexes changed after 2008 Global Crisis. While all the correlations are negative before the 2008 Global Crisis, after the crisis, correlations between BIST100 Index return and Economic Policy Uncertainty Indexes of France, Italy, Spain and Germany turned in to positive.

According to causality in variance test results, there are no volatility spillovers between BIST100 Index return and Economic Policy Uncertainty Indexes but after the 2008 Global Crisis there are unidirectional volatility spillovers from Economic Policy Uncertainty Indexes of Germany, Italy and Spain to BIST100 Index return.

From the point of view of Borsa Istanbul, in which %50 portion of shares belong to foreign investors, results of the study can be considered with the effects of debt crises which is deepened in Europe. The effects of the increasing uncertainty in some of the PIIGGS countries; Portugal, Ireland, Spain, Italy and Iceland, as a result of debt crisis, tally with the results of the study. In this context, investors especially who are risk averse, should review their investments in Borsa Istanbul, considering the changes that occur in policy uncertainty of Germany, Italy and Spain.

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The Risk Structure of Travel and Leisure Sector in Turkey: Before and After the Global Crisis

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Abstract

There are many studies focusing on the hotels and hospitality firms in the literature, however, there is few studies on the risk structure of travel and leisure sector. The purpose of the study is to compare the risk structure of travel and leisure sector with the general stock market (Turkish Stock Market) before and after the global crisis. Travel and leisure sector includes sport clubs, resort & thermal hotels, movie theatre and airline companies. A price weighted index is created for travel and leisure sector using DataStream sector classification. The results indicate that leisure sector has less risk than general stock market for both before and after the crisis period. It is clear that global crisis has less impact on leisure sector than general stock market.

Keywords: sport travel and leisure sectors, risk structure, volatility, borsa Istanbul.

Introduction

Over the past decade the travel and leisure sector have played an important role in the economy. The total contribution of travel and leisure sector to the gross domestic product (GDP) is getting increase year by year. Thus the significance of the travel and leisure sector has been increasing nowadays in the world (Puarattanaarunkorny et al., 2014).

To determine the stock and the index that investors will choose is the most difficult and important decision for investors. This decision firstly depends on the investors risk appetite and then the volatility structures of the alternative instruments.

Turkish stock market face challenges due to some uncertainty events such as global economic recession. The negative shocks effect on the travel and leisure industry and related businesses such as hotels, airlines, transportation services, and restaurants. Consequently, the shocks can have an influence on investment in the stock market, particularly with stocks that are related to these industries. Thus the purpose of the study is to compare the risk structure of travel and leisure sector with the general stock market (Turkish Stock Market) before and after the global crisis to see whether the global crisis has a deep effect on travel and leisure sector. This study is first study performing a univariate analysis of the time series properties of the returns on travel and leisure sector whether there is much more studies related to this sector (Chen, 2007; Garcia et. all. 2003; Chen, 2011, Cave et.al, 2009).

In the literature, academics, practitioners, investors and regulators are mostly interested in stock market volatility rather than specific sector such as travel and leisure sector. Thus, the literature has been growing in the stock market of individual countries (Balaban et. all, 1999; Tse, 1995; Tse and Tung 1992, Dimson and Marsh, 1990) and foreign exchange markets (Taylor, 1987; Lee, 1991; Andersen and Bollerslev, 1998). For Turkey, the studies are fundamentally based on modeling stock market volatility (Muradoğlu, et. all, 1999, Yalçın, 2006; Telatar and Binay, 2002; Akgül and Sayan, 2005; Mazıbaş, 2005).

There is no any study on the risk structure of travel and leisure sector in Turkey. Travel and leisure sector includes sport clubs, resort & thermal hotels, movie theatre and airline companies. A price weighted index is created for travel and leisure sector using DataStream sector classification. The results indicate that leisure sector has less risk than general stock market for both before and after the crisis period. It is clear that global crisis has less impact on leisure sector than general stock market.

For this purpose, this paper is organized as follows: Section II describes the research method employed. Section III describes data and empirical findings. Section IV provides the summary and conclusion.

Methodology

Time series can be expressed as a function of its lagged values; it can be defined as an autoregressive process and can be stated as

$$Y_t = \delta + \alpha_1 Y_{t-1} + \alpha_2 Y_{t-2} + \dots + \alpha_p Y_{t-p} + \varepsilon_t$$

If the value of a variable at time t is determined by the lagged value of the residual in the same period and the previous, this process is defined as a MA process and can be stated

$$Y_t = \mu + \varepsilon_t + \beta_1 \varepsilon_{t-1} + \dots + \beta_q \varepsilon_{t-q}$$

The most popular class of models for conditional volatility is the Auto Regressive Conditional Heterocedasticity (ARCH) class of models introduced by Engle (1982). The GARCH models, which are generalized ARCH models, allow for both autoregressive and moving average components in the Heteroscedastic variance developed by Bollerslev (1986) and stated as follows:

$$r_t = \sqrt{h_t} \varepsilon_t$$

$$h_t = \alpha_0 + \sum_{i=1}^q \alpha_i r_{t-i}^2 + \sum_{j=1}^p \beta_j h_{t-j}$$

$$\alpha_0 > 0$$

$$\alpha_i \geq 0 \forall i \geq 1$$

$$\beta_j \geq 0 \forall j \geq 1$$

Data and Empirical Findings

This study covers both general market index and travel and leisure sector index. The data required for analyzing were obtained from Data Stream, for the period between 15.04.2005 and 22.01.2014 when all four stocks were trading on the stock exchange market. Eviews 6.0 software package was used for the analysis. The paper compares analyses of the two

subsample periods to evaluate how financial crisis affects the risk structure of travel and leisure sector. The paper divides the total sample period into two subsamples periods: pre-crisis and crisis and apply ARCH class model to characterize the risk structure of travel and leisure sector. The pre-crisis period ranges from 15.04.2005 to 15.09.2008 when Lehman Brothers collapse and crisis period ranges from 16.09.2008 to 22.01.2014.

To investigate the risk structure of travel and leisure sector and general stock market in Turkey, we used univariate analysis as GARCH models. For applying this method, the return series don't have unit root. Firstly, Augmented Dickey-Fuller unit root test (ADF) is applied for checking the unit root process of this series (Dickey and Fuller, 1981). Results of Augmented Dickey-Fuller (ADF) unit root tests, reported in Table-1.

Table 1: Unit Root Tests Result

Variable	ADF- t statistic- for the model without trend	ADF- t statistic - For the model with trend
General Market	-36.55095	-36.53989
Travel and Leisure Sector	-35.25192	-35.26762

* MacKinnon critical values for the significance level of 1 %, 5 % and 10 % respectively are as follows: - for the model without trend -3,43, -2,86 and -2,56, for the model with trend ; -3,96, -3,41 and -3,12.

As a result of Table 1, calculated t-test values for both general market and travel and leisure sector are higher than t-test table values. Thus the null hypotheses of unit root were rejected and this shows that both general market and travel and leisure sector are stationary. Secondly, for modeling conditional mean, we must primarily detected the fitted AR, MA and ARIMA models using autocorrelation and partial autocorrelation function. The estimated parameters are presented in Table-2.

Table 2: ARMA Models Parametric Estimates

	Variable	Coefficient	Std. Error	t-Statistic	Prob.
General Market	C	0.042514	0.038112	1.115517	0.2647
	AR(6)	-0.036271	0.012429	-2.918220	0.0036
	AR(7)	-0.855412	0.053628	-15.95074	0.0000
	MA(7)	0.819563	0.059928	13.67583	0.0000
Travel and Leisure Sector	C	0.033838	0.042995	0.787027	0.4313
	AR(1)	0.070255	0.020816	3.375031	0.0008

Table 2 show that general market mean model is AR(6), AR(7) and MA(7), while travel and leisure sectors mean model is AR(1). Those models are selected by Akaike information criterion (AIC). Thirdly, after determining the conditional mean, we test for autoregressive conditional heteroscedasticity (ARCH) in the residuals using Lagrange multiplier (LM) (Engle 1982). For both general market and travel and leisure sector, it is confirmed the persistence of conditional heteroscedasticity. We now focus on the volatility modeling using ARCH models (Tsay, 2005). The estimated models are presented in Table-3.

Table 3: Volatility Models

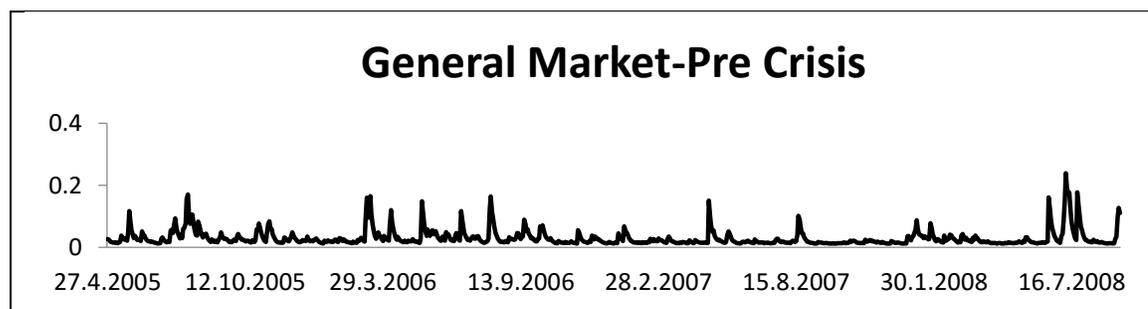
<i>Fitted GARCH (1,1) Models</i>					
		Coefficient	Std. Error	z-Statistic	Prob.
General Market	C	0.112487	0.019837	5.670525	0.0000
	RESID(-1) ²	0.100165	0.009124	10.97855	0.0000
	GARCH(-1)	0.870496	0.011606	75.00619	0.0000
Travel and Leisure Sector	C	0.434196	0.024704	17.57573	0.0000
	RESID(-1) ²	0.279748	0.015237	18.35956	0.0000
	GARCH(-1)	0.629600	0.013829	45.52600	0.0000

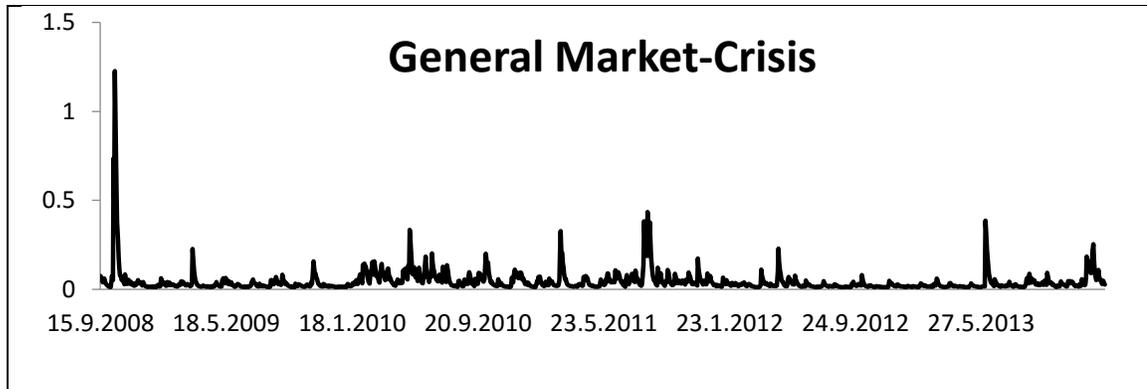
According to Table 3 the GARCH (1,1) model seems to be the fitted model, as it incorporates the ARCH processes verified by the ARCH LM test. . However, large values of the ARCH and GARCH parameters influence the conditional volatility in different ways. A high ARCH parameter implies high short-run volatility and high GARCH parameters indicate high long-run volatility. It is clear that Travel and Leisure Sector has more high short-run volatility than General Market

The descriptive results of estimated volatility model are presented in Table 4 and Graph 1-2 for both pre-crisis and crisis period.

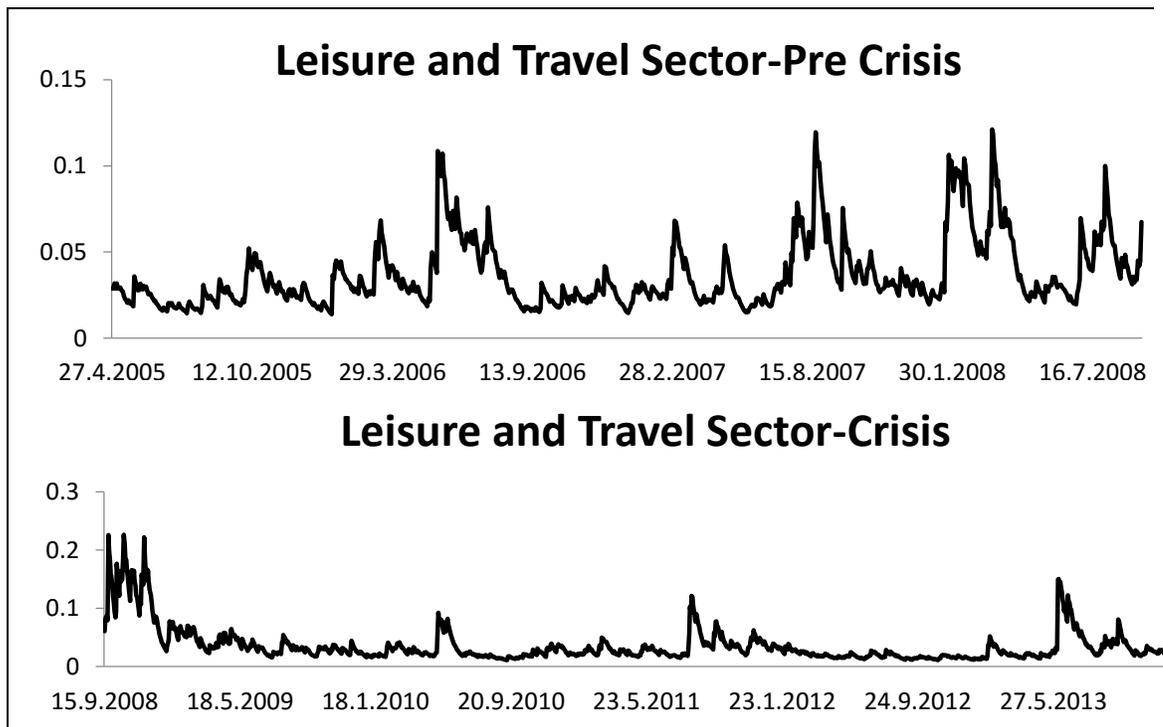
Table 4. Summary Statistic For Estimated Volatility

	Mean	Median	Max.	Min.	Std. Dev.	Skewness	Kurtosis
Pre-Crisis							
GM	3.674	2.95	1.21	1.39	2.00	1.63	5.50
LEI	3.052	2.12	2.38	1.21	2.67	3.37	1.71
Crisis							
GM	5.202	3.50	2.26	1.55	4.28	2.03	6.50
LEI	4.608	2.56	1.22	1.27	9.28	8.40	8.79





Graph 1. The Risk Structure of General Market: Before and After the Global Crisis



Graph 2. The Risk Structure of Travel and Leisure Sector: Before and After the Global Crisis

Table 3 confirms that GARCH (1,1) models fit for both general market index and travel and leisure sector in Turkey.

The paper compares analyses of the two subsample periods to evaluate how financial crisis affects the risk structure of travel and leisure sector. The paper divides the total sample period into two subsamples periods: pre-crisis and crisis and compare descriptive statistics of estimated conditional volatility to characterize the risk structure of travel and leisure sector (see Graph 1 and 2)

For pre-crisis period it is clear from Table 4 that travel and leisure sector has less risk than general stock market ($3,674 > 3,052$), however for crisis period whether the risk structure of

general market and travel and leisure sector increased, it is clear from table 4 that travel and leisure sector has still less risk than general stock market ($5,202 > 4,608$). It is clear that global crisis has less impact on leisure sector than general stock market.

This study was applied only to Turkish stocks which were quoted on Borsa Istanbul for the period between 2005 and 2014. Therefore, the results may not be generalized to all stocks in the world.

Conclusion

The purpose of the study is to compare the risk structure of travel and leisure sector with the general stock market (Turkish Stock Market) before and after the global crisis. The paper compares analyses of the two subsample periods to evaluate how financial crisis affects the risk structure of travel and leisure sector. Total sample period is divided into the two subsamples periods: pre-crisis and crisis to see whether the financial crisis have deep effect on travel and leisure sector.

It can be seen when the conditional variance structures are analyzed that shocks that occur in the market are less persistent than the general market. This result indicates that Travel and Leisure Sector has more high short-run volatility than General Market.

The results indicate that leisure sector has less risk than general stock market for both pre-crisis and crisis period. It is clear that global crisis has impact on leisure sector because the risk structure of travel and leisure sector increased in crisis period but leisure sector has still less risk than general stock market for the crisis period. Thus it is clear that global crisis has less impact on leisure sector than general stock market.

For further studies, it is investigated for developed countries and other emerging countries. Other events like European Crisis can be considered as subperiods. On the other hand, spillover models which help to determine magnitude and duration of the effects can be used.

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Attachment 1: Summary Statistic for General Market

	Pre-crisis Period		Crisis Period	
	T&L Sector	General Market	T&L Sector	General Market
Mean	0.099232	0.060288	-0.010104	0.033739
Median	0.000000	0.000000	0.000000	0.016977
Maximum	7.589003	7.179995	10.80930	12.72548
Minimum	-6.935000	-8.525478	-18.04510	-10.90198
Std. Dev.	1.593805	1.917450	2.094456	1.894835
Skewness	0.126565	-0.152172	-0.883449	-0.145894
Kurtosis	7.040096	4.328986	11.79959	7.587071
Jarque-Bera	593.3259	67.30515	4766.149	1249.976
Probability	0.000000	0.000000	0.000000	0.000000
Sum	86.23302	52.39019	-14.34773	47.90919
Sum Sq. Dev.	2204.907	3191.303	6224.791	5094.779

Food and Beverage Cost Control Process of Hotel Enterprises: The Case of Orlando, Florida

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Abstract

Income provided from food and beverage (F&B) sales is an important source of revenue for the hospitality industry. Therefore, hotel enterprises which are one of the most important elements of accommodation industry should perform an F&B cost control in order to minimize costs and increase customer satisfaction. For an effective cost control process; F&B cost control processes and cost control points need to be monitored carefully. The purpose of this study is to investigate F&B cost control processes of hotel enterprises in Orlando, FL and perform an importance-performance analysis for the issues appear to be critical in F&B cost control processes. Regarding the literature review, it is expected that there is a significant difference between the size of the hotels and their F&B cost control processes. To this end, in order to collect data, the research establishes a questionnaire survey to be performed by F&B managers of Orlando hotels to find out the existence of those possible differences. Also, the research investigates the usage rate of Activity-Based Costing (ABC) in hotel enterprises as an overhead allocation method. The research will deploy quantitative data analysis for the evaluation of survey results.

Keywords: food and beverage cost control process, activity based costing, hotel enterprises, cost control measures

Introduction

In today's business world, the design and effectiveness of information systems in industries, which are especially dominated by intense competition, carries an extremely critical role for companies. In this context, trying to increase profitability by simply increasing the sales price is no longer an option. Hence, the only rational way to increase profit is cost reduction. In particular, accurate cost information for manufacturing and service firms and ongoing cost control process is extremely important. Without having accurate cost information, the cost control analysis will not be able to be grounded on a correct basis and strategic decisions regarding this cost information would be wrong.

When food and beverage (F&B) is dealt on a departmental basis, there appears a distinguished issue due the nature of F&B department with its low margin relative to the rooms and relatively its high operational cost driven by high labor involvement (Bertagnoli, 2010). The ultimate outcome is a department that has an average cost level that typically ranges from 78%-90% and a profit margin which is averagely 20%-25% compared to 50%-

75% profit margin generated by commercial room sales (Hoyer, 2007; Metz, 1991; Rushmore, 2003). This fact explains why cost control process matters for F&B department that needs a special monitoring.

In this sense, the study focuses on three important points. Firstly, the study investigates the F&B control methods carried out by the hospitality enterprises and explores the impact of the size of the enterprises on F&B cost control methods. Secondly, it explores the usage rate of ABC in F&B departments in the hotel enterprises. In especially hospitality enterprises, the overhead level can increase to significant levels. So, the research aims to explore the validity of Activity Based Costing (ABC) in F&B departments and the potential prevailing of conventional costing methods regarding a research by CAM-I which exhibit that;

- 80% of US firms still use conventional cost systems and,
- Only %23 of them is satisfied with the information collected for their decision making process (Sharman, 2003).

Thirdly, an importance-performance analysis will be conducted with the importance level of cost control measures during F&B cost control stages and the frequency of implementation of these cost control measures by hotel enterprises will be explored in accordance with the responses of research participants.

Concept of food and beverage cost control

F&B industry has established its own standards in order to facilitate the benchmark process within the industry. One of the most important factors in the benchmark process is standards. The percentages of primary cost standards for similar processes constitute these standards. The primary costs are food, beverage and labor costs. In other words, these costs establish a substantial amount of costs of hospitality enterprises. In this perspective, cost control may be defined as “having necessary limitations and obligations on the resources of enterprise’s operations”. It usually takes place at the planning stage and implemented by field supervisors and managers at the daily basis (DeFranco & Noriega, 2000). In food service sector, there are four main production costs (Miller, Hayes, & Dopson, 2005).

- Food Costs are the actual costs that are used to produce menu item preferred by guests. These costs comprise meat product costs, daily fruit and vegetables and other costs categories that are associated with the food items produced by food service.
- Beverage Costs comprise the related costs of alcoholic beverages and other ingredients, such as juices, carbonated water, or fruit that are used to make drinks for guests (Barrows, Powers, & Reynolds, 2012). Costs of non-alcoholic beverages are usually included in the food costs because of their non-alcoholic nature.
- Labor costs are whole employee costs that are necessary for the continuity of the enterprise. Labor costs generally appear to be the most costly item.
- Manufacturing overhead are the costs other than F&B and labor costs such as tablecloths, napkins, glassware, knives, pots, indirect labor and etc. This cost category has an important place in today’s enterprises due to it crucial influence on total profitability.

The stages of food-beverage cost control

As food, beverage and labor costs constitute three primary costs in hospitality enterprises, management should monitor these three costs extensively. If F&B costs are combined to a one cost category, then this category represents one of the two highest cost categories. The F&B cost control is a holistic process which needs of the monitoring of all activities from purchasing, storing, issuing and to finally, service. (DeFranco & Noriega, 2000). Below are given the stages of F&B cost control:

Purchasing: Purchasing is the initial process where cost control measures take place (Oliva, 2003). Therefore, a successful purchasing depends on the standards and standard procedures that determine the quality, amount and price of F&B item (Dittmer, 2003). Nevertheless, another important issue is determining the required stock level. The required stock level may be defined as the amount of material that should be at hand. To accomplish an optimal required stock level, sales forecasts should be performed on a rational basis and standard receipts should be established to monitor if there is any missing material for the production (Miller et al., 2005). If these factors are carefully considered, then economic order quantity which especially minimizes costs of stock orders and storing will have been taken into account (Hilton, 1999).

Receiving: Receiving activity involves checking whether the received item is at the same quality, quantity and price with the related order (Dittmer, 2003). After this approval is provided, the material must be secured as quickly as possible and risk of dangers such as theft or corruption should be avoided. Appropriate and accurate recordings should be made and workers that have received specialized training should be employed (DeFranco & Noriega, 2000).

Storing and issuing: Proper storing is very important for accountability and quality maintenance. Labeling items will facilitate FIFO and LIFO processes and clarifies the specific items that have more value than others. Items should only be delivered when formal request is made and all delivery processes of items from warehouse should be recorded with the signature. That is one of the crucial measures that should be taken at the first step (DeFranco & Noriega, 2000). Also, the easy perishable characteristic of F&B items forces managers to combine the responsibility of storing and issuing under the same employee (Miller et al., 2005).

Preparation and production: One of the important subjects in production stage of F&B is receipts. Receipt comprises lists and amount of materials for producing a particular product regarding a procedure and method to follow. Standard receipt helps to maintain quality in each production cycle (Dittmer, 2003; Miller et al., 2005). Controlling portions are another effective step to monitor costs and provide significant savings. This process should be performed on a permanent basis to avoid risk of fraudulent portion sizes, material shifting and other kinds of theft. Management should monitor personnel and pay attention to customer responses (DeFranco & Noriega, 2000).

Service: The main responsibility of the management is to provide products and services at the required level of quality with the affordable price. On the other hand, focusing solely

on cost issues may compromise quality which at the end will lead to customer dissatisfaction (Miller et al., 2005).

Sales control: The primary goal of sales control is to ensure all menu items generate optimal income for the enterprise regarding the fact that a price of the menu item served to the customer is the revenue gained (Dittmer, 2003).

F&B cost control methods

Thanks to cost control methods in hospitality, the cost analysis may be performed by actual F&B costs and progress can be monitored and checked if the costs are within predetermined or acceptable limits. In practice, F&B cost control methods are very close to each other and they are based on the same principles. The common goal of all methods is to deliver the cost data to managers as correctly and quickly as possible. Although literature suggests a variety of cost control methods referred with different names, two basic and common cost control methods are mentioned in this study:

Cost to sales percentages: After actual cost of F&B sold is identified, F&B cost percentage can be used to evaluate operations. It is a contemporary way of looking at food expense and this method is generally a preferred method for preparing profit and loss statement. Below is given the equation that expresses how to compute actual F&B cost percentages. Although this equation combines F&B cost together, all two cost percentage categories can be calculated separately or moreover, specific F&B items can be separately put in this equation.

$$F \& B \text{ Cost } \% = \frac{\text{Actual Cost of F\&B Sold}}{\text{Actual F\&B Sales}} \quad (1)$$

F&B cost % represents that portion of F&B sales that was spent on F&B expenses (Miller et al., 2005). The benchmarking in the same industry may be fruitful because the enterprises in the same industry have some cost drivers and revenue sources for their similar operations. When benchmarking the percentages of F&B cost, the industry averages or predetermined ratios set by management can be used to identify the cost levels of items.

Standard costing: Standard costs are referred as costs that should be arisen at the level of given income and business volume (Jagels & Coltman, 2004). These costs, in other words, are the cost of goods and services accepted by the management. The standard cost method involves evaluating F&B costs and measuring the effectiveness of controlling procedures. By using this method, managers are able to compare actual costs with standard costs at that period. Then, the favorable or non-favorable differences are identified and this process leads managers have guidance about the items that have excess cost levels. This method is proper for the enterprises that have set the standard recipes for all F&B items and used standard costs for all these items. The standard cost method requires detailed records and consistent calculation of the cost of F&B items (Dittmer, 2003; Jagels & Coltman, 2004).

Literature review

A review of the research conducted on F&B cost control operations reveals a limited amount of work. Although earlier few studies have applied purely mathematical analysis to explain break-even analysis in F&B operations (Casparian, 1966; Greenberg, 1986); contiguous studies have extensively presented the sampling of hotels with a narrow

accounting perspective that exhibit their methods to reduce costs by menu engineering (Metz, 1991); hiring an external audit firm to manage purchasing activities (Patterson, 1993); improvements at late room service (McCarthy & Simmons, 1995); using computerized inventory control system (Oliva, 2003); applying strategic decisions just like joint-ventures or external contracts with restaurants (Rushmore, 2003); using recycling kitchen equipment for display and incorporating live action stations (Kirby, 2009) and cutting costs without sacrificing their reputations (Bertangoli, 2010; Hoyer, 2007). Some studies especially emphasized the impacts of industry-wide recessions caused by Gulf War (Metz, 1991) and 9/11 attacks (Bertangoli, 2010).

Other commentaries have mainly mentioned other factors that may have an impact on F&B costs such as packaging (Demetrakakes, 2011); modern POS systems for F&B outlets (Harty, 2012); and food safety control systems (Wu, 2012).

Nevertheless, a literature review on ABC reveals a substantial amount of work. Studies in the late 1990s revealed that ABC seemed to gain a significant popularity among US firms. Such that, US firms found to have an average 49% usage rate (Krumwiede, 1998). There is some documented evidence that the satisfaction level of cost management systems of US firms gradually increase after the implementation of ABC system (Anderson, 1995; McGowan & Klammer, 1997; Narayan & Sarkar 2002; Swenson, 1995). However, even during those periods, the success of ABC among US firms had been found to have a great variation (Shields, 1995). Likewise, in the early 2000s, with a substantial drop, CAM-I found that the usage rate of ABC was %35 among US firms (Sharman, 2003).

Eventually, recent operation environments with intensive competition do not seem to maintain ABC as a cost allocation method and rather, ABC seems a frequent abandoned cost method with few success stories. A recent study explored the fact that 60% of US companies tried ABC and two out three had abandoned the system after first try (Van Der Merwe & Thomson, 2007). Correspondingly; Banker, Bardhan, & Chen, (2008) found no direct impact of ABC on factory performance in terms of production costs, production period and product quality.

Many research conducted about ABC system has a tendency to suggest the system mostly fits for manufacturing environment and samplings are mainly gathered form the listings of manufacturing firms. These studies found a positive association between ABC implementation and cost management satisfaction in British firms (Innes & Mitchell, 1991; Nicholls, 1992); Australian firms (Norris, 1994) and in Portugal (Major & Hopper, 2005).

Nevertheless, ABC found to be a satisfactory cost system within service industry. Such that, other more recent hotel industry research related to cost allocation methods extolled the virtues of ABC approach by the evidence found in Greek hotels (Pavlatos & Paggios, 2009; Vazakidis & Karagiannis, 2011); Taiwan hotels (Tsai, Hsu, Chen, Lin, & Chen, 2010); and USA hotels (Vaughn, Raab, & Nelson, 2010). Especially, Vaughn et al. (2010) applied ABC methods at a support kitchen in a Las Vegas casino and concluded that ABC is a powerful technique for proper overhead assignment.

Hypothesis development

The review of the literature has identified a number of evidence that F&B cost control has a crucial role because of F&B department's high-cost but low-margin nature. For this highly sensitive department, some studies (DeFranco & Noriega, 2000; Dittmer, 2003; Miller et al., 2005) suggest that some small measures may provide substantial cost savings. Additionally, the literature suggests the implementation of ABC has some benefits in hotel enterprises. In this perspective, the research uses "size of the enterprise" as the independent variable and it aims to explore the impact of the size of the enterprise on F&B cost control methods, ABC usage and the importance/performance ratings of the cost control measures. This framework forms the basis of hypothesis development of the study.

Cost control methods: If methods of cost to sales percentages and standard costing are compared, it is evident that standard costing is much more sophisticated method than the percentage method. Even though standard costing is a reflection of traditional cost system, it needs a detailed record with continuously updating and calculations of costs with the need of setting the standard recipes for all F&B items and defining standard costs for all these items. (Dittmer, 2003; Jagels & Coltman, 2004). Nevertheless it is evident that the standard costing process needs a comparison of actual and standard costs whereas cost to sales percentages only account for actual costs. Standard costing may only be proper with larger hotel enterprises which can devote much hour of work and resources, and need much detailed information. Therefore, it is hypothesized that;

Hypothesis 1a: There is a difference between standard costing usage and the size of the hotel enterprise.

Hypothesis 1b: There is a difference between cost to sales percentage usage and the size of the hotel enterprise.

ABC system implementation: A review of contingency studies found that there is a positive association between management accounting information design and firm size (Bruns & Waterhouse, 1975; Merchant, 1984). To establish an ABC system, which is considered as a highly sophisticated management accounting system; the defining of proper activity cost pools, related cost drivers and updating these cost drivers are necessary and those can only be performed by larger hotel enterprises which need highly detailed cost data for their decision making process. Additionally, previous studies also found a positive association between the size of the enterprise and ABC usage (Innes, Mitchell, & Sinclair, 2000; Pavlatos & Paggios, 2009). It is therefore hypothesized that;

Hypothesis 2: There is a positive association between the usage of ABC system in F&B department and the size of the hotel enterprise.

Importance/performance ratings

Previous publications emphasized some measures that should be taken during cost control stages. Despite these cost control measures which have been mentioned earlier in this study, are not relatively costly measures, it is suggested that they may provide significant cost savings and facilitate the cost monitoring process (DeFranco & Noriega, 2000;

Dittmer, 2003; Miller et al., 2005). Along with the previous hypotheses; importance/performance analyses of these cost control measures are performed and it is expected that size may have an impact on the attitudes towards cost related issues.

Therefore, it is hypothesized that;

Hypothesis 3a: There is a difference between importance ratings of cost control measures according the size of the hotel enterprise.

Hypothesis 3b: There is a difference between performance ratings of cost control measures according the size of the hotel enterprise.

Methodology

The survey questionnaire was designed to collect data to test the hypotheses developed for the research. The research aims to explore the issues about cost control process in hotel enterprises in Orlando, FL. The main focus of the survey is managers because of the fact that daily controlling of operations is more frequently handled by the field managers or supervisors (DeFranco & Noriega, 2000).

The survey consists of three main parts in accordance with the three hypotheses developed for the study. The first part consists of questions regarding the size of the enterprise in terms of stars, F&B cost control methods in use and satisfaction levels of the cost control methods. The second part consists of questions the level of ABC adoption and satisfaction level from cost allocation method in use. All questions about satisfaction levels were measured by a 5 point Likert-Scale ranging from “5-very satisfied” and “1-very dissatisfied”. Finally, the third part consists of importance/performance analyses of cost control measures that are suggested to be taken during F&B cost control stages. These cost control measures are identified by previous publications on F&B cost control (DeFranco & Noriega, 2000; Dittmer, 2003; Jagels & Coltman, 2004; Miller et al., 2005). This part is designed in three columns. First column asks the responder to specify the level of importance perceived by the manager for the cost control measure placed in the second column of the same line. For this analysis, 5 point Likert-Scale was used ranging from “5-very important” and “1-not important at all”. The third column of the related line evaluates the frequency of taking the mentioned cost control measure ranging from “5-every time” and “1-never”. The study used Likert-type scale response anchors by Vagias (2006).

The initial sample consisted of 242 Orlando hotels obtained from tripadvisor.com. The Orlando hotels were selected as the sample because Orlando has a heterogeneous pattern in hotel sector whereby it consists of both city hotels and resort hotels. An online survey has been established to conduct the survey and hotels’ e-mail addresses were obtained from each hotel’s web-site. 76 participants responded the survey. The response rate was therefore 31%.

Findings

General profile of the respondents: The respondents that participated in the study represented most of the positions in hotel’s organizational structure. The largest position groups represented in the sample was F&B manager (51,32%), followed by general

manager (25%), owner (10,53%), director of sales (7,89%), and accounting manager (5,26%).

42,11% of the respondents work in two star hotels; 44,74% of them in three star hotels; 11,84% of them in four star hotels, and 1,32% of them work in five star hotels. These percentages directly reveal the fact that the analysis was regarding the mid-size hotels. *F&B Cost Control Methods:* Respondents were asked to indicate their F&B cost control methods in use. If there were multiple methods in use, respondents were allowed to select multiple choices. Although standard costing and cost to sales percentage methods were used in the survey, respondents were asked to describe any other F&B cost control methods than the given methods in the survey. However, no significantly different types of control methods were identified. Standard Costing found to have a usage rate of 9,21% whereas cost to sales percentages found to have a usage rate of 93,42%. The satisfaction level of F&B cost control methods in use has a mean of 4,22.

ABC Experience: A significant number of hotel enterprises (89,74%) have not used or tried ABC system as their overhead allocation method. Among the 10,53% of the hotel enterprises that have had an ABC experience, just 3,95% of them still use it which reveals the fact that 62,5% of hotels that once used ABC system, then rejected it after implementation. The satisfaction level of overhead allocation method in use of the sample hotels found to have a mean of 4,05.

Importance and performance of the F&B cost control measures: Table 1 indicates the importance/performance analysis of the cost control measures suggested in the survey. Although there may be much more F&B cost control measures in other stages, these three stages are presumed to be the most significant stages that these cost control measures take place.

The first column of Table 1 indicates that the no. 9 (mean= 4,4868) cost control measure that consists “labeling the dates of supply on the items in the warehouse to facilitate FIFO or LIFO procedure“ is the most important F&B cost control measure followed by no.8 (mean =4,3947) “placing of items according to the system applied in order to facilitate LIFO or FIFO system” and no. 3 (mean=4,3684) “establishing a long-term contract with a supplier”.

Nevertheless, the second column of Table 1 indicates that performance of these statements. It is apparent that the rank of the statements has slightly changed whereas no. 8 is the most frequently performed F&B cost control measure (mean= 4,2763) followed by no.9 (mean =4,1316) and no. 3 (mean=4,0921).

The third column of Table 1 where T-tests indicated statistically significant importance–performance gaps were found in 7 statements out of 16. Among 5 statements out of 7 statements, importance of these items exceeded performance ratings. These items exhibit the areas where performance improvement may be necessary. For instance, no.7 “merging the delivery and storage of the products under the same employee’s responsibility” has the

greatest significance level among the items where their importance exceeded importance ratings.

Hypothesis testing

Cost control methods: A one-way ANOVA analyses were conducted to find out if there were any statistically significant differences between standard costing usage and the size of the hotel enterprise (H1a) and between cost to sales percentage usage and the size of the hotel enterprise (H1b).

The findings revealed that statistically significant differences were found between standard costing usage and the size of the hotel enterprise (H1a: $F_{STD}=7,763$; $p_{STD}=0,000<0,050$); and between cost to sales percentage usage and the size of the hotel enterprise (H1b: $F_{CoSa}=5,996$; $p_{CoSa}=0,001<0,050$).

ABC system implementation: A regression analysis was conducted to find out if there was a positive association between the usage of ABC system in F&B department and the size of the hotel enterprise (H2).

The findings revealed that no statistically significant positive association was found between ABC usage system in F&B department and the size of the hotel enterprise (H2: $t=1,802$; $\beta=0,205$; $p=0,760>0,050$). Adjusted R Square was found to be 0,029 which indicates the 2,9% of variation in the dependent variable (ABC Usage) explained by the regression model.

Importance/performance ratings: For further analysis; the cost control measures are classified in three categories according to the stages that they take place: purchasing (PUR), storing (STO) and production (PRO) stage (Table 1). The distribution of number of statements between purchasing, storing and production stages is 3, 9 and 4 respectively. The average means of the related items under each category is used for one- way ANOVA analyses which were conducted to find out if there were any statistically significant differences between importance ratings of cost control measures according the size of the hotel enterprise (H3a) and between performance ratings of cost control measures according the size of the hotel enterprise (H3b).

Table 1: Importance/performance Analysis of the Cost Control Measures

Cost Control Measurers	Level of Importance		Level of Performance		T-Test	
	Mean	Std.Dev	Mean	Std.Dev	T Value	Sig.
Group 1: Purchasing Stage	3,684	1,1158	3,706	1,2118		
1. Considering "Economic Order Quantity" during purchasing	3,171	1,3305	3,434	1,2365	-1,9602	N/S
2. Considering "Safety Stock" for meeting excessive demand	3,513	1,0391	3,592	1,3384	-0,7859	N/S
3. Establishing a long-term contract with a supplier that can permanently meet product specifications	4,368	0,9776	4,092	1,0605	3,6207	0,000
Group 2: Storing Stage	3,279	1,3677	3,200	1,3403		5

4. Observing and controlling delivery personnel	3,315 8	1,3085	3,421 1	1,3393	-1,0162	N/S
5. Employing a separate warehouse manager in charge of warehouse operations	2,013 2	1,5620	2,302 6	1,5407	-2,8788	0,005 2
6. Following the daily warehouse stocks of food items	3,789 5	1,4816	3,460 5	1,2695	1,6868	N/S
7. Merging the delivery and storage of the products under the same employee's responsibility	3,368 4	1,4033	3,026 3	1,2959	4,0285	0,000 1
8. In order to facilitate LIFO or FIFO system, placing of items according to the system applied	4,394 7	0,9944	4,276 3	0,9179	0,8687	N/S
9. To facilitate FIFO or LIFO procedure labeling the dates of supply on the items in the warehouse	4,486 8	1,0262	4,131 6	1,2473	2,5411	0,013 1
10. To prevent the theft and deterioration of items, labeling their prices on items for the detection of expensive items in the warehouse	2,276 3	1,3623	2,381 6	1,4044	-0,6596	N/S
11. Placing the expensive items somewhere far away from exit of the warehouse	3,315 8	1,6183	2,973 7	1,5746	3,3041	0,001 5
12. Registering exiting items from warehouse with the signature	2,552 6	1,5526	2,828 9	1,4732	-2,2871	0,025 0
Group 3: Production Stage	3,759 9	1,2774	3,717 1	1,1514		
13. In order to prevent the theft of material by the production staff and fraudulent portion size observing the production staff and pay attention to customer responses	3,631 6	1,1644	3,671 1	1,1820	-0,5046	N/S
14. Keeping records and reports related to the losses incurred during the production stage	3,657 9	1,3221	3,486 8	1,3012	3,1530	0,002 3
15. Continuously performing portion size controls, to prevent possible deviations.	4,039 5	1,1825	3,855 3	0,9480	1,9783	N/S
16. Updating the standard recipes based on the current production process	3,710 5	1,4405	3,855 3	1,1742	-1,5241	N/S

The findings revealed that no statistically significant differences were found between importance ratings of cost control measures according the size of the hotel [H3a: ($F_{PUR}=1,462$; $p_{PUR}=0,232>0,050$; $F_{STO}=1,063$; $p_{STO}=0,370>0,050$; $F_{PRO}=2,329$; $p_{PRO}=0,82>0,050$)].

On the other hand, the findings revealed that statistically significant differences were found between performance ratings of cost control measures in purchasing stage and production stage but not in storing stage according the size of the hotel [H3b: ($F_{PUR}=2,799$; $p_{PUR}=0,046<0,050$; $F_{STO}=0,289$; $p_{STO}=0,833>0,050$; $F_{PRO}=4,367$; $p_{PRO}=0,007<0,050$)].

Conclusion

This study investigates F&B cost control processes of hotel enterprises in Orlando, FL and performs an importance-performance analysis for the issues that appear to be critical in F&B cost control processes. The results reveal that standard costing was found to have a usage rate of 9,21% whereas cost to sales percentages were found to have a usage rate of 93,42%. The satisfaction level of F&B cost control methods in use has a mean of 4,22. The research also investigates the usage rate of ABC in hotel enterprises as an overhead allocation method and only 10,53% of the hotel enterprises expressed that they have had an ABC experience and just 3,95% of them are still using it. Therefore, 62,5% of hotels that once used ABC system, rejected it after implementation. This finding is consistent with the findings of Van Der Merwe & Thomson (2007). No statistically significant positive association was found between ABC usage system in F&B department and the size of the hotel enterprise. The satisfaction level of overhead allocation method in use of the sample hotels was found to have a mean of 4,05 which appears to be contradictory with the finding of Sharman (2003) which claims only 23% of US companies were satisfied with their conventional cost systems.

T-tests indicated statistically significant importance-performance gaps were found in seven F&B cost control measures out of sixteen. The findings revealed that statistically significant differences were found between standard costing usage and the size of the hotel enterprise and between cost to sales percentage usage and the size of the hotel enterprise.

The findings revealed that statistically significant differences were found between performance ratings of cost control measures in purchasing stage and production stage but not in storing stage according to the size of the hotel. On the other hand, the findings revealed that no statistically significant differences were found between importance ratings of cost control measures according to the size of the hotel.

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National Culture and Leadership Practices: Vietnamese-American Entrepreneurs Perspectives

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Abstract

Currently, there exists many significant cross-cultural studies that explore culturally derived values and such influence on leadership practices amongst what is considered mainstream Asian groups—Chinese, Singaporean, Korean, and Japanese. These researchers delve into how these business leaders and their employees utilize leadership opportunities in comparison to their international counterparts such as the United States, Chile, Austria, and Germany. Thus far, no research exists to specifically understand the national cultural characteristics of Vietnamese American entrepreneurs influence their leadership practices. Naturally, such studies would focus on the Vietnamese American experience in business in the west, most notably the United States, which has the largest population of Vietnamese settlers. This qualitative study explores the cultural background of Vietnamese- Americans and their influence of this background on leadership practices among Vietnamese-American entrepreneurs. This study utilizes the Geert Hofstede's national cultural dimensions of power distance, uncertainty avoidance, individualism-collectivism, masculinity-femininity, and Confucian Dynamism. Six participants are business leaders who previously worked in private and public US companies. These Vietnamese American leaders either resigned from their positions at will or because they were terminated, and forged their own path into entrepreneurship by starting their own business. The interview process consisted of three sessions with open-ended questions. In the first session, participants were invited to reveal as much as possible about their life history and to reconstruct their experiences. In the second session, participants were asked to share stories and to give concrete details of their experiences relating to Hofstede's national culture dimensions. In the third session, participants reflected on the meaning of their experiences. This study included only men; therefore, findings are from a male perspective, but it is culturally and ethnically relevance. The participants stated their beliefs that cultural leadership elements, such as inherited traditions, ethnic values, family teaching and history, and the concept of karma, acted as a compass for their leadership practices. The individuals in the study sought to merge their national beliefs with Western leadership theories of business management and operation. They demonstrated the relationship between a merged Vietnamese-Western beliefs as the ideal leadership prototype for promising Asian business leaders, especially those who reside in a Vietnamese dominated community.

Keywords: national culture and leadership practices, entrepreneurs and leadership practices, Asian leadership practices

An Empirical Evaluation of the Impact of M-Commerce on Saudi Banks

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Abstract

The main purpose of this research is to critically analyze the impact of mobile commerce on the banks of Saudi Arabia. Through secondary research and substantial literature review, the research identifies different impacts and barriers that can hinder the adoption of mobile commerce. With the passage of time and continuous technological evolutions one of the most widely used tools in the current scenario that is utilized by banks and other business entities is marketing through mobile. New opportunities are being offered to the users by the banks over the mobile devices, for instance, transferring of funds, making payments and locating the branches. It is obvious that the next evolution stage for Banks with the business organizations is to provide a platform to users where they can easily operate their accounts without being connected to any wired network. Furthermore, the research analyses different researcher's work, who have studied the emergence and adaptation of mobile commerce. In addition to this, the research also highlights different aspects of mobile commerce and various driving force that lead towards the success of mobile commerce in today's competitive business world.

Keywords: mobile banking, m-commerce, mobile phones.

Introduction

With the evolution of internet, the way people interact and communicate with each other within their social circle has significantly changed. The increase accessibility and availability of the internet has drastically shifted the use of m-commerce towards the business environment (Clarke, 2008). The increase in the demand of continuous availability of the internet connection has shifted the users from desktops to laptops and further to mobile devices. The channel of telecommunication has also been observed to migrate not only from fixed nature to mobiles, but also from voice to data, which has enabled people stay connected from anywhere, at anytime (Hopkins, 2006). Organizations are continuously adopting different mediums and channels in order to meet the expectations of their customers, increase customers' convenience, maintain profitability and reduce costs.

In today's competitive world, electronic commerce has immediately penetrated into majority of the organization's marketing strategy. With the new technologies emerging and web changing continuously, it has become possible for non-technical users to interact through social media, which includes, support channels, reviews, blogs, business chat,

consumers feedback, online videos, etc. (Hopkins, 2006). However, with the passage of time and continuous technological evolutions, one of the most widely used tools in the current scenario that is utilized by enterprises is marketing through mobile. This marketing application has become a widespread medium in different industries because a sale up thrust is given through this medium. New leads are created and customers are informed at really low cost. The term mobile commerce has emerged from the wireless nature of devices that support the business transactions performed through mobile networks. Devices and technologies which include, Personal Digital Assistants (PDAs), notebooks, pagers, digital cellular phones, as well as automobiles, are able to easily access the wireless Internet and use its different abilities, like Web-browsing and e-mails. The use in the m-commerce transaction is increasing drastically around the globe, for example, the transaction has increased per year from 498 million in 2007 to 4.8 billion in 2011 (Genis-Gruber & Tas, 2011).

Research Aim and Objective:

The main aim of this research is to critically analyze the impact of mobile commerce on the banks of Saudi Arabia.

Significance of the Study

This study of mobile commerce is an emerging concept for understanding how it can revolutionize the world of banking and how the adaptation of mobile commerce has affected the banking system of Saudi Arabia. The study findings will be helpful for managers in understanding about the significance and benefits of adopting m-commerce as a mode of communication and services. This research will further be helpful in identifying various barriers that are faced by banks in integrating mobile commerce. This will enable banks in Saudi Arabia and business entities in Saudi Arabia to come up with different techniques and strategies to use mobile commerce for effectively communicating with their customers. Furthermore, since the integration and usage of mobile commerce is significantly changing the way consumers are being approached and the way in which consumers behave and perceive. This research will help out in analyzing how this technological revolution is affecting the overall banking industry.

Literature Review

Emergence of M-commerce

The commerce businesses have been witnessing rapid boost that is caused by the emergence of wireless technology. After the revolutionary emergence of electronic commerce and its impact on the business environment across the globe, mobile commerce is another step towards the revolution of wireless network (Doney & Canon, 1997). With the extensive developments, it has provided an opportunity to develop a strong connection between the firms and their target markets, where a number of businesses and organizations have been taking chances by adopting this opportunity. In today's competitive world, Mobile Commerce as wireless technology has become a part of everyday life (Rogers, 1983). This refers to connecting people and making business through mobile applications and is considered to be an effective strategy. This has been considered to be great potential making ways for the adoption of mobile commerce on the business world.

Concept of Mobile Commerce

Even though, there has been a widespread agreement that mobile commerce is using the mobile devices for communicating and conducting different transactions through private and public networks, yet, no formal definition exists for mobile –commerce (Yung-Ming Li, 2009). Such type of confusion will destroy the research and theories developed on the issues and application of mobile commerce.

M-commerce Features

There are some major features of m-commerce that are determined only through the mobile environment, which also enhances the opportunity for new application and use of technology. The features include: Ubiquity, Customization, Personalization, Flexibility, Mobility and Dissemination. Ubiquity are the features that employ the application of m-commerce from anywhere at any time (Yung-Ming Li, 2009). For example, the prices of stocks can be checked from any place at any time. In customization, the users check the information and then can send it to other customers through SMS. Special services can be set up by personalization feature of m-commerce that will allow the user to build different suitable ways. The best example of personalization is advertising and auction. However, the users can conduct the business from any place at anytime (Asfour & Haddad, 2014). In addition, mobile devices are portable because of which transactions can be performed easily even while travelling; however, internet should be available. Purchasing of goods by accessing websites from mobile phones can be an example of m-commerce. Furthermore, wireless technology has been used in every region and data can be transferred by using internet.

Expansion of M-commerce

In 2010, researchers had shown that many people are using mobile phones and have increased approximately to five billion with a future estimation that it will increase to six billion by 2012. However, it was confirmed through one of the future research that the device is prolific and there are a variety of services that are provided by the technology of m-commerce, such as mobile banking and mobile retailing; therefore, there is a rapid increase seen in the growth of m-commerce (Doney & Canon, 1997). In 2010, the transaction through m-commerce increased rapidly and the revenue from mobile ticketing and mobile retailing reached up to \$72 billion. Furthermore, it was predicted that the revenues through mobile payment would increase to \$30 billion by 2014. The expansion in the adaptation of m-commerce technology will bring a change in the way users purchase products and services.

M-commerce in Developed Countries

In developed countries, the adaptation of m-commerce has experienced a drastic increase in the growth of this technology. For example, in United States, the consumer purchasing on mobile phones increased up to \$1.4 billion in 2009; whereas, it was \$396.3 million in 2008 (Choi, 2008). In France, 30 percent of the population is using the application of m-commerce in buying the plane and train tickets. For many years, the consumers of Jordan have adopted the application of m-commerce for doing shopping and 17 percent of the e-commerce sale is done through the application of m-commerce (Ghezzi, 2010). In addition, it is not necessary that only trading is done through mobile commerce it can be used for

many other important aspects of the life. According to Harris, et.al (2005), the UK registered donated over 1 million for the relief project via SMS using the application of m-commerce. Many researches on have been carried out on impacts of mobile banking in developed economies, such as South Korea and Finland, where the collaboration between financial institutions and cellular carriers has been well established. However, we find limited empirical research in developing countries, especially in Middle East (Al-Qeisi, K. I. 2009).

M-commerce in Saudi Arabian Banks

Saudi Banks have introduced a variety of methods to provide mobile banking services such as online SMS-banking, downloading application–mobile banking or WAP banking. As every bank is offering these services, customers have more options to shop around for more competitive products and services offerings. As a result, the banks face a competition from other established banks. The banks have to satisfy their customers by providing them the newest electronic delivery channel (Alsheikh, L., & Bojei, J. 2014).

According to KPMG survey (Koenig-Lewis, N., Palmer, A., & Moll, A. 2010), 27% of Middle East/Africa region (Saudi Arabia and South Africa) consumers conduct mobile banking but 50 % of respondents are not comfortable with using a mobile device for banking purpose. According to this research, 54% respondents showed their acceptance to mobile banking.

In recent years, m-commerce (mobile commerce) in Saudi Arabia has become a topic of more interest and has been benefited from considerable development. This interest is due to increasing number of smart phone users. According to De Vere (2012), 60% of mobile users own smart phones in Saudi Arabia. Moreover, 85% of smart phone users have internet access in Saudi Arabia (Chris Crum, 2012).

The businesses are expanding their access to these smartphone. As a result of m-commerce, there will be banking transactions. Therefore, m-commerce and banking are interrelated. M-Commerce has impacts on banking system because the banking system should adopt such a model so that m-commerce can be carried out smoothly and according to the customers' satisfaction.

In light of the above considerations, this study has been undertaken to empirically examine the extent to which commercial banks in Saudi Arabia are affected with m-commerce.

Trust in M-Commerce

Building trust on the consumer is a complex phenomenon that is studied extensively with discipline to marketing (Doney & Canon, 1997) and economics (Williamson, 1993; Dasgupta, 1988). The studies argued that the trust is elevated in e-commerce. Many of the researchers suggested that trust is one of the important factors in the success of the online environment (Salo & Krjaluoto, 2007). In today's world, the level of trust among the customers has to be dynamic or static that changes from time to time as when the contact with the customer is not face to face then the building of trust is difficult. Therefore, it is

necessary that the services through mobile are given in a satisfactory manner with a high quality.

Challenges and Opportunities of M-commerce

The banks in Saudi Arabia want to achieve a competitive position in the global world by building a strong relation with its customers by providing them with high quality services so that customers could be satisfied; for this they adopted mobile banking service (Clarke, 2008). In the developed countries, the usage of mobile phone users has already exceeded 1.08 billion. Banking sector in Saudi Arabia is the key factor in developing the economy. As banks of Saudi Arabia are looking for different ways to improve the services so that the level of customer satisfaction is increased. In addition also wants to reduce the cost by in lining with the change of technology which will further enhance the customer satisfaction. The importance of this study is to expand the use of the technology in the banking sector and which will help both the parties to maintain the satisfaction (Asfour & Haddad, 2014). The impact of m-commerce is in terms of reliability, security, flexibility, efficiency and accessibility are evaluated that affect the banking sector of Saudi Arabia.

History of Mobile Banking

History shows that the adaptation of mobile banking is low in the world, but due to economic crisis there is a significant change in the dynamics of the consumers spending and information dispersion, the change has started to begin and there is an increase in the usage of smart phone (Harris, Rettie & Kwan, 2005). The increased use of smart phones has made the industry to adopt m-commerce in order to facilitate the customers in getting up-to-date information of their account, transferring the funds, making payment of bills, transferring funds and locating the local branches of their banks.

The services of mobile banking are classified on the basis of a service session that is either pull or push (Salo & Karjaluo, 2007). Pull is when the customer explicit the request for any service or any information from the last five years and is requested from the bank; whereas, push is when the bank sends out the information based on agreed set out of rules such as: the banks send out an alert when the account balances goes below a threshold level.

Theoretical Framework

The Technology Acceptance Model

In addition, although there are numerous theories and models related to the adoption and diffusion of technology, previous studies have mainly focused on the adoption of technology itself. In contrast, the perspective on services and service-enabling technologies is considerably less pronounced (Leung & Antypas, 2001). Similarly, although varieties of m-commerce services are now available, most studies have focused on the mobile user's intention to adopt m-commerce itself, not a specific service or service categories. Few studies have performed cross-service comparisons to investigate cross-service differences during adoption processes. The use of technology is increasing rapidly; therefore the research studies the impact of adaptation of m-commerce application on the banking sector.

Technology acceptance has been studied by multiple researchers in many disciplines using a variety of models, but no model has been more widely studied than the Technology Acceptance Model (TAM). The constructs of the model proposed by Davis (1989) include perceived usefulness and perceived ease of use which affect behavioral intention to use and, finally, the actual use of the technology in question. Perceived usefulness of the technology is the extent to which a person believes that using specific technological system would improve his/ her productivity and overall job performance. Kim, Chan & Gupta (2007) found that perceived usefulness positively affected internet retailing and, similarly a positive affect was observed on the perceived value of the Internet used via mobile devices. Perceived ease of use is defined as the degree to which a person believes that using a particular system will be free from effort. It reflects the level of effort involved with learning and using a technology (Doney & Canon, 1997). According to the TAM, perceived ease of use and perceived usefulness positively influence behavioral intention and behavioral intention positively influences actual use.

Meanwhile, numerous theories and models have developed to attempt to explain technology adoption in different circumstances. In order to explain users' adoption of m-commerce services, theoretical perspectives from sociological, technological, and psychological aspects are adopted in this study. The diffusion of innovations (Rogers, 1983) is selected as the foundation of the study, and other theories or models such as the theory of reasoned action (TRA), the theory of planned behavior (TPB), and the technology acceptance model (TAM) were used to explain the relationship between technology users' beliefs, intentions, and actual technology use. The well-established and robust intention-behavior models from TRA and TPB have been proven successfully in predicting and explaining technology users' intention and behavior. Based on TRA and TPB, TAM is also one of the most frequently cited models for predicting technology acceptance in the information systems area. However, many researchers have recommended that TAM will have better explanatory power when other relevant variables are added in the model because it is too parsimonious, organization-oriented, and has weak explained variance. With these considerations, this study extends TAM by adding new, but theoretically proven variables, such as perceived attributes of innovations from the theory of diffusion of innovations and mobile users' motivational dimensions from the uses and gratifications model.

Methodology

This research is conducted on the basis of secondary data. The research encompasses the publications, articles and similar studies accessible on the Internet. Keeping in view the approach taken in earlier studies the research began with a broad analysis of the existing literature. The findings & conclusions are based on the secondary data. The methodology used for the purpose of this research is based on the secondary data. This research is more or less based on the literature review & the conclusions are drawn on the basis of actual resources listed in the references. The method of investigation used, consists of a theoretical framework of secondary data by reviewing the current position of mobile commerce application as used in the organizations, business entities and banking sector.

Data Collection Procedure

The methodology adopted in this research focuses on the existing research through journal, internet, other research works and articles etc. Data collection from the secondary research was evaluated thoroughly to eliminate the factor of biasness and check the accuracy of the data. In addition, making sure that the data used is not very old and is relevant to the research. Local Libraries, Pheonix and other data bases were use to add data to the existing material.

Discussion

Mobile is becoming the dominant means for accessing communications primarily because integrating the use of mobile networks is not cost-effective, but also as it provide immense convenience and flexibility for its users as compared to the users of landline telephones (Wessels & Drennan, 2010). M commerce, in most cases, is considered to be a sub-set of e-commerce involving all the transactions of electronic commerce carried out via mobile devices. This increasing popularity of mobile commerce has forced the business world of today to create a new platform for commerce activities. A study conducted in Saudi Arabia showed that the users are interested in e-commerce and m-commerce applications (Hopkins, 2006). Most of the local banks such as Saudi Fransi Bank offered online internet banking services to the users for the stock market (Djeflat, 2009). It was estimated that 48.36% of internet users use mobile phones in Saudi Arabia (Djeflat, 2009). However, m-commerce is the beginning in a growth phase of Saudi Arabia; whereas, this was the huge opportunity for the brands to connect the consumers with other activities on a personal level. The infrastructure of Saudi Arabia has improved in order to the connections of 3G that allows the telecommunication companies to compete in the market (Davis, 1989). Currently, the m-commerce services used in the Saudi Arabia emphasizes on the usage of SMS and MMS which will then provide the users with discount offers and alerts. On the other hand, a survey conducted by Yankee Groups (2010), showed that less than 10 percent customers are willing to pay for the extra service of mobile transactions such as mobile banking and mobile payments. According to Deatsch (2011), ABI predicted that by the end of 2015, most of the Saudi consumers will be spending approximately \$119 billion on the services of mobile phones.

Impact of Mobile Commerce on Banks

It has been observed that the Internet has significantly become a part of daily life. Instead of being just a static storehouse of information, it has now changed into a vehicle for rendering services and connecting with people. These services include online banking, airline ticket bookings, hotel booking, etc. (Bedford, 2005). It has also been observing a rapid progress in the handheld and wireless technologies, beside the new part played by the Internet in the lives of Saudis. New opportunities are being offered to the users of Saudi Arabia by the banks over the mobile devices, for instance transferring of funds, making payments, locating the branch location. Sending and reading instant messages has become an activity of daily communication (Rogers, 1983). WAP (Wireless Application Protocol), Internet surfing has become extremely easy, and is another technological evolution used by bank that has made it easy for the user to use the application of m-commerce. It is obvious that the banking sector wants to provide a platform to users where they can easily

operate their account without being connected to any wired network or walking in the branch.

Twenty years ago, the internet brought about a major shift in the way business is conducted. In addition, everyone who owns mobile and has internet access, now has the power to purchase products and share information from the comfort of their home. The adaptation of m-commerce by banks has had a major effect on the banking industry as people can transfer the payments, operate their bank accounts from anywhere in the world, at any time (Ghezzi, 2010). By logging into a mobile device and surfing the net, a person can make a payment from Saudi Arabia and have it to a location in Africa.

During the past two decades, it has been seen an explosive growth in the number of providers of mobile services and the number of people subscribing to these services. There were 2.7 billion mobile handsets in use worldwide in 2007 which is three times the number of computers in use, and the world's mobile subscriber base is expected to grow from 2.65 billion to 4.81 billion by 2012. The device of mobile phone has become a ubiquitous internet device that accesses the web and operating the bank account easily. The use of mobile commerce has made it easy for the banking sector to provide customers with variety of services, the time of the consumers are also saved and the cost is also decreased (Christou, 2010). However, the security and privacy issues has been reported which has sometimes become a threat for the banking sector of Saudi Arabia.

As Bedford (2005) described, it is recognized as the use of wireless devices, like cell phones and personal digital assistants (PDAs), to connect to the Internet for the purpose of communicating and/or conducting business without location restriction. Mobile phones have provided access to an ever-widening range of mobile content and services for a growing number of mobile users (Leung & Antypas, 2001). Mobile users of Saudi Arabia have now adopted the use of internet banking via m-commerce and this has benefited the customers and the banking sector. With the unique features of m-commerce such as the mobility of users and location discovery, banks are able to capture personal information while users are moving, and this information can be used as a personalized marketing tool.

Value Proposition of M-Commerce

M-commerce has received widespread acceptance among consumers across the globe. In 2002 the total number of wireless device users was estimated at 237 million worldwide. This number reached 1 billion in the year 2003 and continues to growth exponentially (Williamson, 1993). Even forecasters have underestimated the propensity growth of mobile commerce users. The widespread acceptance of mobile commerce is partly explained by its value proposition. The demand side of m-commerce services is based on the premise of how value can be delivered to customers. By and large m-commerce procures two main benefits to the customers including mobility and reach benefits. With mobility benefit, consumers can have access to mobile commerce services regardless of location, time and other constraints. With reach benefit consumers can be reached anywhere and anytime. The value proposition of m-commerce puts more focus on the mobility aspect than on the reach aspect. The value-added elements deriving from the choice being created for the customers include flexibility, convenience, and ubiquity. However, these terms are too

broad to capture the value creation understanding that consumers want. These terms do not address the relevance of the context in which users seek to use m-commerce. The characteristics of m-commerce that really create value to the consumers include the location of the users, the users' situation, and their missions.

M-commerce value is today built around specific dimensions such as location-centric, convenience, customization, and flexibility. The accessibility concept confers to users the ability to constantly carry the cellular phone given its portable nature. As a result, users conduct transactions unceasingly via public and private networks. With the location-centric advantage, m-commerce providers such as banks can better respond to customers' needs by providing information given the location of the users (Genis-Gruber & Tas, 2011). Customers acknowledge the convenient aspect of m-commerce when some unpleasant tasks are eliminated in their mobile banking process. Avoiding long line at counter desk and avoiding a trip to the branch are some of the benefits that consumers take advantage of when using m-payment. As a consequence, it is assumed that in mobile banking such as time and cost are being considerably reduced to facilitate or to encourage the use of m-commerce. M-commerce services give providers a unique opportunity to tailor services to m-commerce users.

It appears that most of the value propositions that customers gain from m-commerce are translated into the constant and convenient access to mobile services. Similar benefits are well represented through the usage of m-payment because with m-payment consumers benefit from a discontinuous and systematic access to financial transactions (Rogers, 1983). One can argue that a discontinuous financial access is already present through electronic payment system such as debit and credit cards.

Driving Forces that lead Mobile Commerce on Saudi Bank towards Success

Wireless communications are not just based on the telephones but it also includes different appliances such as PDAs (personal digital assistants). Driven by a widely spread understanding about the capabilities of the Internet, the strength, power and reach of electronic commerce, and advancements in the wireless devices and technologies, m-commerce has rapidly been adopted by the business entities and banks in Saudi Arabia. According to the findings of various researches, mobile commerce the conduction of business activities and services through wireless and portable devices will soon become a dominating force in the society and the business world (Ghezzi, 2010).

Among a number of driving forces, social influence also has a positive impact on the adoption of mobile commerce activities. The decision of approving or disapproving the integration of social networks in the business activities plays a very important part in the adoption of mobile commerce. It is quite interesting to understand how mobile networks have been frequently using social networks, whether professional or personal, the use of older telephone networks or the new platforms such as social networking.

The major driver for the pervasive adoption of mobile devices and m-commerce services is the introduction of advanced technologies such as (1G, 2G, 2.5G, 3G and 4G). Internet technology is another major driver for the expansion of mobile communication (Bedford,

2005). Mobile users can connect to the Internet wherever and whenever, and therefore, Banks can expand the delivery of services to mobile users through multiple channels, such as mobile phones and PDAs.

Barriers for using Mobile Commerce

Mobile commerce is applicable to business to consumer area, such as mobile retailing, mobile advertising, mobile auction, mobile banking, mobile shopping, and mobile ticketing. Furthermore, it is also applicable for performing business to business activities. As suggested by Leung and Antypas (2001), mobile commerce enhances the efficiency for performing banking activities by readily disseminating information to the remote workforce and by offering new mediums through which banks are easily able to interact with their customers. It was further suggested by Christou (2010) that banks having the capability to harness the power of mobile technologies for streamlining and automating banking procedures might reap the benefits of improved and enhanced productivity, increased level of customer satisfaction, improved decision-making, and reduced operational cost. However, mobile devices and m-commerce has led and opened doors for new and innovative services and applications and also provides easy access to their owners and users, wherever they go.

For the first time in the history of electronic transactions, mobile commerce has promised more convenient, more than a simpler and more secure way for performing transactions. Mobile commerce adopted by the banks of Saudi Arabia offers a convergence of previous autonomously performed functions in one set of instantly accessible consumer-demanded services (Ghezzi, 2010). Banks promises hassles free transactions, complete avoidance from the extremely time consuming procedures and instant payments. Mobile commerce offers simplicity, flexibility, cost-effectiveness, etc.

Security and Privacy

From the technical perspective, over the wireless networks- mobile commerce is essentially insecure as compared to the electronic commerce. The reasons for this insecurity include reliability and integrity, privacy and confidentiality, authentication and identification, and the capability (Salo & Karjaluo, 2007). The fading and interferences make the errors of wireless networks prone. With frequent disconnections and handoffs the channels tend to degrade the security services. Therefore, the communication message is easily interpreted and intercepted, and information can easily be extracted if there is no security mechanism applied, like cryptographic encryption. There is an additional difficulty introduced by the mobility of wireless devices for the identification and authentication of mobile terminals.

Conclusion

The application of mobile commerce is emerging and the business entities and banking sector are committing themselves towards the adaptation of m-commerce. The platform is characterized by accessibility, location sensitivity, flexibility and Ubiquity. The mobile device is intensely personal with different input and output sensibilities. As m-commerce is a new kind of instrument of commerce, this study includes consumers' prior mobile banking experiences and their impact on banking sector of Saudi Arabia including the factors related to security and privacy. The model explored in this study is especially ideal

to test cross-nationally because m-commerce services are more a global than a local issue. Moreover, because the majority of technology adoption studies have been conducted in a certain countries, it is not easy to say that theories and models used in technology adoption studies are applicable to other countries or cultures. Consequently, the verification of whether the existing theories and models are applicable to people in different countries and cultures is important. In response to the current discrepancy in diffusion of mobile commerce in the world, after verifying factors affecting the intentions and actual use of m-commerce services, this study investigates the impact of m-commerce on Saudi Banks and the increased use of m-commerce application around the globe.

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Alliances and Concentration: The Economic Consequences of Market Structure in the Liner Shipping Industry

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Abstract

Modern oceanic shipping is characterized by three types of services: on-demand (tramp) shipping, specialized single good (bulk) transport, and common carrier liner shipping. Liner shipping is the most common type of oceanic shipping and a vital component of the global economy; most sources estimate that liner shipping carries 60-70% of world trade by value. This number would be considerably higher if we excluded petroleum: for all intents and purposes the liner shipping industry carries all non-bulk oceanic shipping. The liner shipping market was historically characterized by long standing price fixing cartels known as “conferences.” However, a string of recent regulatory changes and increasing demand for globalized shipping has greatly weakened (if not outright destroyed) the power of these conferences. The modern industry is now characterized by a number of strategic alliances between carrier firms and a wave of mergers that has left a small number of firms with considerable market power. To date there have been very few formal efforts to determine how these changes could impact transportation costs and trade distribution. Most of the literature on shipping concerns itself with how changes in market structure impact the profitability of shipping firms without considering the possibility of impacts on the wider system of trade, while most trade literature downplays or ignores transportation issues. This lack of interest in the structure of the shipping market in the existing literature is surprising, given that it is widely acknowledge that trade costs (and thus transportation costs) are vitally important in the modern economy. What literature there is on this topic is generally out of date, dealing with market structures and legal environments that simply do not exist anymore. My research aims to fill this gap in the existing literature by examining how the market structure and legal environment of modern liner shipping impacts transportation prices and the size and distribution of international trade. I will create a model of the liner shipping industry that better accounts for the characteristics of the modern industry. I will test the predictions of this model against available empirical data to ensure the model’s validity. From this I will be able to predict how the changes in liner shipping are likely to impact the international economy.

Keywords: industrial organization, transportation economics, strategic alliances, game theory

Assessment of Willingness to Pay for Benefits of Improved Air Quality using Contingent Valuation Method: a study of Delhi, India

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Abstract

Urban air pollution is a growing concern for many cities across the world including National Capital Territory (NCT) of Delhi, India. Increase in population combined with migration from other states in search of decent employment opportunities are some of the factors that put the resources available in the city, under serious pressure. Rapid urbanization, deforestation and increase in number of motor vehicles on road (especially diesel vehicles) show little signs of receding and the congestion in Delhi continues to grow, thereby causing serious decline in air quality. Many governments face difficulty catering to environmental issues along with meeting the goals of economic growth. Stringent policies undertaken by the Delhi government in the recent past, like resettlement of the industries outside the city domain, switching over to the CNG compliant vehicles for public transport etc. have proved insufficient in bringing high levels of pollution under control. Poor air quality in turn is responsible for adverse effects on public health. The present study uses Contingent Valuation Method to assess the value attached to the benefits of clean air as elicited through willingness to pay by the residents of Delhi. Responses collected through a primary survey were used to evaluate the effect of covariates (like socio-economic, expenses incurred on illness due to bad air quality, travel time to work etc.) of respondents on probability of positive willingness to pay for benefits of clean air. The relationship between the covariates and the probability of positive willingness to pay in terms of direction, magnitude of change and its statistical significance is established using logit regression. The analysis demonstrated expected results for most covariates. The results reinforced the importance of certain variables in influencing the probability of positive willingness to pay for improved air quality in Delhi. This could be helpful in effective and efficient formulation of pollution control policies.

Keywords: air pollution, willingness to pay, contingent valuation method, dichotomous approach.

Developing Sustainable Township Tourism: A Collaborative Stakeholder Approach

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Abstract

Despite the extensive body of tourism literature focusing on the benefits of sustainable community tourism, the realisation of this laudable goal remains quite elusive. This can be attributed largely to the inability of getting full collaboration from all relevant stakeholders. This study presents a model for implementation in obtaining the effective participation of the principal stakeholders in the development of sustainable township tourism. Hence, using a quantitative research approach this study employs three sets of questionnaires in collecting data from potential visitors to the Soshanguve community, Soshanguve residents and tourism business managers in the community. Through an analysis of the potential visitors' travel motivations, the residents' perceptions of tourism impacts in their community and the business managers' understanding of the tourism-business success factors, this study proposes a model for the effective engagement of relevant stakeholders in the realisation of sustainable community tourism in Soshanguve Township. Recommendations are then made on the implementation process of this model. The significance of this study lies in its easy adaptation and implementation in communities with similar characteristics to Soshanguve.

Keywords: community tourism, sustainable tourism, stakeholders, Soshanguve township.

Introduction

The study of tourism business development has gained impetus in recent times. Lee and Chang (2008:180) allude to the general truism that tourism development attracts foreign exchange earnings, avails opportunities for job creation, stimulates growth in local industries, and triggers overall economic growth. According Sebele (2010:136) the concept of community development was introduced as an approach to rural development in the 1950s and 1960s. This approach calls for the more active involvement of locals in development issues. Similarly, tourism literature since the 1980s has advocated the inclusion and involvement of local communities in tourism as local residents have been identified as being instrumental in sustaining the product (Sin & Minca, 2014:97; Nyaupane, Morais & Dowler, 2006:1374; Sutawa, 2012:417). Furthermore, Tosun (2006:493) asserts that apart from being instrumental in tourism sustainability, community participation also ensures that a number of benefits accrue from tourism, namely employment opportunities for local people, positive local attitudes, conservation of local resources and physical development within the community.

Theory

Collaborative stakeholder approach to tourism planning and development

Tourism planning seeks to provide a coordinated transition or link between the present situation at a destination for an improved future for both residents and tourists (Stokes, 2008:253; Bhatia, 2006:5) According to Angeleska-Najdeska and Rakicevik (2012:211) sustainable tourism development planning revolves around environmental preservation planning which should take place in order to determine the nature and direction of development. However, Spencer (2010:684) contends that tourism planning is complicated as it incorporates the views and interests of multiple stakeholders with sometimes very divergent goals. Spencer argues that failure to include the indigenous community in the planning process may have disastrous consequences. The challenge in tourism planning is further compounded by the fact that in many countries, government (and often private companies) have little experience with planning for tourism development and are reluctant to embark on this (Gupta, 2007:3). Nonetheless, Costa and Rovira (2010:232) attest to the progressive inclusion of strategic planning approaches to tourism planning which has encouraged a holistic analysis of the competitive environment resulting in greater co-ordination and co-operation among stakeholders.

Apart from the specific motivations for tourism planning given above, Carvalho-Ribeiro, Lovett and O’Riordan (2010:1112) and Connell, Page and Bentley (2009:868) indicate that tourism is a vital instrument in the development of vibrant, healthy and sustainable communities and contributes to job creation, income generation and other benefits. Furthermore, tourism provides the *raison d’être* for the protection and preservation of both natural and man-made heritage thereby making it possible for tourists and community members to have access to a green and un-spoilt countryside.

Stakeholder theory

The importance of stakeholder collaboration in tourism has long been acknowledged in literature (Arnaboldi & Spiller, 2011:644, Bramwell & Sharman, 1999:395). Hall (2008:164) contends that as early as the 1970s Western governments have progressively sought to diminish the role of the public sector in tourism planning and development in favour of collaborative partnerships with other tourism stakeholders. The imperative for a more stakeholder collaborative approach in tourism development is dictated not only by the composite nature of the tourism product but also by the need to deliver a quality product that can withstand the competitive nature of the tourism market (March & Wilkinson, 2009:458).

The Stakeholder concept (Freeman, 1984:98) argues that the inclusion and participation of stakeholders in an organisation’s operations is an imperative. This concept holds that each organisation has a network of relationships with interested parties who have diverse and sometimes conflicting interests (Neville, Bell & Menguc, 2005:1188). Sheehan, Ritchie & Hudson, (2007:67) emphasis that the support of all stakeholder groups is indispensable to the sustainability of the organisation. In essence, the stakeholder concept deviates from the traditional management school of thought which focussed on internal stakeholders at the expense of external stakeholders.

Stakeholder theory considers every person or group of people who can affect or be affected by the organisations' operations as a stakeholder (Matilainen & Lahdesmaki, 2014:74). However, Waligo, Clarke and Hawkins, (2013:344) identify two factors as instrumental in determining the extent to which a stakeholder can influence operations in an organisation: the legitimacy of the claim to the firm and the urgency of the claim. Consequently, Matilainen & Lahdesmaki (2014:76) conclude that the level of success achieved by a manager in any organisation is determined by their ability to create wealth, value and satisfaction for the organisations' stakeholders. In the light of the above, this paper considers tourism development stakeholders to be people or communities associated with tourism development and therefore have the potential to affect or be affected by tourism development activities. Prime among these will be the local community because tourism development takes place around them, the government responsible for the peoples' welfare, the visitors' who demand the tourism product and Non-governmental Organisations (NGOs) who generally play a moderating role.

The relevance of a community tourism approach

According to Noakes (2007:10) Community-based tourism (CBT) is a form of sustainable tourism with the specific aim of alleviating poverty in a community setting. Likewise, *Tourism Concern* (2012:1) points out that the goal of community tourism is the beneficiation of indigenous people and villagers through tourism ventures.

Regardless of the angle from which community tourism is viewed, the participation of local communities seems to be pivotal to its implementation. Zahra and McGehee (2013:25) assert that tourism literature has advocated the inclusion of local communities in tourism since the 1980s. Developing tourism from the local community level is considered crucial to the success of tourism at the national level. This is because communities play a key role in the tourism product sustainability and their positive interaction with tourists helps to build a good image for the destination (Sebele, 2010:136; Simpson, 2008:1; Ballesteros & Ramirez, 2007:679; Zahra & McGehee, 2013:23; UNWTO, 2004).

Theories underpinning stakeholder participation in tourism

Several theories have been put forth to explain effective stakeholder participation and management. This study examines the Social Exchange Theory (SET) and the Theory of Reasoned Action (TRA) for the purpose of developing a model for effective stakeholder participation in sustainable community tourism.

Social Exchange Theory (SET)

Social Exchange Theory holds that stakeholders tend to trade their support for projects in exchange for the benefits they stand to get from those initiatives. In other words, stakeholders in general and local residents' support for tourism will depend to a large extent on the benefits that they get or are likely to get from tourism. Hence it is by weighing the economic, social, cultural and environmental concerns that residents of a community decide whether to support tourism ventures or not (Lee, 2013:39; Frauman & Banks, 2011:130; Nunkoo & Ramkissoon, 2011:1005). Residents' attitude towards tourism is one indicator of its successful application as a development tool. This is illustrated by the fact that attitude is related to behaviour, hence favourable attitudes towards tourism would

translate to pro-tourism behaviour manifested in pro-conservationist behaviour and participation in tourism (Lepp, 2007:876).

Theory of Reasoned Action (TRA)

Ajzen and Fishbein (1980) explain the relationship between positive attitude and positive behaviour using the Theory of Reasoned Action (TRA). This hierarchical model states that one's behaviour is determined by behavioural intent which in turn is influenced by attitudes and subjective norms (perceived social pressure for a particular behaviour) and both of these stem from one's set of beliefs. Research has established the validity of this (TRA) in a tourism context as it has been observed that tourists' perceptions about a certain activity influence their attitudes towards the activity and subsequently affect their behaviour when they participate in the activity (Kim, Kim & Goh, 2011; Sekhar, 2003:341; Lee, Graefe & Burns, 2004:75). This implies that if stakeholders have positive perceptions about tourism, their attitudes would be favourable to tourism development and they would behave and act in a friendly way towards tourism resources and tourists.

However, the TRA is not without its flaws as Kaiser and Gutscher (2003:590) and Ryan (2000:346) have demonstrated. These studies found that tourists' attitudes about conservation were poor predictors of environmentally compliant behaviour, probably because environmentally compliant behaviour requires a considerable amount of effort. This therefore suggests that the TRA is not a good predictor when general attitudinal measures are applied to specific (individual) behaviour patterns. In spite of the above, Lepp (2007:878) concludes that the TRA is still a useful model in the planning and management of community tourism as it illustrates that fostering positive attitudes among community members towards tourism could lead to positive behaviour towards tourism.

The theoretical premise of this study therefore holds that through participation in the entire process, the community and other stakeholders take ownership and responsibility for the end product. Following the Social Exchange Theory the spirit of mutual benefit sustains every stakeholder in the project by making it worthy of their support, and in line with the Theory of Reasoned Action the positive attitude arising from the positive gains fosters positive behaviour towards tourism and tourists to Soshanguve.

Methodology

The empirical study consisted of three surveys. The first survey was conducted on the demand-side to gain an understanding of the travel motivations of visitors to the City of Tshwane (Pretoria). Two subsequent surveys were carried out on the supply-side of tourism in the Soshanguve township, firstly, to understand the readiness of Soshanguve residents to support tourism development in their community, and their perceptions of tourism impacts.

Quantitative research

Following the quantitative research approach three sets of questionnaires were developed and administered in this study with the purpose of exploring both the demand-side and supply-side potential for tourism development in Soshanguve. The three surveys were conducted as follows:

Survey 1: Demand-side (potential visitors to Soshanguve)

The purpose of this survey was to explore the potential demand for the township tourism product, especially with regard to communities such as Soshanguve in the City of Tshwane Metropolitan Municipality (CTMM).

Sampling frame

Cooper and Schindler (2001:170) define the sampling frame as the exhaustive list of elements or population from which the sample for the study is to be drawn. According to South African Tourism (SAT, 2012:55), Gauteng was the most visited province in South Africa in 2012, capturing 44.6% of all tourist arrivals to the country. Of these, 3.86 million (46.3%) were foreign tourists, while 5.1 million were domestic visitors. However, the City of Tshwane (COT, 2008:1) indicates that five million tourists visit the city annually. The sample frame for this study consisted of all five million visitors to the City of Tshwane Metropolitan Municipality as anyone of them could have been there during the study period from 23 to 27 September 2013.

Sampling method

A convenience probability sampling method was used in the selection of the 401 (N) respondents, as every visitor to the City of Tshwane during the study period had a “nonzero” chance of taking part in the study. This number (401) conforms to the sample size required to validate the study (Sekaran, 2003:294; Krejcie & Morgan, 1970:608). These studies validate a sample of 384 (N) for a population of one million and above.

Data collection

The data was collected between 5 and 27 September 2013. Visitors to various City of Tshwane Metropolitan Municipality attractions were randomly approached and asked if they would like to take part in the study. Those who responded positively to the request were handed the questionnaire for completion.

Data analysis

Data collected using the questionnaires was captured on Excel spreadsheets and sent to the statistical consultation services of the North West University where it was analysed using the SPSS (Statistical Package for Social Sciences) software programme. Descriptive statistical methods were then used to portray a general perspective on the issues considered important by visitors (demand-side).

Survey 2: Supply-side (Soshanguve residents’ survey)

The aim of this survey was to explore the perceptions of residents of Soshanguve township on tourism development impacts in their community. Following the Social Exchange Theory (SET), this would then form the basis for understanding the extent to which the residents would support tourism development initiatives.

Sampling frame

The residents’ survey considered all the inhabitants of the Soshanguve community as part of the study population. With a population of 403 162 residents (Statistics South Africa, 2011) each one of these had the possibility of being selected for the study.

Data analysis

Data collected using the questionnaires was captured on Excel spreadsheets and sent to the statistical consultation services of the North West University where it was analysed using the SPSS (Statistical Package for Social Sciences) software programme. Descriptive statistical methods were then used to portray a general perspective on the issues considered important to the residents.

Survey 3: Supply-side (Product managers' survey)

This survey was aimed at exploring the range and quality of tourism products in the Soshanguve township. This was considered important because the demand for Soshanguve tourism can only be stimulated by the availability of quality products.

Sampling method

The sampling method was purposive as only managers of tourism products in Soshanguve were targeted. There are few tourism businesses in the township so it was decided that all the 29 tourism businesses identified would be requested to take part in the study.

Results

Visitors' motivations for taking a holiday

These questions were aimed at providing a proper understanding of the reasons why the respondents take a holiday. This is important as the motives for taking a holiday determine the needs to make that holiday successful or not. The needs also influence the travelers' mode of transportation and therefore knowledge thereof is important. The results obtained are presented in Table 1 below.

Table 1: Summary of Visitors' Motivations for Taking a Holiday

	MOTIVATION	VISITOR RESPONSE				
1	To relax	4%	4%	34%	18%	40%
2	To share a familiar/unfamiliar place with someone	6%	12%	26%	33%	23%
3	To do exciting things	4%	6%	28%	31%	31%
4	To explore new destinations	4%	8%	29%	31%	28%
5	To relax from daily tension	5%	5%	26%	39%	25%
6	To meet people with similar interests	5%	14%	28%	31%	22%
7	To experience different lifestyles	5%	9%	32%	29%	25%
8	To have fun	8%	6%	25%	28%	33%
9	To get refreshed	6%	5%	29%	28%	32%
10	To be together as a family	7%	8%	23%	29%	33%
11	To learn new things	5%	10%	32%	28%	25%
12	To participate in entertainment	9%	12%	27%	26%	26%
13	To escape from a busy environment	16%	13%	20%	27%	24%
14	To be together as a group of friends	12%	11%	28%	27%	22%
15	To study	35%	15%	18%	17%	15%
16	To participate in recreation activities	10%	17%	29%	23%	21%
17	To rest physically	8%	7%	29%	32%	24%
18	To spend time with friends	9%	10%	25%	28%	28%
19	To learn more about my/other countries	3%	8%	28%	29%	32%
20	To do something out of the ordinary	9%	7%	25%	28%	31%

The top five motivations for taking a holiday, with the respondents “agreeing somewhat” to “fully agreeing” can be summarized as follows:

- To do exciting things (62%)
- To have fun (61%)
- To relax (58%)
- To be together as a family (62%)
- To learn more about my/other countries (61%)

The purpose of the correlation matrix is to give an indication of the correlation coefficient between a given factor and all the other factors (Tustin *et al.*, 2005:669). In this regard, Table 3 below explains the correlation between each of the key travel motivators and each of the other travel motivators.

Table 2: Factor Correlation Matrix for Travel Motivations Among Visitors

FACTOR	1	2	3	4	5
1. Socio-cultural motivators	1.000	.250	-.387	.238	.439
2. Interpersonal motivators	.250	1.000	-.215	.294	.186
3. Escape motivators	-.387	-.215	1.000	-.234	-.382
4. Educational motivators	.238	.294	-.234	1.000	.151
5. Rest and recovery	.439	.186	-.382	.151	1.000

Note: ≤ 0.5 indicates significant correlations; 0.3 indicates visible correlations; 0.1 indicates small correlations

Community Perspective

Results of the factor analysis

The five factors extracted from the analysis were labelled as follows: economic factors, social factors, infrastructure factors, environmental factors and recreation and entertainment factors. In other words, these factors have a propensity to influence the development of sustainable community tourism in the Soshanguve township.

The following table (Table 4) summarises the correlation coefficients (loadings) between the factor labels expressed in the vertical axis and variables indicated in the horizontal axis.

Table 3: Results of the Factor Analysis on Perceived Impacts of Tourism in the Soshanguve Community

Tourism impacts on the community	Impact loadings				
Factor label	Economic impacts	Environmental impacts	Infrastructure	Conservation impacts	Recreation and entertainment
ECONOMIC IMPACTS					
More finance for SMMEs	.871				
More income	.718				
More training	.714				
Less poverty	.681				

Tourism impacts on the community	Impact loadings				
Factor label	Economic impacts	Environmental impacts	Infrastructure	Conservation impacts	Recreation and entertainment
Tax benefit	.658				
ENVIRONMENTAL IMPACTS					
Waste of water		.740			
Increased pollution		.683			
More diseases		.658			
Improved electricity		.367			
INFRASTRUCTURE					
Water provision			-.853		
Access to transport			-.801		
Road network			-.715		
Health facilities			-.688		
Safety and security			-.661		
CONSERVATION IMPACTS					
Animal protection				-.722	
Environmental protection				-.266	
RECREATION AND ENTERTAINMENT					
Entertainment facilities					-.688
Cultural performances					-.318
Sports and recreation facilities					-.309
Cronbach's Alpha	0.836	0.687	0.852	0.800	0.695
Inter-item correlations	0.508	0.352	0.537	0.669	0.432
Mean values	3.43	3.23	3.59	3.29	3.50

The economics factor consists of five constructs relating to more finance for small and medium size enterprises (SMMs), more income for community members, more training opportunities for tourism sector employees, poverty reduction in the community of Soshanguve and tax benefits for the government. It is hardly surprising that the primary noticeable impact of tourism development from the community perspective is in the economic sphere in view of the pressures imposed by quality of life issues such as unemployment and poverty. This is also supported by literature on the social exchange theory which points to the fact that people are more likely to support a project if they foresee personal benefits accruing from it.

Tourism Industry Perspective

The aim of this part of the study was to assess the managers understanding of the needs of the tourism business and match these against their opinions on what obtains in their business. The results (Table 7) are an important indicator of how well the managers understand the nature of operations in the tourism industry, in general and their specific business sector (Table 8) in particular.

Table 4: Perceptions on General Tourism Business Success Factors

General business success factor	Not at all important	Slightly important	Important	Very important	Extremely important
Access roads	3%	0%	59%	31%	7%
Adequate signage	4%	0%	69%	24%	3%
Business location	0%	10%	62%	28%	0%
Telecommunications	3%	17%	52%	21%	7%
Running water	7%	3%	28%	41%	21%
Electricity	0%	6%	21%	38%	35%
Public transport	0%	20%	35%	35%	10%
Marketing	3%	0%	17%	49%	31%
Industry association	24%	24%	32%	17%	3%
Social media marketing	14%	27%	35%	21%	3%
Website	3%	28%	31%	31%	7%
Internet access	0%	14%	41%	31%	14%
Clients' recommendations	0%	0%	21%	31%	48%
Qualified management	0%	0%	24%	55%	21%
Qualified employees	0%	0%	35%	41%	24%
Service excellence	0%	3%	21%	21%	55%
Safety and security	3%	3%	17%	24%	53%
Insurance cover	21%	10%	38%	28%	3%
Attractive décor	0%	14%	52%	20%	14%
Adequate parking	10%	7%	55%	25%	3%

In order to get a snapshot of the elements that the managers consider essential to their business success, this study decided to aggregate the totals of the top five factors described as “very important” and “extremely important”. The results regarding the general business success and individual business success were as follows:

General business success contributors:

- Marketing (80%)
- Safety and security (77%)
- Qualified employees (76%)
- Clients' recommendations (79%)
- Qualified management (76%)

Conclusion

In this regard, Figure 1 proposes a five-phased model starting from stakeholders' identification, product development, planning, implementation and evaluation and feedback. Each phase begins with the nomination of the leading stakeholder and the supporting stakeholder, the key actions, the output and reference literature to guide the process.

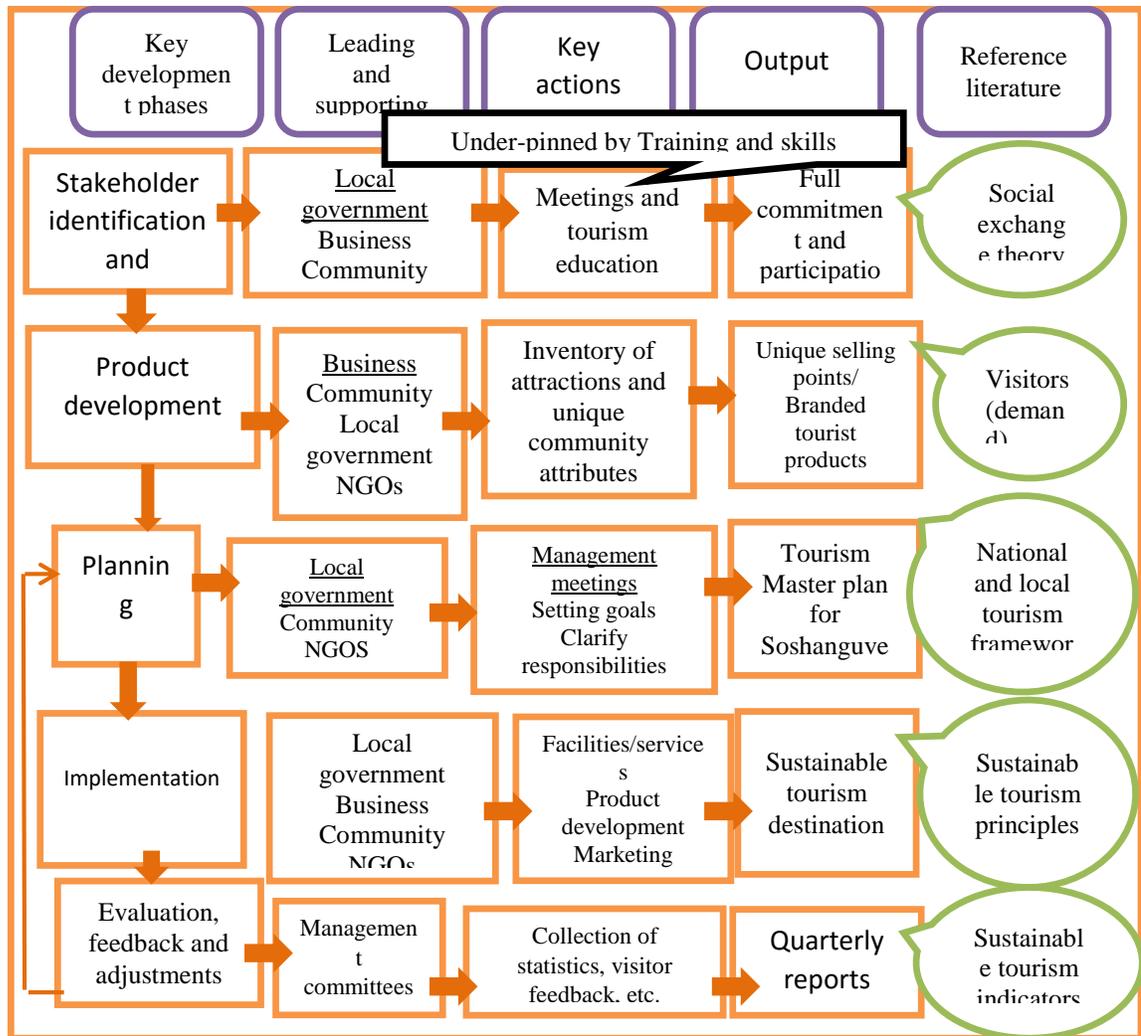


Figure 1: Model for Collaborative Stakeholder Participation in Developing Sustainable Township Tourism

Step 1: Recommendations regarding stakeholder identification

In both the Soshanguve resident survey and the community-leaders' interviews the respondents indicated that there is currently no tourism development plan for the community despite the fact that a tourism plan for the area was handed to the researcher by the tourism division of the CTMM. This confused atmosphere is characteristic of tourism development processes that are not inclusive. This study therefore recommends that the stakeholders' identification process be fully inclusive of all parties likely to be affected by tourism development impacts.

Further to the foregoing, it is recommended that the focus of the choice of stakeholders be guided by the necessity to achieve environmental sustainability, economic viability and maximise socio-cultural benefits. Hence, the strategic role of the government to initiate, coordinate the process and regulate tourism activity, business to ensure profitability, communities to provide the enabling socio-cultural environment and labour, NGOs to

ensure fairness to the environment and communities and tourists to demand and enjoy the product.

Step 2:Product development

It is recommended that the product development phase be led by the business fraternity as they should be more versed with market conditions. The demand potential of the tourism products should be tested through a visitor survey and market trends in the country and internationally.

Step 3:Tourism planning

Planning meetings should be held in order to agree on tourism development goals and objectives. The responsibilities of all stakeholders should equally be clearly outlined to facilitate implementation. At the end of this process a tourism master plan in the form of a road map should be produced aligned with the regional tourism framework.

Step 4:Implementation

It is recommended that the government coordinate the tourism implementation process, with entrepreneurs actively setting up tourism businesses, the community selling their labour and NGOs guarding against abuse of either the environment or people. This buzz of activity culminates in the establishment of facilities and services to cater for tourists' needs, tourism products that are adequately marketed, tourists having quality experiences and a community that is gainfully employed. All these in conformity with sustainable tourism guidelines.

Step 5:Evaluations and adjustments

Even though community tourism might be sailing “smoothly” as described above, it is recommended that regular assessments be conducted to ensure that all aspects of sustainability are working well and mitigating actions are taken promptly to avoid unintended results such as those mentioned in literature. Monitoring the impacts of tourism development and making adjustments when necessary in the pillar of maintaining sustainability.

In conclusion, the model for effective stakeholder participation in developing sustainable community tourism presented and elaborated upon above illustrates that achieving sustainable tourism is not by chance but a planned and meticulously executed process. To succeed, this process requires the support and full commitment of all stakeholders. It has also been illustrated that stakeholders are not only beneficiaries but equally active participants in the tourism development process.

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Can accounting ratios differentiate between Islamic banks and conventional banks? A Study on the Dhaka Stock Exchange Listed Private Commercial Banks of Bangladesh

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Abstract

There are three types of private commercial banks listed in the Dhaka Stock Exchange. They are full-fledged Islamic banks, full-fledged conventional banks, and conventional banks with Islamic windows. The paper studies the accounting ratios of five of eight full-fledged Islamic banks and six of nine full-fledged conventional banks listed in the Dhaka Stock Exchange during the ten year period of January 2004 to December 2013. Accounting ratios chosen for the analysis reflect profitability, efficiency, risk, liquidity, and asset quality of the banks under study. Statistical tools as logistic regression and correlation have been used to examine the 110 bank-year observations. The paper has tested multicollinearity among the final distinguishers to ensure that the study is free of such matter. It is seen that accounting ratios can be fine differentiators between Islamic banks and conventional banks operating in the financial market of Bangladesh.

Keywords: financial market, private commercial banks, islamic banks, accounting ratios.

Introduction

Banking industry in Bangladesh started its journey after its independence in 1971 with 6 nationalized commercial banks, 2 state-owned specialized banks, and 3 foreign banks. In the 1980's banking industry achieved significant expansion with the entrance of private banks. Now, banks in Bangladesh are primarily of two types with Bangladesh Bank, the central bank of Bangladesh, being the chief regulatory body of the banking sector:

- Scheduled banks
- Non-scheduled banks

Non-scheduled banks are established for special and definite objective and operate under the acts that are enacted for meeting up those objectives. These banks cannot perform all functions of scheduled banks. On the other hand, scheduled banks are the ones that get license to operate under Bank Company Act, 1991 (Amended in 2003). There are 56 scheduled banks in Bangladesh who operate under full control and supervision of Bangladesh Bank which is empowered to do so through Bangladesh Bank Order, 1972 and Bank Company Act, 1991. Scheduled Banks are classified into:

- State-owned commercial banks
- Specialized banks
- Private commercial banks
- Foreign commercial banks

There are five state-owned commercial banks which are fully or majorly owned by the Government of Bangladesh and three specialized banks established for specific objectives like agricultural or industrial development. These banks are also fully or majorly owned by the Government of Bangladesh. There are nine foreign commercial banks operating in Bangladesh as the branches of banks which are incorporated abroad. There are 39 private commercial banks which are majorly owned by the private entities (Banks & FIs: Bangladesh Bank, 2013). The private commercial banks can be categorized into three categories:

- Full-fledged conventional private commercial banks
- Conventional banks with Islamic windows
- Full-fledged Islamic banks

Full-fledged conventional banks perform the banking functions in conventional fashion i.e. interest based operations. They are nine in number. There are eight Islamic private commercial banks in Bangladesh that execute banking activities according to Islamic Shariah based principles i.e. profit-loss sharing mode. The largest number of private commercial banks are conventional banks with Islamic windows. They have the majority of their operations executed in the conventional interest based fashion, while having a separate section simultaneously that operates under the Islamic Shariah based principles. This sector comprises of 22 banks.

Bangladesh entered the Islamic banking system in 1983, with the establishment of the Islami Bank Bangladesh Limited. Since then, eight more full-fledged private Islamic banks and 22 Islamic banking branches of conventional banks have been established. Currently, Islamic banks hold 24 percent of total banking deposit and have around 10 percent of the total bank branches. The combined share of Islamic banks (excluding Islamic banking branches/windows of conventional banks) is 16.85 percent in assets, 19.85 percent in investments (loans), 14.3 percent in equity and 17.1 percent in liabilities as of December 2012, according to the Financial Stability Report 2012. The globally-booming Islamic finance is making strides and gaining popularity in Bangladesh, with experts predicting that the Shariah-compliant industry will continue in steady steps to become the mainstream banking system in the Muslim-majority nation (Suman Saha, 2013). The trending flow from conventional banking to Islamic banking might be the result of better performance of Islamic banks in terms of bank profitability, efficiency, asset management, liquidity, and risk management. This has given the author an incentive to formulate a way which can see if the financial performance of the banks, in other words, their accounting ratios, can differentiate between conventional private commercial banks and Islamic private commercial banks in Bangladesh and thus, provide an explanation to this flow. The objectives of the study are:

- i. Determining accounting ratios of five of eight Islamic private commercial banks listed in the Dhaka Stock Exchange during the period of January 2004 to December 2013.
- ii. Estimating the accounting ratios of six of nine full-fledged conventional private commercial banks listed in the Dhaka Stock Exchange during the same time period.
- iii. Finding out if accounting ratios can be good distinguishers between the Islamic banks and conventional banks operating in the financial market of Bangladesh

Literature Review

Multiple studies have been conducted to compare the performances of Islamic banks and conventional banks. A study conducted employing data envelopment analysis on the Islamic banks and conventional banks in the UK and Switzerland during 2008 – 2009 show Islamic banks experience lower cost efficiency, higher allocative inefficiency and poor, but relatively better, technical efficiency compared to conventional banks. The inefficiency of the banks is mostly due to their sub-optimal size of operations (Abu-Alkheil, Burghof, & Khan, 2013). Research applying logit model on the Islamic banks and conventional banks operating in the Gulf Cooperation Council reveals that Islamic banks are more profitable, less efficient and less risky than conventional ones. The study also shows Islamic banks are more stable and immunised against the crisis 2007-2008 (Kolsi & Zehri, 2014). A Gulf Cooperation Council (GCC) region based study attempted to distinguish between conventional and Islamic banks on the basis of financial characteristics alone. Although the two types of banks operate under different principles, the competitions they face are the same. The research applies different models to find that the means of several financial ratios are similar between the two categories of banks. However, non-linear classification techniques (k-means nearest neighbours and neural networks) are able to correctly distinguish Islamic from conventional banks in out-of-sample tests at about a 92% success rate (Olson & Zoubi, 2008). Another study conducted on 68 conventional and 42 Islamic banks from 1997 to 2009 in Malaysia, Saudi Arabia, Kuwait, United Arab Emirates, Bahrain, and Qatar, where there is a dual banking system, depicts that Islamic banks appear to be more focused on deposit/loan financing and less diversified in terms of non-financing income activities compared to conventional banks. Islamic banks also seem to be less susceptible to earnings volatility given their lower diversified income source. Islamic banks have lower profitability (on average) on a risk-adjusted basis when compared to their conventional counterparts (Philip & John, 2013). In 2010, a paper studies the relative financial strength of Islamic banks based on evidence covering individual Islamic and commercial banks in 19 banking systems with a substantial presence of Islamic banking. It demonstrates that (a) small Islamic banks tend to be financially stronger than small commercial banks; (b) large commercial banks tend to be financially stronger than large Islamic banks; and (c) small Islamic banks tend to be financially stronger than large Islamic banks, which may reflect challenges of credit risk management in large Islamic banks (Čihák & Hesse, 2010). The same year, another research investigates the profit and cost efficiency levels of 71 commercial banks in the Gulf Cooperation Council countries during 1997-2007 and finds that in levels of both profit and cost, conventional banks on average are more efficient than Islamic banks (Srairi, 2010).

The various studies show that Islamic banks and conventional banks operating in different economies in the world vary in terms of their financial performances which can be indicated by their accounting ratios. The type of variations, however, differs from study to study. This provides a reason to study the financial performance, as represented by accounting ratios, of the Islamic private commercial banks and conventional private commercial banks listed in the Dhaka Stock Exchange and to see whether and how the banks can be differentiated on the basis of their ratios.

Data and Methodology

The paper aims to investigate if accounting ratios can differentiate between Islamic private commercial banks and conventional private commercial banks that are listed in the Dhaka Stock Exchange (DSE). There are 30 DSE listed private commercial banks in Bangladesh. Out of them, there are seven Islamic banks, nine full-fledged conventional banks, and the remaining banks are conventional banks with Islamic windows. The study is conducted on five of seven full-fledged Islamic banks and six of nine full-fledged conventional banks during the ten year period of January 2004 to December 2013. The samples are selected based on availability of data during the period of study. The chosen Islamic banks are: Al-Arafah Islami Bank Limited, Export Import Bank of Bangladesh Limited, Islami Bank Bangladesh Limited, Shahjalal Islami Bank Limited, and Social Islami Bank Limited. The selected full-fledged conventional banks are Dutch Bangla Bank Limited, Eastern Bank Limited, Mutual Trust Bank Limited, One Bank Limited, United Commercial Bank Limited, and Uttara Bank Limited. Data for the study have been taken from audited annual reports of the sample banks. Relevant information has been accumulated through visits to the websites of the selected banks. Websites of the banks under study have been visited to acquire required information. Substantial data have been collected from the Dhaka Stock Exchange data archive. Relevant literature in this context has also been discussed.

Twenty-five accounting ratios (shown in Table 1) of each chosen bank for each year have been determined for the ten-year period of study of January 2004 – December 2013. The ratios are the indicators of bank profitability, efficiency, asset management, liquidity and risk management. The indicators are expressed mostly in similar manners by both Islamic banks and conventional banks of Bangladesh. For example: profit paid on Mudaraba deposits for an Islamic bank is the same as interest expense for a conventional bank. Six ratios have been calculated for each bank for each year to measure bank profitability, seven ratios for measuring bank efficiency, four ratios to indicate bank asset management, two ratios to learn about bank liquidity, and six ratios to get an idea about bank risk management.

Table 1: Accounting Ratios and their Formulae Used to Indicate Bank Profitability, Efficiency, Asset Management, Liquidity, and Risk Management

Ratios	Formulae
Profitability	
Return on assets	Net income/ Average total assets
Return on equity	Net Income/ Average total shareholders' equity
Profit margin	Net income/ Operating income
Return on deposits	Net income/ Average total customer deposits
Return on shareholder capital	Net income/ Shareholder contributed capital
Net operating margin	Operating income/ Interest income
Efficiency	
Interest income to expense	(Interest income–Interest expense)/ Average total loans and advances
Operating expense to assets	Operating expense/ Average total assets
Operating income to assets	Operating income/ Average total assets
Operating expense to revenue	Operating expense/ Operating income
Asset turnover	Interest income/ Average total assets
Net interest margin	(Interest income–Interest expense)/ Average total assets
Net non-interest margin	(Non-interest income–Non-interest expense) Average total assets/

Asset Management	
Provision to earning assets	Provision for loan loss/ Average total loans and advances
Write-off ratio	Loans written off during the year/ Average total loans and advances
Loan ratio	Average total loans and advances/ Average total assets
Loan to deposits	Average total loans and advances/ Average total customer deposits
Liquidity	
Cash to assets	Cash/ Average total assets
Cash to deposits	Cash/ Average total customer deposits
Risk Management	
Deposits to assets	Average total customer deposits/ Average total assets
Equity Multiplier	Average total assets/ Average total shareholders' equity
Equity to deposits	Average shareholders' equity/ Average total customer deposits
Liabilities to equity	Average total liabilities/ Average total shareholders' equity
Liabilities to shareholder capital	Average total liabilities/ Average total shareholder contributed capital
Retained earnings to assets	Retained earnings/ Average total assets

Note: Adapted from the *Journal of Islamic Economics, Banking and Finance*, Vol. 9, No. 3, p. 76, by F. Zehri and N. Al-Herch, 2013, IBTRA.

Binary logistic regression has been run to test if accounting ratios can distinguish between Islamic banks and conventional banks listed in the Dhaka Stock Exchange. Statistical tools as Wald (z-statistic) and chi-square have been used to test the significance of the predictor variables and goodness of fit of the model. Karl Pearson's coefficient of correlation (r) has been used to test the multi-collinearity among the dependent variables to ensure the study is free of such matter.

Empirical Findings

Summary statistics of the accounting ratios of the selected Islamic banks and conventional banks listed in the Dhaka Stock Exchange for years 2004 to 2013 have been demonstrated in Table 2. It can be seen that statistics of most of the profitability ratios are either same or higher for Islamic banks, except for return on share capital and net operating margin. In case of efficiency, some indicators are in favor of Islamic banks and some are for conventional banks. Similar pattern is observed in bank asset management. However, statistics indicate Islamic banks to be more liquid than conventional banks over the period of study. When some statistics are indicating Islamic banks to be better risk managers, others are showing otherwise.

Table 2: Descriptive Statistics of Accounting Ratios of the Chosen Islamic Banks And conventional Banks Listed in the Dhaka Stock Exchange for Years 2004-2013

Ratios	Bank Type	Mean	Median	Standard Deviation	Minimum	Maximum	Count
Return on assets	0*	2%	2%	2%	0%	11%	60
	1**	2%	1%	2%	0%	10%	50
Return on equity	0*	26%	21%	29%	7%	176%	60
	1**	30%	19%	49%	2%	352%	50
Profit margin	0*	32%	25%	38%	4%	264%	60
	1**	42%	30%	48%	3%	284%	50
Return on deposits	0*	4%	2%	4%	0%	17%	60
	1**	4%	2%	4%	0%	22%	50
	0*	12%	2%	71%	1%	556%	60

Return on shareholder capital	1**	4%	2%	8%	0%	36%	50
Net operating margin	0*	72%	71%	23%	7%	140%	60
	1**	54%	54%	17%	5%	106%	50
Interest income to expense	0*	4%	4%	6%	-38%	14%	60
	1**	5%	5%	6%	-4%	44%	50
Operating expense to assets	0*	3%	3%	1%	1%	9%	60
	1**	2%	2%	0%	1%	3%	50
Operating income to assets	0*	6%	6%	2%	1%	15%	60
	1**	5%	5%	1%	0%	8%	50
Operating expense to revenue	0*	50%	42%	39%	25%	319%	60
	1**	46%	36%	59%	19%	438%	50
Asset turnover	0*	9%	9%	2%	4%	17%	60
	1**	10%	10%	2%	5%	15%	50
Net interest margin	0*	2%	3%	4%	-26%	8%	60
	1**	3%	3%	1%	-3%	5%	50
Net non-interest margin	0*	0%	-1%	1%	-5%	3%	60
	1**	-1%	-1%	2%	-3%	14%	50
Provision to earning assets	0*	1%	1%	1%	-1%	4%	60
	1**	1%	1%	1%	0%	9%	50
Write-off ratio	0*	1%	0%	2%	0%	10%	60
	1**	0%	0%	0%	0%	2%	50
Loan ratio	0*	64%	65%	8%	39%	83%	60
	1**	67%	72%	16%	5%	93%	50
Loan to deposits	0*	138%	82%	134%	40%	562%	60
	1**	129%	89%	119%	24%	568%	50
Cash to assets	0*	4%	4%	2%	0%	11%	60
	1**	6%	5%	3%	2%	13%	50
Cash to deposits	0*	17%	10%	17%	1%	69%	60
	1**	21%	11%	25%	1%	123%	50
Ratios	Bank Type	Mean	Median	Standard Deviation	Minimum	Maximum	Count
Deposits to assets	0*	69%	81%	27%	13%	155%	60
	1**	71%	79%	29%	14%	175%	50
Equity Multiplier	0*	1498%	1418%	568%	733%	4048%	60
	1**	1495%	1375%	481%	901%	3630%	50
Equity to deposits	0*	16%	9%	15%	3%	61%	60
	1**	16%	10%	18%	3%	79%	50
Liabilities to equity	0*	1273%	1247%	460%	404%	2487%	60
	1**	1570%	1208%	1427%	4%	8718%	50
Liabilities to shareholder capital	0*	4039%	2616%	3833%	941%	21311%	60
	1**	2905%	1904%	4234%	13%	24424%	50
Retained earnings to assets	0*	1%	1%	1%	0%	4%	60
	1**	1%	1%	2%	-10%	6%	50

0* stands for conventional banks

1** stands for Islamic banks

Binary logistic regression has been run using sets of different combinations of accounting ratios to devise a model that would be able to distinguish between the Islamic private commercial banks and conventional private commercial banks operating in the financial market of Bangladesh during the period of 2004 to 2013. The dependent variable is a

dummy variable taking the value of “zero” when a conventional bank and “one” when an Islamic bank. The equation of the regression goes:

$$\text{Log} \left[\frac{P_i}{1-P_i} \right] = \alpha + \sum_{j=1}^n \beta_j X_j + \varepsilon_i \quad (1)$$

Where, $\left[\frac{P_i}{1-P_i} \right]$ is the odds that a bank will be an Islamic bank. α is the constant. β_j stands for the coefficient of independent variable “j”, while ε is the error term.

Probability of chi-square statistic, in other words, the p-value, is determined for each model using different combinations of accounting ratios. The model with a p-value (0.0040) less than α (0.05) is chosen, as the model is proved to be statistically significant. The output of the model is summarized in Table 3.

Table 3: Output of the Binary Logistic Regression Model

Bank type	Coefficient	Standard Error	z	P> z	[95% Conf. Int.]
Loan ratio	1.5874681	8.44642086	0.389	-2.027964	5.202901
Cash to deposits	4.12179	1.960887	2.10	0.036	.2785225 7.965058
Deposits to assets	2.426912	1.498242	1.62	0.105	-.5095884 5.363412
Operating expenses to revenue	1.024179	.4748946	2.16	0.031	.0934023 1.954955
Net operating margin	4.619018	1.293114	3.57	0.000	2.084561 7.153474
Constant	-7.123763	2.017631	-3.53	0.000	-11.07825 -3.169278

Log likelihood = -64.029853
 Number of obs = 110
 Wald chi2(5) = 17.25
 Prob> chi2 = 0.0040

The Wald statistics (z-values) are obtained by dividing the coefficients of the predictors by their respective standard errors. The probabilities of the z-values, which are the p-values, indicate if the coefficients of predictors are significantly different from “zero” and therefore, whether the null hypothesis can be rejected. The p-values of the majority ratios in the model are less than α (0.05) and thus, are statistically significant. Exceptions are loan ratio and deposits to assets. The model can be summarized as:

$$\text{Log} \left[\frac{P_i}{1-P_i} \right] = -7.12 + 4.62 \text{ Net operating margin} + 1.02 \text{ Operating expenses to revenue} + 1.59 \text{ Loan ratio} + 4.12 \text{ Cash to deposits} + 2.43 \text{ Deposits to assets} + \varepsilon(2)$$

The model shows that increase in the net operating margin by one unit increases the likelihood of the bank being an Islamic bank by 4.62 log-odds units, keeping all the other variables constant. This indicates that Islamic banks tend to be more profitable than conventional banks listed in the Dhaka Stock Exchange. The positive coefficients of the rest of the variables denote that Islamic private commercial banks also tend to be more efficient, better asset manager, more liquid, and better risk managers than conventional private commercial banks operating in the financial market of Bangladesh. Thus, inputting the ratios of a certain bank into this model might tend to give an indication as to whether the bank’s operations are Islamic or conventional.

Multicollinearity has been tested among and between the predictors. It can be seen from Table 4 that most of the predictors share low correlations between and among themselves, hence, ridding the study of any such issues. Exception is the correlation between cash to deposits and deposits to assets.

Table 4: Correlation among the Independent Variables of the Derived Binary Logistic Regression Model

	Net operating margin	Operating expenses to revenue	Loan ratio	Cash to deposits	Deposits to assets
Net operating margin	1				
Operating expenses to revenue	-0.37061	1			
Loan ratio	-0.12731	-0.21783	1		
Cash to deposits	-0.19752	0.119054	-0.11386	1	
Deposits to assets	0.209157	-0.15859	0.169123	-0.80814	1

From the results, it is seen that Islamic private commercial banks tend to be more profitable, efficient, and liquid than conventional private commercial banks of Bangladesh during 2004 to 2013. The former banks also appear to be better asset and risk managers than the latter ones. It has also been seen that it is possible to devise a model using accounting ratios of banks to distinguish between banks whose operations are Islamic and whose are conventional.

Conclusion

The purpose of the paper is to substantiate a model that would be able to differentiate between Islamic banks and conventional banks operating in the financial market of Bangladesh. Accounting ratios measuring bank profitability, efficiency, asset management, liquidity, and risk management, are used to create the model. It has been seen that accounting ratios can prove to be good discriminators between banks with Islamic Shariaa' based operations and banks with conventional operations in Bangladesh. It has also been found out that it is possible to formulate a model based on accounting ratios to predict they type of operations a bank is following in the Bangladesh market. However, further studies can be done to incorporate the operations of conventional banks with Islamic windows into the model, so that the overall private commercial banking sector of Bangladesh can be covered and conclusions drawn upon.

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The Outcomes of Immigration: Case Studies of Germany and Norway

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Abstract

What happens to young immigrants? How much of their assimilation to the new country depends on the length of exposure they had to the native country? How does the time spent in a native country impact decisions immigrants make later in life? How different are the outcomes of a second generation immigrant compared to outcomes of general population? The fact is that more than 214 million people today are immigrants, and their choices have an impact on global labor markets. We study those impacts while focusing on young immigrants and the second generation immigrants in Germany and Norway. The share of immigrants in these two countries is 13 and 10 percents, respectively, and neither has much historical experience with immigration. Two country studies allow us to find common patterns in immigration outcomes. Data comes from national socio-economic panel studies that allow for intergenerational analyses. Immigration has social and economical consequences and the findings of this study might have policy relevance.

Keywords: young immigrants, immigration outcomes, intergenerational analysis



The Exploration of One University Uses English as the Default Homepage Language in a Non-English-Native Country: The Case of Asian Students

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Abstract

This study presents an exploratory study using survey data collected at two universities in South Korea and China to analyze students' opinions when a university in a non-English-native country adopts English as the default language of its homepage. The empirical results show that Chinese students and non-Chinese Asian students have similar opinions toward this university promotion strategy, which positively gains more attraction from students, enhances the university's image, increases the willingness of registration. In addition, results also demonstrate that students have positive evaluation toward European and American universities, the effect of country-of-origin (COO). These findings suggest that in a highly competitive higher education market, a higher education institution in a non-English-native country may employ English as its default language of its homepage to enhance the evaluation in students' minds.

Keywords: university image, willingness of registration, English website

Factors for a Customer Satisfaction Index Applied to the Mexican Restaurant Industry: A Partial Least Squares-Path Modeling Approach

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Abstract

We present an application of the European Customer Satisfaction Index to the Mexican Restaurant Industry. We model the Index using Partial Least Squares Path Modeling. We will present the literature review that supports the construction of the manifest variables that serve as a proxy for the latent variables of the model. We also give an economic background on the importance of the Restaurant industry in Mexico, in particular in Guadalajara's Metropolitan Area. We aim to contribute to the literature with a better understanding of customer satisfaction, which is measured through loyalty.

Keywords: customer satisfaction; marketing; partial least squares-path modeling; hospitality; restaurant industry; Mexico.

Introduction

Measurement of quality in services and products entered the realm of academics and industry in Mexico in the late 90s. To date, the Mexican consumer has become more demanding, having had contact with robust systems of excellence, including global franchises. Even the government is beginning to feel the demands of taxpayers who ask for accountability and transparency in regards to their taxes.

In the early 70s, quality gurus emphasized the fact that quality is free, and that it was enough to produce quality goods or offer quality services in order to increase sales. However, the 80s saw a different trend. Firms opted to keep their customers satisfied, as this was cheaper than implementing costly campaigns to find new customers. As a consequence, measures of satisfaction were required to clarify a firm's areas of opportunity.

Currently, companies have taken a step forward to include, not only satisfaction, but loyalty (or confidence) as well. The key to success lies in focusing on customer satisfaction and, in turn, satisfaction is linked to loyalty (in the form of repeated purchases or referral to potential clients).

The model of satisfaction begins with the construction of internal quality of the good or service. This is because, internally, employees adopt company objectives as their own and

transmit them indirectly to their customers. Internal quality includes not only care in the product or service offered, but employee satisfaction, as well.

Internal quality includes consumer experience: attributes, benefits obtained from the service or product, costs, and company image held by the customers. At the same time, satisfied customers tend to remain loyal to the brand, or to have confidence in the service. Loyalty includes the predisposition towards repeat purchases and referral to friends. Hence, customer satisfaction correlates to sales through brand loyalty.

External satisfaction, meanwhile, has several repercussions. The most important of these are increased sales and financial success of the company, (Chanes, 2013).

Increased customer satisfaction leads to more sales. This is not a spurious correlation; rather, the explanation lies in the fact that, the more satisfied the customer is, the more loyal he or she will be. Loyalty thus leads to product repurchase.

This paper, therefore, will focus on the importance of having a quantitative model or method, which allows us to measure satisfaction in an objective manner in the specific context of the restaurant sector. This measure can be useful to restaurateurs as a practical tool for decision-making.

Satisfaction cannot be measured solely by answering the question: How satisfied is my customer with the goods or service. Thus, we will begin with a model which analyzes variables such as perceived quality, customer expectations, image, perceived value, the relationship among these factors, and the effects they can produce: complaints or referrals.

Conceptual Framework

For an in-depth understanding of the model, it is necessary to remit to the first articles on customer satisfaction. Engel, Kouat, & Blackwell (1968, p.512-15) and Howard & Sheth (1969, P 145-50) established that satisfaction is directly related to product expectations. This point of view was based, in large part, on laboratory studies carried out by Cardozo (1965). Later research by Anderson (1973), Cohen & Goldberg (1970), Olshavsky & Miller (1972), Olson (1976), Woodside (1972) and Oliver (1977), confirmed that satisfaction is a more complex issue than had previously been understood, *cf.* (Oliver, 1980).

Further studies carried out by Bishop (1984), Doyle (1984), Jacoby & Olson (1985), Sawyer & Dickson (1984), and Schlechter (1984), dealt with the relationship between price and quality and their fundamental power in determining production selection and purchases. These studies were later criticized for being ill-conceived in terms of their definitions, as affirmed by Monroe & Krishnan (1985), Zeithaml (1983), Bowbrick (1982), Olson (1977) and Peterson & Wilson (1985), *cf.* (Zeithaml, 1988).

The first country to develop a customer satisfaction index was Sweden in 1989. The Customer Satisfaction Barometer (CSB) offered an annual measure of customer satisfaction in over 30 industries and 100 firms. The new index was intended to be a complement to productivity measures and to examine the quota of market participation.

The model proposes that satisfaction will be lower in industries with a homogenous supply and a heterogeneous demand (Fornell C. , 1992).

In 1994 in the United States, the American Customer Satisfaction Index (ACSI) was implemented by researchers at the University of Michigan, in conjunction with the American Society for Quality in Milwaukee, Wisconsin, and the CFI Group in Ann Arbor, Michigan. The index was developed to provide information about quality satisfaction for both products and services available to consumers. This index was based on the Swedish model (Fornell C. J., 1996).

In Mexico, there is no way to measure customer satisfaction and loyalty in a uniform manner or to track these indicators against international standards on global index reports. The problem is that there is no Mexican satisfaction index that includes a model considering measurement errors and standardized with a unique methodology, to compare satisfaction and establish benchmarking per sector.

Measurement of quality in goods and services is complex. Currently, when it is necessary to make decisions based on customer satisfaction, the practice is to apply instruments such as Likert-scale surveys. This leads to subjectivity in the study, as well as to a bias; if we observe the distribution frequencies, we find that approval is always greater than disapproval, regardless of the statement. This shows that expressions of disapproval are not equidistant (Antz Research Company).

In more developed countries, such as Sweden and the United States, as we have seen, there are indices which measure customer satisfaction and the way in which this affects customer loyalty, determined by the quality of the product or service, customer expectations and perceived value.

Satisfaction is a subjective perception; thus, it should be measured using models that include measurement error, analysis of variables, and the relationships between these, in a quantitative manner.

This study was carried out based on the model of the *European Customer Satisfaction Index* (ECSI), which allowed us to carry out a multivariable analysis of the restaurant industry in the Mexican state of Jalisco, to obtain correlations among construct variables, using structural equations, in particular using the Partial Least Squares Path Modeling (PLS-PM) approach. By means of multivariable analysis, we intend to eliminate subjectivity in quality measurements. A measurable objective instrument will allow for correct decision making by restaurateurs.

The following figure shows the ECSI model (Ball, Simões Coelho, & Machás, 2004), which will be applied to our study in the restaurant industry in the state of Jalisco.

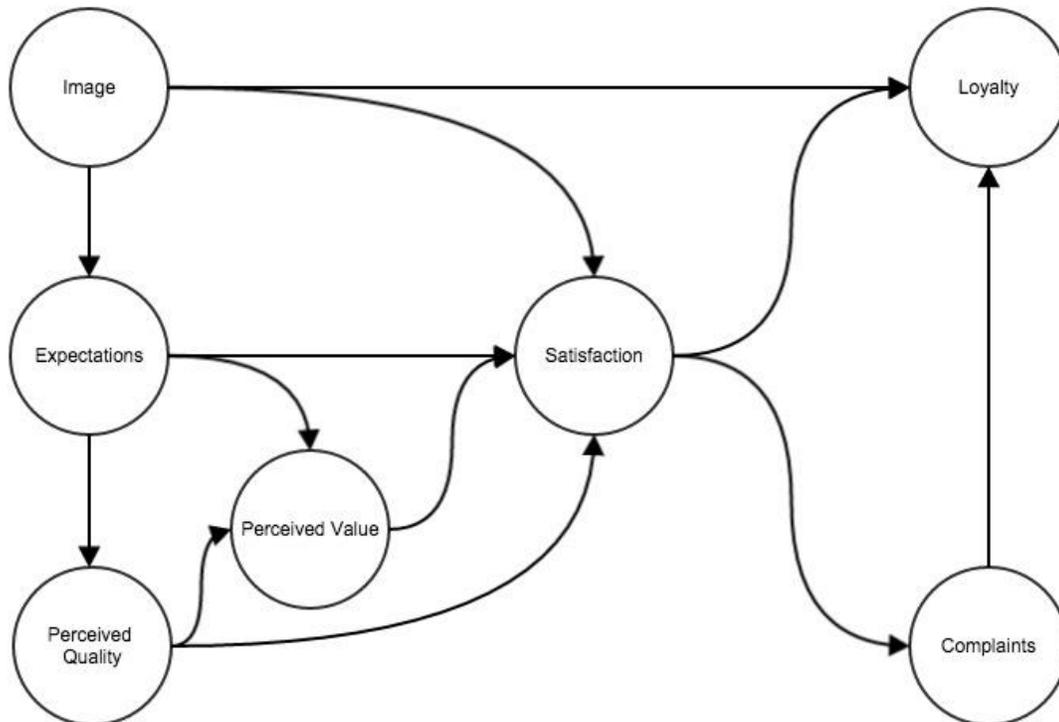


Figure 1. European Customer Satisfaction Index

Since 1970, exhaustive research has been carried out into customer satisfaction in developed countries. In 1989, Fornell and his colleagues at the University of Michigan helped Sweden construct the first model of customer satisfaction measurement. This model uses structural equations to link customer satisfaction to its determiners: quality, expectation, and perceived value (Rovah., 2014).

In 1990, the customer satisfaction index gained recognition from governments and companies (Rovah., 2014). However, image was not included as a variable until it was implemented into the ECSI.

The history of the study of corporate image reveals convergence in a *gestalt* sense, but omits corporate attributes to center exclusively on the perception of image. Thus, prior expectations are explored after the purchase, or at the same time that satisfaction is measured. Therefore, what is really being recovered is customer perception or corporate brand image (Rovah., 2014).

Image is formed as a result of all the impressions received by the consumer in regards to a brand, regardless of where these impressions come from (Valls, 1992)

Between 1960 and 1970 a variety of products or services arrived at the market, giving rise to increased firm rivalry and a need to obtain a greater market share. During this period, image was used to highlight product differentiation, showing them in a more honest and fun light and garnering consumer favor, (Caldeiro, 2005).

For Martineu (1958) image is the way an organization is defined in the mind of the consumer, “partly by the functional qualities and partly by an aura of psychological attributes” (García, 2008).

Anderson (1978) maintains that image refers to a holistic and living impression that a concrete audience holds towards a company. This is formed as a result of the processing of information by the members of the audience, as well as global communication from the firm in regards to its nature; that is, a picture the firm creates and projects of itself (García, 2008)

Now we proceed to define the different factors that constitute our model.

Satisfaction

On the index, customer satisfaction is calculated as a weighted average of the three survey questions that measure different facets of satisfaction with a service or good. ACSI researchers use proprietary software technology to calculate the weighting for each question (Ball, Simões Coelho, & Machás, 2004).

Expectations

Customer expectation is a measure of the pre-conceived ideas of a customer about a company’s products or services. Expectations represent previous experiences as well as hearsay, such as advertising, word of mouth, and trust that the company will continue to offer quality in the future (Ball, Simões Coelho, & Machás, 2004).

Perceived quality

Perceived quality is the measure of recent consumer experience. Quality is measured in terms of personalization; *i.e.*, the degree to which the good or service fulfills the customers individual needs, and reliability, which is the frequency of problems with the good or service (Ball, Simões Coelho, & Machás, 2004).

Perceived value

Perceived value is the measure of quality in relation to price. Though the price (value for money) tends to be of prime importance in a first purchase, generally its impact lessens through satisfaction with repeated purchases (Ball, Simões Coelho, & Machás, 2004).

Complaints

Customer complaints are measured as a percentage of respondents who have complained directly to the company about a product or service within a specified time. Satisfaction correlates negatively to customer complaints, since the more satisfied they are, the lesser the likelihood of their complaining (Ball, Simões Coelho, & Machás, 2004).

Loyalty

Customer loyalty is a combination of the likelihood expressed by the customer of a repurchase from the same provider in the future, and the possibility of acquiring goods or services from the same company at different prices (price tolerance). Customer loyalty is

a critical component of the model in its current form, as a proxy for profitability (Ball, Simões Coelho, & Machás, 2004).

Table 1 shows a review of the literature about the variables that make up the customer satisfaction model.

Table 1. Literature Review about Satisfaction Factors

Reference	Image	Expectations	Perceived Value	Perceived Quality	Satisfaction	Loyalty	Complains
(Fornell C. J., 1996)		x	x	x	x	x	x
(Raquel Sánchez Fernández, 2013)			x	x	x	x	
(Mohammad Hossein Askariadz, 2013)	x	x	x	x	x	x	x
(Prybutok, 2009)		x	x	x	x		
(Demirel, 2013)	x	x	x	x	x	x	x
(Odette Lobato-Calleros, 2013)		x		x	x	x	x
(Andreassen & Lindestad, 1997)	x				x		
(Bayol, 2000)	x				x		
(Ball, Coelho, & Machas, 2003)	x	x	x	x	x	x	x
(LeBlanc & Nguyen, 1996)	x				x		
(O'Loughlin & Coenders, 2002)					x		x
(Parasuraman, Zeithaml, & Berry, 1988)			x	x	x		
(Lam, Shankar, Erramilli, & Murthy, 2004)					x	x	
(Mathwick, Malhotra, & Rigdon, 2001)		x		x	x		
(Overby & Lee, 2006)				x	x		
(Ryu, Han, & Soocheong, 2010)				x	x		
(Yang & Lee, 2010)				x	x		
(Babin, Lee, Kim, & Griffin, 2005)				x	x		
(Jones, Reynolds, & Arnold, 2006)					x	x	
(Chiu, Hsieh, Li, & Lee, 2005)					x	x	
(Stoel, Wickliffe, & Lee, 2004)					x	x	
(Johns & Howard, 1998)		x	x		x		
(Cronin & Taylor, 1992)		x		x	x		
(Olorunniwo, Hsu, & Udo, 2006)		x		x	x		
(Kivela, Inbakaran, & Reece, 1999)	x			x	x	x	
(Kara, Kaynak, & Kucukemiroglu, 1995)			x		x	x	
(Kim & Kim, 2004)			x	x	x		
(Boulding, Kalra, Staelin, & Zeithaml, 1993)		x	x	x	x		
(Keillor, Hult, & Kandemir, 2004)				x	x	x	x
(Andreassen & Lindestad, 1998)	x				x	x	
(Martensen, Kristensen, & Grønholdt, 2000)	x				x	x	
(Johnson, Gustafsson, Andressen, Lervik, & Cha, 2001)		x			x	x	
(Anderson & Fornell, 2000)		x		x	x		
(Chan, y otros, 2003)		x	x	x	x	x	

We have shown how these factors have been measured by different authors in the literature review, in order to construct the manifest variables that will measure the constructs of our model. We have also describe the data sample that will be used in the study and the implications of implementing such satisfaction index in such an industry, due to its economic impact.

This paper will serve as a starting point to build the quantitative analysis of the Customer Satisfaction Index, which is currently under process.

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Good or Bad? Questioning the Effect of *Guanxi* on Firm Performance for Multinational Corporations (MNCs) in China

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Abstract

This paper questions the effect of business *guanxi* on the overall firm performance in China when the organization is large with a structured hierarchy and/or complex business functions (which is typical for multinational corporations – MNCs). Following a literature review on Chinese *guanxi*, the author brings up an inquiry about the possible dual impacts of *guanxi* on MNCs' performance in China – an area that little is known. While *guanxi* is commonly believed to be a catalyst in doing business in China, it can be an inhibitor for larger formal organizations there. In other words, *guanxi* is not an all-time guarantee of business achievements in China. Management should note the “divergent” influences of its actors – the employees – who can diminish the positive returns of *guanxi* on firm's achievements due to potential conflicts/fights between employees on overlapping *guanxi* networks within the organization as the author suggests. The larger the organization, the higher the risk is. This review paper serves as a starting point; empirical studies are deemed necessary to seek more understanding about the relationship between business *guanxi* and the organizational performance of MNCs in China.

Keywords: business ethics; China; corporate governance; FDI; firm performance; *guanxi*; HRM; MNCs



Challenges to Innovation in Small Business Enterprise Sector in India

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Abstract

Indian small scale industry occupies a significant position in the manufacturing sector. Data show that there are fifty million registered small enterprises comprising 90 percent of the Indian manufacturing sector in the unorganized sector. This sector contributes a net 9 percent of Gross Domestic Product per year which is 45 percent of India's total industrial output and also contributes 40 percent of country's total exports and generates 1.3 million jobs every year. This sector operates in a very challenging environment and grapples with many networking problems that hamper the innovative capacity. The present study examines in detail the problems of technology generation, innovative capabilities and draws lessons from the growth experiences of Japan, South Korea and Taiwan. The present study examines in detail the problems of technology generation, innovative capabilities and draws lessons from the growth experiences of Japan, South Korea and Taiwan. The future prospects of international synergies are great for the Indian small business enterprise if the efforts are escalated in the direction of technology augmentation by creating a culture of innovation systems.

Keywords: manufacturing sector, small business sector, technology generation, innovation culture

Introduction

Small business enterprises (SBEs) have been surging as drivers of economic growth in the industrialized West and the emerging economies of the Southern hemisphere as well. The contribution of SBEs as a ratio of Gross Domestic Product has been ranging from 6 per cent to 40 per cent in the world which occupies a significant position in the economic growth of a country. Recent studies the world over have shown that attention to promote SBE sector with a changed nomenclature. The term Micro, Small and Medium Enterprises (MSME) is being used in place of SBE, probably with 2001 report of the World Bank, *Challenge*, The World Bank review of Small and Medium business activity. Soon, the International Finance Commission's Country Reports on Indonesia, Thailand, Tajikistan etc., inspired the world to get into accelerating the pace of MSME sector as prime engine of economic growth. India also followed in the treaded path by amending the statutes to pass MSME Act 2006, to replace the erstwhile category of Small Scale Industry. Different countries follow different parameters and criteria and methods to classify the small firms, and industry on the basis of capital employed, sales turnover, employment of workforce, size of the firm etc. Sales turnover, is a little nebulous category being subject to intense cyclical fluctuations and subject to heavy market shocks. Most countries follow the methodology of using employment and capital investment as more stable indicators to classify and analyze the performance of MSME sector.

MSME definitions vary across countries as noted earlier, while using employment of the workforce criteria, it is quite high in Asian countries. For example it is 10 to 250 persons employed per unit in India, China, Japan, Korea, Indonesia, and Pakistan while the norm is restricted to the range of 0 to 20 and at the most up to 50 in UK, New Zealand, Australia, France, Germany, and the US. Structural changes in the international economy, domestic economies across the world, changing business practices, technological change and innovation in the light of globalization have radically changed the manufacturing industry in general and MSME sector in particular in the past one decade or so (World Bank, 2001). This has brought in a compulsive innovation-based competitive environment that builds a new strategy of innovation cluster networking among the small enterprises, for their sheer survival.

Role of MSME Sector in Industrialization

Small business firms have assumed an important position in the manufacturing sector of the economies all over the world and more so in Asian economies. The contribution of MSMEs to various key ratios such as their output, employment, and exports as a ratio of GDP have been occupying a significant position and needs to be closely monitored in the national industrialization policies. In fact, if we observe the historical trend of the process of industrialization of countries like France, Germany, Japan, Korea and many Organization of Economic Cooperation and Development (OECD) countries, it becomes clear that they had followed a closely monitored industrial policy with orientation towards micro, small, and medium enterprises.

Table 1 below presents some features of key ratios in select countries.

Table 1: Key Ratios of SME Performance: Select Countries

S.No.	Name of the Country	Employment/GDP (percent)	Output/GDP (percent)	Exports/GDP (percent)
1.	Indonesia	97.2	57.2	15.8
2.	Korea	87.5	49.4	30.9
3.	Germany	79.0	53.8	55.9
4.	Thailand	77.9	38.7	29.5
5.	Japan	70.2	50.0	53.8
6.	Pakistan	70.0	30.0	25.0
7.	Malaysia	58.9	31.9	19.0
8.	U.S.A.	49.4	46.0	33.7
9.	India	40.0	17.0	40.0
10.	Bangladesh	40.0	22.5	11.3
11.	Sri Lanka	35.0	52.0	20.0

Source: International Finance Corporation, Country Reports, World Bank Washington; IFC Asia-2015, Division of World Bank, Tokyo.

The post-globalization scenario has thrown new challenges to the micro, small and medium enterprises in terms of competition from the large firms, particularly with those firms which have transnational operations. The challenges are in terms of augmented demand for capital resources, novelty of consumer tastes and choices, new product mix, new choice of technological innovation, and reduced time delay in delivering outcomes.

Clusters in MSME Sector

Small and medium enterprises operating in the same or inter-related industrial sectors tend to concentrate in specific geographic locations. This phenomenon has been observed in all parts of the world. There are sound economic reasons for this phenomenon (Krugman 1991). Micro and small units operating in such clusters derive a clear competitive advantage from:

- The proximity to sources of raw materials and other inputs,
- The availability of suitably customized Business Development Services (BDS),
- The abundance of clients attracted by the cluster tradition in that industry, and
- The presence of a skilled labor force.

Such a phenomenon calls for close networking of the MSMEs towards minimizing costs, in transport, transactions, so also, maximizing scale efficiencies in output and breaking the structural rigidities that may arise due to institutional factors which calls for nesting into what may be called a 'cluster.

A 'cluster' may, therefore, be defined as the agglomeration of SMEs producing same/similar products/services or engaged in the same line of manufacturing activities or services, located within an identifiable and, as far as practicable, contiguous area. Not all the clusters are however characterized by the same dynamism or indeed by the same economic success. According to a UNIDO survey of Indian SME clusters undertaken in 1996 (later updated in 1998), there are 350 SME clusters. Also, there are approximately 2000 rural and artisan based clusters in India. It is estimated that these clusters contribute 60% of the manufactured exports from India (UNIDO, 2009). The SSI clusters in India are estimated to have a significantly high share in employment generation.

Some Indian MSME clusters are so big that they account for 90 per cent of India's total production output in selected products. As for example, the knitwear cluster of Ludhiana, Tirpur, the Gems and Jewelry clusters of Surat and Mumbai account for 90 percent of the total exports in those merchandise categories. Similarly, the clusters of Chennai, Agra and Kolkata are well known for leather and leather products. However, the majority of Indian clusters, especially in the handicrafts sector, are very small with no more than hundred workers, so specialized that no other place in the world matches their skills and the quality of their output (UNIDO, 2011). This is the case, for example, of the Paithani sarees cluster in Maharashtra. However, only a tiny minority of such artisan based clusters are globally competitive. Globalization has opened up a wide ranging access to international markets and products through the World Trade Organization, particularly in the area of traditional culture and arts-based products besides the merchandise based on geographical indications. The formidable challenges created for the SME sector by the liberalization of the Indian economy, as well as its closer integration within the global economy, have generated a great deal of interest within India on novel approaches to SME development. As a result, both private and public sector institutions at the Central as well as the State levels are increasingly undertaking cluster development initiatives.

Before examining the dynamics of competition, market access, innovativeness and technological capabilities of the MSME sector in India a brief review of the structure and growth of this sector in the last six and half decades of independent India is in order.

Rise and Decline of Industrial Policy

The Industrial Policy Resolution of 1948, marked the evolution of Indian Industrial Policy has spelt out the broad contours of the policy and defined the role of the state in industrial development both as an entrepreneur and as a regulatory authority. In order to optimize the utilization of scarce resources and reduce the threat of re-colonization by the multinationals, centralized planning was adopted with wide ranging controls on private trade, investment, land ownership and foreign exchange.

The foundations of the policy for the small scale industry were laid in the Second Five Year Plan. In 1956, the government announced its second industrial policy which unambiguously chose equity as the guiding principle for small industry development. The operative statement says: “small scale industries provide immediate large scale employment, offer a method of ensuing a more equitable distribution of national income and facilitate an effective mobilization of resources of capital and skill which might otherwise remain unutilized”.

The industrial policy statements of 1977 and 1980 marked a strategy for focusing attention on micro, medium and small scale industrial units by reserving select group of products in the exclusive domain of this sector. The number of products reserved for SME sector was increased from 180 in 1977 to 504 in 1980 and further to 836 items in 1996.

The focal point of development for small sector and cottage industries was shifted from metropolitan areas, cities and state capitals to the "district" headquarters. In each district, there would be one agency to deal with all requirements of small and village industries. This was called the “District Industries Center”. The recognition of the importance of ancillary industry found expression in the policy statement of 1980 which laid emphasis on ancillaries. Moreover, the program for the development of rural and backward areas was accelerated.

The Industrial Policy Statement of 1985 made incremental changes and took into account the impact of inflation. By 1991 the course and direction of industrial policy radically shifted towards abolition of the erstwhile controls on free flow of capital and technology foreign countries and reduction in bureaucratic controls on private investment and entrepreneurial activity which culminated in new paradigm shift. From then on a new era has ushered in the industrialized growth path with liberalized policy regime with broad banding of numerous products geared towards international competition.

Gradually the parameters of competition also changed the dynamics of industrial growth by the emergence of big corporates taking to the wheel by mergers, acquisitions and business regroupings leading to establishment of conglomerate large business houses on the one hand while the majority SME units being marginalized on account of paucity of capital resources, technological incompetencies, and lack of entrepreneurial skill

endowments. As noted in the early sections of this paper, the SME sector being a potential employment generating sector, a major proportion of unregistered manufacturing activity is also located in this domain. In India it is denoted as unorganized sector which comprises of the 90 percent of small and petty commodity producers as well.

The political economy aspect of this sector is that all the governments that have been in power since independence have declared their support to this sector with their left or right leaning economic policies; that is either during protective control regime with import substituting industrialization policies or during export led growth model of free liberalized open market driven free-trade policy without quantitative restrictions.

Revival of Policy Instruments

Indian macroeconomic policy making towards controls and free market has always been in eternal dilemma of "to be or not to be?" That is the reason there is no complete abandonment of public sector, nor destitution of planning commission which has assumed a new *avatar* namely *Niti Ayog* (literally means Policy Commission) implying macroeconomic policy making. The previous government led by United Progressive Alliance had rechristened the small business sector as Micro Small and Medium Enterprise sector with the notification of Micro, Small and Medium Enterprises Development (MSMED) Act in 2006. The Act seeks to facilitate the development of these enterprises as also to enhance their competitiveness. It provides the first-ever legal framework for recognition of the concept of "enterprise" which comprises both manufacturing and service entities. It defines medium enterprises for the first time and seeks to integrate the three tiers of these enterprises, namely, micro, small and medium. The Act also provides for a statutory consultative mechanism at the national level with balanced representation of all sections of stakeholders, particularly the three classes of enterprises and with a wide range of advisory functions.

India always distinguished the size of the industry as small, medium or large enterprise in terms of capital employed rather than personnel employed or at least showed preference to use the investment criterion for regulatory support from the government.

On 9 May 2007, subsequent to an amendment of the Government of India (Allocation of Business) Rules, 1961, the erstwhile Ministry of Small Scale Industries and the Ministry of Agro and Rural Industries were merged to form the Ministry of Micro, Small and Medium Enterprises (M/o MSME). This Ministry now designs policies and promotes/facilitates programs, projects and schemes and monitors their implementation with a view to assisting MSMEs and help them to scale up.

According to the newly enacted Micro, Small and Medium Enterprises Development Act 2006, which has come into effect from October 2, 2006, enterprises were classified into Micro, Small and Medium according to the following criteria: Table 2 shows the criteria. The industrialization scenario in the post-globalization era has thrown up new opportunities and a number of challenges to MSME sector in India. It demanded a proactive policy intervention from government, coordination of multi-institutional innovative systems comprising of educational efforts to impart skill training in those sectors which lack it,

industry-academia collaboration, and making the majority small enterprises Trade Related Intellectual Property Rights (TRIPS) compliant in the new patent regimen in accordance with WTO norms.

Table 2: Classification of MSME in Terms of Capital Employed

Type of enterprise	Engaged in manufacture or production of goods	Engaged in providing or rendering of services
	Investment in Plant and Machinery	Investment in Equipment
Micro enterprise	Does not exceed 25 Lakh rupees	Does not exceed 10 Lakh rupees
Small enterprise	More than 25 Lakh rupees, but does not exceed 5 Crore rupees	More than 10 Lakh rupees, but does not exceed 2 Crore rupees
Medium enterprise	More than 5 Crore rupees but does not exceed 10 Crore rupees	More than 2 Crore rupees but does not exceed 5 Crore rupees

Source: Ministry of MSME, Government of India. 1 Lakh = 100000; 1 crore = 10 million

However, the potential of SMEs is often not realized because of problems commonly related to size, isolation, market opportunities, standards/ quality, supply chains, logistics and technology innovation. To preserve their narrow profit margins, small-scale entrepreneurs in developing countries do not opt to innovate products and processes and resort to tactics that deters their growth in the long run. Left on their own, many SMEs face difficulties arising from liberalization-induced adjustments. With SMEs varying widely in size, capabilities, environment, whether urban or rural-based and organizational structures in case of cooperatives, coherent region-wide approaches to address their problems have been difficult to craft.

In order to enable SMEs tide-over the problems of technological backwardness and enhance their access to new technologies, it is imperative to offer them a conducive environment, which in the present context of globalization, calls for approach with knowledge playing a predominant role. There is a need to understand and assess the real needs of the SMEs and accordingly devise approaches that ensure their sustainable growth. The need today is also to leverage on modern technologies to harness human capabilities through the process of increased communication, cooperation and linkages, both within the enterprise as well as across enterprises and knowledge-producing organizations.

The government of India had set up a Working Group on SMEs for the Eleventh Five Year Plan (2007-2012) period which came up with some important suggestions for the improvement of entrepreneurial capabilities of this sector. The Working Group has tried to look at SMEs from the view-point of science and technology interventions, examined the global scenario of SMEs, status of the Indian perspective, looked into various schemes in existence in India and finally suggested ways to improve the health of SMEs and impart them an edge to compete in the global market (Working Group, 2014).

International Experience

Globalization process had propelled the countries into a new constellation of liberal policy trajectory and India has jostled its way into a secure slot of free market space arduously trying to wipe out the past image of "dirigisme" regime of bureaucratic controls. India is hesitant and cautious to extend full throttle support to MSME sector towards injecting the

much needed financial support, as in the past, lest it may slip back into much maligned *protective conundrum*. It is interesting to note here that, while India is distancing from extending support to small business, those countries which have had smooth sail of free-enterprise tide in the turbulent sea of capitalist economic growth for more than three centuries, for example, US, UK, and the European nations, are willy-nilly docking to the turf of interventionist financial support to SMEs.

SME experiences all over the world show that there has been a constant and consistent support to MSME sector in terms of capital infusion, technology up gradation, skill empowerment and governmental negotiation for international Research and Development inflows.

In the United States, small business have benefited from direct cash injections. Procurement policy also seeks to increase the participation of small businesses, veteran-owned small businesses, small/ disadvantaged business, women-owned small businesses. The Small Business Act requires that each contract with an anticipated value of greater than US\$2,500 but less than US\$100,000 be reserved exclusively for small business concerns (unless the contracting officer is unable to obtain offers from two or more small businesses that are competitive with market prices and with the quality of the goods or services to be purchased (US SBE, 2011).

In Hong Kong in 2005, a total of almost 270,000 SMEs accounted for over 50% of employment, providing job opportunities to almost 1.2 million people. The majority of enterprises were in the services sector, specifically import and export, and wholesale and retail trade.

Korea, recognizing the importance of SMEs has introduced many measures that include tax breaks and reduced interest loans for those starting new businesses in rural areas. Probably the other Asian and South East Asian countries have also done fairly well in this regard.

In Japan the experience has shown that a systematic spurt in the small firms under family conglomerates, namely, *keiretsu*, were able to create synergies of capital, technology and an assured access to markets in the initial stage. In Japan, where SMEs are defined as establishments employing between four and 299 employees with a turnover of less than 100 million yen, they represented 99.7% of all enterprises, with retail and manufacturing being the most popular industries.

The Japanese Ministry of International Trade and Industry had also helped these *keiretsu*, firms grow on a steady path by negotiating for cost effective technology from the giant transnational corporations, by negotiating contracts on behalf of these firms, and eliminating cross competition and parallel cost escalation within the firms for the same technology. This has built up a strong networking of technological negotiations benefitting the local entrepreneurs and avoiding the unhealthy competition within the same sector, industry or even region.

The growth of large firms like Toyota in the automobile sector, Mitsubishi in automobiles, chemicals as well as machine tools and Sumitomo are only a few examples in a big league, which all were essentially *keiretsu*, in the early stages and transformed into *zaibatsu*, giant corporations, and possibly also developed into huge transnational corporations at a later stage. Today in our country there is great future for outsourcing, ancillarization, medical transcription, clinical research and trials, subcontracting, biotechnology and the like have tremendous potential for MSME sector, of course, with all the necessary precautions and preventive steps to be followed.

Countries like South Korea, with *cheebols*, Taiwan, China all had a predefined industrialization path with definitive macroeconomic policy and substantive governmental support. Korea Institute of Science and Technology (KIST), Japan's National Institute of Advanced Science and Technology (AIST), China's Shanghai Zhangjiang High-tech Park (SZHP), Taiwan's Hsinchu Science-Based Industrial Park (HSIP) have all played a very crucial role in a systematic growth of small business graduating to big business story.

The moral of the story is very clear. A well-coordinated trilateral networks and hybrid industrial organizational methods--state-industry-academia; on the other traditional, cultural eastern strengths in combination with modern western technology. This alone can steer the path of technology generation, competitive strength, innovative capabilities, and augmentation of productive capacities whereby national wealth maximization can be achieved.

The Indian government realizes the role played by MSMEs in the economic and social development of the country because employment potential and the overall growth in the MSME sector is much higher than in the large industries. The government has fulfilled its mission by formulating policies, designing and implementing support measures in the field of credit, technological up gradation, marketing, entrepreneurship development, etc. This has resulted into increasing rate of innovations within the MSME sector and most of the innovations in the MSME segment have been witnessed in these areas.

A National Knowledge Commission of India study reveals that 42% of large firms and 17% of MSMEs have introduced 'new to the world' innovations during the course of their business. Seventeen per cent of the large companies rank innovation as the top strategic priority and 75% rank it among the top three priorities. India is ranked 62nd on the Global Innovation Index, 1st in its region, and 8th in its income group—after China, Moldova, Jordan, Thailand, Viet Nam, Ukraine, and Guyana India's position, however, is dragged down by its poor performance on the input side (ranked 87th): India is in the last quintile on business environment, elementary education, tertiary education, and knowledge workers. But the country has high marks—within the top 40—on R&D (35th); general infrastructure (11th) To assess the innovative capabilities and innovation characteristics of MSME firms in India, a pilot Innovation Survey was carried out considering the fact that this would play an important role in generating policy relevant information about innovation processes, innovation behavior and innovation performance. The main focus of the survey was private firms. Respondents were chosen from the sectors including leather, processed food, textiles, information technology, defense, gems and jewelry, electronics,

chemicals and Ayurveda products. 10 respondents on an average were chosen from each sector. From the innovation surveys, percentage of innovating firms in India was quite low.

Summary and Conclusion

Small business enterprises in India play a very significant role in terms of contribution to national GDP and employment generation in the economy. In 2006 the small scale industry in India got changed to the MSME sector through a statutory act. Globalization has thrown up a wide array of opportunities so also formidable challenges to survive in the face of fierce competition from the large corporations domestically as well as the transnational giants with new technologies and product mix. Large inflows of capital, technology in the liberalized post-WTO scenario the MSME units are left with the option to go for up gradation of skills, technology and innovativeness. Domestic in-house R&D efforts have to be geared up to accelerate technology based production activity.

However, according to UNIDO, India is the fourth largest scientific and technical manpower pool in the world, is a consolation, which can be focused to strengthen our indigenous R & D targets which is inadequate at present. However, the potential for domestic innovation capabilities are quite high in the MSME sector. Probably the other Asian and South East Asian countries have done fairly well in this regard. In Japan the experience has shown that a systematic spurt in the small firms under family conglomerates, namely, *keiretsu*, were able to create synergies of capital, technology and an assured access to markets in the initial stage. The Japanese Ministry of International Trade and Industry had also helped these *keiretsu*, firms grow on a steady path by negotiating for cost effective technology from the giant transnational corporations, by negotiating contracts on behalf of these firms, and eliminating cross competition and parallel cost escalation within the firms for the same technology. This has built up a strong networking of technological negotiations benefitting the local entrepreneurs and avoiding the unhealthy competition within the same sector, industry or even region. Countries like South Korea, with *cheebols*, Taiwan, China all had a predefined industrialization path with definitive macroeconomic policy and substantive governmental support. A well-coordinated trilateral networks and hybrid industrial organizational methods, namely, state-industry-academia combined with the other traditional, cultural eastern strengths in combination with modern western technology is likely to ensure a better position for India in future. This alone can steer the path of technology generation, competitive strength, innovative capabilities, and augmentation of productive capacities whereby national wealth maximization can be achieved.

In India, however, right now different provincial governments in the states are either indulging in offering incentives on a platter, or bidding higher rent accruals to the foreign technology providers at the cost of collective wealth. Such policy, either by individual state governments or a lackadaisical attitude of the central government can only hamper the long-term prospects of country's economic growth.

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The Economists Strike Back: Keeping Economics in the Core Curriculum

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Abstract

The core curriculum pushes students to learn about various disciplines and become well rounded graduates. Liberal arts colleges in particular emphasize producing “T” students who are knowledgeable across a large spectrum of disciplines and specialized in one. Unfortunately economics is not always a required part of the core, but instead is often one of several options that fulfills a specific requirement. During the 2011-2012 academic year our university, a small, public liberal arts college, revised its core. Prior to this revision every student was required to pass at least one Economics course before they could graduate. Among other changes, the new core removed the economics requirement from the core for non-business majors. These courses were not only a significant source of the hour generation for the economics department, they were also one of the primary ways in which we recruited students. One of the other changes that the core revision made was the addition of a required freshman level critical thinking class referred to as GC1Y classes. Knowing that many students would forgo taking an optional economics class, which has a reputation of being difficult, some faculty began developing new courses designed to meet the requirements of a GC1Y class. The three courses are Freakonomics, Swansonomics, and Sex, Drugs, and Economics. Freakonomics is based on the first two Freakonomics books. Swansonomics utilizes a series of quotes by the famous/infamous libertarian character Ron Swanson from the show Parks and Recreation to frame a discussion of comparative economics systems. Finally, Sex, Drugs, and Economics is essentially a controversial issues class. These courses have been extremely successful, even outcompeting dozens of courses in other, more traditionally popular, disciplines. They are very popular, meaning they have significantly contributed to our hour generation, and have proven to be a fertile source of new economics majors. This paper will discuss the ways in which each of these classes is structured to work as a freshman level critical thinking class.

Keywords: economic education, core curriculum, credit hour generation, teaching economics

Social Development Index and Turkey: A Comparative Analysis by Country Examples

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Abstract

For many years, policy makers and economists have believed that, economic development accompanied economic growth. However, when it comes to the 1970s it was revealed that these two concepts have different meanings and economic growth does not always mean economic development. While efficient use of economic resources and distribution contribute to economic growth while it is not sufficient for economic development and it is required that countries develop in social and humanitarian terms, regional development differences are minimized and it should cover elements including unemployment, poverty, income distribution. Upon the realizing the fact that economic growth is not sufficient alone for the development of any country, the concept of development came into prominence and the concept was discussed in social, cultural and humanistic terms. Human Development Report which was published by MahbubulHaq, the Pakistani economist and minister of finance and his team for the first time is published every year now. Human Development Index included in this report indicates the change in living standards of people in line with growth. But it is literally insufficient to measure the change in social life. In order to overcome with this deficiency, the concept of Social Development Index was raised by Michael Porter, Professor of Business Administration in Harvard University. In the first part of this study the Social Development Index will be discussed with its conceptual dimensions. In the second part of this study, the value of this index on the basis of countries of the world will be presented. In the third and final part of this study will focus on the importance of the concept for Turkey.

Keywords: social development index, human development index, economic growth, economic development

Introduction

While trying to determine development levels of countries, GDP size which most allows to make a comparison among countries was often used. GDP size reflects that a country is a wealthy country but it may be insufficient to measure its development level. Different indices were developed in order to overcome with this insufficiency and owing to this, it was tried to determine what sorts of changes economic growth led in living standards of the people of the countries in terms of social, cultural and human indicators. The index most commonly used for this purpose is the Human Development Index. However although this index gives an idea in the sense of measuring the change in living style it fails to measure the change in social life. Therefore social development index was created in order

to measure the change that appeared in social life. This index gives an idea about social development levels of societies using the sub-indices it contains.

Conceptual Dimension of the Social Development Index

Social development of societies refers to a development where the individuals composing the society participate in political decision mechanisms in line with economic and cultural development, no gender discrimination is made, free expression environment is provided, unemployment is decreased, working conditions are improved, and income distribution is made more just.

Growth of economies is referred as the increase in GDP per capita. This expression has created for many years the impression that economic growth realizes economic development automatically. However as a consequence of the problems encountered and social unrest arising despite the increase in GDP, it attracted the attention to the difference between the concepts of development and growth. To express more correctly, the sociological factors that should make the basis for development gained significance.

The Difference Between Development and Growth

While development and growth was expressed with the increase in national income in 1960's, the purpose for development was shifting production structure from agricultural sector to industry and services sector. And as an indicator of welfare increase in the country GDP per capita was taken. (DPT, 2003: 6-7) However when it comes to 1970's the concept of development was redefined.

Economic development covers income increase, rise of education and health levels, efficiency increase, technological development and more other factors (Bassanini and Scarpetta, 2001: 2). Development refers to increase in life quality of people (Ünal, 2008: 90). In addition to these, values including literacy rate, schooling rate, average lifetime are included in the scope of definition of development. The concept of development is an approach which takes humans as basis. Economic and cultural environment created by thoughts, abilities and education levels of humans develops innovation and creativity and contributes to economy as the input of production process (Schultz, 1961: 4-5). Development has three building stones. The first one is increase of incomes of people, and improvement of food consumption, education of people and other conditions in line with growth. The second one arises with social, cultural, political institutions and self-confidence of people. The third one is increase of freedoms in line with development of alternatives of people (Günsoy, 2005: 36-37).

And economic growth refers to the increase in GDP of the country. The concept has no sociological dimension and it completely contains economic value increase. Economic growth does not always provide economic growth but it is necessary for realization of development.

Human Development Index

Human development is a concept aiming at rising life standards of societies. The real richness of societies in human development approach is the human being (Mıhçı, 2003:

27). Being able to produce output in economic terms depends on bringing production factors together. Increasing human capital of persons may provide significant contribution to economic development. A suitable environment where persons will be able to use the human capital they have should be available for this purpose. As long as any development based on GDP per capita of the country fails to increase human capital in line with income increase and to use the same, waste of human capital in countries comes to the agenda (Karataş and Çankaya, 2010).

United Nations Development Program published Human Development Report in 1990. The purpose of this report is providing human to be placed in the center of national and global development policies and attracting the attention of international community to the significance of life quality of individuals. The roots of the concept of human development are in “actualization” approach of AmartyaSen (Gürses, 2009: 341). According to Sen, the basis of social development is actualizations. Development theory as expanding basic actualizations is the starting point of human focused development and progress approach as well. Breadth of actualizations should be taken into consideration while assessing life quality of the individual (Sen, 1999)

Human development index is created by using three sub-indices. These are welfare standard, education standard and health standard. Those three criteria contributing to social development targets in different weights are generally obtained as follows (Demir, 2006). Considering welfare standard as the economic criterion in determining development level and education and health standard determined as the social criteria, HDI value is calculated (Karabulut et.al. 2009: 4).

-Welfare Standard: Purchasing power of GDP per capita is obtained as a result of calculation with parity. According to welfare standard index, increase of USD 1.000 in GDP per capita affects human development index by 0,8% in 1998, by 0,6% in 2000, 0,4% in 2005 and 0,3% in 2009.

-Education Standard: Measurement is performed using two variables for education standard. These are literacy rates among adults and average education period. In the sub-index of education standard; 1% increase in adult literacy affects HDI by 0,2%; and increase of 1 percent in schooling rate affects HDI by 0,1%.

-Health Standard: According to this sub-index, long lifetime is qualified as health standard and is measured with native life expectation. The effect of 1-year increase in life expectation on HDI is seen as 0,6%.

Social Development Index

Although Human Development Index is one of the most frequently used development indicators new indices using different methodologies were derived in time. Social Development Index (Social Development Index – SPI) the bases of which was laid in World Economic Forum and prepared under the leadership of Michael Porter, Professor of Business Administration in Harvard University is one of those indicators. (www.tepav.org.tr)

The fact that enormous uprisings arose in Arabic countries from 2011 despite ascending in ÍGE indicators led to questioning this measurement method. Arabic countries decreases their HDI scores by 1.3 percent annually from 1980 to 2010. Within this period national income per capita of Arabic countries increased, at the same time they had improvement in criteria including lifetime expectance, baby death rate and schooling rate (Kuhn, 2011). The fact that enormous uprisings arose in Arabic countries despite those improvements indicates that social development failed to provide social satisfaction in the sense HDI measures.

Social Development Index measures the capacity of any country to respond basic needs of its countries, to create the environment for its citizens to sustain and improve their life quality and to provide the conditions under which individuals can evaluate their potential fully. (<http://www.socialdevelopmentimperative.org>) The mean of three sub-indices under the names of Basic Human Needs, Fundamentals of Welfare and Opportunities while calculating ÍGE. Basic Human Needs index measures the degree of responding of the most basic needs including nutrition, sheltering, access to water and safety which are necessary for people in a country to sustain their existence. Fundamentals of Welfare index examines the factors of basic education, access to information and communication channels, healthy life and environmental sustainability which enables the individuals and societies to increase their welfare. Finally, Opportunities sub-index assesses factors of individual and collective rights, struggle against discrimination and access to higher education which enable individuals to evaluate their potential fully (www.tepav.gov.tr).

Social Development Index Ordering in the World

The top three ranks in score ordering are occupied by New Zealand, Switzerland and Canada. And Chad, an African country is in the last rank. The list is composed of 132 countries. Selected countries were given in this table.

Table 1: Social Development Index Ordering on the Basis of Selected Countries

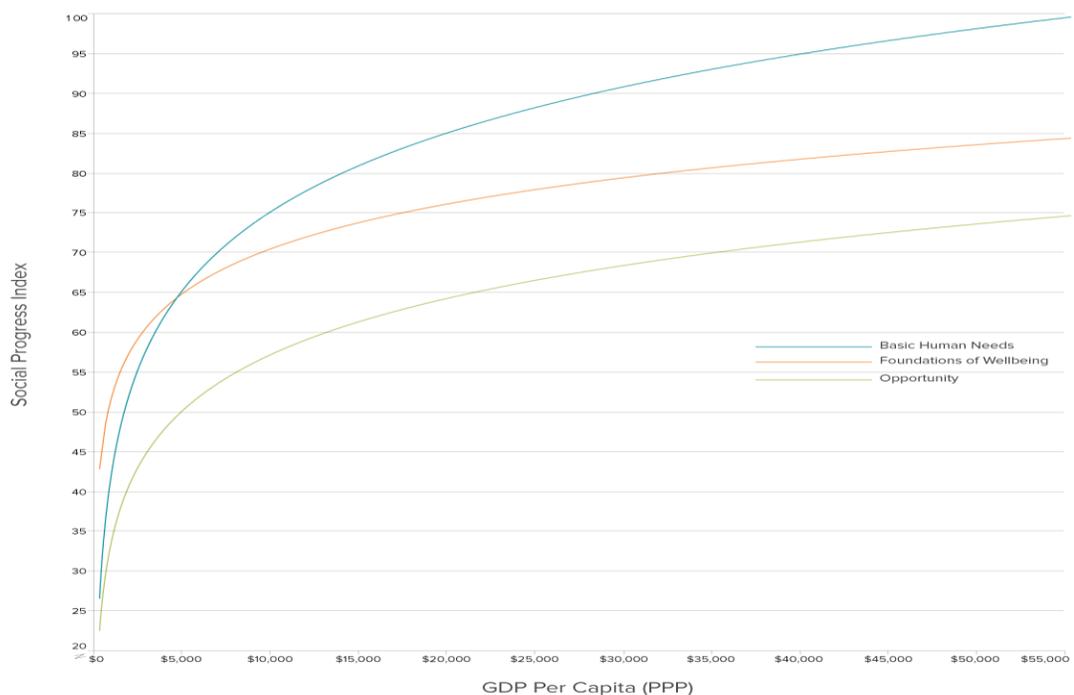
Country	Score	GDP	Country	Score	GDP
New Zealand	88.24	25.857	Israel	71.40	27.296
Switzerland	88.19	39.293	Kuwait	70.66	40.102
Canada	86.95	35.936	Malaysia	70	14.822
Finland	86.91	31.610	Brazil	69.97	10.264
Denmark	86.55	32.363	Mexico	66.41	13.067
Australia	86.10	35.669	Saudi Arabia	64.38	27.346
Austria	85.11	36.200	South Africa	62.96	9.860
Germany	84.61	34.819	Jordan	61.92	5.289
England	84.56	32.671	Russia	60.79	15.177
Japan	84.21	31.425	Egypt	59.97	5.795
Ireland	84.05	36.723	Indonesia	58.98	4.272
ABD	82.77	45.336	China	58.67	7.958
Belgium	82.63	32.639	Morocco	58.01	4.573
France	81.11	29.819	Iran	56.65	10.405
Portugal	80.49	21.032	India	50.24	3.341
Czech Republic	80.41	23.815	Kenya	50.20	1.522
Greece	73.43	20.922	Iraq	44.84	3.659

United Arab Emirates	72.92	36.267	Chad	32.60	1.870
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Source: www.socialprogressimperative.org

As one may see in the table as well, although high levels of GDP per capita of countries affect social development indices positively it is not a sufficient and unique condition. Although GDP per capita value for United Arab Emirates is higher than England, Germany, France, Japan, Portugal, Czech Republic, Belgium and Greece, social development index value is found lower. While New Zealand is at lower level in terms of GDP per capita value than England, France, Canada, USA, Japan and Belgium which are among developed countries development index value is found higher. While Jordan has lower GDP per capita value than Russia, Iran and China index value is found higher than those countries.

At that point the question of “Does economic growth bring economic development?” comes to the agenda again. It is possible to say that economic growth is necessary but not sufficient for economic development, considering the table. Societies are required to develop in terms of many factors including education, health, rights and freedoms, political participation and the like in order to develop.



Source: www.socialprogressimperative.org

Figure 1: The Relationship of SPI and GDP Per Capita

As it is seen in the graph as well, certain sub-indices have closer correlation with GDP per capita. For example, the sub-index of Basic Human Needs is parallel to increase in GDP per capita. Nevertheless the sub-indices of Opportunities and Fundamentals of Welfare indicate parallelism up to a certain income level and then increases decreasingly.

Table2: Social Development Index Ordering According to Similar GDP Groups

Country	Score	GDP	Country	Score	GDP
Chile	76.30	15,848	Belarus	65.20	13,427
Latvia	73.91	15,826	Mexico	66.41	13,067
Russia	60.79	15,177	Mauritius	73.68	13,056
Malaysia	70.00	14,822	Lebanon	60.05	12,592
Panama	72.58	14,320	Bulgaria	70.24	12,178
Botswana	65.60	14,109	Kazakhstan	59.47	11,973
Uruguay	77.51	13,821	Argentina	70.59	11,658
Turkey	64.62	13,737	Venezuela	63.78	11,623

Source: www.socialprogressimperative.org

When an ordering is made among countries with similar GDP including Turkey, it is observed that Social Development Index score and GDP figures are proportionate. Social Development Index score of countries decreases while GDP value decreases. This may be explained with the fact that sub-index of Basic Human Needs is parallel with decrease of GDP per capita. In countries with low GDP per capita Basic Human Needs are more significant than sub-indices of Opportunities or Fundamentals of Welfare.

Social Development Index and Turkey

Turkey was 64th among 132 countries in 2014 Social Development Index ordering with a score of 64.62. Table 2 indicates index values of Turkey depending on sub-index refractions.

Table3: Turkey's Score on the Social Development Index in 2014

Social Development Index (64.62)		
Basic Human Needs (82.10)	Fundamentals of Welfare (64.36)	Opportunities (47.41)
Nutrition and Basic Medical Treatment (94.45)	Access to Basic Knowledge (91.49)	Personal Rights (56.02)
Insufficient Nutrition	Adult Literacy Rate	Political Rights
Shortage of Food	Primary Education Participation Rate	Freedom of Expression
Rate of Mortality at Birth	Lower Secondary Education Participation Rate	Right of Meeting/Demonstration
Proportion of Death to Birth	Upper Secondary Education Participation Rate	Freedom of Movement
Child Mortality Rate	Gender Equality in Secondary Education Participation	Personal Property Right
Deaths Caused by Contagious Diseases	Access to Communication and Correspondence (57.61)	Personal Freedoms and Selection Right (64.60)
Water and Cleaning (95.90)	Mobile Telephone Subscription	Freedom in Individual Selections
Access to Drinking Water	Internet Users	Freedom of Pray
Rural-Urban Differences in Access to Clean Water	Press Freedom Index	Modern Slavery, Human Trafficking and Child Marriages
Access to Sanitation Means	Health (67.82)	Responding the Demand for Birth Control
Existence of Housing with Low Costs	Expected Lifetime	Malpractice
Access to Electricity	Deaths Caused by Non-Contagious Diseases (30-70 ages)	Tolerance and Participation (32.42)

Electricity Supply Quality	Obesity Rate	Respectful Treatment to Women
Deaths Caused by Indoor Air Pollution	Deaths Caused by Outdoor Air Pollution	Tolerance toward Immigrants
Personal Safety (58.18)	Suicide Rate	Tolerance toward Homosexuals
Rate of Murder	Sustainability of the Ecosystem (40.52)	Discrimination and Violence toward Minorities
Level of Violence Crimes	Greenhouse Gas Emissions	Religious Tolerance
Perceived Crime Rate	Drawing Water from Sources in Percentage	Social Security Networks
Political Terrorism	Biodiversity and Habitat	Access to Higher Education (36.62)
Deaths Caused by Traffic Accidents		Average Period of Higher Education of the Society
		Average Period of Education of Women
		Opportunity Inequality in Education
		Number of Universities in International Ordering

Source: www.tepav.org.tr

When the detailed table related to Turkey is examined, it is observed that Turkey has a good score Basic Human Needs sub-index, it has low scores in the sub-index of Fundamentals of Welfare and Opportunities.

And while it has good scores in Nutrition and Medical Treatment, Water and Cleaning, Sheltering indices which are components of Basic Human Needs sub-index, its Personal Safety index score is found to be low. And in the sub-index of Fundamentals of Welfare, the index of Access to Basic Knowledge is found to be high, however the fact that indices of Access to Communication and Correspondence and Health and Sustainability of the Ecosystem are found to be low lowers the sub-index value. And in the sub-index of Opportunities which is the lowest sub-index, the fact that components of Tolerance and Participation, Access to Higher Education are found to be rather low and values of Personal Rights and Personal Freedoms and Selection Right are not low leads to the sub-index of Opportunities to be found low.

The table containing the sub-index values of New Zealand, at the top of Social Development Index ordering and USA and Turkey is given as follows. According to the table, New Zealand receives higher scores than Turkey for all components of the sub-indices of Personal Safety, Access to Communication and Correspondence, Sustainability of the Ecosystem and Opportunities. While Turkey is in 44th rank in the world with GDP per capita value of USD 13.737, New Zealand is in 25th rank in the world with GDP per capita value of USD 25.857. and USA receives lower score than New Zealand for all components of the sub-index of Basic Human Needs excluding the Sheltering index. Scores of USA for all components of the sub-index of Fundamentals of Welfare are lower than New Zealand excluding the Health component. And in the sub-index of Opportunities it has lower scores than New Zealand in all components other than Access to Higher Education. While the figure of GDP per capita of USA is 45.336 it is USD 25.857 for New

Zealand. Although New Zealand has lower GDP per capita than USA it has better score than USA in Social Development Index ordering.

Table4:Turkey, New Zealand and USA Comparison in SPI 2014

	Turkey	New Zealand	USA
Basic Human Needs	82.10	91.74	89.82
Water and Cleaning	95.90	100.00	97.82
Nutrition and Basic Medical Treatment	94.45	97.57	95.77
Sheltering	79.86	83.23	87.99
Personal Safety	58.18	86.13	77.70
Fundamentals of Welfare	64.36	84.97	75.96
Access to Basic Knowledge	91.49	99.49	95.10
Health	67.82	77.81	81.33
Access to Communication and Correspondence	57.61	96.74	73.61
Sustainability of the Ecosystem	40.52	65.8	53.78
Opportunities	47.41	88.01	82.54
Personal Freedoms and Selection Right	64.60	94.00	84.29
Personal Rights	56.02	98.80	82.28
Access to Higher Education	36.62	76.84	89.37
Tolerance and Participation	32.41	82.41	74.22

Source: www.socialprogressimperative.org

Conclusion

What is significant in GDP growth of countries is how much of this growth is used for increasing welfare of the society. Mere numerical growth may lead to social unrest. Nevertheless GDP is required to increase and economy is required to grow for increase of social welfare. New Zealand at the top of the list according to 2014 Social Development Index is at 25th rank in the world in terms of GDP size. And this indicates that New Zealand emphasized on the concept of development and used its sources for increasing social welfare.

Turkey who is at 64th rank in the list is behind developed countries. Countries with high figures of GDP per capita including United Arab Emirates or Kuwait are behind developed countries. This indicates that growth is not sufficient for development. Considering those elements what Turkey should emphasize should be development accompanying to stable growth.

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Transforming India in the Gujarat Way: An Introspection through Data Envelopment Analysis

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Abstract

In the last decade the Indian Industrial sector witnessed signs of growth due to many proactive industrial promotion and investment policies. The state of Gujarat conveyed a positive signal for India in terms of economic and industrial development leading the way for other states by attracting high volumes of industrial investment. Modi's "Make in India" campaign is designed to transform India into a global manufacturing hub and to use manufacturing as a means for job creation. The plan includes a variety of measures from easing the regulatory burden to establishing special economic zones to awaken India's latent manufacturing potential. The data for the study has been compiled from Annual Survey of Industry (ASI) for the period ranging from 2000- 2013. The technique of Data Envelopment Analysis (DEA) has been used to work out the Malmquist Productivity Index of Indian states. Total number of factories, Gross Fixed Capital Formation and number of workers have been considered as the inputs while Gross Value Added has been taken as the output. Thus, performance of select states has been analysed with the help of log growth rates and Malmquist Productivity Index. It shows that few states performed well though Gujarat marked with an exemplary performance. The analysis brings in interesting insights.

Keywords: data envelopment analysis (DEA); Malmquist productivity index; log growth rates

Introduction

Ever since the implementation of the Five Year Plans in India, there had been a lot of efforts to boost up the investment in the industrial sector of the country and to enhance its share in Gross Domestic Product (GDP) and employment. However, industry oriented growth has been deviated towards service sector because of sceptical business environment, inadequate investment in the manufacturing industries, labour market rigidities, liberalization of service sector, IT and ICT revolution and owing to the presence of large chunk of skilled, semi-skilled and unskilled workers. In the absence of adequate industrial jobs, the unskilled workers opted for employment in the service sector characterised with low wages. There is no denying the fact that their massive contribution in varied service sector activities has contributed to large share of GDP. However, employment opportunities created in service sector are highly informal in nature and do not ensure maintaining quality standard of living. The inappropriate growth of manufacturing sector has been instrumental in diversification of industrial growth.

The Indian Industrial sector witnessed signs of growth due to the proactive industrial

promotion and investment policies introduced and modified by many states. To name a few, Industrial Single Window Clearance Act of 2002 and provision of several economic incentives may be cited. (Mishra and Yadav, 2013). The establishment of world class infrastructure congenial to industrial development by way of ports, airports, expressways, supply of power as well as water contributed in this regard.

The Scenario of leading States in India

The industrial sector of India has grown tremendously over the past decade, though during 2011-12 a downward trend was visible on account of the global economic meltdown. During 2000-01 to 2012-13, India's average growth rate of Net State Domestic Product (NSDP) in industry was 6.5 percent. Andhra Pradesh is also considered as a highly industrialised state. It's NSDP and per capita NSDP are high since it attained remarkable growth in all three sectors. The major contributors of this growth are Gujarat, Maharashtra and Tamil Nadu. States such as Andhra Pradesh, Uttar Pradesh, West Bengal, Karnataka, Madhya Pradesh and Orissa have also contributed significantly to this impressive growth.

Regional Disparity in NSDP

While evaluating the regional disparity and dynamism in growth rate of different states in India it becomes clear that the provision of jobs in reducing the regional imbalances in development is extremely important. The regional disparity among states can be evaluated by their NSDP and its growth rate in the last decade. Table 1 shows the NSDP of 18 states in India. The table shows NSDP at constant prices of 2004-05 is expressed in the table. The size of the state GDP helps us to understand how developed the economy of the state is. However, NSDP does not capture development in all areas. This comparison is based on the argument that higher NSDP leads to higher development which in turn enriches per capita income and ultimately results into improvement of standard of living. The states are classified on the basis of size of their NSDP from 1999-00 to 2012-13. The state of Maharashtra has the highest NSDP i.e. 7390.40 billion whereas Himachal Pradesh has the lowest NSDP i.e. 360.63, as indicated in Table 1 in the year 2012-13.

During 1999-00, NSDP at factor cost of Gujarat was 1269.24 billion. It was subjected to a marginal decline during 2000-01 and is at a steady increasing trend till 2012-13 which amounted to 3689.07 billions. While considering the states of Andhra Pradesh, Maharashtra, Tamilnadu and West Bengal, NSDP was 1475.85, 2945.40, 1566.28 and 1465.34 respectively in 1999-2000. It increased to 3826.33, 7390.4, 3974.71 and 3077.20 respectively by 2012-13. It indicates that that Gujarat is much ahead of any other state in this regard.

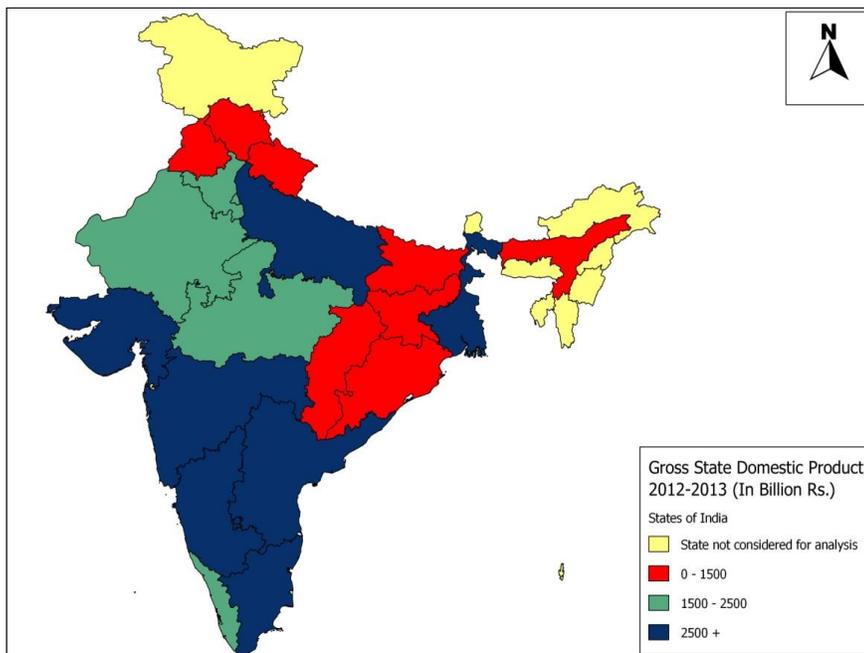
Table 1 : Net State Domestic Product At Factor Cost - State-Wise(At Constant Prices)
Billion Rupees

Year/State	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13
Andhra	1475.84	1598.55	1671.04	1709.08	1876.51	2013.03	2209.01	2445.87	2727.26	2922.58	3036.68	3381.64	3628.08	3826.33
Assam	385.21	394.96	405.15	429.70	456.14	471.81	486.02	507.97	529.68	561.23	612.94	657.26	690.35	730.81
Bihar	538.37	627.01	591.05	665.79	622.86	701.67	684.19	802.60	844.15	972.84	1019.38	1175.03	1295.21	1433.12
Gujarat	1269.24	1185.44	1281.78	1393.53	1625.63	1722.65	1972.70	2139.54	2392.53	2494.80	2847.32	3158.92	3417.23	3689.07
Haryana	585.58	632.12	680.94	722.68	793.78	862.22	940.11	1047.00	1128.96	1215.88	1367.80	1460.53	1585.24	1673.89
Himachal	154.70	164.57	172.95	181.38	193.53	211.89	230.09	248.19	263.62	276.49	291.49	315.90	339.55	360.63
Jharkhand	434.80	383.51	409.94	421.41	453.30	530.56	506.78	515.27	630.05	604.72	664.65	761.34	801.57	868.61
Karnataka	1226.58	1234.76	1257.14	1324.57	1350.37	1487.29	1640.31	1810.86	2038.10	2183.09	2183.63	2408.17	2480.40	2595.00
Kerala	778.42	798.08	837.95	899.27	957.55	1047.76	1155.00	1246.25	1357.47	1440.94	1571.23	1671.78	1808.12	1960.77
Madhya	932.42	856.64	917.92	870.05	967.65	999.40	1049.75	1145.45	1199.58	1351.24	1479.33	1557.01	1708.79	1884.80
Chhattisgarh	314.45	295.09	336.39	330.70	392.83	413.87	420.63	500.65	541.12	576.62	592.63	649.77	692.65	712.94
Maharashtra	2945.40	2854.92	2955.77	3159.61	3403.64	3700.23	4236.32	4819.83	5380.81	5465.33	5993.38	6676.25	6980.86	7390.40
Orissa	511.69	498.19	528.52	524.72	601.34	679.87	710.05	798.45	866.92	932.07	939.57	998.80	1019.80	1087.42
Punjab	725.28	749.39	759.16	772.09	820.30	861.08	903.30	1000.72	1087.38	1147.66	1220.97	1299.83	1369.87	1425.27
Rajasthan	923.73	893.71	995.48	875.89	1154.59	1126.36	1202.02	1343.50	1404.71	1522.84	1611.59	1853.66	1946.51	2032.98
Tamil Nadu	1566.28	1653.23	1621.20	1629.31	1730.85	1936.45	2215.88	2562.86	2723.40	2867.44	3167.60	3599.61	3865.08	3974.71
Uttar	1948.55	1988.39	2024.56	2090.07	2200.12	2310.29	2445.14	2639.35	2808.51	3021.92	3209.89	3466.21	3646.84	3836.44
Uttarakhand	141.67	159.34	166.90	182.53	196.97	222.88	254.48	285.14	334.98	370.64	434.07	479.67	527.49	553.72
West Bengal	1465.34	1516.70	1626.23	1683.23	1782.14	1900.29	2019.94	2178.49	2347.98	2442.62	2632.30	2791.91	2894.34	3077.20

Source: Ministry of Statistics and Programme Implementation, Government of India, New Delhi.

Categorisation on the basis of NSDP

Figure 1 displays the classification of NSDP of different states in three categories such as NSDP above Rs. 2500 Billion in 2012-13; Between Rs. 1500-2500 billion and GDP Below Rs. 1500 Billion. The states of Andhra Pradesh, Gujarat, Karnataka, Maharashtra, Tamil Nadu, Uttar Pradesh and West Bengal belong to first category of NSDP above 2500 Billion. The states of Haryana, Kerala, Madhya Pradesh and Rajasthan come under the second category. The third category of states such as Assam, Bihar, Himachal Pradesh, Jharkhand, Chhattisgarh, Orissa, Uttarakhand and Punjab are under the third category. The quantum of NSDP just provides vague picture of industrialised states and developed states, though, it does not focus on the standard of living of its habitant.



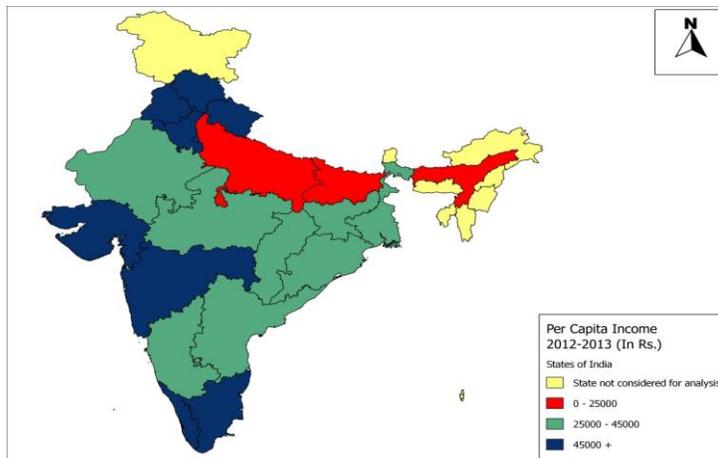
Source: Derived from QGIS

Figure 1: Classification of NSDP of States in India

Categorisation on the basis of PCI

Therefore, the Figure 2 evaluates classification on the basis of per capita income of the states. The per capita income based classification takes into consideration the population density and the role of economic activities in improving the standard of living of people. The state of Maharashtra has the highest per capita income of Rs 64,218. Interestingly, per capita income of Haryana, Punjab and Uttarakhand are Rs 64,136, Rs 47,834 and Rs 54,462 respectively. These states have low population density and accordingly the fruits of economic development are being shared in greater proportion by their population. The high population density in Uttar Pradesh and Bihar adversely affected the standard of living and quality of life as reflected by their per capita income of Rs 18,595 and Rs 14,361 respectively in the year 2012-13. The figure represents classification on the basis of per capita income. The states which have PCI above Rs. 45,000 in 2012-13 such as Gujarat, Haryana, Himachal Pradesh, Kerala, Maharashtra, Punjab, Tamil Nadu and Uttarakhand are represented in blue colour. The states which have PCI between Rs. 25,000 to 45,000 in

2012-13 such as Andhra Pradesh, Jharkhand, Karnataka, Madhya Pradesh, Chhattisgarh, Orissa, West Bengal and Rajasthan are shaded in green colour. Three states which have PCI below Rs 25,000 such as Bihar, Assam and Uttar Pradesh are shaded in red colour.



Source: Derived from QGIS

Figure 2: Classification of PCI of states

The Case of Gujarat

While considering the demographic and economic dividends, today, Gujarat is among the richest states in the country. As per 2011 Census, the population of Gujarat is only 4.9 percent of the total population of India. The state contributes to 7.9 percent of the total domestic output. The national average of urbanised population constitutes 31.2 percent whereas the share of Gujarat is 42.6 percent.

Gujarat is highly industrialised state with the manufacturing sector constituting 25.23 percent of its Net State Domestic Product (NSDP) in 2012-13 which is the highest in the country. The share of India during the same period was hardly 15.75 percent. According to RBI (2013), the same trend has been observed from 1999-00 to 2012-13. Over the years, the state attained the unique distinction as an entrepreneurial and industry-friendly state. For most of the years from 1999-00 to 2012-13, the state of Gujarat secured the first position in NSDP in total manufacturing where as Maharashtra held the second position. RBI (2013). However, the trend was reverse during the earlier period. Gujarat's share in NSDP of total manufacturing increased from about 23.34 percent in 1999-00 to 25.23 percent in 2012-13.

While considering the percentage contribution of manufacturing sector to GDP of the states, it may be seen that ever since 1999-2000, Gujarat maintained its steady pattern. The impact of an earthquake on January 26th 2001, at Bhuj had hardly any effect on the share of manufacturing to NSDP in this state. Even during Gujarat's riot period (2002) it almost remained the same. The share of the states of Maharashtra and Tamil Nadu reduced to 16.64 and 16.79 percent respectively. UP maintained the share of 11.08 percent which is not much less than 13.12 percent in 1999-2000 whereas West Bengal maintained its share of 8-9 percent throughout the period. The share of Andhra Pradesh reduced to 10.14 percent while that of Karnataka was 12.88 percent, as mentioned in Table 2.

Table 2 : Manufacturing as a Percentage of NSDP

Year/State	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13
Andhra	10.89	9.73	9.91	10.71	10.71	10.28	9.88	10.42	9.66	10.29	9.98	10.42	11.34	10.14
Assam	7.32	5.90	6.72	8.40	9.07	9.17	8.09	7.49	6.35	5.55	6.86	6.72	6.56	6.30
Bihar	7.07	5.56	5.35	5.12	5.23	4.90	4.64	4.25	5.31	5.74	5.02	5.51	4.31	3.82
Gujarat	23.34	21.38	18.73	20.98	20.76	23.37	23.73	24.52	23.78	23.39	27.29	24.79	25.79	25.23
Haryana	19.83	19.46	19.09	19.24	18.83	18.88	18.73	18.15	17.77	16.50	16.73	16.52	15.82	15.83
Himachal	10.82	11.16	10.67	10.95	10.77	10.54	9.84	10.60	9.04	10.93	13.86	14.26	14.21	13.81
Jharkhand	24.73	13.56	9.97	19.16	19.92	33.04	25.31	20.64	29.78	18.02	17.84	17.29	14.55	13.23
Karnataka	12.78	12.55	13.66	15.49	16.75	15.73	14.29	17.00	15.75	16.48	14.71	14.22	14.02	12.88
Kerala	9.74	9.58	8.52	8.27	8.14	7.72	7.14	7.10	7.87	7.30	6.68	7.05	6.80	6.85
Madhya	12.63	12.83	11.39	10.28	9.19	9.81	10.13	12.33	12.13	12.84	12.69	11.03	10.34	9.56
Chhattisgarh	13.11	12.74	10.63	14.61	15.79	19.82	13.92	19.31	20.41	18.69	14.91	11.48	9.07	6.84
Maharashtra	21.99	19.62	18.07	18.99	19.67	18.20	20.92	22.05	21.72	19.36	19.17	19.74	17.83	16.64
Orissa	6.90	6.35	5.08	6.13	6.59	9.22	7.64	8.98	10.55	11.34	5.82	4.54	5.16	5.03
Punjab	15.24	15.19	13.85	14.42	14.07	14.02	14.55	16.43	18.44	17.87	19.24	19.79	19.01	18.79
Rajasthan	14.32	13.92	11.44	12.59	9.83	11.27	11.82	13.38	12.94	12.98	14.19	11.13	10.99	10.64
Tamil Nadu	18.11	18.43	16.34	16.73	17.83	16.95	17.19	17.77	16.65	15.05	18.15	18.32	17.25	16.79
Uttar	13.12	12.14	11.61	12.12	11.84	11.85	11.64	13.14	13.11	11.03	12.61	12.81	11.79	11.08
Uttarakhand	8.50	10.91	9.33	11.75	11.76	11.21	14.83	15.59	19.73	19.95	20.45	21.76	22.33	22.47
West Bengal	8.75	8.83	8.54	9.19	8.97	9.34	8.47	9.01	9.49	8.91	8.94	9.29	8.26	8.08

Source: Ministry of Statistics and Programme Implementation, Government of India, New Delhi.

Gujarat has emerged as highly investor-friendly state by attracting large volumes of industrial investment. The state is well known as the most favoured investment destination in the country. The investment climate and industry friendly policies of Gujarat converted it into the role model in the country which leads in creation of jobs. The operation and management coupled with proactive policy framework of high investment-oriented regions and industrial areas in Gujarat resulted in their development as global hubs in economic activities. The positive impact of economic liberalization is very much evident in the industrial scenario of Gujarat vis-a-vis certain other states. Gujarat has conveyed an encouraging signal for the rest of the country in terms of economic and industrial development by remaining as role model for other states to emulate. (Mishra and Yadav, 2013). From 2003 onwards the Vibrant Gujarat Global Investment Summit is organised to highlight the state as a major investment destination.

Industrialisation for creation of Employment Opportunities

India is characterised with the problem of high incidence of unemployment. The country's economic growth was not efficacious enough to generate meaningful jobs for its expanding working-age population. The jobs related to rural construction jobs was the only alternative for many. As a result, millions of families were compelled to depend on low productivity agriculture for their livelihood.

The demographic dividend is indicative of a higher proportion of workers and higher per capita income. It paves the way to higher disposable incomes, greater consumption and faster growth. It also leads to increase in the domestic savings, producing a larger pool of capital to finance investment and development. If India can create numerous high productivity, higher quality jobs, the demographic dividend will support higher growth levels than would ordinarily be possible.

The productivity rates in construction have declined since the surplus labor from rural and urban areas is merely spilling over from one occupational activity to another. (Green 2014). It is a well known fact that India produces twice as many graduates as its labour market can absorb. India's large chunk of labor force is engaged in low-productivity agriculture-oriented occupations and the sector contributes little to GDP.

Thus, the employment potential in informal manufacturing is sizeable, but its contribution to the economy is not proportional. The informal manufacturing has developed largely due to restrictions on formal manufacturing. Around 85 percent of informal manufacturing firms and slightly less than half of employment in the sector of informal manufacturing consist of single-person microenterprises as per NSSO estimates. (68th Round, 2011-12).

Manufacturing Sector and Creation of employment

The formal manufacturing sector presents a more hopeful picture in creation of employment opportunities. It provides more formal sector jobs than modern services. For

instance, manufacturing as a whole has not been instrumental in creating much employment growth in the last decade. Employment in formal manufacturing, on the other hand, has also grown impressively during the same period.

Many a times, low employment implies high productivity in formal sector manufacturing. It also highlights the fact that Indian manufacturing has relied to a greater extent on capital when compared to labor for its growth. Indian firms operate in more capital-intensive industries than predicted from the experience of other countries with similar labor supplies, development levels, and institutional quality. (Hasan et al, 2013). According to NSSO estimates, the four largest manufacturing industries by output are also the four least employment-intensive. (68th Round, 2011-12) Within the same industry, they use more capital and less labor than comparable firms in other countries. (Hasan et al, 2013). With effect from 2004, India's labor intensity was declining, in contrast to what was observed in several other Asian economies. (Das et al, 2009) The reasons for the small size and capital intensity of formal-sector Indian manufacturing have been widely documented. (Das et al, 2009) Among the most salient reasons are inflexible labor regulations, poor infrastructure, unfriendly government policies and the difficulty in acquiring land.

Yet another aspect of capital intensity indicates that successful capital-intensive formal-sector manufacturers often assign the labor-intensive activities on contractual basis. This allows them to keep workers off their books to avoid exposure to further regulatory interference and provision of social security measures.

The urgency to improve efficiency determines the rate of growth of productivity followed by better wages. When these industries grow further in strength to impact broader labor markets, they spurt wages and hike incomes across the economy. For this reason such industries are named as "elevator industries." (Green, 2013). They are inextricably associated with the development process. However, provision of jobs by certain such industries have almost exhausted in India.

The modern services that offer the best jobs have not been successful in provision of jobs in large quantities. Even formal sector jobs in traditional services, the largest source of those jobs, constitute only about 6.00 percent of all jobs in the economy (NSSO, 68th Round). Furthermore, almost half of formal sector jobs in traditional services are derived from sectors like public administration and education, which is not likely to drive major productivity gains in the present scenario. NSSO, 68th Round, 2011-12

As a result the job growth has been much slower than output growth, and has been concentrating in segments requiring high-skilled, educated workers. If India successfully adapts and follows global trends in the field of education, in twenty years, there would be a doubling of the number of people with the post-secondary education necessary to be qualified for a professional job in the modern service sector. It implies that roughly one-third of workers who are the new entrants to the labor market in forthcoming two decades would be highly educated. Certainly not all can find suitable jobs in the modern service sector.

An adequate supply of skilled labor poses one potential limitation on growth. Despite the education forecast cited above, India Skills Report by the Confederation of Indian Industries' (2014) research shows that the information technology industry will face a shortage of 3.5 million skilled workers by 2022. (<http://wheebox.com>). Wage costs in modern services have shot up at a drastic rate than inflation, indicating difficulty in acquiring adequate staffing.

The strategies to attain job growth in India focuses on the potential of manufacturing sector to provide large-scale quality jobs. The argument dates back to Simon Kuznets. It originates from the fact that every developed country passed through a period when output and employment were dominated by manufacturing sector. In the previous century, the growth based on manufacturing sector in countries such as Japan, South Korea, and Taiwan was characterized by high investment ratios, small public sectors, export orientation, labor market competition, and government intervention. (Kuznets, 1988) Almost all the developed economies have passed through the same track and those currently making the best progress, like China too embraced the same route.

The strongest argument in favor of pursuing the attainment of development through manufacturing path for India is its increasing labor force. As Green (2014) puts it, most of the economies that relied on manufacturing for development began with relatively less educated workforce predominantly engaged in agricultural operations. They started by developing labor-intensive industries like textiles, toy making, and low-end electronics assembly, which make use of cheap, low-skilled labor force abundant in supply.

To make use of the labor force which is abundant in supply for low-value chain manufacturing, labor-intensive manufacturing has to become much more competitive when compared to what it is today. Manufacturers will need to build large-scale operations tied into global supply chains.

Two major types of constraints confront the formal manufacturing sector. The first is the policy environment according to Green (2014). The formal manufacturing has to go ahead by exposing itself to the unsuitable policies than the modern service sector. Further, it is much more dependent on the measures taken by the government and delivery of public goods like infrastructure. Presumably, removing these obstacles could generate tremendous growth. Skeptics argue that India would require a major shift in the amount of FDI flowing into manufacturing to acquire both the capital and technical know-how to start a large export industry. Also, care has to be taken to ensure the entry of right type of FDI so as to curb the undesirable effect occurring due to indiscriminate entry of FDI into the country. (Dolly, 2014).

India possesses an advantage that only China can compete with. It is the potentially massive domestic market. Shifting operations to India not only allows access to its labor force, but also provides a comfortable position from which to access the domestic market. For instance, the attractiveness of servicing the domestic auto market is the prominent reason why many auto parts firms engage in (capital-intensive) export-oriented

operations from India despite a difficult business climate. This bonus will help India to cross cost thresholds more easily, potentially overcoming other disadvantages.

Labor reform stands out as a pre requisite to manufacturing job growth that it deserves particular attention. (Jha, 2014) India has the strictest labor regulations in the world. There are umpteen number of central laws and large number of state laws governing labor issues, making reform a complex one.

The Relevance of Modi's "Make in India" Campaign

Inspired with the success of Gujarat State, National Manufacturing policy (2011) was devised to increase manufacturing activities and greater ease of conducting business which includes both formal and informal to the extent of 25.00 percent of GDP and to create 100 million manufacturing jobs by 2022. The initial measures taken by Modi government give some ray of hope. But the follow up measures require investigation, creativity and persistence to identify business- friendly procedures that still meet necessary public policy objectives.

The problem of infrastructure development must be addressed so as to ensure growth. Mallet (2014) mentions where logistics costs for manufacturing firms exceed their entire wage bill. Allcot (2014) opine that owing to disturbed supply of electricity, productivity was adversely affected. These aspects should be considered seriously when tackling the infrastructural bottlenecks .

Modi with his renowned administrative ability to enforce accountability with CEO-like leadership, and his plans to replicate his success in Gujarat on a larger stage in India are positive signals in this regard. At Gujarat, Modi was successful in managing the state's complex bureaucracy for maintaining positive relations with business. His ability to make efficient business-government interactions was widely appreciated.

After assuming charges as Hon'ble Prime Minister of India, Modi has prioritized manufacturing growth through the "Make in India" campaign. His government has already enacted some moderate labor reform legislation and has made a concerted push for the tax on Goods and Services . But overall the main strategy appears to be devising the Gujarat way of development at the Centre. This approach focused on marginal improvements rather than large scale reforms, to improve processes and reduce inefficiencies.

Modi's "Make in India" campaign is designed to "transform India into a global manufacturing hub" and to use manufacturing as a means for job creation. Steps to boost up the performance of industrial sector such as establishment of Special Economic Zones (SEZs), Special Investment Regions (SIRs), enactment of Gujarat Special Investment Regions Act of 2009 , provision of world class infrastructure as well as proactive policy framework are praiseworthy. The plan includes a variety of measures starting from easing the regulatory burden to establishing Special Economic Zones to awaken India's latent manufacturing power. The modern service sector and the formal manufacturing sector are the true growth sectors for India. One of the challenging goals of the Indian

government is the economic inclusion by bringing more citizens into the modern, productive economy. In order for poverty alleviation and for improving health and educational indicators, it is important to enrich economic outcomes by creating formal sector jobs, which ensures steady and higher wages. The formal sector workforce accounts for 14.00 percent in India.

The cooperation of state governments is essential to attain the target, since two-thirds of regulations affecting manufacturing are at the state level.(Planning Commission,2014). In practice, land acquisition is almost entirely a state and local government issue. The massive undertaking of infrastructure improvement relies heavily on state and local governments. In future, the service sector is unlikely to generate high-quality jobs. It may grow well if the broader domestic economy performs well. Neither export markets look as promising as in the past. But there is no argument to suggest that it will increase its employment intensity. It is more reasonable to expect a continuation of the same pattern of the past two decades. In such a scenario, manufacturing sector offers myriad opportunities.

Research Methodology and Data Analysis

The data for the purpose of the analysis has been compiled from Annual Survey of Industry (ASI) for the period ranging from 2000 to 2013 for different states.

Calculation of Log Growth Rate

The data on NSDP from 1999 to 2013 has been analysed by calculating the log growth rate in order for having a deeper understanding on issues related to varying pattern on growth in different states. The logarithmic growth describes a phenomenon whose size or cost can be expressed as a logarithmic function of some input. e.g. $y = C \log(x)$. According to Szecsei, (2006) Logarithmic growth can be termed as the inverse of exponential growth where the speed is very slow.

Data Envelopment Analysis

The technique of Data Envelopment Analysis (DEA) is used to work out the Malmquist Productivity Index. Total number of factories, Gross Fixed Capital Formation (GFC) and number of workers have been taken as inputs while gross value added has been taken as output. Certain states where number of factories was observed to be less than 1000 in the financial year 2012-13 have been excluded from the analysis by treating them as an outlier. The reason for exclusion is that they may perform well in terms of other large industrialised states. Other than the Union Territory (UT) of Delhi, rest of the union territories have less number of factories. So UTs are excluded from the analysis because of their negligent contribution to the industrial outcome compared to states with strong industrial base. The state of Bihar is also excluded as it reported to have negative Gross Fixed Capital Formation. The reason is that the DEA technique does not accept negative value in the analysis. The nominal GVA and GFC have been deflated using Wholesale Price Index (WPI) of manufacturing product. Thus, performance of 18 Indian states has been analysed by using Malmquist Productivity Index.

Softwares Used

The analysis has been done with the help of DEAP Frontier software developed by Joe Zhu and two softwares such as Quantum Geographical Information System (QGIS) and Eviews.

Construction of Malmquist Productivity Index (MPI)

MPI uses linear programming technique so as to estimate the productivity of the firms over the period of time. This method was originally developed by **Sten Malmquist** in 1953 and further improved by Fare, Grosskopf and Lovell in 1994 to represent DEA based productivity measure. Firms in the Data Envelopment Analysis are referred as Decision Making Units (DMU) and in the present study each state is referred to as DMU. DEA uses relative efficiency to assess the performance of the firms and hence the analysis is based on the comparative performance of the states. Further, the analysis is based on input oriented measure. Input oriented measure attempts to answer by how much input quantities proportionally reduced for producing the same level of output (Coelli,1996). Following Zhu (2003), suppose each DMU j ($j = 1,2,3,\dots,n$) produces a vector of outputs $y_j^t = (y_{1j}^t, \dots, y_{sj}^t)$ by using a vector of inputs $x_j^t = (x_j^t, \dots, x_{mj}^t)$ at each time period t , $t = 1, \dots, T$. From t to $(t+1)$, DMU o 's efficiency may change or the frontier may shift. The output oriented MPI is defined as

$$M_o = \left[\frac{\theta_o^t(x_o^t, y_o^t)}{\theta_o^t(x_o^{t+1}, y_o^{t+1})} \frac{\theta_o^{t+1}(x_o^t, y_o^t)}{\theta_o^{t+1}(x_o^{t+1}, y_o^{t+1})} \right]^{1/2} \quad (1)$$

M_o measures the productivity change between period t and $(t+1)$. Productivity declines if $M_o > 1$, remains unchanged if $M_o = 1$ improves if $M_o < 1$. The modification in M_o makes it possible to measure the change of technical efficiency and the movement of the frontier in terms of a specific DMU $_o$.

$$M_o = \frac{\theta_o^t(x_o^t, y_o^t)}{\theta_o^{t+1}(x_o^{t+1}, y_o^{t+1})} \cdot \left[\frac{\theta_o^{t+1}(x_o^{t+1}, y_o^{t+1})}{\theta_o^t(x_o^{t+1}, y_o^{t+1})} \frac{\theta_o^{t+1}(x_o^t, y_o^t)}{\theta_o^t(x_o^t, y_o^t)} \right]^{1/2} \quad (2)$$

The first term on the right hand side measures the magnitude of technical efficiency change between the periods t and $(t+1)$. The second term measures the frontier or technology change.

Results of Data Analysis

The methods of data analysis performed are narrated in the following sessions.

Log Growth Rates of State Domestic Products

The log growth rate of NSDP of all the states indicates that Gujarat has done quite well as their NSDP share is increasing very fast. The NSDP Growth rate remained highest for the state of Gujarat during 2012-13 i.e.7.65 as indicated in Table 3. It is followed by the State of Orissa with 6.42. Among other states, West Bengal is significant with NSDP growth rate of 6.13, followed by Himachal Pradesh which 6.02. Assam's growth rate during the same period is 5.70.

The log growth rates of NSDP of the states with reference to different years are displayed in the following table.

Table 3 : Log Growth Rates of State Domestic Products in Select States

Year/States	2012-13	2011-12	2010-11	2009-10	2008-09	2007-08	2006-07	2005-06	2004-05	2003-04	2002-03	2001-02	2000-01
Andhra	5.32	7.03	10.76	3.83	6.92	10.89	10.19	9.29	7.02	9.35	2.25	4.43	7.99
Assam	5.70	4.91	6.98	8.81	5.79	4.19	4.42	2.97	3.38	5.97	5.88	2.55	2.50
Gujarat	7.65	7.86	10.39	13.22	4.19	11.18	8.12	13.55	5.80	15.41	8.36	7.81	-6.83
Haryana	5.44	8.19	6.56	11.77	7.42	7.54	10.77	8.65	8.27	9.38	5.95	7.44	7.65
Himachal Pradesh	6.02	7.22	8.04	5.28	4.77	6.03	7.57	8.24	9.06	6.48	4.76	4.97	6.18
Karnataka	4.52	2.96	9.79	0.02	6.87	11.82	9.89	9.79	9.66	1.93	5.22	1.80	0.66
Chhattisgarh	2.89	6.39	9.20	2.74	6.35	7.77	17.42	1.62	5.22	17.22	-1.71	13.10	-6.35
Maharashtra	5.70	4.46	10.79	9.22	1.56	11.01	12.90	13.53	8.35	7.44	6.67	3.47	-3.12
Orissa	6.42	2.08	6.11	0.80	7.25	8.23	11.73	4.34	12.27	13.63	-0.72	5.91	-2.67
Punjab	3.96	5.25	6.26	6.19	5.40	8.31	10.24	4.79	4.85	6.06	1.69	1.30	3.27
Rajasthan	4.35	4.89	13.99	5.66	8.07	4.46	11.13	6.50	-2.48	27.63	-12.80	10.78	-3.30
Tamil	2.80	7.12	12.79	9.96	5.15	6.08	14.55	13.48	11.22	6.05	0.50	-1.96	5.40
Up	5.07	5.08	7.68	6.03	7.32	6.21	7.64	5.67	4.89	5.13	3.18	1.80	2.02
Uttarakhand	4.85	9.50	9.99	15.80	10.12	16.11	11.38	13.26	12.36	7.61	8.95	4.64	11.75
West Bengal	6.13	3.60	5.89	7.48	3.95	7.49	7.56	6.11	6.42	5.71	3.45	6.97	3.44

Source: Computed using Eviews Software

Average log growth

The log growth rates of NSDP are displayed in the following table. The average log growth between 2000-01 to 2012-13 for the states brings in more realistic picture in this regard. The state of Gujarat maintained the highest position with 8.21 percent followed by the state of Haryana with 8.08 as displayed in Table 4 . Maharashtra could attain only seventh position with 7.08 percent whereas Tamil Nadu's share which was on 5th position was 7.16 percent. The lowest average log growth is displayed by the state of Assam which amounts to 4.93 percent.

Table 4: Average log growth rate between 2000-01 and 2012-13

Rank	State	Percent
1	Gujarat	8.21
2	Haryana	8.08
3	Bihar	7.53
4	Andhra Pradesh	7.33
5	Tamil Nadu	7.16
6	Kerala	7.11
7	Maharashtra	7.08
8	Himachal Pradesh	6.51
9	Chhattisgarh	6.30
10	Rajasthan	6.07
11	Orissa	5.80
12	Karnataka	5.76
13	West Bengal	5.71
14	Madhya Pradesh	5.41
15	Jharkhand	5.32
16	Uttar Pradesh	5.21
17	Punjab	5.20
18	Assam	4.93

Source: Derived by using Eviews

Empirical Results of DEA

In short, industrial development has remained uneven in the country ever since the attainment of independence. The states that succeeded in industrialisation have ensured better livelihood with the provision of physical and social infrastructures to its people. There has been large scale migration of skilled as well as unskilled labour into these states in search of employment and better employment opportunities. The analysis attempts to gauge the relative performance of the chosen states in comparison of other states. Since it is very difficult to single out the best state from this analysis, an attempt is made to evaluate the states which have outperformed the other states with the given constraint and resources by using the technique of DEA by developing MPI. Table 5 shows the state-wise result which is a Geometric Mean of Total Factor Productivity Change, Technological Change and Efficiency Change ranging from the years of 2000-01 to 2012-13. The states of Gujarat, Maharashtra, Tamil Nadu, Uttaranchal, Assam, Chhatisgarh and Jharkhand have performed better than other states as the value of MPI is less than one. Rest of the states have less productivity since the value of MPI is greater than 1. The result is based on the value of input oriented MPI which indicates that inefficient states need to reduce the quantum of input keeping the output level constant so as to ensure optimum use of inputs. The result explains the fact that while comparing the actual number of the variable

of Gross Value Added, the states of Gujarat, Maharashtra, Tamil Nadu have remained among the top five states. Moreover, these states employ maximum number of industrial workers in the country. Though the states of Jharkhand, Chhattisgarh, Assam, Himachal Pradesh, and Uttaranchal are among the states which performed well during the period of analysis, the extent of industrialisation is far less in comparison with other three states. The states such as Gujarat, Maharashtra and Tamil Nadu are performing better with the given inputs than rest of the states whose MPI value is greater than 1. The next two columns are indicative of the reasons for the change in the total factor productivity. The productivity change occurs due to two factors. Firstly, due to the changes in the technological aspect which ensures higher output and secondly because of optimum utilization of resources of the firms. Optimum utilization of the existing resources affirms that same output can be produced with lesser resources. Column two explains the efficiency change in the utilization of the resources. The value is less than 1 only for the state of Assam. The result indicates that the rest of the states have not performed well on the efficiency frontier since the resources were not optimally utilised. This case is true even for industrialised Gujarat, Maharashtra and Tamil Nadu which were showing positive results as per the MPI.

A closer look at the third column of the table 5 explains that driving force of the Indian industries is the technological shift in the production process. Eleven states have progressed adopting technological shift as indicated by their respective results where the value is lesser than 1. The states of Punjab, Haryana, Rajasthan, Madhya Pradesh, Andhra Pradesh, Karnataka and Kerala have not performed well in both the categories. These states are lagging behind other states because they are not making use of their resource in the optimum way and their technological upgradation is not keeping pace with other states. The performing states are using proportionally lesser input to produce the same level of output in comparison to non performing states. Thus, the result tentatively suggests that Indian industrial sector adopts capital intensive methods for the attainment of greater output. Rigid labour laws have exacerbated the industrial climate, since adoption of suitable methods necessitate reforming of the relevant policies.

Table 5: Total factor Productivity Change from 2000-01 to 2012-13

State	Malmquist Index	Efficiency Change	Frontier Shift
Himachal Pradesh	0.938	1.000	0.939
Punjab	1.017	1.014	1.006
Uttaranchal	0.964	1.000	0.964
Haryana	1.019	1.008	1.010
Rajasthan	1.058	1.042	1.019
UP	1.041	1.050	0.991
Assam	0.919	0.937	0.981
West Bengal	1.026	1.051	0.977
Jharkhand	0.966	1.000	0.966
Odisha	1.010	1.017	0.994
Chhattisgarh	0.968	1.026	0.944
Madhya Pradesh	1.047	1.041	1.006
Gujarat	0.986	1.019	0.977
Maharashtra	0.980	1.013	0.968
Andhra Pradesh	1.048	1.045	1.003
Karnataka	1.021	1.016	1.005
Kerala	1.016	1.004	1.012

Tamil Nadu	0.991	1.005	0.987
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Source : Computed by using DEA

Conclusion

Modern technology-enabled services have accelerated the progress of Indian economy during the last two decades. In order to boost up productivity, instead of employing extra labour industries opt for technological upgradation. Though many industries have upgraded their machines and have been using more capital intensive technology in the recent past, the technology is not innovative enough to produce optimum output. It is essential for the industries to rely on innovative production methods for generating employment. The services sector has grown due to increase in domestic demand. However, when compared to the size of the labor force, the number of jobs in service sector is quite small. Many look forward to Modi as miraculous problem solver with a magic band. In order to fulfil the aspirations of people, it points towards the necessity of creating new jobs which are larger in number. In light of this, the government is expected to prioritize creation of high-quality jobs as a key to economic inclusion through programmes such as “Make in India”. India needs to attain twin objectives of creating new jobs and shifting more workers into sectors of high-productivity.

The argument that formal-sector manufacturing could provide a new, labor-intensive acceleration to the economy is based on two facts. Primarily, India’s massive low-skilled labor force and the potential labour force which is growing in quantum as well as in terms of levels of education. Secondly the formal manufacturing has not yet had a chance to meet its potential since appropriate policy measures are not formulated for this purpose. Removing the constraints by the application of suitable policy measures could transform the Indian manufacturing sector in toto. The manufacturing sector has not held as much promise as a driver of economic development as it used to, because of factors such as changing global consumption patterns or sluggish global growth. India has a large domestic market of its own which would help to expand its manufacturing sector. Close access to the domestic market makes India as an attractive investment destination for both domestic as well as foreign investors.

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The Analysis of Impact of the Rating Scores of Firms in Borsa Istanbul Corporate Governance Index on Brand Value

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Abstract

The aim of this study is to analyze the impact of the corporate governance rating scores and performances of the firms in Borsa Istanbul Corporate Governance Index on their brand value. Measured in the scope of corporate governance rating, shareholders, public disclosure & transparency, stakeholders, board of directors and overall score for corporate governance are analyzed individually in order to find out the impact on brand value. The result of this study shows that shareholders and public disclosure & transparency ratings have significant and positive effects on brand value.

Keywords: corporate governance, brand value, BIST Istanbul corporate, governance index, brand valuation



Waste Minimization at Retailer end in Beef Supply Chain

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Abstract

The beef industry contributes around 12% to the agriculture output in UK. However, it is currently suffering from the consequences of epidemics in past decades like BSE (Bovine Spongiform Encephalopathy), Foot and Mouth disease and amendments in CAP (Common Agriculture Policy). These things collectively have led to the decline in demand of beef, ban on British beef exports and termination of headage subsidies for beef farmers. Waste minimization strategy is an effective tool to compensate these negative outcomes. Reports of Food Chain Centre (UK) suggest that approximately 20% of the expenses associated with beef supply chain is adding no value. Hence, it is an alarming signal for beef industry, considering their existing issues. The identification of root causes of waste in beef supply chain at retailer end is the main goal of this study. It also includes the list of good operation and management practices to address this waste. These practices will enhance the revenue of beef industry and also assist in curbing the environmental pollution caused due to meat wastes.

Keywords: waste minimization; beef supply chain; supply chain management.

Physical Self-Perception of Female Students at Faculty of Sport Sciences, Anadolu University

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Abstract

Physical perception is a general term that denotes all aspects of a person's perceptions and may change in time (Barut, 2008; Çetin, 2009). This study has been carried out to examine the levels of physical perception of female students at Faculty of Sport Sciences. There were 60 female students in the research group in 2013-2014 Teaching year. The Multidimensional Body-Self Relation Questionnaire was used. % 65 wear casual clothes, % 66.7 care their physical appearance, % 71.7 think that their bodies are attractive, % 48.3 are not anxious about their health, % 70 pay attention to their health, % 48.3 have a healthy life style, % 71.7 are on a diet, % 65 pay attention to physical fitness, % 76.7 attach great importance to performance in sport and % 36.7 do sport regularly. As a result, Mülazımoğlu (2001) revealed that females who play any sports have more positive perceptions than those who don't play any sports. According to Baştuğ's research (2009), female athletes pay attention to their health, physical appearance, physical fitness and like their muscular bodies. It can be stated that the results of these two studies support our study.

Keywords: physical perception; physical fitness; health

Introduction

Perception is the process of recognizing and interpreting extrinsic and intrinsic stimuli. According to other definition, being aware of inner and external world is called perception (Alagül, 2004). Self-perception means to recognize, interpret the meaning of stimuli and understand sensual stimulation.

Body perception is a picture of all senses in an individual's mind. Inner body perception includes one's physiological self-concept such as touch, sadness, changing of posture, thirst and sexual experiences. External body perception is how an individual is perceived by the society (Dökmen, 2004). Body perception is seen in adolescence period (Harris, 1987). Shilder, (1935) says that body perception means the picture of our own body which we form in our mind. It also covers all experiences in our lives. Parents, role models, friends and cultural values help to form individual's positive and negative thoughts. Body perception may change in time (Çetin, 2009). It involves the way how we perceive our body, how we feel about ourselves (body realism), body's reaction to our demands (body presentation) and ideal body that evaluates them (Güçlü and Yentür, 2008). It is indicated that ideal body perception increases self-respect, makes an individual accept and respect all his personality traits and helps self-esteem. (Saygı, 2009). In developing self-respect

process, family takes an important part. Ideal parents' attitudes and behaviors effect children's self-respect positively. How people show their self-respect is identified by the culture in which they live (Sanford and Donovan, 1999). Behaving relevant to gender role means to gain good behaviors for male and females at different ages in adolescent period. Gender is related to social standards, attitudes, interests and dressing styles that covers the concepts of men and femininity of the society (Salkind ve Ambron, 1987). Females sometimes have these two different gender features. However this does not seem a problem for males. Because males are always considered to behave as mannishness by the society they belong to. (Dökmen, 1999). Since most of females have trouble about their bodies, they have low self-esteem. Sometimes first low self-esteem then negative body image occur. Negative abstract emotions related to self respect diverts to tangible body. Instead of saying 'I am ordinary,' 'I am unhappy', they say 'I am fat', 'I am ugly,' They think that, they will have a good life if they have a good body (Demir, 2006). Apart from being a social stimulus, body has become a sexual stimulus since the beginning of adolescence period. An individual would like to have a good impression on others. Physical appearance gives perceptible information to the society. For this reason it is considered as an important issue. Research results reveals that females complain about their bodies during their lives, because even they are normal weight, they perceive themselves fatter than they are. Unhealthy beauty standards impose the beauty to people as the most crucial and important thing for their lives. According to Çetin's research, it is expected that females should be tall and thin, have big breasts and hip to be appreciated. If not, they are expected to be very successful in their jobs.

The problem of this study is to find out how beauty standards are perceived by female university students.

This research has been done to examine body perception level of female university students in 2013-2014 teaching year at Faculty of Sport Sciences, Anadolu University .

Method

This study has been applied to 60 female students at different departments of Faculty of Sport Sciences, Anadolu University in 2013-2014 teaching year. The Multidimensional Body-Self Relations Questionnaire- MBSRQ, developed by Winstead ve Cash (1984) and reliability and validity tested by Doğan ve Doğan (1992), has been used. There are 7 sub questionnaire in multidimensional Body-Self Relations Questionnaire. They are; 1. Appearance Evaluation- 2. Appearance Tendency- 3. Evaluation of Physical competence- 4. Physical Competence Tendency- 5. Health Facilities- 6. Health care- 7. Physical wellness (Doğan, 1992).

Validity study of The Multidimensional Body-Self Relations Questionnaire has been done by the researcher. First, it has been applied to 10 female participants. Coefficient of correlation is $r=.55$ and ($p<0.001$). After that MBSRQ has been applied to 10 participants for construct validity, average point is 204.5, MOP is 3.55. Validity study has been done using test re test method. For this reason the questionnaire has been used twice after 12 days. The result is 0.91. Frequency and percentage analyzes have been used in evaluation process.

Findings

Participants' responses for the sub questionnaires are as follows; 1.% 65 do not focus on dressing and make up, 2.% 66.7 take care of their appearance, 3. % 71.7 find their bodies attractive and feel happy, 4. % 30-35 like their body sizes, 5. % 48.3 do not have regular check up and care about their health, 6. % 70 care about their health, % 48.4 have a healthy life style, % 71.7 have a balanced diet, 7. % 65 take care of physical wellness, % 76.7 care about taking part in performance sports and % 36.7 do sports regularly.

Result and Conclusion

In conclusion, female students like casual wear, care about their appearance and find themselves attractive. According to Mülazımoğlu's research (2001) females who play any sports have more positive perceptions than those who do not play any sports. While increasing their body image, they decrease their social and physical anxiety level (Mülazımoğlu 2001). It can be said that these results have similar features.

Furthermore, they care about their health but nearly half of them go for a check up regularly and just one third of the students do sport regularly. According to Baştuğ's research (2009) female athletes care about their health, appearance and physical fitness so that they have fit and muscular bodies.

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Sexual Habits and Attitudes of University Handball Players in Turkey

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Abstract

The aim of this study is to reveal undergraduate men and women handball players' attitude towards sexual life and sports and how they control their sexual life and habits. Gender-related individual differences take important part in sexual life and some exact rules have not been set up (Yılmaz and Bayrak, 2006). It has been thought that sexual life decreases athlete's performance. As a result of this theory, sports has been considered against sexual life and some coaches have advised their athletes to avoid sex before the games (Zabci, 2006). The sample of the study comprised of handball players competed in 2008-2012 Super League and First League of University Handball Championship in Turkey. A total of 255 questionnaires were distributed, developed by Tekes (2006). In terms of results, male players give a lot of importance to sexual life and after a sexual act they are more relaxed, happy and confident. Furthermore, players from the East, South East and Black Sea region have less sexual experience and they are also so conservative.

Keywords: sexual life; gender; handball players

Introduction

The attitudes and values about sexuality, introduced by society and culture, effect people in many ways by controlling, restraining and guiding (Ersoy, 2009). People generally hesitate to talk and inform to each other about sexuality. It attracts considerable attention in sport. Because of many individual differences among athletes, we cannot set certain rules and also we have to consider gender differences (Yılmaz and Bayrak, 2006). It has been considered that sexual life effects athletes' performance negatively and for this reason they are not allowed to have sexual relationships before the games (Zabci, 2006). However, it is known that mutually satisfying sex has a positive effect and relaxes people (Daninos, 1973). If athletes do not get energy after a heavy training or a challenging game, their sexual lives definitely effect their performance negatively (Açıkada, 1990; Tanagho, 1992; Tiryaki, 1992). To gain some attitudes and habits for both athletes and coaches in accordance with athletes' sexual attitudes and habits in Turkey is our problem. The aim of this research is to reveal sexual habits and attitudes of male and female handball players in university handball teams.

Method

A survey, developed by Tekeş in 2006, has been used. The research population is male and female handball players in 2008-2012 University Handball Championship. The survey has been applied to 18 university teams. The sample of the study comprised of 219 players. In

this research, percentage and frequency analysis of demographic features and sexual experiences of players have been studied.

Findings

%61.2 is male, %38.8 is female, %36.5 earns 500TL<, %26.5 500-750TL, %63.5 at the age of 20-23; Their place of birth; %26 from Marmara Region %25.6 from Middle Anatolia, %17.9 Black Sea, %11.7 Eagean, %9.6 Mediterranean. Participants' mothers' educational background; % 37.9 primary and secondary school graduate, % 33.3 high school graduate, % 16.9 bachelor. Participants' fathers' educational background; % 22.8 primary and secondary school graduate, % 42.0 high school graduate, % 29.2 bachelor. The followings are in our questionnaire; '*Have you ever had a sexual experience so far?*' % 59.4 says Yes, % 40.6 says No. '*How old were you then?*' %58.4 18-20, %18.3 15-17 % 1.4 21-23, "*How many partners have you had until now*", %36.2 says 5 partners %34.1 1-2 partners, %7.8 3-4 partners.

Table 1: Participants' Sexual Attitude Perception Dimensions

Sexual Attitude	N	M	SD
Attitude 1 I am ashamed of talking about sexual life	219	1,8767	1,09140
Attitude 2 I have no exact knowledge about sexuality	218	2,1055	1,14516
Attitude 3 Sexual life effects my life negatively	214	2,3832	1,27191
Attitude 4 Games effect my sexual life negatively	217	2,9770	1,37249
Attitude 5 I restraint before the games	211	3,0190	1,45393
Attitude 6 If my coach and managers warns me to avoid sexual relation, this effects my game performance negatively	214	2,7664	1,37775
Attitude7 Drive's energy due to sexual instinct can be consumed by doing sports	218	2,6606	1,23855
Attitude 8 I avoid to be informed and get knowledge about sexual life	218	2,0367	1,07272
Attitude 9 Heavy training effects my sexual performance	212	3,1604	1,28526
Attitude 10 Sexuality is so important for me	216	3,3843	1,30670
Attitude 11 Coaches or managers have enough knowledge about sexuality	217	3,0046	1,12833
Attitude 12 I feel myself under pressure in my sexual life	214	2,5514	1,21982
Attitude 13 I feel myself under pressure due to rules	217	2,6959	1,25449
Attitude 14 I feel good after sexual relation	214	3,5748	1,27876
Attitude 15 I feel god psychologically after sexual relation	213	3,5305	1,26836
Attitude16 I feel angry after sexual relation	213	2,0704	1,01856
Attitude 17 I feel sad after sexual relation	209	2,1196	1,13088
Attitude 18 I feel guilty after sexual relation	212	2,1415	1,12649
Attitude 19 I am disappointed after sexual relation	212	2,1226	1,09027
Attitude20 I feel weak after sexual relation	213	2,4648	1,26824

1= Absolutely agree 5= Absolutely disagree

Table 2. Sexual Attitude of Participants

Attitudes	Gender	N	M	SD	p	t
Att. 1	Male	134	1.65	.86	.00**	-4.004
	Female	85	2.23			
Att. 2	Male	134	1.75	.93	.00**	-6.018
	Female	85	2.64			
Att. 8	Male	134	1.89	.93	.014*	-2.473
	Female	85	2.25			
Att. 9	Male	134	3.35	1.30	.005**	2.816

	Female	85	2.85			
Att.10	Male	134	3.77	1.17	.00**	5.891
	Female	85	2.77			
Att. 14	Male	134	3.97	1.15	.00**	6.439
	Female	85	2.91			
Att. 15	Male	134	3.75	1.25	.001**	3.363
	Female	85	3.1			
Att. 16	Male	134	1.80	.86	.00**	-5.206
	Female	85	2.51			
Att.17	Male	134	1.88	1.05	.00**	-3.962
	Female	85	2.50			
Att. 18	Male	134	1.93	1.07	.00**	-3.607
	Female	85	2.49			
Att. 19	Male	134	1.84	.99	.00**	-4.959
	Female	85	2.57			
1= Absolutely disagree 5= Absolutely agree				* P<.05 **p<.01		

In table 2 t-test has been used and average values of participants' sexual attitudes differs according to gender.

According to t-test results, *Attitude 1*; female participants are more ashamed of talking about sexuality than male participants. *Attitude 2*; female participants have less knowledge about sexuality than male participants. . *Attitude 8*; female participants more hesitate to share knowledge about sexuality than males. *Attitude 9*; the average score of males is higher than females. Male participants think that heavy trainings or challenging games affect their sexual performance. *Attitude 10*; male participants consider sexual life more important in their lives. *Attitude 14* and *15*; male participants feel themselves more relax after a sexual activity than females. *Attitude 16 and 17*; there are some negative psychological consequences for females after a sexual activity. They feel themselves angry and sad. *Attitude 18 and 19*; female participants feel themselves guilty and disappointed.

Results and Discussion

Minimum wage was 585TL-599TL between the years 2007-2012 (<http://muhasebeturk.org>, 2015). So, %63.5 of the participants have this minimum wage from their clubs in handball leagues. According to Çeliksoy's other research (2009), %38.2 of the participants have approximately 1500 TL from their clubs and this shows similarity to ours.

Most of our participants are at the age of 20-23 and come from Marmara, Middle Anatolia and Black Sea regions. It can be said that handball is more popular in these regions.

Most of parents graduated from secondary and high school, so this has a positive effect to lead their children to play any sports. Furthermore, they show great interest to handball in their regions. These results are nearly similar to Çeliksoy's research (2009).

Most of the participants have their first sexual experience when they are students at universities. According to Dağdeviren and Aktürk's research (2004), % 24.1 of university students have sexual relations with more than a partner. This supports our results. Most of the participants have their first sexual experience when they are 18 and 20 years old but

fewer participants have their first experience at the age of 15-17. According to Kvapilik's research (1975) in Czech Republic, the youngest participants have their first sexual experience when they are 13, the oldest participants are 24; Tekeş (2006) have a research on male handball players in Turkish Men Handball Super League. His research results revealed that the age of first sexual experience is 15, the oldest is 24. Number of partners they have; % 45.2 have 1-3 partners, % 22.6 have 4-6, % 22.6 have 7-9, and % 9.7 have 10 or more partners. These results show similarities to our research. However, Caron's (2013) research revealed that male university students increase the number of partners they have in their conversations in order to show their strength.

Participants absolutely agree to attitudes 4, 5, 9, 11, and 13. According to Tekeş's research (2006) % 97 of the participants avoid to have a sexual relation just before a game. This result shows similarities with the findings for *Attitude 5*. In the same research, % 99.2 of the participants think that heavy training effect their sexual performance negatively. This result can be correlated to *Attitude 9*.

Participants absolutely disagree to *Attitudes 1, 2, 3, 6, 7, 8, 12, 16, 17, 18, 19, 20*. In Tekeş's research (2006), % 88.6 of the participant state that sexual drive can be suppressed by doing or playing any sports and they do not feel guilty and disappointed after a sexual relation. This result shows similarities with the findings of our research. Zabci (2006) states that sexuality is a physiological human need; Öztarhan (1996) argue that people could consume more energy in a sexual activity than other physical activities.

According to t-test results, in *Attitude 1* females are more embarrassed than males when they talk about sexuality. It can be said that males feel free when they share their sexual knowledge in Turkey but females do not.

Attitude 2; females' sexual knowledge are not sufficient. Because schools do not have any subjects about sexual education. It is given traditionally to children. The information on sexual matters is obtained informally from friends, the media and internet (Canatar, <http://www.milliyet.com.tr>, 2015). According to Mert and Özen's research (2009) % 37.9 of female participants learn sexual matters from their friends, % 24.1 from their husbands, % 19 from parents, % 18 from media (Mert and Özen, 2009). Besides, people in Turkey receive information about sex from some conversations with a parent, a friend or pornographic publications (<http://feminapsikoloji.com>, 2013). These results support our research.

Attitude 9; male participants state that heavy training and hard games affect their sexual performance negatively. According to Bayraktar's research (2004) we have to regard not only effects of just sexual activity but also after effects such as compulsion. It can be said that deterioration of a sexual performance is not the result of only a heavy training, there are also extrinsic factors that affect individual's performance. However, Bompa (1998) states that after playing hard games it takes about 48 hours to recover. As a result males may struggle to perform their sexual activities.

Attitude 10; males care about sexuality more than females. Coşkundeniz, (2014) defends this opinion. (mehmet.coskundeniz@posta.com.tr, 2014). Because there are some gender differences and individuals have different habits from their childhood. The differences between males and females are not only biological, physiological or psychological but also there are cultural differences. Sexuality affects males and females' daily routines and body perceptions (Dinçer, 2007).

Attitudes 14 and 15; after a sexual relation males feel happier psychologically than females. In Tekeş's research (2006) nearly % 83 of participants states that they feel happy and relax after a sexual activity. Keçe (2025) states that female individuals feel themselves anxious, restless and stressful because blood in pelvic organs may cause low back pain and backache (<http://www.cemkece.com>). This supports our research.

Attitudes 16 and 17; female participants feel angry and sad after a sexual activity. Topkara (2015) states that females have some responsibilities not only for themselves but also for their families. Hence, they restrain their some behaviors. This is a matter of honor (<http://www.mustafatopkara.com>). Females have some pressure because of the rules of families and societies and they feel guilty in many aspects.

Attitudes 18 and 19; females feel guiltier and disappointment. Whitbourne (2013) compares females' emotions before and after a sexual activity. They feel guilty and disappointment after a relation. This result supports Topkara's research.

In conclusion, participants are at the age of 18-20, they have average income, most of them have their first sex experience when they are university students and have 3 or more partners. They think that sexuality is so important in their daily lives. It is psychological and physiological need for them, they cannot restrain their sexual drive by doing sport, they avoid to have a relation before the games. Female handball players are more embarrassed than males and have less knowledge. Also they always feel angry and sad after a relation.

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An Examination of Cultural Intelligence and its Implications for Managers

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Abstract

Globalization has changed the way business is conducted and has also changed managers' perspective on how to manage in culturally diverse setting. Cultural Intelligence (CQ) is increasingly being studied and identified as an important framework for achieving cross-cultural competencies. According to Ang & Van Dyne, (2008), Early and Ang, (2003) "cultural intelligence refers to an individual's ability to function effectively across cultures – national, ethnic, organizational, as well as other types of culture". Brislin, Worthely & MacNab (2006) posit that cultural intelligence focuses on a set of skills that enable individuals to transfer social skills from one cultural context to another. There is also evidence that cultural intelligence is a key cross-cultural leadership competency for effective leaders (Deng and Gibson, 2009). Thus, as organizations seek to operate efficiently in the global marketplace; managers need to have an understanding of cultural intelligence and its implications for organizational success. This study will examine Ang & Van Dyne's (2005) Four Factor Model of Cultural Intelligence. Specifically, we will examine each of the four factors, which include Motivational CQ; Cognitive CQ; Metacognitive CQ; and Behavioral CQ. The different capabilities and the interrelatedness that exist amongst these variables will be examined and discussed.

Keywords: cultural intelligence, cross-cultural competencies, cross-cultural leadership

Maturity Effects in Futures Contracts on the SAFEX Market

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Abstract

This paper examines support for maturity effects in contract volatility, traded volume, open interest and spread by futures listed on SAFEX. The Samuelson hypothesis suggests return volatility increases as time-to-maturity diminishes (Samuelson, 1965). Three classes of derivative contracts are examined; agricultural, metals and energy futures. Two measures of futures return volatility are used; ordinary least squares (OLS) and Glosten, Jagannathan, and Runkle (1993) GARCH (GJR GARCH) estimations. In the volatility relation, the analysis further simultaneously tests for the Samuelson effect while enabling checking for significance of traded volume, change in open interest and the bid-ask spread. Further, multicollinearity is accounted for by replacing change in open interest and spread with respective residuals to generate more precise results. The effects of seasonality are incorporated into the analysis to examine if maturity effects remain in the contracts. Findings are that wheat supports the maturity effect, but not white maize, silver and WTIO crude. Yellow maize does not support maturity effects if the GJR GARCH approach is used or when daily and monthly seasonality have been accounted for in the OLS estimations.

Keywords: futures market; volatility, contract maturity, Samuelson hypothesis

Introduction

The paper looks at maturity effects in three asset classes on the futures market in South Africa. The focus is on agricultural, metals and energy contracts. When futures volatility and sensitivity to new information rises as contract maturity nears, the Samuelson effect is said to hold (Galloway & Kolb, 1996; Samuelson, 1965). Understanding futures volatility behaviour is important in determining initial margins, margin adequacy, hedging positions, futures risk and option prices (Kalev & Duong, 2008; Serletis, 1992). Maturity effects on SAFEX were investigated for white maize, yellow maize and wheat in Viljoen (2004) using non-parametric approaches. In that study, the Samuelson hypothesis was confirmed in white maize, but not yellow maize and wheat. In this paper, maturity effects in 3 futures asset classes are examined using diverse parametric approaches. It is believed this paper is the first study to look at maturity effects in energy or metal contracts on SAFEX. This is also the first paper to examine maturity effects in traded volume, open interest and spread in SAFEX contracts. Findings from the study will be useful to futures market participants enabling optimisation of hedging, speculation, margin computations and option pricing. Findings are that wheat on SAFEX supports the Samuelson effect going by the various

tests in literature or using extensions to previously used analysis. The paper is organized as follows. Section 2 provides literature and findings by selected authors on maturity effects. Section 3 presents the methodology and data for this study. Section 4 provides the preliminary and main findings. Section 5 describes the robustness analysis carried out to further validate the key findings. Section 6 concludes the paper.

Literature Review

Tests for maturity effects in literature have generated mixed outcomes (Liu, 2014). Segall (1956) and Telser (1956) first formally acknowledged the tendency for increased financial asset volatility as maturity nears, while Samuelson (1965) put forward the hypothesis to this effect. Samuelson (1965) posited that as a contract gets nearer to maturity, variability in prices rises. In this section we critically review a number of papers that investigated the Samuelson hypothesis. Galloway and Kolb (1996) suggest sensitivity to new information increases nearer maturity as spot and futures prices converge, hence the occurrence of maturity effects. In Castelino and Francis (1982), the maturity effect is accepted for CBOT soybean and wheat futures. The data used is from 1960 through 1971. In Anderson (1985), data from 1966 through 1980 on 8 commodities is used in maturity-effect estimations. Wheat, corn, soybeans, oats, soybean oil, live cattle, silver and cocoa on CBOT, KCBT, CME and COMEX were examined finding four commodities with Samuelson effects. Maturity effects in agricultural, financial and metal futures are investigated in Milonas (1986) and Milonas (1991). The studies examine 5 agricultural, 3 financial and 3 metal futures contracts. Out of the 11 futures contracts, 10 supported the Samuelson hypothesis. Evidence was also provided that far-from-maturity futures contracts were reacting less strongly to information than nearer-maturity contracts.

Serletis (1992) finds support for the Samuelson hypothesis in NYMEX energy contracts in data from 1987 through 1980. Khoury and Yourougou (1993) examined 6 agricultural futures on the Winnipeg Commodity Exchange (WCE) with data from 1980 to 1989. Price data used includes WCE daily high, low, open, and close levels for canola, rye, feed barley, feed wheat, flaxseed and oats. All futures contracts supported calendar seasonality effects as well as maturity effects using OLS regression estimation. Goodwin and Schnepf (2000) confirm the Samuelson hypothesis in maize but not wheat in US futures markets using weekly data. GARCH estimations and the VAR approaches used find seasonality, crop growing conditions and the maturity effect as key determinants of price volatility. In Chatrath, Adrangi, and Dhanda (2002) there is support for the Samuelson effect for maize but not wheat. The analysis uses augmented GARCH extensions with control for seasonality and maturity effects. Daal, Farhat, and Wei (2003) find support for maturity effects by agricultural and energy contracts listed in London, Sydney, Tokyo, Winnipeg and the US over the period 1960 through 2000. In a study involving 20 futures contracts from four categories (agricultural, energy, metals, financial), Duong and Kalev (2008) confirmed the Samuelson effect for agricultural futures, but not for metals, energy and financial futures. Data in the study was from 1996 to 2003. A different study by Kalev and Duong (2008) investigated the Samuelson effect in 14 futures using data from 1996 through 2003. Agricultural contracts supporting the Samuelson hypothesis included maize, soybean, soybean oil, soybean meal and wheat. The maturity effect was not supported by energy, metal and financial futures. Maturity effects were examined in Karali and Thurman

(2010). Futures contracts studied were maize, soybeans, wheat and oats, all on the North American grain futures markets. Strong evidence of the effects in contracts studied is confirmed. Kenourgios and Katevatis (2011) examined two leading Greek indices on the Athens Derivatives Exchange (ADEX) finding support for the Samuelson hypothesis in both of them. OLS and GARCH approaches were used with data from 1999 through 2007.

It has also been suggested in a number of studies the maturity effect is not common in financial futures (Allen & Cruickshank, 2002; Duong & Kalev, 2008; Galloway & Kolb, 1996). Kenourgios and Katevatis (2011) have incorporated market liquidity and seasonality-related variables into maturity effect estimations. Their idea was to find out if these variables were more important in explaining volatility than time-to-maturity. This paper has looked at this literature and gone further to consider the bid-ask spread, another key liquidity variable in financial markets. Corwin and Schultz (2012) estimated the bid-ask spread using daily high-low futures prices from 1993 to 2006 capturing the liquidity-returns relationship. Among some of the uses of the bid-ask spread estimator is trading costs computations, asset pricing and market efficiency research.

Methodology and Data

Empirical Methodology

Two approaches are used to estimate support for the maturity effect, firstly, a linear regression, then the Glosten et al. (1993) GARCH (GJR GARCH) analysis. Two proxies for return volatility have been used; a variability estimator derived from daily high-low prices and conditional variance from the GJR GARCH model. Daily high and low prices are used to calculate volatility similar to Garman and Klass (1980), Parkinson (1980) and Serletis (1992). The specification of volatility follows the relation

$$Var_t = \frac{(\ln H_t - \ln L_t)^2}{4 \ln 2} \quad (1)$$

H_t and L_t are high and low prices respectively. In Serletis (1992), simple regression estimation has been used to check for the Samuelson effect as follows:

$$VAR_t = \alpha_0 + \alpha_1 \ln TTM_t + \varepsilon_t \quad (2)$$

VAR_t is the variance of futures prices or returns. Time-to-maturity is captured in the term TTM_t which decreases from the time a contract is listed to its maturity, at which stage it becomes zero. A random error is represented by ε_t . Estimation of the GJR GARCH augmented with a ‘‘Samuelson effect’’ dummy variable is carried out as follows

$$\sigma_t^2 = \omega + \xi \varepsilon_{t-1}^2 + \gamma \varepsilon_{t-1}^2 I_t^- + \eta \sigma_{t-1}^2 + \lambda TTM_t \quad (3)$$

In the above equation, σ_t^2 is the conditional variance and is representing price variability while ε_{t-1}^2 is the unconditional variance. Asymmetry in volatility is captured in γ . I_t^- , an

indicator function, takes the value 1 when $\varepsilon_t < 0$, but 0 otherwise. When $\gamma > 0$, bad news impacts volatility more than does good news, by way of the *leverage effect*. Asymmetry is basically confirmed when $\gamma \neq 0$. TTM_t represents time before maturity on day t . Optimal GARCH specifications for each contract are arrived at using criterion that includes AIC and SBC (Bollerslev, 1988). Further, Bollerslev and Wooldridge (1992) robust standard errors are used as in most cases futures series may not follow the normal distribution.

Similar to Kenourgios and Katevatis (2011), traded volume and open interest are introduced into the relations testing for the maturity effect using the following relation:

$$VAR_t = \beta_0 + \beta_1 \ln TTM_t + \beta_2 \ln Vol_t + \beta_3 \Delta \ln OI + u_t \quad (4)$$

VAR_t is the volatility of futures prices or returns derived from daily high and low prices in Equation (1). Time-to-maturity, traded volume and change in open interest are captured respectively in $\ln TTM_t$, $\ln Vol_t$ and $\Delta \ln OI_t$. The paper makes an addition to literature by incorporating the bid-ask spread, an important liquidity variable in financial markets. This paper follows Corwin and Schultz (2012) who make use of daily high and low prices to derive the bid-ask spread. Roll (1984) postulates that the bid-ask spread is a reflection of transaction costs which themselves influence liquidity in futures markets. Corwin and Schultz (2012) acknowledge their bid-ask spread estimator is fairly easy to generate and use. The key relation for deriving the estimator is:

$$\left[\ln \left(\frac{H_t^0}{L_t^0} \right) \right]^2 = \left[\ln \left(\frac{H_t^A (1 + S/2)}{L_t^A (1 - S/2)} \right) \right]^2 \quad (5)$$

Where the actual daily high and low prices are captured in $H_t^A (L_t^A)$, and $H_t^0 (L_t^0)$ are observed daily high and low prices, on trading day t . The bid-ask spread in Corwin and Schultz (2012) was defined by the simplified relation:

$$S = \frac{2(e^\alpha - 1)}{1 + e^\alpha} \quad (6)$$

Furthermore, simplification of the equations gives:

$$\alpha = \frac{\sqrt{2\beta} - \sqrt{\beta}}{3 - 2\sqrt{2}} - \sqrt{\frac{\gamma}{3 - 2\sqrt{2}}} \quad (7)$$

Parameters β , σ_{HL} , k_2 and γ are elaborately defined in Corwin and Schultz (2012). The next step in this paper is to expand on the relation in Equation (4). Using the series for the bid-ask spread in Equation (6), the paper estimates:

$$VAR_t = \beta_0 + \beta_1 \ln TTM_t + \beta_2 \ln Vol_t + \beta_3 \Delta \ln OI + \beta_4 SP_t + u_t \quad (8)$$

Where SP_t is the bid-ask spread series for each contract. This brings into literature an extension to the relation introduced by Kenourgios and Katevatis (2011), which did not include the bid-ask spread. The paper next explores the relationship between traded volume and time-to-maturity. Chamberlain (1989) used the following relation

$$\ln \Delta OI_t = \alpha_0 + \alpha_1 \ln Vol_t + \varepsilon_{1,t} \quad (9)$$

In the above α_1 provides the extent of the influence of changes in traded volume on change in open interest. Residuals $\varepsilon_{1,t}$ are saved such that they become a regressor in the next relation estimating the bid-ask spread.

$$SP_t = \alpha_0 + \alpha_1 \ln Vol_t + \hat{\varepsilon}_{1,t} + \varepsilon_{2,t} \quad (10)$$

Where SP_t is the spread as defined by the estimator in Corwin and Schultz (2012). To account for multicollinearity in Equation (8), liquidity variables in change in open interest and spread are replaced by their residuals in the modified relation as follows:

$$VAR_t = \beta_0 + \beta_1 \ln TTM_t + \beta_2 \ln Vol_t + \beta_3 \hat{\varepsilon}_{1,t} + \beta_4 \hat{\varepsilon}_{2,t} + u_t \quad (11)$$

Proxies for $\ln \Delta OI_t$ and SP_t are respectively, $\hat{\varepsilon}_{1,t}$ and $\hat{\varepsilon}_{2,t}$.

Data

End of day futures trade close prices, daily high and low prices as well as daily traded volume and open interest for white maize, yellow maize, wheat, silver and WTIO crude have been used. Daily data was collected through Thompson Reuters and DataStream for various periods depending on respective contract listing. Returns were calculated using the relation

$$R_t = 100 * \ln \left(\frac{P_t}{P_{t-1}} \right) \quad (12)$$

Where R_t is the futures contract return and the price and lagged price series are respectively given in P_t and P_{t-1} . Prices are expressed in Rands (the South African currency) per ton, and returns are expressed in percentage terms.

Table 1: Contracts descriptive information

Commodity	Beginning	End	Observations	Maturity months	Year of Listing
<i>Agricultural commodities</i>					
White maize	01/04/1997	22/12/2014	4425	3,5,7,9,12	1997
Yellow maize	01/04/1997	28/11/2014	4416	3,5,7,9,12	1997
Wheat	01/01/1999	23/09/2014	3937	3,5,7,9,12	1997
<i>Metals commodities</i>					
Silver	14/12/2010	19/12/2014	995	3,6,9,12	2010
<i>Energy commodities</i>					

WTIO 12/10/2009 22/12/2014 1297 3,6,9,12 2009

Descriptive information on the contracts in this study is presented in the table. The months January, ..., December are represented under the column “Maturity months” as respectively 1, ..., 12. Contracts are categorized as agricultural, metals and energy contracts.

Contract specifications and maturity months for futures in this study are provided in Table 1. Agricultural commodity contracts have maturities in March, May, July, September and December. Energy and metals contracts mature in March, June, September and December. SAFEX trading hours are from 9.00 am to 12.00 pm during business days. In Figure 1, the graphs for each contract show the price and returns series from the beginning of each contract’s sample to about December 2014.

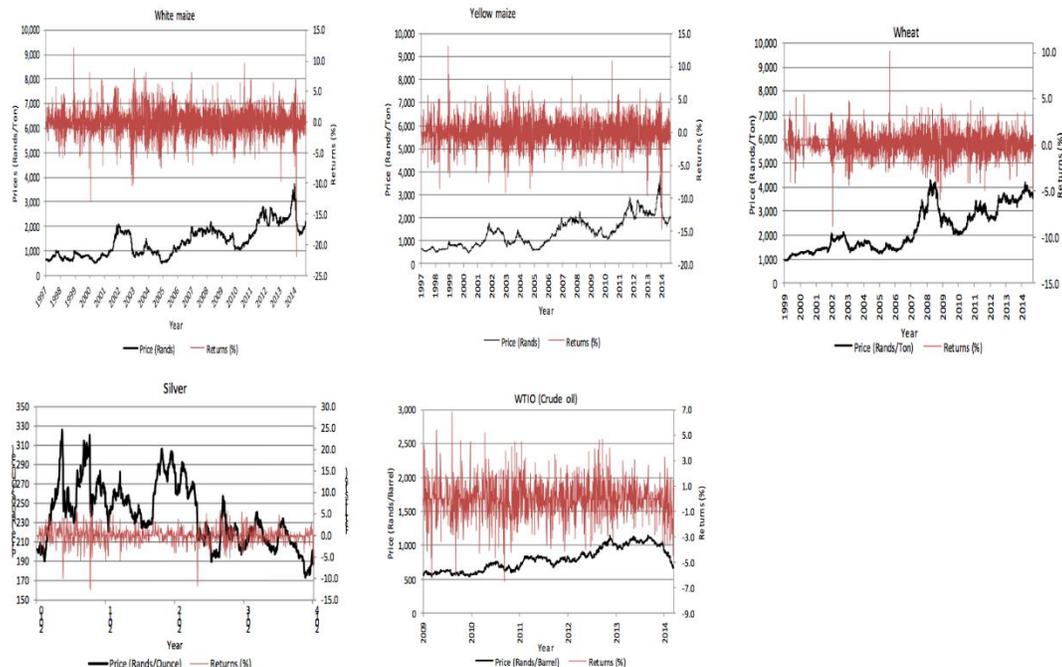


Figure 1: Graphs on Price and Return Series by Commodity

Graphs for the daily price and returns series for white maize, yellow maize, wheat, silver and WTIO crude traded on SAFEX are presented. Daily contract prices are expressed in Rands and returns are presented in percentage terms. The horizontal axis presents the time period over which data for respective contracts has been collected.

Peak prices for maize and wheat around mid-2008 coincide with the peak of the global economic downturn. For white and yellow maize, an additional notable peak in prices (beyond R3,000.00 per ton) was recorded at the beginning of 2014. These prices were attributable to globally tight maize supply conditions compounded by poor earlier rainfall in key producing regions in South Africa. White and yellow maize prices subsequently collapsed to a trough of below R2,000.00 per ton around harvest time (about mid-2014) before starting to climb gradually upwards. WTIO prices on SAFEX have been gradually rising since contract listing and only started falling significantly in the second half of 2014.

Silver prices have been flat since listing, before declining marginally in the second half of the graph.

Empirical Findings

Firstly, we look at whether contracts support the Samuelson effect using ordinary least squares estimation. Table 2 gives the results of the tests using Equation (2).

Table 2: Test for the Maturity Effect using Daily High and Low Prices

Commodity	α_0	α_1	R^2	Adj. R^2
White maize	0.00022*** [0.0000]	-0.00001 [0.3104]	0.0002	0.0000
Yellow Maize	0.00030*** [0.0000]	-0.00005*** [0.0000]	0.0115	0.0112
Wheat	0.00021*** [0.0000]	-0.00005*** [0.0000]	0.0223	0.0220
Silver	-0.00002 [0.6770]	0.00003** [0.0406]	0.0089	0.0068
WTIO	0.08924 [0.2883]	-0.01934 [0.4562]	0.0007	-0.0006

Ordinary least squares estimation of volatility is presented, with the daily high-low price volatility estimator. The regression estimated in the table is specified as:

$$VAR_t = \alpha_0 + \alpha_1 \ln TTM_t + \varepsilon_t$$

P-values are shown in parenthesis. Significance levels at 1%, 5% and 10% are depicted by ***, ** and * respectively.

Here we make use of daily high and low prices to generate the volatility estimator in Equation (1). In this OLS estimation, yellow maize and wheat support the maturity effect at 1% level of significance. The results also show that white maize, silver and WTIO do not support the Samuelson hypothesis. Silver has a positive and significant coefficient at 10% level, suggesting volatility declines as time-to-maturity decreases. Next is a presentation of results using the GJR GARCH augmented with the maturity effect term, TTM_t .

Table 3: Test for maturity effect using GJR-GARCH models

Commodity	ω	ξ	γ	η	λ	Adj. R^2
White maize	0.1455** [0.0157]	0.1365*** [0.0000]	0.0040 [0.8830]	0.8369*** [0.0000]	-0.0007 [0.6098]	0.0075
Yellow Maize	0.1240*** [0.0049]	0.1173*** [0.0000]	-0.0020 [0.9377]	0.8536*** [0.0000]	-0.0004 [0.6505]	0.0028
Wheat	0.0753*** [0.0000]	0.1095*** [0.0001]	-0.0072 [0.7986]	0.8632*** [0.0000]	-0.0010** [0.0168]	0.0095
Silver	0.9910** [0.0564]	0.2615** [0.0387]	-0.1072 [0.3877]	0.4953*** [0.0014]	0.0217 [0.2026]	0.0073
WTIO	1.8127** [0.0232]	0.0560 [0.2871]	0.0828 [0.3061]	0.0673 [0.8460]	0.0030 [0.7275]	-0.0004

Maximum likelihood estimation of the conditional variance in the GJR-GARCH is carried out in the table using the equation

$$\sigma_t^2 = \omega + \xi \varepsilon_{t-1}^2 + \gamma \varepsilon_{t-1}^2 I_t^- + \eta \sigma_{t-1}^2 + \lambda TTM_t$$

For brevity, the table only focusses on the variance equation of the GJR GARCH model output. P-values are shown in parenthesis. Significance levels at 1%, 5% and 10% are depicted by ***, ** and * respectively.

The GJR GARCH model uses conditional variance as the proxy for return volatility. Wheat supports the maturity effect at 5% significance level as shown in Table 3. There is no

evidence of asymmetry in the volatility of any of the 5 contracts. For all the contracts, the coefficient of TTM_t is negative, as expected.

Liquidity variables in Equation (8) are introduced next. It is necessary to address multicollinearity in this relation. Given possible relationships among explanatory variables, the next step was to construct a table of cross-correlation coefficients. There is evidence of significant cross-correlations between volume and change in open interest for white maize, wheat and WTIO crude, as shown in Table 4.

Table 4: Cross-correlations among traded volume, open interest, spread

Description		$lnVol_t$		$\Delta lnOI_t$		SP_t
White maize	$lnVol_t$	1.0000				
	$\Delta lnOI_t$	0.0451***	[0.0047]	1.0000		
	SP_t	0.0629***	[0.0001]	0.0327**	[0.0406]	1.0000
Yellow maize	$lnVol_t$	1.0000				
	$\Delta lnOI_t$	0.0162	[0.3238]	1.0000		
	SP_t	0.0101	[0.5381]	0.0661***	[0.0001]	1.0000
Wheat	$lnVol_t$	1.0000				
	$\Delta lnOI_t$	0.0739***	[0.0002]	1.0000		
	SP_t	0.0625***	[0.0014]	-0.0297	[0.1281]	1.0000
Silver	$lnVol_t$	1.0000				
	$\Delta lnOI_t$	-0.0953	[0.1189]	1.0000		
	SP_t	0.3199***	[0.0000]	0.0651	[0.2873]	1.0000
WTIO Crude	$lnVol_t$	1.0000				
	$\Delta lnOI_t$	-0.1285***	[0.0013]	1.0000		
	SP_t	0.0436	[0.2755]	-0.0562	[0.1600]	1.0000

The table shows cross-correlations among traded volume, the change in open interest and the bid-ask spread. SP_t represents the bid-ask spread generated using the estimator in Corwin and Schultz (2012). As there are significant cross-correlation coefficients, the need arises for modifying estimations to account for the impact of multicollinearity. P-values are shown in parenthesis. Significance levels at 1%, 5% and 10% are depicted by ***, ** and * respectively.

Significant cross-correlation between traded volume and the bid-ask spread is observed in white maize, wheat and silver. Change in open interest and the bid-ask spread are significantly correlated in the case of white maize and yellow maize. This paper then looked at providing for multicollinearity among explanatory variables in Equation (8).

Table 5: Maturity effect – residuals of volume, change in open interest, spread

Description	W/Maize	Y/Maize	Wheat	Silver	WTIO
β_0	0.00000	0.00017***	0.00014***	-0.00017**	0.14317
	[0.9758]	[0.0000]	[0.0000]	[0.0184]	[0.2570]
β_1	-0.00000	-0.00003***	-0.00004***	0.00005**	-0.04710
	[0.7925]	[0.0003]	[0.0000]	[0.0208]	[0.1839]
β_2	0.00003***	0.00002***	0.00001***	0.00008***	0.00948
	[0.0000]	[0.0011]	[0.0005]	[0.0000]	[0.5810]
β_3	0.00001	-0.00000	0.00000	0.00003	-0.00530
	[0.5822]	[0.8230]	[0.9214]	[0.2531]	[0.9481]
β_4	0.00936***	0.00783***	0.00754***	0.00425***	-0.04099
	[0.0000]	[0.0000]	[0.0000]	[0.0000]	[0.9244]
Adj. R^2	0.1247	0.0940	0.0956	0.2674	-0.0036

Ordinary least squares (OLS) estimation for the influence on volatility of time-to-maturity, traded volume, residuals from the change in open interest relation and residuals from the bid-ask-spread relation, is presented. The model estimated is:

$$VAR_t = \beta_0 + \beta_1 \ln TTM_t + \beta_2 \ln Vol_t + \beta_3 \hat{\varepsilon}_{1,t} + \beta_4 \hat{\varepsilon}_{2,t} + u_t$$

Residuals replacing change in open interest and the bid-ask spread are respectively, $\hat{\varepsilon}_{1,t}$ and $\hat{\varepsilon}_{2,t}$. Volatility in the relation is derived from high and low prices using Equation (1). P-values are shown in parenthesis. Significance levels at 1%, 5% and 10% are depicted by ***, ** and * respectively.

Iterative regressions in equation (9) and (10) were estimated generating the residuals series from relations of change in open interest and bid-ask spread, respectively denoted as $\hat{\varepsilon}_{1,t}$ and $\hat{\varepsilon}_{2,t}$. Equation (11) is the estimated model with results presented in Table 5. The findings show that yellow maize and wheat support maturity effects at 1% significance level after accounting for multicollinearity. Residuals of change in open interest ($\hat{\varepsilon}_{1,t}$) have no significance in explaining volatility of any of the 5 contracts.

Seasonality and maturity effects

Milonas (1986) and Choi and Longstaff (1985) suggest the Samuelson effect has secondary impact subordinate to seasonality. We attempt to filter out seasonality in futures contracts while determining maturity effects in Table 6.

Table 6: Maturity effects – accounting for multicollinearity and seasonality

Description	W/Maize	Y/Maize	Wheat	Silver	WTIO
β_0	-0.00029*** [0.0000]	-0.00009** [0.0262]	0.00001 [0.8340]	-0.00028*** [0.0001]	0.09291 [0.4570]
β_1	0.00002* [0.0775]	-0.00001 [0.5136]	-0.00002*** [0.0030]	0.00006*** [0.0013]	-0.04008 [0.2529]
β_2	0.00004*** [0.0000]	0.00002*** [0.0000]	0.00001*** [0.0001]	0.00007*** [0.0000]	0.00893 [0.5991]
β_3	0.00001 [0.5769]	0.00000 [0.9657]	0.00000 [0.7795]	0.00003 [0.2478]	-0.01912 [0.8127]
β_4	0.00847*** [0.0000]	0.00706*** [0.0000]	0.00740*** [0.0000]	0.00373*** [0.0000]	-0.02590 [0.9516]
Adj. R^2	0.1103	0.0779	0.0837	0.2506	-0.0045

Ordinary least squares (OLS) estimation of the maturity effect is presented. Seasonality at the daily and monthly levels is taken into account by way of dummy variables. The seasonality relation is:

$$VAR_t = \alpha + \sum_{i=2}^5 \delta_i D_{i,t} + \sum_{m=2}^{12} \theta_m M_{m,t} + \varepsilon_t$$

Residuals ε_t are saved as the new volatility series nv_t . The relation estimated in Panel C is:

$$nv_t = \beta_0 + \beta_1 \ln TTM_t + \beta_2 \ln Vol_t + \beta_3 \hat{\varepsilon}_{1,t} + \beta_4 \hat{\varepsilon}_{2,t} + u_t$$

Residuals derived from traded volume, change in open interest, and the bid-ask spread are respectively represented as nvs_t , nos_t , and nss_t . P-values are shown in parenthesis. Significance levels at 1%, 5% and 10% are depicted by ***, ** and * respectively.

To account for seasonality, the following relation is used:

$$VAR_t = \alpha + \sum_{i=2}^5 \delta_i D_{i,t} + \sum_{m=2}^{12} \theta_m M_{m,t} + \varepsilon_t \quad (13)$$

Daily and monthly dummies are given by $D_{i,t}$ and $M_{m,t}$ respectively. Residuals series ε_t , is saved as the new volatility series nv_t . The following regression is then estimated in Table 6:

$$nv_t = \beta_0 + \beta_1 \ln TTM_t + \beta_2 \ln Vol_t + \beta_3 \hat{\varepsilon}_{1,t} + \beta_4 \hat{\varepsilon}_{2,t} + u_t \quad (14)$$

Findings of the OLS estimation provide evidence that wheat still supports the Samuelson hypothesis after accounting for daily and monthly seasonality. Silver has a significant coefficient for the time-to-maturity term, but with a positive sign. Silver therefore experiences lower volatility as maturity nears. A key observation is that inclusion of seasonality has not affected substantially support for the maturity effect in wheat but that which was detected in yellow maize.

Conclusions

Maturity effect estimations are carried out in this paper using contracts in the agricultural, metals and energy categories. The Samuelson hypothesis suggests return volatility increases as time-to-maturity diminishes (Samuelson, 1965). Following Kenourgios and Katevatis (2011), the paper looked at the joint effect of traded volume, change in open interest and time-to-maturity on return variability. An extension was introduced to include the bid-ask spread as a liquidity explanatory variable. By replacing change in open interest and the bid-ask spread with respective residuals, estimation of maturity effects with the residuals as explanatory variables took account of multicollinearity, to give more precise results. After these adjustments, yellow maize and wheat showed evidence of support for maturity effects. Finally, seasonality was accounted for in the robustness analysis finding daily and monthly seasonality not affecting maturity effects in wheat. Yellow maize no longer supports maturity effects after taking into account seasonality. White maize, silver and WTIO crude have shown no support for maturity effects at all.

Findings in this study are in disagreement with those of Viljoen (2004) who found support for the Samuelson hypothesis in white maize, but not in yellow maize and wheat using data from 1997 to 2003.

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An Investigation of Investor Sentiment and Speculative Bond Yield Spreads

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Abstract

Investor sentiment has long been the topic of interest for pricing assets. This paper aims to investigate the effect of investor sentiment as a systematic risk factor on speculative bond yield spreads. After applying a correlation analysis to determine the strength of linear association between these two variables, a vector autoregressive (VAR) analysis and impulse response tests are employed to examine the relationship between these two variables. The sample period extends from January 1997 to August 2014. In the VAR models, speculative bond spreads and consumer confidence index are used as endogenous variables. The results reveal that sentiment co-varies with the speculative bond yield spreads and has a negative effect on them. The previous period spread level is statistically significant for the determination of current period sentiment, as well as the fourth lag of the sentiment level is statistically significant for the determination of current period spread level. The findings of this paper indicate the importance of considering the effect of investor sentiment when investing in below investment grade, risky bonds.

Keywords: investor sentiment, speculative bonds, bond spreads, VAR analysis

Introduction

Bonds, as investments can provide a means of preserving capital and earning a predictable return. Like any other financial asset, the value of a bond is simply the present value of its cash flows which in this case are the coupon payments. The rate when discounting the coupon payments to the present value is called the “yield”. In traditional term structure models, yields are determined mainly by three factors: interest rate, the risk of default, and the expected loss in the event of default (Liu, Shi, Wang and Wu, 2009). So premiums are the reason why there are different debt securities with different market rates. Since the yields of bonds differ across different risk groups; there has been an extensive development of rating based models for the empirical modelling of corporate bond prices (Elton, Gruber, Agrawal, and Mann, 2004). But most of these models are not sufficient to fully explain the yields of corporate bonds. In the literature the components of the spread between corporate bond rates and government bond rates are mainly focused in 3 groups. These are expected default loss, tax premium and risk premiums (Fons, 1994; Delianedis and Geske, 2001; Huang and Huang, 2003; Syros, 2013). However all the variables that should in theory determine spread changes, have rather limited explanatory power (Elton, Gruber, Agrawal, and Mann, 2001; Collin-Dufresne, Goldstein, and Martin, 2001). Rather than attempting

to put forward the determinants of the bond yields, this paper aims to explore the systematic effect of investor sentiment on the speculative bond yield spreads.

Traditional finance argues that rational investors lead the financial markets to equilibrium via arbitrage, so the security prices would reflect risk-based fundamentals. However considerable amount of study shows that security price movements often fall beyond the reasonable explanations based on rational investors and risk-based pricing models. This has led to a rise in attention to behavioral aspects of financial markets (Nayak, 2010). Only since the mid-1980's has there been a serious attempt to explore the possibility that financial markets are not always as orderly as might be suggested by the efficient market hypothesis (Brown and Cliff, 2004). In his famous study Black (1986) posits that some investors trade on a "noisy" signal that is unrelated to fundamentals and that would lead asset prices to deviate from their intrinsic values. After that, De Long and others (1990) investigated the irrational behavior of individual investors; and Lee and others (1991) found that individual investor sentiment and market prices are related. Brown and Cliff (2004) explained sentiment as the representation of the expectations of market participants relative to a norm. So sentiment denotes the level of irrational beliefs in projections of future cash flows and risks underlying any security. When investors fear that the economy will worsen, they become afraid that the market will fall and they will lose money. As a result, they sell their assets, which may cause the market to fall. People of the 21st century are bombarded with financial news. With a continuous and uninterrupted source of information, called internet; along with the broadcasts from the mass media, these news are directing unsophisticated investors to a certain direction according to their perceptions. Whether investor sentiment has any aspects on asset returns has long been debated. Several recent papers provided information on the systematic mispricing in the financial markets (Shiller, 1981; Daniel and Titman, 1997; Neal and Wheatley, 1998; Shleifer, 2000; Wang 2006) and evidence of mispricing affecting the asset prices (Otto, 1999; Brown and Cliff, 2004; Baker and Wurgler, 2006; Chung, Hung, Yeh, 2012). The mispricing gets corrected as the economic fundamentals are revealed and sentiment wanes. Therefore the pricing correction results in a negative relationship between investor sentiment and future returns. As a consequence, investor sentiment exhibits predictive power for returns (Chung, Hung and Yeh, 2012).

The effect of investor sentiment in equity markets is well documented. But it is still little known about whether investor sentiment is pervasive across segments of financial markets. There are studies reporting evidence about the mutual interaction of bond and stock markets (Fama and French, 1993; Campbell and Ammer, 1993; Kwan, 1996; Norden and Weber, 2009). Along with these studies others analyzed the role of investor sentiment in the spot and futures markets and the volatility spillovers between them (Verma, 2012; Corredor, Ferrer and Santamaria, 2014). To the best of our knowledge the role of sentiment in pricing of corporate bonds still remains unexplored except the studies of Baker and Wurgler (2012) and Laborda and Olmo (2014). Although past literature revealed that lower rated bonds demonstrate larger mispricing, it doesn't appear to be any recent comprehensive research presenting the role of sentiment on speculative bond yield spreads. This paper addresses that gap by examining speculative yield spreads before and after recent global financial crisis and intends to give insight to the behavioral issues in corporate

bond markets. Nayak (2010) is a similar study, but we differentiate our study by using data during the global financial crisis as well as examining a specific type of corporate bonds. The remainder of this paper is organized as follows. Section 2 addresses the existing literature on the determinants of the yield spreads. Section 3 denotes the data, methodology, and the results of the analysis. Lastly section 4 makes concluding remarks.

Literature Review

The framework for identifying the determinants of credit spread changes depends on the structural models of default. These models generate predictions for what the theoretical determinants of credit spread changes should be and offer a prediction for whether changes in variables like spot rate, slope of the yield curve, leverage volatility, probability of a jump or overall business climate should be positively or negatively correlated with changes in credit spreads (Collin-Dufresne, Goldstein and Martin, 2001).

In one of the early studies about the determinants of bond yield spreads, Sloane (1963) studied varying degrees of risk on equal maturity bonds and tried to explain the different yields from three different approaches in regards to the explanation of the interest rate structure and found it useful to employ the expectation approach with the emphasis upon the subject evaluation of risk under the conditions of uncertainty. His analysis covered the period of 8 months in 1957-1958. His results showed that the yield is widened more with low quality bonds and changes in outstanding volume of bonds, short term interest rates and economic conditions have an impact on the spread. Fons (1994) offered a bond pricing model by demonstrating the relationship between credit spreads, estimated default likelihood, and recovery rate. His study showed that lower rated issuers tend to have a wider credit spreads. Although his model had a lower regression fit, he explained the discrepancies by the assumption he made in his model about the risk neutrality of the investors. Das and Tufano (1996) also suggested a model for pricing credit sensitive debt. By employing stochastic spreads and recovery rates, rather than the fixed ones, the model provided greater variability in spreads in line with that observed in practice. The suggested model allowed spreads to vary even when the firm's rating class did not change.

In their ground breaking study Elton, Gruber, Agrawal and Mann (2001) examined the effects of risk premiums over spreads for the first time and showed that risk premiums explain a substantial portion of the difference. They also showed that risk on corporate bonds is systemic rather than diversifiable and risk premiums increase for lower rated debt. Collin-Dufresne, Goldstein and Martin (2001) investigated the determinants of credit spread changes and showed that spread changes are driven by local supply/demand shocks. By employing principal components analysis, they showed that spread is mostly driven by a single common factor but they weren't able to find any set of variables that can explain that factor. Longstaff, Mithal and Neis (2005) used the information in credit default swaps to provide evidence about the size of the default and non-default components in corporate spreads. Their results indicated that the default risk accounts for approximately 70% of the total spread for BBB and BB rated bonds. They also found out that the non-default component of spreads is strongly related to market wide or macroeconomic components. Giesecke, Longstaff, Schaefer and Strebulaev (2011) studied corporate bond default rates from 1866 to 2008 and reported that credit spreads are roughly twice as large as default

losses. They also examined the relation between changes in credit spreads and changes in default rates and the financial and macroeconomic variables. They found no evidence of a relation between macroeconomic measures and credit spreads. The one important outcome was the negative sign coefficient for the stock return and positive sign coefficient for changes in volatility. These are indicating that the spread widens in periods of increased stock market uncertainty.

Besides these studies modelling or identifying the determinants of the yield spreads, there is a limited amount of research investigating the effect of investor sentiment on the corporate bond spreads. One of the first studies on the issue is Nayak's (2010). In this study, impact of investor sentiment on corporate bond yield spreads is examined over an 11 year period from 1994 through 2004 for 818 publicly listed companies. Nayak (2010) used the composite investor sentiment index for regression analysis. He formed eight characteristic based zero-investment portfolios and six of the eight zero-investment portfolios' excess spreads are found to be higher when previous sentiment is high than when it is low. So yield spreads bear strong correlations with the sentiment variable. Then for each portfolio, he conducted full-period time-series regressions of portfolio yield spreads on beginning-of-period sentiment, term factor and default factor. The results showed that the coefficient of sentiment in six portfolios is significant. His analysis also showed that lower rated bonds demonstrate larger mispricing than higher rated bonds. Spyrou (2013) investigated the yield spread determinants for a sample of European markets from 2000 to 2011. Along with the economic fundamentals, investor sentiment, supplied by the European Commission is also employed in the regression analysis. The findings of the VAR analysis showed that investor sentiment is a statistically significant determinant for the changes of yield spreads, especially during the crisis period 2007-2011. With a negative sign in monthly changes in investor sentiment it is expected that contemporaneous negative sentiment changes would lead to contemporaneous positive yield spread changes. Laborda and Olmo (2013) studied the statistical significance of the market sentiment variable to predict the risk premium on U.S. sovereign bonds. Researches applied a regression analysis and found out that market sentiment has a negative effect on the excess returns, suggesting that a positive investor sentiment momentum implies a drop in bond risk premia. Along with these studies, Baker and Wurgler (2012) filled the gap on the effect of investor sentiment on government bond pricing. They found out that bonds are more closely linked to some stocks than others because they involve cash flows, risk-based required returns, and investor sentiment in common. They also argued that investor sentiment affected bonds and bond-like stocks less intensively than it did speculative stocks.

In light of this literature, we test the following hypotheses:

1-Investor sentiment and speculative bond spreads are interrelated. During an expanding economy investors are seeking for risk and don't require much extra return to induce them to buy very risky securities; but in crisis times they become risk averse so the spreads expand.

2- Investor sentiment impacts speculative bond spreads. If the sentiment is low, subsequent spreads are high. Therefore sentiment leads the bond yield spreads.

The expectations are straightforward. Speculative bonds are more sensitive to sentiment. They have larger mispricing and stronger trends in yield spreads conditional on sentiment. Therefore, during high sentiment periods, investors are optimistic and they demand speculative high-yield bonds causing a decrease in their spreads. Alternatively, during low sentiment periods, pessimistic investors prefer safer assets or demand more return for the risky assets so the yields increase as they adjust their expectations.

Data, Methodology, and Empirical Results

The data employed in this study consist of monthly estimates of the bond yields and the sentiment indicator. Speculative bond yield spreads data is obtained from Federal Reserve Bank of St. Louis Economic Research database (FRED). For time series of bond yields, FRED uses Bank of America and Merrill Lynch Option-Adjusted Spreads. This data represents an index value, which tracks the performance of US dollar denominated below investment grade rated (those rated BB or below), also referred as speculative corporate debt publically issued in the US domestic market. These spreads are calculated between an index of bonds with greater than 1 year of remaining maturity, a fixed coupon schedule, a minimum amount outstanding of \$100 million and a spot Treasury curve. As an indicator of investor sentiment, University of Michigan Consumer Sentiment Index is employed in the analysis. This index is published monthly by the University of Michigan and Thomson Reuters and it is normalized to have a value of 100. Prior to empirical analysis, the correlation coefficient between these two variables is presented in Table 1 to display the strength of linear association between them.

Table 1. Correlation Coefficient between Spread and Sentiment

<i>Correlation</i>	
t-Statistic	
(Probability)	
SPREAD	SENTIMENT
	-0.50755
	-8.536336
	0.000000

The large negative correlation reveals the opposite relation between spreads and sentiment. When there is high sentiment, optimistic market participants become risk seekers and demand risky assets such as speculative bonds. This is causing the price to move up and therefore returns to go down. But correlation analysis does not necessarily imply the dependent relationships in between these two variables. Therefore to empirically investigate the connection and hypothesis described in the previous section, as well as to get a more tangible sense of the relations in-between investor sentiment and speculative bond yield spreads, a vector autoregressive (VAR) approach is employed where sentiment and spreads are treated as variables endogenous to the system and lags are allowed. The following equations (1) and (2) are estimated simultaneously as a VAR system in their levels. The variables, speculative bond yield spreads and consumer sentiment are expressed in natural logarithm.

$$LSPR = C(1)*LSPR(-1) + C(2)*LSPR(-2) + C(3)*LSPR(-3) + C(4)*LSPR(-4) + C(5)*LSENT(-1) + C(6)*LSENT(-2) + C(7)*LSENT(-3) + C(8)*LSENT(-4) + C(9) \quad (1)$$

$$LSENT = C(11)*LSPR(-1) + C(12)*LSPR(-2) + C(13)*LSPR(-3) + C(14)*LSPR(-4) + C(15)*LSENT(-1) + C(16)*LSENT(-2) + C(17)*LSENT(-3) + C(18)*LSENT(-4) + C(19) \quad (2)$$

For the analysis, monthly data are collected over the 17 year period from January 1997 to August 2014. After deleting the major outliers there are 192 observations. The length of the period is determined by the availability of the two time series data. The models are estimated in Eviews-8 software program for the full sample period (1997-2014) and, in order to capture the impact of investor sentiment on the spreads during and after the global financial crisis times, they are re-estimated for a sub-period (2007:12-2014:08). Figure 1 presents the breakpoints for both of the series.

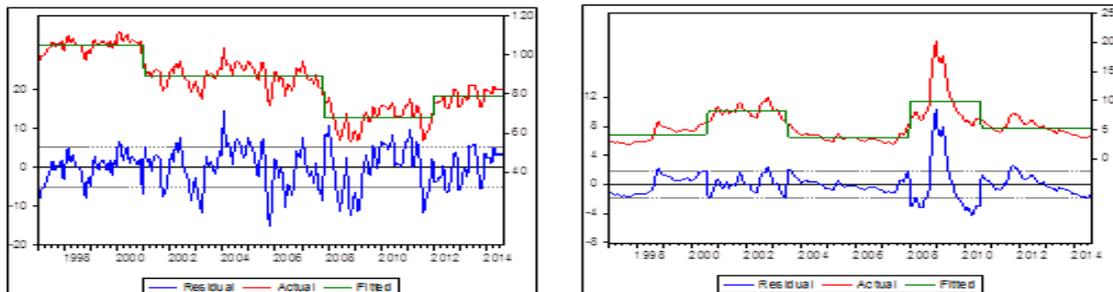


Figure 1: Breakpoints in Sentiment and Spreads

The choice of the sub-period is based on Bai and Perron (1998) breakpoint test. The correct lag length for the system is chosen for sample period based both on the Akaike and Schwarz Information Criteria. The Augmented Dickey-Fuller (ADF) unit root test of the data series reveals that they are stationary in levels. The stationary property of the estimated VAR equation is reflected by the inverse roots of the polynomial lying inside the unit circle which is the case in this system. The LM Autocorrelation Test is applied to search for residual serial correlation up to twelve orders and the null hypothesis of no serial correlation of order twelve is failed to be rejected. The results are the same with White Heteroskedasticity Test.

Table 2 and Table 3 present the VAR estimations of the entire sample and the sub period, respectively. The results in Table 2 indicate that, when both spread and local sentiment are treated as endogenous variables and lags are allowed; the previous period spread level is negative and statistically significant at the 5% level for the determination of current period sentiment level. Additionally fourth lag of the sentiment level is statistically significant at 5% level and has a negative sign. These findings are consistent with the expectations. Both of the variables are mainly influenced from their own lagged values for up to two periods. Similar findings are obtained from the sub-period analysis during 2007-2014, as well. Current spread is mainly determined by lagged spread; and sentiment is statistically significant for the determination of the yield spread during the 2007-2011 period. An interesting finding about the analysis reveals that sentiment is also affected by spread, pointing out a feedback relationship between these two variables. Granger Test failed to reject the null hypothesis of “Spread does not Granger Cause Sentiment” at 10% level; but

rejected the causality from sentiment to spreads, indicating a weak bi-directional causal pattern between variables.

Table 2. VAR Estimations for the Period of 1997:01-2014:08

Included observations: 196; t-statistics in []		
	LSPR	LSENT
LSPR(-1)	1.306479 [17.4093]	-0.122039 [-2.63172]
LSPR(-2)	-0.438482 [-3.61915]	0.129345 [1.72769]
LSPR(-3)	0.160456 [1.34391]	-0.075612 [-1.02486]
LSPR(-4)	-0.059035 [-0.81865]	0.047361 [1.06286]
LSENT(-1)	0.007197 [0.05732]	0.787749 [10.1533]
LSENT(-2)	-0.007252 [-0.04597]	-0.067263 [-0.69003]
LSENT(-3)	-0.228927 [-1.44750]	-0.001878 [-0.01922]
LSENT(-4)	-0.278583 [2.30578]	0.088532 [1.18583]
C	-0.173628 [-0.46332]	0.932217 [4.02566]
Adj. R-squared	0.960209	0.905547
Sum sq. resids	1.041149	0.397551
S.E. equation	0.074817	0.046232
F-statistic	523.8412	208.7251
Log likelihood	235.1914	329.5416

Table 3. VAR Estimations for the Financial Crisis Period (2007:12-2014:08)

Included observations: 69; t-statistics in []		
	LSPR	LSENT
LSPR(-1)	0.926245 [7.58330]	-0.196229 [-2.10239]
LSPR(-2)	-0.144463 [-1.44976]	0.128449 [1.68688]
LSENT(-1)	0.146467 [0.86067]	0.595183 [4.57683]
LSENT(-2)	-0.271703 [-1.81440]	-0.073485 [-0.64218]
C	1.265054 [2.26766]	2.088418 [4.89896]
Adj. R-squared	0.943183	0.680781
Sum sq. resids	0.243307	0.142076
S.E. equation	0.062145	0.047489
F-statistic	226.7648	30.00404
Log likelihood	96.93327	115.493

While the estimated coefficients may not be revealing of the magnitude of the variables' dynamic interactions, it would be useful to make inferences based on the structural impulse

response analysis. Figure 2 presents the structural impulse response functions. The functions in all sample show that speculative bond spreads react negatively to structural innovations in sentiment levels. Following a one-standard deviation shock in the sentiment, spreads drops in the fourth month and maintains its level up to sixth month. Again in response to spread shocks, sentiment declined in the second month and its decline remained persistent over the plotted horizons. The findings of the sub-period are no different than the findings for the entire sample. For innovations, response of spread to sentiment goes up in the first month followed by a decline in the second and last for the whole ten months.

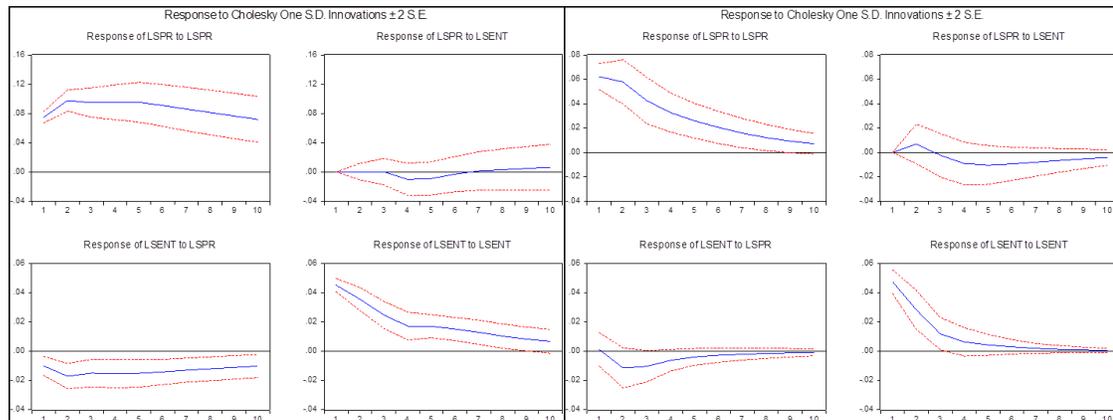


Figure 2: Impulse-Response Functions of One Standard Deviation Innovations

The findings of the paper seem to be in line with Nayak (2010), Laborda and Olmo (2013) and Spyrou (2013). In his study Nayak (2010) found similar patterns in stock markets and posits that in pessimistic periods bonds become underpriced (with high yields) and overpriced (with low yields) in optimistic times. Spyrou (2013) revealed that third lagged sentiment is a significant variable for the determination of spread and has a negative effect in European Markets. Laborda and Olmo (2013) ascertained that market sentiment has a negative effect on the excess returns and those excess returns are more important for periods of high sentiment.

Conclusions

Empirical studies in behavioral finance assert that investors may form stochastic beliefs, with either excessive optimism or excessive pessimism, causing asset prices to deviate from their intrinsic values. These studies suggest that it is natural to expect that investor sentiment may well have an impact on the financial markets. The systematic effect of investor sentiment has been very well investigated especially in stock markets. Nevertheless in the complexity of the today's world and sophistication of the financial markets, attention has to be shifted towards bonds and derivatives markets. There are two studies showing the role of sentiment in pricing of corporate bonds (Nayak, 2010; Laborda and Olmo, 2013) however it doesn't appear to be any recent comprehensive research presenting the role of sentiment on speculative bond yield spreads. Using 196 monthly observations obtained from FRED database, between January 1997 and August 2014, this study aims to answer these questions by employing a Correlation and VAR Analysis. Correlation analysis points out an increase in sentiment would narrow the spreads down. The result is rather perceptive. High investor sentiment periods are associated with

lowering investor risk aversion and a higher desire to borrow against the future. Investors over-demand the speculative bonds, overlook the uncertainty and eventually drive the value up. Conversely during the low sentiment times they become highly risk averse and simply seek for more compensation for the risk they are bearing above actuarially neutral yields. VAR analysis showed that investor sentiment (4th lagged) is a statistically significant determinant and it has a negative effect on yield spreads. However during and after the global crisis, time lag has shortened to two months revealing the quicker response of the financial market participants. One of the reasons for this difference in timing would be the exposure to more financial news about the scale and the direction of the crisis in the mass media. An interesting finding about the study is the effect of spread on investor sentiment as well. Previous two month's spreads seem to have effect on the sentiment levels indicating a bi-directional relation between sentiment and spreads. This implies that rising spread would be the signal for rising interest rates and shrinking economy, which would affect investors' sense of the future, causing them to lower their expectations and a decrease in the sentiment level. All in all investor sentiment reflects market expectations on future interest rate dynamics and monetary policies as well. This might also be a useful indicator since sentiment has an impact on most of the asset prices. Due to this feedback effect that is seen in the VAR analysis, a causality relationship has been investigated. A weak causality has been found from spreads to investor sentiment, backing up the opinion on the interest rate movements from the view of the investors.

The findings reveal that investor sentiment effect cannot be restricted with stock markets. Furthermore there is a similarity between the investor sentiment effect in stock market and bond market. In both of the markets risk levels of securities seem to influence the level of exposure to investor sentiment. In the stock market, sentiment plays an important role in the pricing of shares of small firms. Shares of small firms tend to be more risky than big firms' shares. Likewise, low-quality bonds (assumed more risky) seem to be impacted by investor sentiment. Finally, since varying spreads may be leading indicators for future interest rates, an indirect relationship between spreads and future stock returns can be proposed. Investor sentiment appears to have a potential for constructing this channel between spreads and expected stock returns. Future studies may investigate the relationship between investor sentiment and bond yield spreads for other national bond markets.

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Social Security in the Urban Informal Manufacturing Sector: An Empirical Study in Assam, India

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Abstract

The importance of informal sector as a source of income and employment generation for the poor in the developing countries is an accepted fact. The informal sector is growing rapidly in the developing world and the countries in transition. In Indian context also the importance of studying informal sector is understood from its major contribution towards employment as well as GDP. In Assam also Urban Informal Manufacturing Sector is growing and the number of people depending on it is also increasing. However, these are the workers who are outside the social safety net. The expansion of informal sector has adversely affected employment and income security for the large majority of the workforce, along with a marked reduction in the scale of social welfare/security programmes. Providing adequate social safety nets and welfare measures to the growing segment of unorganised sector workers has become an important challenge for the globalised India. With this background it is essential to study the level of social protection enjoyed by the informal sector workers operating in the state. The paper attempts to quantify the level of insecurities among the urban informal workers of the state through the construction of the Composite Labour Security Index (CLSI).

Keywords: social security, urban informal manufacturing sector, composite labour security index

Introduction

There is little debate regarding the importance of informal sector as a source of income and employment generation for the poor in the developing countries which is well reflected in the report of labour conference. The report states that

...‘the bulk of new employment in recent years, particularly in developing and transition countries, has been in the informal economy; as most of the people cannot find jobs or are unable to start a business in the formal economy’ (ILO 2002).

The informal sector is growing rapidly in recent years in the developing world and the countries in transition (Portes et.al 1989). Once, the existence of the informal sector was considered as a transitory phase in the process of development of these countries. But later it is found that the sector not only existed but also expanded as the development process takes momentum and now the sector is considered as a solution to the problem of enormous

surplus of labour in the developing countries (Mukhopadhyay 1998). The interest in informal sector activities was spurred by four problem areas – employment, economic development, urban growth and basic needs (UNCHS 2006).

In Indian context also the importance of studying informal sector is understood from its major contribution towards employment as well as GDP (Sethuraman 1981, Fukuchi 1998, Lalitha 2002, OECD 2002, Muller 2003). Almost 93 percent of the working population falls in the informal sector which contributes nearly half of the total GDP, for which the informal sector is termed as the ‘Backbone’ and the ‘Engine of Growth’ of India (NCEUS 2008b, Sulzer 2004, Mukherjee 2009). The informal sector in Indian context as defined by NCEUS consists of all unincorporated private enterprises owned by individuals or households engaged in the sale and production of goods and services on a proprietary or partnership basis and with less than ten total workers and informal employment is defined as unorganised workers consists of those working in the unorganised sector or households. (NCEUS 2008a). Amongst informal sector, both rural and urban informal sectors are in existence but urban informal sector is gaining momentum due to migration. The social security in the urban informal manufacturing sector is the focus of this paper.

In Assam also Urban Informal Manufacturing Sector (UIMS) is growing and correspondingly, the number of people depending on it is also showing an increasing trend. From the angle of productivity these workers are found to have major contribution to the value added of the UIMS. However, these are the workers who are outside the social safety net and earn too little to accommodate the minimum living standard in an urban society. Literature also confirms that, though the social security system in India is very old, the security provisions for the informal sector workers is very poor; both in terms of coverage and implementation. The expansion of informal sector, in recent times, has adversely affected employment and income security for the large majority of the workforce, along with a marked reduction in the scale of social welfare/security programmes (Ramesh 2007). Providing adequate social safety nets and welfare measures to the growing segment of unorganised sector workers has become an important challenge for the globalised India. Accordingly, during the past decades, Government of India (both at the centre and state levels) have been striving towards designing and implementing more effective measures to strengthen and expand the social protection to the unorganised sector workers. With this background it is essential to study the level of social protection enjoyed by the informal sector workers operating in the state. The present paper attempts to quantify the level of insecurities among the urban informal workers of the state through the construction of the Composite Labour Security Index (CLSI).

The Concept of Social Security: The concept of social security is not static and has evolved over a period of time (Garcia and Gruat 2003). International Social Security Association (ISSA) defined social security “as any programme of social protection established by legislation, or any other mandatory arrangement, that provides individuals with a degree of income security when faced with the contingencies of old age, survivorship, incapacity, disability, unemployment or rearing children”. Social security can include social insurance programmes, social assistance programmes, universal programmes, mutual benefit schemes, national provident funds and other arrangements

including market oriented approaches that in accordance with national law or practice, form part of a country's social security system (ISSA n.d). Thus the institutional definition of social security as given by ILO and ISSA is defined by access to basic needs such as infrastructure pertaining to health, education, dwelling, information and social protection as well as work related security. However the applicability of this institutional definition of social security is found its relevancy for the developed countries where it aims at providing relief to the workers from specific contingencies and thus remained confined to the organised sectors workers alone (Prabhu 2001). Presence of a huge informal sector, incomplete structural transformation and high levels of poverty in the developing countries, demands a wider concept for the social security. Dreze and Sen (1989) argued that the provision of social security in developing countries needs to be viewed from a broader perspective and "essentially as an objective to be pursued through public means rather than as a narrowly defined set of particular strategies". In line with it Ahmad (1991), Burgess and Stren (1991), and Guhan (1992) emphasized persistently low incomes or poverty as an important objective of social security. In India the term social security is used in its broadest sense, which may consist of all types of measures, preventive, promotional⁵ and protective as the case may be. The term encompasses social insurance, social assistance, social protection, social safety net, micro insurance or insurance for the poor and other steps involved (Sulzer 2004, Das 2012).

Composite Labour Security Index: CLSI attempts to measure quantitatively the extent of insecurities among the informal sector workers. This index is used by Standing (1999, 2004), Sen and Dasgupta (2009) to measure the labour security among the organised sector workers. Here, the technique is used to quantify the social insecurities among the informal workers of the UIMS of the state.

Methodology and data source

The CLSI is constructed for a group of informal workers engaged in industries such as furniture, food and beverages, steel fabrication, textiles and wearing apparels. As per NSSO (2007) report these industry group covers nearly 85 percent of the total informal manufacturing enterprises in Assam and thus assumed to have high concentration of workers in these industries. Besides these industries, while carrying out the field survey mushrooming growth of garages, cycle repairing shops, and electrical equipment manufacturing shops were observed and are included in the study as the miscellaneous enterprise category. A total of 160 informal workers are interviewed and the city of Guwahati is taken as the area of sampling, which is the most urbanised in Assam.

CLSI is calculated as the arithmetic mean of 8 different security indices, by assigning equal weights to each of them. The component security indices are income security, financial security, voice representation security, family support security, work security, job security, education and skill reproduction security and employment security. Each of the security indices are calculated in the same way as the aggregate CLSI is calculated.

Income security: The welfare of a worker is affected heavily by the income security, which not only implies the adequacy but also the regularity of income. It ensures the current

economic status of a labour. The following aspects are considered important while assessing the income security.

The minimum wage: Whether the worker is getting wages at least equal to the institutionally fixed minimum wage in the country. A worker who earns less than the minimum wage lives in a situation of much stress and strain and deprived of the basic social securities.

Periodicity of wage payment: Receipt of wages/salary at short duration (daily/weekly) increases the income security of an informal worker rather than to wait for a longer duration (a month or so), as these employments do not follow any strict employer employee relation and thus the workers can easily be exploited.

Regularity of wage: Regularity in wage affects income security. Irregularity of wages; whether paid daily, weekly or monthly increases income insecurities, whereas regular receipt of wages increase the same.

Wage revision: Wage revision in the recent past can also be used as an indicator of the income security. Wage revisions are considered helpful in maintaining real wages of the workers over time. It also indicates the presence of the collective voice representation rights of the workers.

Employment security: According to the most commonly used definition, “Employment security means that workers have protection against arbitrary and short notice dismissal from employment, as well as having long-term contracts of employment and having employment relations that avoid casualisation” (Dasgupta 2001). The concept is partly subjective as it depends on the worker’s perception regarding fear of the dismissal from the job, chances of having an alternative employment etc. The following aspects are taken into consideration while measuring employment security

Whether permanent worker: A permanent worker has lesser chance of dismissal as compared to the casual labourers.

Any other economic engagement: Workers having other economic engagement are less prone to employment insecurities.

Work experience: An experienced worker has lesser chance of being dismissed for the job as compared to an inexperienced one.

Chance of alternative employment: Chance of alternative employment also reduces employment insecurity for a worker.

Financial security: Financial security can be used as safety- nets at times of distress and old age and is measured in terms of

Savings: Saving allows families to plan for the future, prepare for the retirement and face the unexpected financial setbacks such as job loss. Saving in the form of purchase of assets provide financial stability to the families.

Possession of bank account: Maintaining a bank account is seen as a form of financial security in the event of financial crisis.

Voice representation security: It refers to workers ability to express their protest as a collective voice through trade unions. The following aspects are taken into consideration for measuring voice representation security

Trade union membership: Having trade union membership, whether inside or outside of the unit, increases the chances of the members to place their say in a way that owners will take note of.

Presence of trade union in the unit: Presence of a trade union inside the unit increases to a greater extent the job security as the union is able to voice its concern regarding matters such as better pay, health and safety rules and regulations etc.

Necessity of a labour union: The necessity a labour union reflects the insecurities and exploitation faced by the labourers in the unit.

Family support security: Family plays a big role in protecting its members from the uncertainties; especially when they are a part of the informal sector. Contributions of the family members in the earning process substantially increase the social security. The following dimensions are considered important to measure the family support security

Whether wife is working; whether children are working; any other earning member

Work security: Work security denotes work related security in the organizations that promote workers well being. It includes protection against occupational hazards, diseases, injuries, work related accidents and also protection against work beyond the normal working hours. The following factors are considered important for measuring work security

Length of the working hours: Workers working regularly for longer hours, especially in unhealthy conditions, significantly increases the chances of being attacked by various kinds of heart diseases, stress, respiratory problems etc. which severely reduces work security.

Bonus for the extra work: If workers are made to work for longer hours, then they should be well remunerated. Absence of proper remuneration reduces the work security of the workers.

Medical allowances: Provision of allowances for health related problems have positive effects on security status of the workers.

Job security: Job security indicates the level of an individual's mobility within the job. It indicates the opportunity for a worker to pursue a 'career' (Standing 2004). Whereas employment security refers to the opportunity of a worker to continue in the same. It is calculated by considering

Relationship of the employee with the employer: A healthy employer employee relationship is the prerequisite for job security

Chances of promotion in the current job: Prospects of promotion enhances the job security of the workers.

Education and skill reproduction security: This is a situation where there is a wide range of opportunities for training, apprenticeship and education to acquire and refine knowledge and competencies. It enables people to develop their capacities and acquire the qualifications needed to exercise socially and economically valuable occupation. The following information is used to evaluate it.

Educational qualification; Special training: Whether the parent firm provides special training.

Each of the security indices are calculated in the same way as the aggregate CLSI is calculated.

$CLSI = 1/8 \sum I_i$, where I_i represents the 8 component security indices.

An attempt is made to look into the security status of the female respondents. The variables used along with the description are given in table .3. The questions are answerable in yes/ No format and are used to form a CLSI only for the female workers surveyed. The CLSI range is defined as: 0.00-0.25: Worst; 0.25-0.50; Critical; 0.50-0.75; Just above the average; 0.75-1.00; very high

Results from the field survey

General Profile: An analysis of the sex composition of the sample respondents shows that percentage of female workers (25%) involved in different types of informal manufacturing activities are much lower than the male workers (75%). Heavy concentrations of female workers are found in textile industry where almost 70 percent of the workers engaged are female, followed by the wearing apparel industry (22.5%) and food industry (7.5%). In terms of the age composition small percentages of workers fall in the age group of below 18 (1.8%) and above 60 (2.5%). Almost 73 percent of the workers fall in the age group 25 to 45 years. The aged who were found to be working above 60 years are basically because of the poor financial support from the family members. The main reasons for the female working in the informal sector were found to be the death of the prime breadwinner of the family and the insufficient or inadequate income of the family as a whole. The workers are found to have maintained sound literacy level as 78 percent of the workers are literate; of which 56 percent have studied up to primary level, 20 percent up to 10th standard and 2 percent have studied up to 12th standard. It is encouraging to note that a very high percentage (68%) of the respondents reported to follow the small family norm of having 1

to 2 children. An analysis of the living condition of the workers reveals that almost 72 percent of the workers live in the rented houses, 95 percent resides in pucca houses. 92 percent of the workers live in a 2 room house. Electricity connection was found to be available in 97 percent of the houses.

Income security: The fixation of the minimum wages is one of the fundamental premises of decent work and in India, the Minimum Wages Act, 1948 fixes and enforce minimum wages. The act aims to prevent sweating or exploitation of labour, especially those in the unorganised sector, who are vulnerable to such risks in view of poor skill and low bargaining power. The national floor level of minimum wage has been fixed at Rs. 100 per day w.e.f. November 2009. A very high percentage (81.2%) of the workers reported to have received wages equal to or above the minimum wages. In 77 percent receive wages on daily/ weekly basis, which is an indication of income security. 94 percent of the workers receive wages regularly. However, only 3 percent of the workers enjoy wage revision. The income security index calculated by incorporating all these dimensions was worked out to be 0.71.

Employment security: 67 percent of the sample workers were found to be permanent in nature. Permanency in employment increases the employment security as a very small proportion of workers (29%) were indulged in other economic activities. 61 percent of the workers are experienced workers (having work experience of more than 5 years). Employment security index calculated from these dimensions of security was worked out to be 0.45.

Job security: An analysis of the various aspects of the job security reveals that a very high proportion (90%) of the sampled workers maintained good relation with the supervisor. A very small proportion of the workers (16%) had the chances of promotion within the same job. The job security index scored at 0.53.

Education and skill reproduction security: The index calculated under this worked out as 0.35, which is very low. The component indices are formed by considering the level and access to education and skill. Primary school level education is considered as the minimum educational qualification for the construction of the security index. Almost 78 percent of the workers had studied either up to primary level or more; of which 6 percent were found to be diploma or degree holder and 18 percent were found to complete their higher secondary level exams. Majority of the workers (86%) were found to be working without undergoing any special training. The master craftsman or the master trainer was reported as the source of training for those workers. Only in 4 percent of the units the workers were provided with special training like attending workshops etc.

Work security: The work security index was found to be as low as 0.32. If a worker remain absent from his work for a few days, he is either driven away or wages for those days were cut, which is really pathetic; especially when a worker gets ill. Further the provision of any kind of medical allowances among the sample respondents was also found to be absent. 66 percent of the workers were reported to work for more than 8 hours a day. In 65 percent of the cases the extra work performed by them is well paid in the form of bonus wages.

Voice Representation security: Voice representation security is about having bargaining power of the workers in various spheres of the work such as wage negotiation, negotiation over various benefits and working conditions etc. The voice representation security among the sample respondents was found to be very poor (0.02). None of the workers interviewed have union membership; but a majority (63%) of them feel the necessity to have such a union in the unit.

Financial security: In terms of the financial security the informal workers were found to be well secured. A very high percentages of workers reported to have bank account (83%) and maintain saving (72%) for the period of contingency. The calculated security index is 0.78.

Family support security: Family and family networks have always been an important source of social security. This is particularly important for that segment of the workers whose income is either irregular or not sufficient enough to provide the needs and wants of the family members. In 23 percent of the cases the wives of the male workers were found to be economically engaged and in 16 percent of the cases the children of the workers were found to have supported the family incomes. 45 percent of the respondents reported to have been enjoying the income the other family members. When asked the type of the work performed by the family members it was found that most of them were also involved in the informal sector itself. The calculated family support security index was 0.28. Incorporating all the above indices to form a composite Labour Security Index as described earlier results in an index of 0.43, which implies the workers in the urban informal sector of the state are in a critical situation. The informal sector workers need urgent attention in view of the widespread insecurities.

Table 1: CLSI and its Component Indices.

Security Indices		Values	
Income Security	Income greater than `100	0.71	0.81
	Daily/ Weekly Income		0.77
	Regular Salary		0.94
	Wage Revision		0.33
Employment Security	Permanent worker	0.45	0.67
	Other economic engagement		0.29
	Work experience of more than 5 years		0.61
	Chances of alternative employment		0.67
Job Security	Good relation with the supervisor	0.53	0.9
	Chances of promotion		0.16
Education and Skill Reproduction Security	Educational qualification	0.35	0.78
	Special training		0.24
	Accessibility to special training		0.04
Work Security	Length of working hours	0.32	0.33
	Bonus for extra work		0.65
	Medical allowances		0
Voice Representation security	Union membership	0.02	0
	Presence of the labour union in the unit		0.056
	Necessity for a union in the unit		0.631
Financial Security	Bank Account	0.78	0.83
	Maintain saving		0.72

Family Support Security	Whether working wife	0.28	0.23
	Whether working children		0.16
	Any other working member in the family		0.45
CLSI		0.43	

Source: Author's calculation based on field survey

An attempt is made to look into the social security status of the female workers involved in the UIMS of the state and it is found that the security index for the female workers is marginally higher than the workers as a whole. A look into the component security indices shows that except the family support security all other security indices are higher for the female workers as compared to the total informal sector workforce (including both male and female). This is an indication to the fact that female workers do get involved in the informal sector activities as a last resort for earning the livelihood, in the absence of adequate financial support from the family.

Table 2: CLSI for Female Workers and its Component Indices

Security Indices		Values	
Income Security	Income greater than `100	0.743	0.925
	Daily/ Weekly Income		0.75
	Regular Salary		0.925
	Wage Revision		0.375
Employment Security	Permanent worker	0.531	0.55
	Other economic engagement		0.35
	Work experience of more than 5 years		0.45
	Chances of alternative employment		0.77
Job Security	Good relation with the supervisor	0.575	0.975
	Chances of promotion		0.175
Education and Skill Reproduction Security	Educational qualification	0.358	0.85
	Special training		0.1
	Accessibility to special training		0.125
Work Security	Length of working hours	0.38	0.425
	Bonus for extra work		0.725
	Medical allowances		0
Voice Representation security	Union membership	0.08	0
	Presence of the labour union in the unit		0.175
	Necessity of a labour union in the unit		0.425
Financial Security	Bank Account	0.862	0.9
	Maintain saving		0.825
Family Support Security	Whether working children	0.05	0.025
	Any other working member in the family		0.075
CLSI for the Female workers		0.44	

Source: Author's calculation based on field survey

Another index aiming at measuring the safety of the female workers of the UIMS is calculated by taking into account the following factors : Safety in the working place: Provision of crèche; Provision for child bearing women; Provision of toilet; Equal remuneration with the male counterpart; Domestic helper.

The calculated CLSI along with the values for their component indices are given below

Table 3: Safety Index for the Female Workers of the UIMS of Assam

Component	Values
Safe working place	0.82
Provision of crèche	0
Provision for the child bearing women	0
Provision of toilet	1
Equal remuneration with the male workers	1
Domestic helper	0.17
CLSI	0.5

Source: Author's calculation based on field survey

The index corresponding to the work place safeness is found to be very high 0.82. All the female workers are reported to get equal remuneration with their male coworkers. The toilet facility at the workplace, which is essential for females, is also found to be present in almost all the sampled enterprises. The corresponding security indices on these two dimensions are found to be 1 each. However, none of the informal units are found to provide any facilities for the child bearing women such as maternity leave or casual leave etc. whenever any such emergency arise the concerned female has to either continue anyway or has to leave the job. None of the units are found to have any provision of crèche, where the working mothers can keep their children while at work. The indices on these counts are found to be 0. These workers are also not able to keep domestic helper because of their high service cost. Only 17 percent of these workers can avail the help from a domestic helper. In the absence of such helper they have to manage both household work as well as the professional work. At the same time, nearly 48 percent of the females were found to carry drinking water from the public tube wells, which are located in a distance of nearly ½ to 1 k.m from their home. This put extra workload on them and severely affects their health. The women engaged in the informal sector are found to manage both the household task and the work outside; which can have harmful impact on their health. The aggregate CLSI work out as 0.5.

Conclusion

An analysis of the general profile of the workers shows that more males than females are engaged in the UIMS of the state. More than 70 per cent of the workers belong to the age of 25 to 45 years. The workers aged over 60 years are found to be working due to the lack of the financial support from the family. Insufficient family income and the death of the prime breadwinner of the family are the main reasons for the females to get involved in the UIMS. The social security status of the informal workers of the state is found to be in a critical state as indicated by the low CLSI (0.43). However the income and financial security of these workers are found to be well protected as indicated by the corresponding indices of 0.71 and 0.78 respectively. The CLSI for the female workers of the state UIMS works out to be 0.44, which is marginally higher than the total workers (including male and the female) and thus found to have marginally better protection. The safety index for the female workers is found to be 0.5. Female workers in the UIMS of Assam get equal remuneration with the male counterpart and they feel safe at the work place. However they suffer from the inadequate provisions in the stage of child bearing and rearing.

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How the Hiring of Stigmatized Populations can Lead to a CSR Backfire Effect with Consumers

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Abstract

Most empirical CSR research aims to demonstrate that CSR activities lead to positive consumer responses such as increase purchase intention and enhanced consumer loyalty. However, CSR research has been criticized as suffering from an attitude-behavior gap. Although consumers claim that they prefer CSR (corporate social responsibility) products, they sometimes avoid products associated with CSR partially because they believe that CSR has negative impact on product quality. Therefore, the purpose of this paper is to explore the backfire effect of CSR by examining consumer responses toward hiring stigmatized populations as producers of products. Using the law of contagion as a lens for viewing this CSR activity, it proposes that consumers may tend to avoid products produced by stigmatized populations because they believe that the producers can contaminate the products. This phenomenon can be viewed as negative producer contagion— consumers believe stigmatized populations will transfer their negative properties to the products during the production process and thus decrease the value of products.

Keywords: corporate social responsibility; consumer behavior; stigmatized population; contagion; disgust

The Role of Employability and Nepotism on Frontline Employees Service Sabotage

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Abstract

When service frontline employees indulge in negative behaviors channeled towards guest or other employees, there is a tendency to sabotage the organizations service (Harris and Ogbonna, 2002). Frontline employees endure elevated stress (Hershcovis & Barling, 2010) as a consequence of their role that spans across borders of customers, supervisors and managers. Sometimes, they resolve to sabotage the service as a means of coping (Kao et al, 2014) against the organization's management for practicing nepotism, giving the level of tribalism in Cameroon. The predicament is that sabotage behaviors are likely to deprive organizations from achieving their aims (Robinson and Greenberg, 1998; Harris and Ogbonna, 2009). But in the wake of ploughing back on their personal adaptability, social and human capital or career identity, they may be able to overcome sabotage urges. This piece of work, explore the effect of nepotism and employability on service sabotage behaviors by frontline employees. The study indulges the social exchange theory connoting employees repaying the organization for their practice. The result of the regression analysis from data collected from over 200 frontline employees, in three and four star hotels in Douala, Cameroon affirmed the hypothesis.

Keywords: nepotism; employability; service sabotage, Cameroon.

Introduction

In the wake of the global tourism development awareness, Cameroon is among those Central African nations still struggling with basic tourism industrial necessities (Kimbu A. & Ngoasong M., 2013) unlike Kenya. The author Kimbu A. N. (2010, 2011 and 2013) remarked on the essence for adequate management of the tourism industry by the government in Cameroon. Alongside other inferences, he recommended the amassment of social capital resource for appropriate tourism development in Cameroon. Also, in service encounters it is incumbent for managers to consider personal resources in hiring and maintaining workers (Karatepe O. M., 2015) especially in the tourism sector in Cameroon. This is so because the hospitality industry is in acute need for workers with rich human capital (Karatepe O. M. & Ngeche R. N., 2012) who are prone to demonstrate positive job attitudes.

Propelled by the issue stated above, this study captures the existing crisis of hospitality workers behavioral response to tourism/hospitality management mal-practice in Cameroon. Implying that, the lapse in management practices which is one of the major

challenges faced by tourism industry in Cameroon (Kimbu, 2011) could be a root cause in the adversary behavior of frontline hotel workers.

The studies that addresses the plight of the tourism industry in Sub-Saharan Africa, are not many (Maswera, T. et al., 2009; Dieke, P. U., 2013; Rogerson, C. M., 2015) and lesser on Cameroon, save a few (Kimbu, 2010; Kimbu, 2011; Kimbu A. & Ngoasong M., 2013; Karatepe O. M., 2015; Tichaawa, T. M., & Bob, U., 2015). Another further cited the essence and critical need for contemporary management practices in Cameroon (Karatepe, O. M., 2012) claiming that career satisfaction precedes service performance. However, illustrations on the depth of the need for better management practices are not sufficient and adequately demonstrated, since the actual outcome of management mal-practices has not been competently approached.

Apart from the fact that there is an absence of sufficient literature coverage on tourism management sectorial issues, there is not enough survey representing the plight or cases of hospitality frontline employees, in Cameroon (Tan, A. L., 2014). Somehow, frontline employees seem to have gone unnoticed, though they symbolized tourism service initially (Yavas, et al., 2010). More so, studies still need to analyze the wide set of frontline behavioral outcomes (Harris & Ogbonna, 2011) crucial in service encounter (Hsu, 2012; Payne & Webber, 2006). Basically, the literature gaps pertaining to Cameroon tourism leaves no foundation for tourism development to embark on. Thus, this study in pursuit to address this empirical emptiness condones to properly address the situation.

Owning to the entire above, we intended to look up a common canker-worm eating deep in the workplaces, service sabotage (Harris & Ogbonna, 2012). Hospitality organizations seemed more complex as far as service industries are concerned maybe, because of the nature of the service performance (Jane Tung, et al., 2013). Therefore, this material analyzed the simple effect of management mal-practices on service sabotage tendencies, to capture and address the problem aligning management in the tourism sector in Cameroon. By conceptualizing the ill of nepotism in hospitality industries, the present project uncovered the acute impact on frontline employees in the three and four star hotels in Douala, Cameroon. Furthermore, frontline employees behavior having not been adequately evaluated, received attention as purposed in this study. In regard of their social or human capital (McArdle, S. et al., 2007) the perception employability by frontline employees reduces their ability to engage in service sabotage behaviors

The subsequent findings draw important implications theoretically and practically for management especially in the Sub-Saharan Africa and Cameroon to pursue. Thereby, it addressed the concern of the need for empirical attention to the tourism sector in Cameroon (Karatepe O. M. & Ngeche R. N., 2012) and the Sub-Saharan Africa as a whole. Also, focus on frontline employees in Cameroon hotels received another account that could be referred by further researches.

Literature Review

Major sources have considered the essence of the procedure in delivering service (Zeithaml et al., 1990) as unique since it entails the whole service experience. In which case, the

offering of quality service is critical to organizational success (Avcı T. et al., 2004) and to be able to withstand the inevitable competitive pressure worldwide. Thus quality service delivery is on top of managers list and the least of their wishes is to endure anything whatsoever that may sabotage the service outcome. This makes service delivery employees a salient part of the whole process, in order to attain the delivery of quality service (Jane Tung et al., 2013). According to Chan and Wa (2012) quality service, to a greater extent, rest on the performance frontline employees.

Frontline Employees

However, the fact that frontline employee's role is pertinent for quality service delivery (Hsu, 2012) renders the service encounter process delicate. Their actions impede weighty impact on the guest service experience and service process (Payne & Webber, 2006). For this reason, service behaviors atone for service performance outcomes, thus it is expected that customer-interface-employees should demonstrate appropriate behaviors (Feng-Hsia Kao et al., 2014). In addition, the almost impossible and cumbersome task they undertake (Zimmermann et al., 2011), dealing face-a-face with diverse groups of people, ignites the curiosity to explore their performance further.

Frontline Employees and Service Sabotage

The close encounter between frontline employees and guest causes the frontline employees to become susceptible to stress kindling elements (Van Jaarsveld et al., 2010) like individual conflict and perceived unfair treatments (Kern & Grandey, 2009) from management. Evidence had detected that in the situation which frontline employees experience such adversary effect, they might renounce to contrary workplace behaviors (Herscovis & Barling, 2010). As a result, they might choose to leave or sabotage the service (Feng-Hsia Kao et al., 2014) especially when the contrary attitude is carried out towards the guests (Harris & Ogbonna, 2009). Statistically, most customer-interface-employees have acknowledged engagement in service sabotage one way or another and have confirmed that it occurred at least once a day (Harris & Ogbonna, 2002). The bone of contention is that service sabotage is detrimental to the organization (Groth & Grandey, 2012), incurs financial defects (Lee & Ok, 2013) and dwindle customer's pleasantness, interest and loyalty (Wang et al., 2011). Thus, giving rise to this present research.

Service Sabotage

Harris and Ogbonna (2012) lamented, amidst some empirical, of the loop in service sabotage literature. Respectively, there has not been sufficient enquiry to decipher causes of service sabotage. Service sabotage is a calculated plan of deviant action to mar service encounters, by customer-interface-employees probably to retaliate against the organization (Harris & Ogbonna, 2009). Supposedly, service sabotage behaviors ranged from customer maltreatment (Patterson & Baron, 2010) inflating customers' bills, cheating and misdemeanors to paint a negative picture on the minds of the customer (Nai-Wen Chi et al., 2013), regarding the organization. In an attempt to understand pro-sabotage elements, Harris and Ogbonna (2006) predicted that managerial practices and personal characteristics precede service sabotage. Therefore, managerial actions could adversely affect personnel to willingly become service saboteurs (Harris & Ogbonna, 2002) sabotaging the service is a means of repaying exploitative managerial practices. Thus, this study expands the prose

depicting motives for service sabotage as a fill to the gap; on the reason why employees deliberately sabotage performance, in the service industry (Harris & Ogbonna, 2012).

Service Sabotage and Nepotism

It was indicated by Analoui (1995) that more than 65% of employee's disgruntlements or causes for complaints are provoked by managerial characteristics (Harris & Ogbonna, 2011). In subsequent analysis, some managerial practice like nepotism was found to have a positive relationship with employee's discontent at work (Padgett et al., 2014; Padgett & Morris, 2012; Arasli & Tumer, 2008). Nepotism is remarked as a managerial practice that stemmed from recruiting employees on the roots of family ties or relationship bonds rather than merit (Daskin, 2015) and it is a negative practice on the path of human resource management. The tremendous effect falls on those who work with or supervise the ones who have been employed out of mere family merit. Colleagues or superiors of *nepotism* employees tend to hold the impression that raise and reward are unfairly meted to the relatives (Boadi, 2000). Depending on employee's subjective perception of contention at work and equity, this nepotistic managerial practice could influence service performance (Jacob & Arvey, 2012; Arasli et al., 2006). The productivity of employees could become less (Bute, 2011) and they might device other means of coping or seek vengeance against management. Mustafa Daskina (2015), lashed out on the limitation of investigations on the outcome of nepotistic human resource management practice on the *non-nepotism* employed, promoted or rewarded workers. Thus, as a first attempt in service literature, this study draws service sabotage as a potential outcome of nepotism.

Nepotism/Cameroon

The economy of Cameroon relies on tourism for its support (Tambenkongho, 2009) but for some reasons, for a long while, the industry was left to rot. This could be because the tourism sector suffered several confrontations (Kotler et al., 2006) like the shortage of adequate resources (Poon, 2003) and environmental pressure. Recently, the government of Cameroon imbibed the initiative to explore this sector for the country's economic advantage, yet the government's effort is deterred by internal corporate corrupt politics (Tambenkongho, 2009; Kimbu, 2011; Kimbu A. & Ngoasong M., 2013), hindering tourism growth. Particularly, governance in the tourism sector is plagued by the no-promotion virus, subtle implying that promotion goes to those with "godfathers" in top positions. Thus, Karatepe (2011) remarked that the country is in a grave need for practices in the human resources department that is synchronous with recent times.

Nepotism, cronyism and bribery are forms of the fraud and corruption family (Johnson-Rokosu, 2013), practiced by misusers of entrusted authority; a plague that has eaten deep, into the marrows of Cameroon's administrative system. Today, it has drawn enormous concern and the government of Cameroon has moved forces like the "Change Habits, Oppose Corruption" (CHOC) program (Ndedi et al., 2015), to combat this ill. Yet, upon all the effort set by the government to improve tourism in Cameroon, the industry has not moved beyond the infant stage (Karatepe & Ngeche, 2012) probably due to mismanagement or management mal-practices. However, nepotism as a corrupt human resource management practice in Cameroon, alongside the procured subsequent outcomes has been literally ignored.

Nevertheless, in order to impute justice to scholar debates, the present study divulge for the examination of a nepotism outcome. Thereby, claiming that this unfair practice has the capacity to ignite negative reaction from the employees (Doh, 2013), and that could be abusive to the organization. Hence, nepotism is hypothesized to be a possible reason for service sabotage in Cameroon hotels.

H1: Nepotism has a positive effect on the service sabotage behaviors of Frontline Employees.

Employability:

In recent years, employability has received considerable awareness in literature. In general, it refers to person's capability for gaining and maintaining employment opportunities according to (Hillage and Pollard, 1998). For individuals, employability depends on the knowledge, skills and abilities they hold, in addition to the way they perform those assets to employers. Employability is affected by both supply and demand sides which are often outside of an individual's control (Sok et al, 2013). Moreover, it is the ability to move self-sufficiently within the labor market in order to realize potential through sustainable employment.

Considering the current business dynamics involving endless and unpredictable change, organizations are forced to adapt rapidly, in terms both of the number of employees and the skills of such employees (Moorman & Harland, 2002). The way organizations face this essential for flexibility relies in subcontracting employees and skills. Employers turn to outside workers in order to achieve flexibility to respond to changes in labor demands, to handle long- or short-term projects without the commitment and costs associated with directly hired workers, and to diminish fixed labor costs. (Chambel and Fontinha, 2009). As a result, organizations have not only become flatter but they also work more flexibly and in a team-based manner, in order to be able to respond fluidly and effectively to the changing environment. Highly employable workers are required for organizations to meet these demands in order to stay flexible. (Sok et al. 2013).

Although the term employability has been used in various streams of literature like; public policy and employment (Kossek, Huber, & Lemer, 2003), vocational counseling for disabled persons (Bricuit & Bentley, 2000), and economics (Lefresne, 1999), however, little research has focused on its foundation or discusses its role in influencing tourism and hospitality organizations. (Fugate et al. 2004).

In addition, employability as well as the role of learning and development has always been counted as two significant factors on the agenda of human resource managers and chief learning officers (Froehlich et al, 2014).

All employability definitions refer to the individual's ability to make labor market transitions (Brown et al., 2003; Forrier & Sels, 2003a; Hillage & Pollard, 1998; McQuaid & Lindsay, 2005). This ability results from the individual's know-how, skills, knowledge of the labor market, and adaptability. (Cuyper et al, 2008). Some scholars believe that employability's fountain in individuals not only exists intrinsically but also is related to

one's educational background. For instance, Employability skill requires students to be interpersonal, creative and spontaneous in any given situation since they will not be dealing with questions or problems in their workplace, based on very specific cases. Instead, in the case of tourism industry, graduates will be assessed in demonstrating the best of their abilities by fully complying with the humanistic, interactive, communicative, cognitive, behavioral and generic skills that they are supposed to reflect onto the managerial staff. (Raybould & Wilkins, 2005; Sandwith, 1993; Martin & McCabe, 2007).

As mentioned in (Cassidy,2006), Raybould and Wilkins (2005) and many other researchers, employability skills can be listed as follows; communication skills, teamwork skills, problem solving skills, self-management skills, planning and organizational skills, technological skills, learning skills, and initiative and enterprising skills.

The abovementioned definition and skill list are clearly discussing and revealing the fact of being employed in one of the tourism industry related organizations, where skillful and well trained employees need to adapt themselves with their working environment, have the ability to be flexible with the possible changes and being able to solve problems in a professional manner , which is the the requirement for being part of any tourism and hospitality organizations which are all well known for being labor intensive.

Reviewing some of the researches related with employability reveals that it has been mostly tested in relation with positive employee and job outcomes such as; work engagement, life satisfaction, job satisfaction, fulfillment of obligations and emolyeee's career sucess according to (Cuyper et al, 2011), (Bernhard-Oettel et al, 2008), (Chambel and Fontinha, 2009)and (Olson and Shultz, 2013). However, in this perticular study we are arguing how employability as a positive personal resource can reduce some negative job outcomes such as service sabotage. Therefore, employability is hypothesized to be a possible reason to reduce employee's attempt to service sabotage in Cameroon hotels.

H2: Employability has a negative effect on the service sabotage behaviors of Frontline Employees.

Theoretical Basis

The bases of the suppositions made in this study owed its allegiance to the social exchange theory (Emerson, 1976) that sprung from anthropological and sociological sources (Cook & Rice, 2003) grounded on the assumption that relationships are all about "give and take" (Kaynak & Marandu, 2006) and maybe such exchanges comes with expectations (Coulson, A. B. et al, 2014). Prior literature deeply explored social expectations on tourism in illustrating the exchange theory (Kwon & Vogt, 2010). Ma, E., and Qu, H. (2011), demonstrated a typical hospitality industry social exchange mechanism. Pertaining to frontline hotel workers, they experience exchange encounters at three levels; the frontline employees versus the supervisors/leaders, with their colleagues and then with the guests (Ma, E., & Qu, H., 2011). Thus, drawing from the exchange between frontline employees and leaders, it is supposed that frontline employees according to what they receive from the organization, they give back in response. The asserted theory seemed more suitable in explaining the presumptions in this study because, in a manner, it illustrated the simple

exchange in the relationship between frontline employee’s perception of the treatment they get from organization and their give back. Implying that, as they perceive nepotism, they are prone to pay back revengefully with service sabotage behaviors (Harris and Ogbonna, 2006).

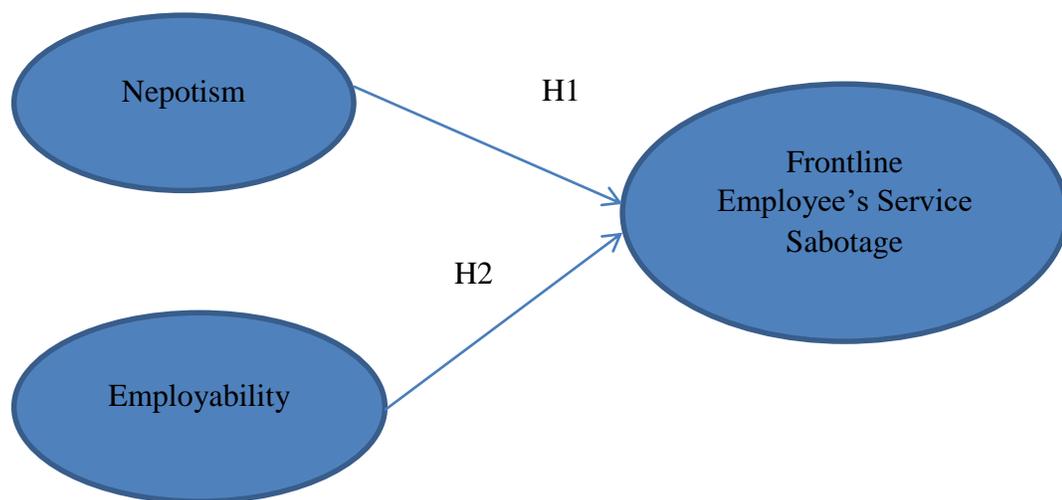
Sample

As a sample, full-time frontline workers seemed better fit for the data amassing. Frontline employees are the advocates and promoters of their organizations image (Denizci & Tasci, 2010), expected to stand for the organization and not sabotage the organization. According to the nature of their work, frontline employees meet upon customers directly, always and receive all kinds of cumbersome tasks. Thus, more likely, they are prone to be service saboteurs, owing to the nature of their job; to assure customers satisfaction, and retention by delivering quality service potent service recovery performances (Karatepe & Ngeche, 2012). Data was collected from this set of full-time workers in the three and four star hotels in Cameroon.

Instrument

A 17-items self-administered questionnaire of Nepotism, Employability and Service Sabotage, including demography checks on a five-point Linkert scale ranging from 1 being strongly disagree to 5 being strongly agree, were shared among 240 frontline employees in the three and four star hotels in Douala, Cameroon. In order to escape from selection bias, the self-administered were distributed among the frontline employees directly rather than through their immediate supervisors or managers. Though, a letter addressing the purpose for the survey was and assurance of privacy and anonymity was tended to the immediate supervisors or managers concerned.

Simple Regression Model.



H1: Nepotism has a positive effect on the service sabotage behaviors of Frontline Employees.

H2: Employability has a negative effect on the service sabotage behaviors of Frontline Employees.

Results and Findings

Table 1. Demographic Characteristics of sample

Demographic Variable		Sample Composition
Gender	Men	72.3% (149)
	Women	27.7% (57)
Age	18-25 years	22.8% (47)
	26-35 years	46.1% (95)
	36-45 years	24.8% (51)
	46 and above	6.3% (13)
Education	Primary	1.5% (3)
	Secondary	26.2% (54)
	High School	47.1% (97)
	University	25.2% (52)
Tenure	At least 1 year	2.4% (5)
	2-4 years	25.2% (52)
	5-7 years	25.7% (53)
	8-10 years	18.0% (37)
	11 years and above	28.6% (59)
Relative	Yes	33% (68)
	No	67% (138)
Relative Number	Have no relative	67% (138)
	At least 1	19.9% (41)
	2-4	11.7% (24)
	5-7	1.5% (3)
Star Rating	3 star	48.5% (100)
	4 star	51.5% (106)
	5 star	0% (0)

The above cross section portrayed that men were more than women with 72% against 28% and together there were 239 people, working in the three and four star hotels in Douala, Cameroon. Most of these people have gained ages of 26 to 35 years old, just a few of them are 45 years old and above. Judging from the educational level of the participants, the literacy rate is remarkable; for 97 of them attained high school and more than 50 have been in the higher institution. Most of them have served for longer period of time, even though it seemed many have no family affiliation where they work.

Rotated Component Matrix Results

Data was operated via using SPSS. We also tested for common method bias. Consistent with Podsakoff (2012), Harman's one factor test was carried out with the first factor calculating for 10,88% meaning that it did not explain more than 50% of the variance. This shows that our collected data was statistically devoid of problems of common method bias Podsakoff et al, (2012).70 reliability for all the variables under study was tested using Cronbach alpha guidelines and there was fit above the cutoff point of 0.70 (Nunnally, 1978) in which the percentages were for Employability .90, nepotism. 92 and service sabotage .88.

Table 2. Rotated Component Matrix
Extraction Method: Principal Component Analysis.

	Component				
	1	2	3	4	5
Nepotism		.862			
Nepotism		.842			
Nepotism		.827			
Nepotism		.732			
Employability			.960		
Employability			.946		
Employability			.857		
Service Sabotage				.724	
Service Sabotage				.713	
Service Sabotage				.702	
Service Sabotage				.697	
Service Sabotage				.569	
Service Sabotage				.546	

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 5 iterations

Factor analysis was employed to clear the patterns in the collected data and to compress data to controllable level (Field, 2005). Using principal component analysis (PCA), only those factors with an Eigen value greater than 1 were retained. (Guttman-Kaiser rule). The Kaiser –Mayer –Olkin (KMO) and Barlett’s (1954) test of sampling adequacy was computed to ensure that factor analysis yielded distinct and reliable factors (Kaiser, 1974). The KMO for this research was around 92 which is Marvelous for Kaiser Measurement. In addition, communalities of 0.60 and above were taken into consideration. All the factors had determinants of matrix above 0.00001 and this suggested there was no multi-collinearity problem (Field, 2005).

From the exploratory factor analysis employability yielded 3 factors, service sabotage 6 factors and finally the nepotism loaded 4 factors. Some items were removed since they did load less than .50 (Nunnally, 1978). The correlation results depicts that employ-ability has a significant negative impact on service sabotage ($r=0.24$, $p>0.01$) and the nepotism has a significant positive impact on service sabotage ($r=0.36$, $p>0.01$).

To test the proposed model, regression analyses were performed to evaluate the effect of each independent variable on service sabotage and the combined effect of the two independent variables on the dependent variable. In the first model, the nepotism variable was introduced and the results indicate that it is a significant predictor of service sabotage (Beta=0.55, R square=0.32, $p>0.01$) assessing for around 30 percent support for H1. This means that when nepotism increases 1 unit or one standard deviation, service sabotage increases by 0.32. In addition to this finding, the introduction of employ-ability increased the predictive power of the two variables to 34% (Beta= -0.19, R square=0.34, $p>0.01$) which is lending support for H2. This shows that when employability improves by one unit or standard deviation, service sabotage boosted by 0.34 percent.

Discussion

Supposedly the findings had not revealed the propositions in this study, there would have been equally sufficient reasons for the outcomes. Nevertheless, the presumptions set forth encountered firm confirmation according to the analysis. In retrospect therefore, nepotism in the workplace that has been characterized by Arasli (2006) as a mechanism that propelled negative behavioral outcomes, he stipulated that intention to quit as well as imputing trespasses in the organization are the results. As an outcome here, nepotism is asserted to ignite service sabotage behavior thus. As simple as it seem, the effect of personal perceived resources cannot be over ignored, Karatepe (2015) in his study on frontline employees in Cameroon, found out that personal resources could curtail tendencies of negative indictment. Similar to this assertion, we uncovered the fact that employability, a concept developed by De Witte (19) that spanned across personal adaptability, social and human capital or career identity (McArdle, S. et al., 2007), deterred frontline employees from engaging in sabotage behavior. That implied the fact that, they embarked on their personal resources and focused more on positive service performance.

Contributions

The assumptions were confirmed so far, meaning that this study had literally succeeded to prove and make a new amendment in general hospitality literature, most especially for the Sub-Saharan context. In a louder tone, the empirical addition of employability as an adversary antecedent to service sabotage is a brand new concept that was meta-analytically confirmed. Hence, this has set the pace for researches to delve expendably on employability as a factor mitigating negative employee job attitudes like service sabotage or even gossip. Since, the more Harris and Ogbonna (2006; 2009) explore service sabotage, it has always been on negative antecedents that either led to or provoke intentions to sabotage behaviors. However, this piece of literature had captured the area whereby, a positive personal resource could negate the probability of engaged sabotage behaviors.

Also, nepotism as portrayed by Arasly (2006) has been obviously a negative organizational mal-practice that set the stage for adverse response. It is not surprising therefore, that nepotism was founded to be a plausible propeller of service sabotage. In this way, this academic out-put added to nepotism literature and sabotage literature. Most especially, it is the first time that those three construct, nepotism, employability and service sabotage has been brought together under a single analysis in a social science study. This is not just an outline of unique contributions made by this study but a foundation to create awareness of likeliness of other possible ways in which the managers, tourism stakeholders and the government can mitigate corrupt organizational practices and reduces possibilities of workers to cause tribulations in organizations.

Limitations and recommendations for future research

This research has specific limitations that are required to be discussed. Data has been collected from the frontline employees working in four and five star hotels with no time lag, which is the evidence for casualty. Therefore, in future research it is suggested to use a longer period of time than it was done in this study. According to (Podsakoff et al., 2003) in future researches, to avoid the risk of common method bias it is recommended to have a time lag in data collection and separate the independent and dependent variables items and

distribute their questionnaires in different times. Moreover, it is suggested that the questionnaires to be collected from more than one source (Employees), future studies can collect their data from different sources (Supervisors, managers,..) as well.

In this particular study, we have chosen nepotism and employability as two possible variables that can influence frontline employees service sabotage, however, other dimensions like emotional dissonance, burnout, role conflict, role ambiguity and lack of job autonomy, can be tested as indicators or mediators in relation with service sabotage and other organizational outcomes in hospitality or other sectors.

Another limitation that needs to be explained is about the sample size. This particular research was carried on with frontline employees of three and four star hotels in only 1 touristic city of Cameroon, (Douala). However, future studies should consider this and test the same framework in different touristic cities of Cameroon or in different countries to see and compare the results.

Managerial implications

The significance of employees, (especially frontline positions) having specific capabilities and skills has been discussed in this research several times. The observation that employable staffs are less likely to commit service sabotage provides the employer with great opportunities to offer employees with the necessary job requirement training, skills, rewards and empowerment. Therefore, hotel managers are suggested to use these high performance work practices tools in the workplace that are proved to have positive effects on frontline employees performance and their work engagement, which is very important specially in tourism and hospitality sector. (Karatepe, 2013).

Moreover, in case of our research, trainings will endeavor to enlighten the very corrupt tourism officials in Cameroon as reported by (Kimbu, 2011). He enacted that tourism operators lacked required professional skills needed to run the organizations.

In addition, employers' focus and investment in the employability of their employees will help them to compete with their rivals easier in the market place. (Pruijt, 2013).

Second, the present results also showed that employees working in the hotel industry of Cameroon are generally satisfied with their jobs. However, the existence of nepotism in their organizations has led them to be part of service sabotage practices. Unfortunately, in this sector in Cameroon, knowledge, training, skills and abilities of job applicants takes the second place, yet the close family relations, political connections or friendships are considered to be the first priority in employee selection which will have negative outcomes for the organization and the society. For this reason, Hotel managers, especially the Human Resource Department managers need to avoid these kinds of link and relation preferences and put the right people the right jobs. Also, as advised by Kimbu (2010) the government of Cameroon, should try to coordinate the tourism sector properly.

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A Model Presenting Factors Influencing Purchase Intention to Use Modern Retail Stores in Bangkok

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Abstract

Hypermarkets and supermarkets are a new form of modern trade. They have been proved that they are important for the Thai economy and have made lots of significant impact on society. Several people have questioned why customers go to these kinds of stores while the traditional stores have been less popular. This study aims to find out factors that affect purchase intention to buy products from these stores. 750 respondents who lived in Bangkok were selected. Structural equation modeling (SEM) was used to test the structure of relationships. The results show that the subjective norm (SN), perceived price value (PPV), perceived product quality (PPQ), and perceived store assortment (PSA) have a direct positive impact on purchase intention (PI) while traveling time (TIM) to stores delivers a negative impact on purchase intention. The study further investigates that age can moderate the path from perceived store assortment to purchase intention; this path is stronger for older customers than for younger customers. Discussions and conclusion are provided in this research.

Keywords: retail stores; discount stores; hypermarkets; supermarkets; and marketing.

Introduction

Retail businesses are so fundamental for economy because they deal with people live every day. Economists and management scientists have attempted to study the retail industry in various angles. A lot of knowledge discovery has been presented in journals and conference proceedings (Cronin Jr., Brady, & Hult, 2000; Das, 2014; Diallo, 2012; Farhangmehr, Marques, & Silva, 2001; Hansen & Solgaard, 2004; Johnson & Kim, 2009). Retail businesses are various in types. For example a lot of types of retail businesses can be found such as, grocery stores, hypermarkets, supermarkets, department store, convention stores, and electronic commerce. Each one contains similarities and differences in customers and products. Grocery stores, supermarkets, discount stores, department stores, and convenience stores, for example, sometimes compete for the same targeted customers even though they present themselves to be different (Kotler & Keller, 2006). Making decision to buy products or services from different kind of retail stores like grocery stores, supermarkets, discount stores, large mega stores, and hypermarkets makes confusion for customers (Popkowski Leszczyc, Sinha, & Sahgal, 2004). The competition results in winners and losers. Modern retail stores play in both luxury products and cheap products so that there is no space for traditional retailers to play. The losers of this competition are small traditional grocery stores and traditional department stores which are rarely to

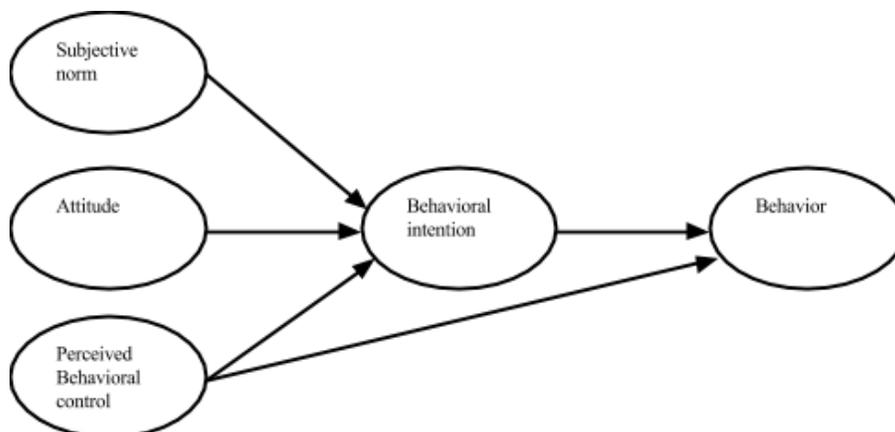
compete with gigantic discount chain stores (Johnson & Kim, 2009). Moreover, hypermarkets offer lower price and convenience for their consumers and such modern chain stores have advanced information systems and technology, logistic and supply systems, and power of bargains to suppliers (Kotler & Keller, 2006). Hence, modern trade stores decline profitability of traditional stores (Farhangmehr et al., 2001).

However, despite a host number of well conducted publications relating to the retail industry, most of articles have been conducted in well-developed nations while those done in developing counties have not equally been published in number, particular models explaining why customers use specific types of retails businesses. Another point is that several studies in retail businesses pay attention on customer loyalty (Bloemer & de Ruyter, 1998; Das, 2014; Juhl, Kristensen, & Østergaard, 2002; Sivadas & Baker Prewitt, 2000; Wallace, Giese, & Johnson, 2004). In this article, purchase intention is focused. The aim of this article is to build a model explaining why Thai customers use modern hypermarts and supermarkets by adapting the Theory of Planed Behavior (TPB) (Ajzen, 1991; Fishbein & Ajzen, 2010). We then seek to find a causal relationship structure to explain Thai customers use modern hypermarts and supermarkets.

Literature Review

Theoretical background

The study aims to find out what causal factors influence customers' intention to buy products or services from a specific hypermarket. This study applies behavioral science to answer a marketing research question. One of well-known theories in behavioral science is the Theory of Planed Behavior (TPB) used to explain why people perform a specific behavior (Ajzen, 1991; Fishbein & Ajzen, 2010). According to TPB, human behavior is directed by a structure of factors; they are behavioral intention (BI), subjective norm (SN), attitude (ATT), and perceived control behavior (PCB) shown in figure 1.



Source: Ajzen (1991)

Figure 1: The Theory of Planned Behavior.

TPB has been adapted in various disciplines. Das (2014) used retail loyalty, retail awareness, retail association, and retail perceived quality as antecedents of purchase intention. Many studies in marketing have attempted to find out causal relationships what

drive purchase intention of customers to buy products or services. Some of these studies apply TPB by changing attitudes to related constructs (Chen & Hu, 2010; Hong & Cha, 2013; Pei, Paswan, & Yan, 2014; Yusof, Singh, & Razak, 2013). Here in the context of retail business, we applied suspected factors that may affect purchase intention. Perceived Product Quality (PPP), Perceived Price Value (PPV), and Perceived Store Assortment (PSA) are applied in the model instead of attitude since they are beliefs while traveling to store are applied to replace perceived control behavior (PCB).

Hypothesis development

Purchase Intention (PI)

Purchase intention is a concept adapted from behavioral intention from TPB, aiming to explain purchase behavior. In marketing, purchase intention is applied to indicate how strong intent of buyers to buy goods or services from sellers (Armstrong, Morwitz, & Kumar, 2000) in some cases it can be used to explain customer's loyalty (Juhl et al., 2002). Consumer's decision making is comprised of a structural set factors like perceive quality, perceive value, and satisfaction, which directly affect intention to buy products or services (Cronin Jr. et al., 2000). In this study, intention is the dependent variable and several studies and theory indicate that it is a prime factor influencing human behavior (Ajzen, 1991; Chaiyasoonthorn & Suksa-ngiam, 2011b; Fishbein & Ajzen, 1975). A study used that store brand price-image to explain purchase intention without the attitude construct (Diallo, 2012); this shows that researchers can apply TPB in various ways. In this study, we use purchase intention as the dependent variable.

Subjective norm (SN)

Subjective norm is a factor that determines people's attitude toward something. This construct is taken directly from TPC. A person will have strong intention to perform a specific behavior if important people suggest him or her to do (Ajzen, 1991; Fishbein & Ajzen, 2010). We conjecture that subjective norm will positively affect purchase intention.

Perceived price value (PPV)

Perceived price value is a cognitive dimension that can determine customers to buy or not to buy products or service. Marketing management often concerns about how to offer excellent value to customers; the evaluation process that customers evaluate products or services becomes important knowledge for companies (Ulaga & Chacour, 2001) even though this process of evaluation is normally subjective. Evaluating price value by different people from different cultures and different time yields different outcome (Sánchez, Callarisa, Rodríguez, & Moliner, 2006). We expect that perceived price value, a belief as a determinant of an attitude in TPB, will positively affect purchase intention.

Perceived products quality (PPQ)

Perceived products quality is a fact that quality is an important factor that determining customers purchase intention because quality is a positive belief of customer resulting in a positive attitude toward products. Research confirms that quality is a cause of behavioral intention (Choi, Cho, Lee, Lee, & Kim, 2004). Our past research also shows a positive correlation between quality and purchase intention (Chaiyasoonthorn & Suksa-ngiam,

2011a). We hence expect that perceived products quality, a belief as a determinant of an attitude in TPB, will positively affect purchase intention.

Perceived store assortment (PSA)

Store assortment is a cognitive part of customer decision. It offers freedom of choices to customers. Hyper-markets offer customers numerous opportunities to go to stores at one time and the customers can get multiple products or services (Popkowski Leszczyc et al., 2004). Normally customers often think that product assortment is important than the store managers think (Hansen, 2003). Moreover, customers can minimize travel costs if the store can serve them with all products they would like to purchase (Popkowski Leszczyc et al., 2004). However, sometimes the assortment of products can be subjective than objective because the perception of customers may be shaped by the arrangement of store's shelves. A study confirms that increasing presentation of product items can improve assortment perception although attributes or the size of the assortment do not increase (Oppewal & Koelemeijer, 2005). Thus, we establish a hypothesis that store assortment, a belief as a determinant of an attitude in TPB, will positively affect purchase intention.

Distance-traveling time (TIM)

Traveling time is a negative determinant adapted Perceived Behavioral Control in order to explain purchase intention. The more time customers travel to a store the less purchased intention. Locations of modern store chains are designed to be accessible to the target customers (Kotler & Armstrong, 2004). The reason behind the application of travel time as an antecedent of purchase intention is that it acts like perceived behavioral control in TPB; people do not intend to perform a specific behavior if the behavior is difficult to perform (Fishbein & Ajzen, 2010). In TPC, perceived behavioral control is a factor regulating both behavior and intention to perform behavior (Ajzen, 1991). In Bangkok, both distance measured in kilometers and distance measured in minutes can be used to represent this factor. However, time travel to the location in this study is more appropriate because customers who use different modes of transportation (private car vs. public transportation) may be affected by distance differently. Distance has a negative effect on how customers select a store; long distance can limit the frequency of customers traveling to a store (Hansen & Solgaard, 2004) so that several store brand decided to be located in the center of a city since they can take advantage from closeness to customers (Finn & Louviere, 1996). In Bangkok Thailand, distance measured by time is better than distance measured in terms of physical distance such as kilometers or miles since people in Bangkok are greatly different among socioeconomics classes; a number of people do not have a car. Therefore, we speculate that the traveling time will negatively affect purchase intention.

Moderating effects

In this study, we investigate further than the original concept of TPC. Besides original causal relationships, we speculate that there might be moderating factors that may moderate the relationships among constructs. Hence we applied age and gender as moderating effects in this study. We then can set hypotheses as follows:

H1: Subjective norm directly positively influences purchase intention and the path is moderated by gender and age.

H2: Perceived price value directly positively influences purchase intention and the path is moderated by gender and age.

H3: Perceived product quality directly positively influences purchase intention and the path is moderated by gender and age.

H4: Perceived store assortment directly positively influences purchase intention and the path is moderated by gender and age.

H5: Distance (traveling time) directly negatively influences purchase intention and the path is moderated by gender and age.

All hypotheses are depicted in figure 2.

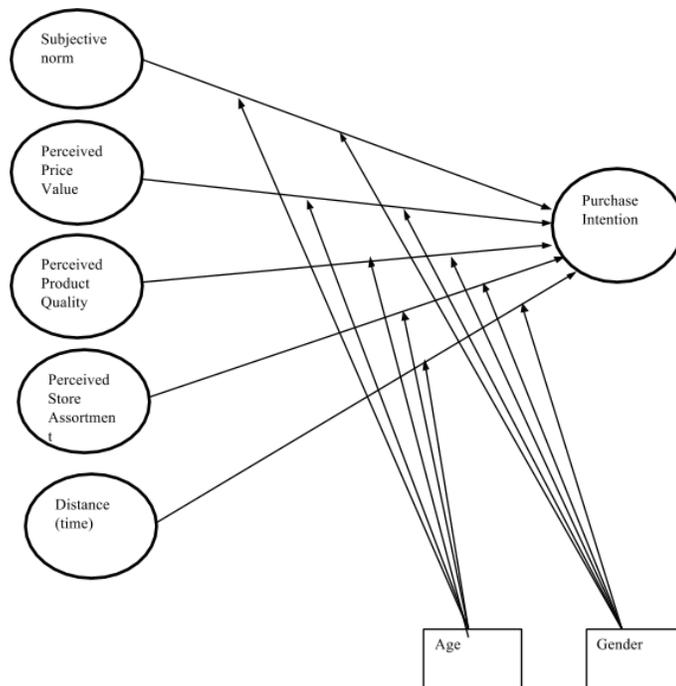


Figure 2: The Conceptual Framework (Hypotheses)

Methodology

Sample size and sampling method

In this research, the sampling size is determined by the numbers of both latent and observed variables. The data are collected by using area sampling from 15 locations in Bangkok.

Measurement

The questionnaire employed in this research is a self-report questionnaire. Purchase intention (PI), subjective norm (SN), perceived price value (PPV), perceived product quality (PPQ), and perceived store assortment (PSA), are comprised of bi-polar semantic differential items (strongly agree (7)-strongly disagree (1)). Travel Time (TIM) is measured

in minutes (self-report); it is then transformed by logarithm (base 10) to avoid a non-normal distribution.

Reliability and validity

Cronbach's Alpha is used to measure reliability of constructs. Content reliability (C.R.) is another concept applied to measure reliability. Construct validity is measured through the value of standardized factor loadings and the average variance extracted (AVE) is used to determine construct validity. Discriminant validity is measured through the values of AVEs that are greater than the squared correlation estimate between two constructs (Hair, Black, Babin, & Anderson, 2010).

Results

The respondents of this study were selected based on area sampling from 15 locations in Bangkok. The distribution of the samples is shown in table 1.

Table 1: Demographic Characteristics of The Samples (n=750).

Categories	Samples	%
Gender		
Male	302	40.3
Female	448	59.7
Age groups		
Below 25	245	32.7
25-35	286	38.1
35-45	162	21.6
More than 45	57	7.6

According to table 2, the standardized loadings of items are mostly found greater than 0.5. Content reliability (CR) and Cronbach's alpha are found greater than 0.6.

Table 2: General Statistics: Mean, Standardized Loadings, Content Reliability, and Cronbach's Alpha.

Latent Variables	Observed Variables	Loading	C.R.	Alpha
PI	PI2	.821	.782	.855
	PI3	.827		
	PI4	.797		
SN	SN2	.796	.770	.842
	SN3	.885		
	SN4	.734		
PP	PP1	.746	.703	.867
	PP2	.768		
	PP3	.756		
	PP4	.761		
PQ	PQ1	.872	.738	.857
	PQ2	.728		
	PQ3	.726		
	PQ4	.800		
PSA	PSA1	.801	.746	.852
	PSA2	.806		
	PSA3	.784		
	PSA4	.761		

TIM	Log(TIM1)	.573	.607	.618
	Log(TIM2)	.800		

In the case of discriminant validity, table 3 shows that squared correlations are not greater than AVEs. These comparisons demonstrate that the discriminant validity is acceptable. Diagonal elements are AVEs and off-diagonal values are squared correlations.

Table 3: Squared Correlations and AVEs.

	PI	SN	PPV	PPQ	PSA	TIM
PI	0.664					
SN	0.334	0.652				
PPV	0.386	0.310	0.574			
PPQ	0.289	0.204	0.511	0.614		
PSA	0.354	0.325	0.493	0.370	0.621	
TIM	0.045	0.000	0.016	0.021	0.025	0.484

The structure of equations

Figure 3 shows the structural equation model. The results show that all standardized loadings are statistically significant ($P > 0.001$).

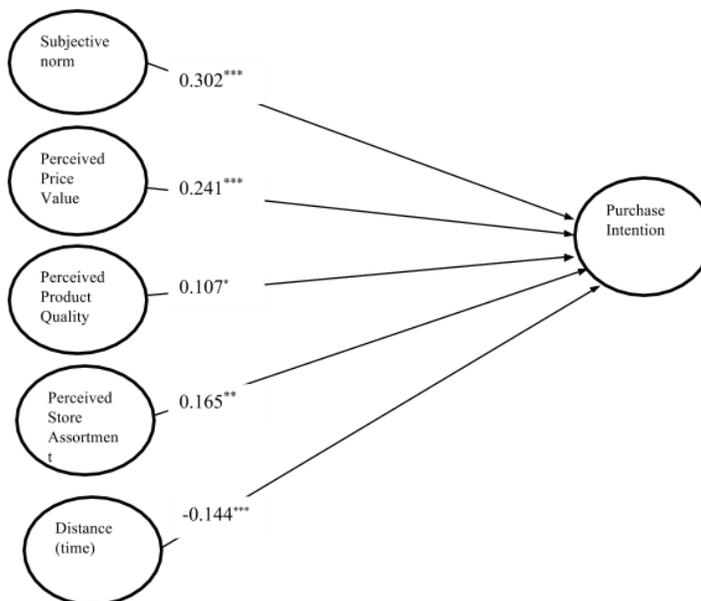


Figure 3: The Results of The Structural Model

* ≥ 0.05 , ** ≥ 0.01 , *** ≥ 0.001 ,
 $\chi^2 / df = 2.743$, P-value = 0.000, SRMR = 0.0312, RMSEA = 0.048, CFI = 0.967, TLI = 0.958, GFI = 0.948, PGFI = 0.673, AGFI = 0.927, PNFI = 0.745

Figure 3 and table 4 show the structure of the paths based on the literature review and all the paths are statistically significant.

Table 4: Path Analysis.

Paths	Hypothesis	Standardized Beta	P	R ²
SN→PI	H1	0.302	0.00	0.511
PPV→PI	H2	0.241	0.00	
PPQ→PI	H5	0.107	0.00	
PSA→PI	H3	0.165	0.00	
TIM→PI	H4	-0.144	0.00	

According to table 4, subjective norm is the most influential factor that positively affects purchase intention at 0.302 beta coefficient, followed by perceived price value at 0.241 beta coefficient. Travel time is a negative determinant of purchase intention with -0.144 beta coefficient. All factors together can explain the variance of purchase intention at 51.1 % (R²=0.511). Table 7 shows that even though the P-value for the model is significant (P-value = 0.000), Normed Chi-square (x^2 / df) is less than 3; this number is acceptable for a model (Hair, et al., 2010).

Multiple group moderating effects

We analyzed the moderating effect of gender groups by employing Chi-square difference test as shown in table 5.

Table 5: Comparison Between Male and Female.

Paths	Male				Female			
	Estimate	S.E.	C.R.	P	Estimate	S.E.	C.R.	P
SN→PI	0.349	0.089	3.908	0.000	0.322	0.062	5.212	0.000
PPV→PI	0.09	0.157	0.573	0.567	0.391	0.104	3.774	0.000
PPQ→PI	0.2	0.089	2.249	0.024	0.089	0.076	1.176	0.240
PSA→PI	0.228	0.093	2.464	2.464	0.131	0.084	3.495	0.121
TIM→PI	-1.087	0.355	-3.061	-3.061	-0.536	0.338	5.203	0.112

Table 6: The Results of Moderating Effects of Gender.

Constrained Paths	x^2	df	P(model)	RMSEA	GFI	AGFI	CFI	x^2 / df Δ	P (x^2)
Default	726.054	298	0.000	0.044	0.911	0.875	0.947	N/A	N/A
SN →PI	726.117	299	0.000	0.044	0.947	0.875	0.947	0.063	0.802
PPV→PI	728.551	299	0.000	0.044	0.911	0.875	0.947	2.497	0.114
PPQ→PI	726.962	299	0.000	0.044	0.911	0.875	0.947	0.908	0.341
PSA →PI	726.647	299	0.000	0.044	0.911	0.875	0.947	0.593	0.441
TIM →PI	727.273	299	0.000	0.044	0.911	0.875	0.947	1.219	0.270

According to tables 5 and 6, gender does not moderate all paths to purchase intention. All gender moderating effects are rejected.

Moderating effects of age.

We then analyzed the moderating effect of age groups by employing Chi-square difference test as shown in table 7 and table 8.

Table 7: Comparison Between The Older Group and The Younger Group.

Paths	The Older Group				The Younger Group			
	Estimate	S.E.	C.R.	P	Estimate	S.E.	C.R.	P
SN→PI	0.253	0.084	2.997	0.003	0.365	0.067	5.41	0.000
PPV→PI	0.241	0.107	2.258	0.024	0.427	0.143	2.977	0.003
PPQ→PI	0.116	0.076	1.522	0.128	0.074	0.086	0.856	0.392
PSA→PI	0.345	0.092	3.755	0.000	0.044	0.089	0.498	0.619
TIM→PI	-0.829	0.664	-1.248	0.212	-0.765	0.216	-3.541	0.000

Table 8: The Results of Moderating Effects of Age.

Constrained Paths	χ^2	df	P(model)	RMSEA	GFI	AGFI	CFI	$\frac{\chi^2}{\Delta}$ df	P (χ^2)
Default	666.255	298	0.000	0.041	0.919	0.885	0.955	N/A	N/A
SN →PI	667.176	299	0.000	0.041	0.919	0.886	0.955	0.921	0.337
PPV→PI	667.369	299	0.000	0.041	0.919	0.887	0.955	1.114	0.291
PPQ→PI	666.383	299	0.000	0.041	0.919	0.886	0.955	0.128	0.721
PSA →PI	671.909	299	0.000	0.041	0.918	0.885	0.955	5.654	0.017
TIM→PI	666.383	299	0.000	0.041	0.919	0.886	0.955	0.007	0.933

According to table 7 and 8, our research shows a surprising result that the path from perceived store assortment (PSA) to purchase intention (PI) is moderated by age. Older customers tend to have purchase intention if they perceive that a retail store has high assortment than younger customers do. The moderating effects of age on the other relationships are not found.

Conclusion and Discussions

The purpose of this study is to understand the structure of factors that affect purchase intention of Thai customers, who live in Bangkok, to purchase goods from Hypermart stores. This research applied the Theory of Planned Behavior (TPB) (Ajzen, 1991; Fishbein & Ajzen, 2010) to explain purchase intention of customers. Subjective norm (SN), perceived price value (PPV), perceived product quality (PPQ), perceived store assortment (PSA), and traveling time (TIM) affect purchase intention to buy products from Hypermart stores. In terms of moderating factors, age moderates the path from perceived store assortment to purchase intention. The path is stronger for the older group than the younger group.

Subjective norm (SN) is the most influential factor that affects purchase intention. The respondents present themselves that they purchase products from the hypermart stores based on their influence of important people. For future research, it is recommended that there be a study to find out who is important for the customers of hypermart stores.

Perceived price value (PPV) is the second most influential factor affecting purchase intention. Price-value is still important for customers of hypermart stores. It presents the strength of hypermart stores delivering cheaper products with high value to customers.

Perceived store assortment (PSA) is the third most influential factor determining purchase intention. Perceived store assortment is more powerful for older customers than for

younger customers since age can moderate the path from perceived store assortment to purchase intention. However, we need other researchers to test this notion in different settings.

Perceived product quality (PPQ) is the least influential factor that directly affects purchase intention. Even though this factor is statistically significant, it seems to have little effect to purchase intention because customers may see no or little differences of products sold in the stores. However, future research should be focused on this issue.

In terms of a negative factor, traveling time (TIM) to the store provides a negative impact on purchase intention. The longer traveling time to stores the less likelihood the customers intend to go to the stores.

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Impact of FDI on Domestic Investment in Six South Asian Countries: An Econometric Outlook

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Abstract

FDI inflows display differing pattern in countries of South Asia. The phenomenal growth of FDI in South Asian region is due to the active promotional measures undertaken by the government. FDI is expected to boost economic growth by promoting domestic investment in the host country. Surprisingly, it is often observed that instead of promoting domestic investment, FDI acts in a contrary way. The moot point is: Does FDI boost domestic investment or does it displace it? In order to verify the authenticity of it, an analysis is performed with the help of methodology used by Agosin and Mayor (2000) by making use of Seemingly Unrelated Regression (SUR) of panel data of the decade ranging from 2003 to 2013 for South Asia. Econometric analysis of six prominent South Asian countries, such as India, Pakistan, Sri Lanka, Nepal, Bhutan and Afghanistan are performed. Three variables such as FDI/GDP, GDP and Domestic Investment (DINV) are considered for the same. Individual countries have been considered for SUR time series analysis. The World Bank data expressed in constant prices in US\$ at 2005 year base is put to use for the analysis. It leads to interesting findings with regard to promoting or displacing domestic investment.

Keywords: foreign direct investment; south asia; india; gross domestic product; domestic investment

Introduction

Though most FDI flows have been taking place between developed countries, a change in trend and pattern in favour of developing countries was visible during the early 1990s. (UNCTAD, 2002). Ever since the occurrence of global financial crisis of 2008-09, developing countries' increasing importance has become even more pronounced in global FDI flows. However, FDI inflows into South Asia are much below its potential even though it has a large market.

Trends in FDI Flows in South Asia

With sustained growth, the South Asian region emerged as the world's third largest measured by GDP. However, South Asia's FDI inflows as share of GDP is termed as the lowest among all developing regions, with an average of less than 2 percent in 2000-11. (World Bank, 2013).

Due to the prevalence of more south-south FDI flows, the number of developing countries investing in South Asia has increased recently. Growth in the number of countries investing in South Asia paves way to greater trade linkages and knowledge spillovers, rather than the expansion of investments from a single country with only marginal additional knowledge

spillovers. (World Bank, 2013).

The increasing trend of developing countries to invest in South Asia has risen since the global economic crisis of 2008. The share of FDI of developing countries reached its peak of US\$603 billion in 2008, which constituted about 35 percent of total inflows. However, the developing countries' share declined to about 20 percent in 2010. (World Bank, 2013). The largest declines in the developing nations' share of South Asia's estimated FDI inflows were from 2009 to 2010 which was during the global financial crisis.

Table 1: FDI Recipient and Source Countries in South Asia (percent of recipient countries' total FDI inflow, 2003-11)

Recipient Countries	Europe	US	India	SAR,ex India	China*	EAP,ex China	MENA	ECA	LAC	SSA	Other
Afghanistan	2.35	1.57	2.72	0.97	71.58	0.00	16.07	4.73	0.00	0.00	0.00
Bangladesh	38.33	11.95	23.88	0.49	3.79	10.02	8.62	0.00	0.00	0.40	2.52
Bhutan	0.00	16.91	48.75	0.00	0.00	24.67	0.00	0.00	0.00	0.00	9.6
India	36.40	19.87	0.00	1.3	4.10	21.26	5.09	1.77	0.56	0.31	9.31
Maldives	4.71	3.86	29.35	0.05	3.86	25.57	13.13	0.00	0.01	0.00	19.47
Nepal	22.05	0.00	53.63	0.61	11.20	1.72	10.68	0.00	0.00	0.00	0.12
Pakistan	19.60	9.92	0.83	0.30	6.11	7.15	45.04	1.52	0.47	0.00	9.06
Sri Lanka	18.09	2.95	37.41	0.22	9.19	8.10	2.71	0.00	0.15	8.36	12.82

Source: Estimates from UNCTAD statistics, FDI Markets and World Bank staff calculations

Note: (*) China includes Hong Kong, Macau and Taiwan; (**) Other includes all advanced economies other than US and European Union.

India's Foreign Direct Investments in Bangladesh was in different sectors such as chemical manufacturing, building and construction materials, industrial machinery, garment industry and consumer products, in the last decade. In the services sector, regional banks have started to operate in Bangladesh. Leading health-care provider of India namely Apollo Hospitals recently opened its first hospital in Dhaka. (World Bank, 2013). India invested in Sri Lanka's energy sector so as to minimise its energy deficits. By reciprocating, Bangladesh's largest food and nutrition company, namely Pran Group, made significant investments in food-processing plants in India. (World Bank, 2013).

Over the past decades, almost 70 percent of South Asia's FDI inflows was from developed countries. It consisted of 32 percent inflows from the EU, 17 percent from the United States and 20 percent from other advanced economies. As far as the developing countries investment in South Asia is concerned, the largest shares of inflows received from the Middle East and North Africa (MENA) and the East Asia and Pacific Regions (EAP). South Asia itself accounted for 5 percent of FDI within the region (UNCTAD,2012). The United Arab Emirates contributed 8.5 percent where as China including Hong Kong, Macau, and Taiwan contributed 6 percent.

The differences in FDI flows as share of GDP across South Asian countries may be attributed to various factors such as geographical features, levels of development,

availability of basic infrastructure, the regulatory frameworks on FDI, and the size of the economy. Due to this relatively larger and more volatile FDI inflows would be found in smaller countries which are characterised by domestic investment. The Maldives has the region's smallest economy but ranks highest in FDI inflows as a share of GDP at almost 5 percent. (World Bank, 2013). Afghanistan, Pakistan, and India follow in the ranking. Bangladesh, Bhutan, and Sri Lanka are below the South Asian average. Nepal received the lowest FDI as a share of GDP.

As shown in Table 1, FDI flows to India are primarily from developed economies, such as the EU, United States, Japan, and South Korea. In contrast, Pakistan's inflows are dominated by capital from the Middle East, while Bangladesh's and Sri Lanka's FDI hail from countries, including the EU, United States, India, and China. The Maldives has the most diverse spectrum of countries as Foreign Direct Investors which include Thailand, India, United States, the EU, and China. Bhutan and Nepal heavily depend on India for FDI inflows. China's FDI in Afghanistan is in extraction businesses. China has also been active in Nepal's renewable energy sector. China also invested in sectors such as tourism, transportation, and construction of Sri Lanka. India contributes 70 percent of intra-regional South Asian FDI. The total within-region FDI is estimated to be just 3.7 percent of all inward FDI in South Asia. India represents 80 percent of South Asia's GDP and accounts for about 85 percent of its FDI inflows. (UNCTAD, 2011). Despite the high absolute FDI inflows, India's inward FDI is quite low when compared to countries of similar economic size.

A decline in FDI inflows was observed in nearly all South Asian countries during the recent global crisis. Pakistan was adversely affected by the global financial crisis. Pakistan experienced an 83 percent fall in FDI inflows as a share of GDP during in 2007-11, as displayed in Table 2. Pakistan witnessed a greater fall in FDI to the annual fall of 63 percent during the same period and the trend continued in 2011. Pakistan's weakening macroeconomic environment, combined with security issues and political uncertainty are attributed to the cause for it. However, India's absolute inward FDI flows rebounded in 2011. The country's FDI witnessed more modest growth in 2012. India experienced a 44 percent slide in FDI between 2008 and 2010.

Most countries recovered in terms of FDI later. In 2009, Maldives' FDI was 17 percent less than that of 2008 though recovered after the crisis. In Bangladesh, the financial crisis caused a 20 percent decline in FDI inflows, which recovered in 2011 and 2012 respectively. FDI in Afghanistan is linked to mining projects. Both Bhutan and Nepal have relatively low FDI levels, inspite of receiving large public-sector investments from India. Bhutan's FDI constituted an annual average of about US\$15 million since 2009. Nepal's FDI progressively increased from US\$1 million in 2008 to over US\$95 million in 2011. (UNCTAD, 2013). Maldives is characterised by the largest share of FDI in GDP, owing to the small size of the economy and large inflows of FDI into the tourism sector.

Table 2. South Asia Foreign Direct Investment Inflows, 2000-11(FDI in million USD)

Country	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Afghanistan	1.70	6.80	50.00	57.80	186.90	271.00	238.00	188.69	87.28	213.67	75.65	91.23
Bangladesh	578.6	354.5	335.5	350.3	460.4	845.3	792.5	666.4	1,086.3	700.2	913.3	1,136.4
Bhutan	0.0	0.0	2.1	2.5	3.5	9.1	72.2	3.0	7.2	18.3	16.3	13.9
India	3,588.0	5,477.6	5,629.7	4,321.1	5,777.8	7,621.8	20,327.8	25,505.6	43,406.3	35,595.9	24,159.2	31,554.0
Maldives	22.3	20.5	24.7	31.8	52.9	73.2	95.2	126.5	174.2	152.1	211.8	281.6
Nepal	-0.5	20.9	-6.0	14.8	-0.4	2.5	-6.6	5.9	1.0	38.6	86.7	95.5
Pakistan	309.0	383.0	823.0	534.0	1,118.0	2,201.0	4,273.0	5,590.0	5,438.0	2,338.0	2,022.0	1,327.0
Sri Lanka	173.0	171.8	196.5	228.7	233.0	272.0	480.0	603.4	752.2	404.0	477.6	300.0

Source: World Bank (2013), *Trends and Determinants of Foreign Direct Investment in South Asia*, Washington, United States

The Impact of FDI in Varied Sectors

The impact of FDI on Asian economies has not been uniform. In certain countries, FDI has crowded out domestic investment by displacing or reducing domestic investment. In certain other countries, FDI stimulates domestic investment by creating an investment environment favourable to it and, transferring technologies and management techniques. In the long run, if there are sequential investments to the initial one, FDI tends to have a favourable impact on domestic investment with its crowding in effect. The relationship between FDI and domestic investment depends on the quality of FDI, domestic regulatory environment and the time period taken into consideration for study. The impact of FDI on job creation is also similarly mixed. The impact of FDI differs with reference to different parameters such as GDP, domestic investment capital formation, backward linkages, employment, technology transfer, market access and knowledge spillovers. According to UNCTAD (1999), indirect employment created by foreign affiliates is between one to two times greater than direct employment created.

Studies find that FDI has a positive role in this due to its relative stability (Levchenko and Mauro, 2007) and its impact on transfer of knowledge and technology. Empirical evidence affirms to FDI's productivity-enhancing effects in advanced economies although the impact varies from country to country. (Bitzer and Görg, 2009). Research in developing countries focus on Czech Republic, Russia (Sabirianova Peter, Svejnar and Terrell 2005), Indonesia (Blalock and Gertler, 2004) and Lithuania (Javorcik, 2004); to name a few. Blonigen and Wang, (2005) find that FDI inflows to developing countries, as opposed to developed countries, have a particularly strong effect on growth by crowding-in domestic investment. Kee (2011) states that direct and indirect spillovers are strong as in the case of Bangladesh.

The view of the above, this study aims to evaluate effects of FDI on domestic investment of select countries of South Asia.

Research Methodology

Six South Asian countries such as Afghanistan, Bangladesh, Bhutan, India, Sri Lanka, Nepal and Pakistan during the time period of 2003 and 2013 are considered for study. All variables used for the analysis such as FDI/GDP level, the Growth rate of GDP and Domestic Investment are based on the World Bank data. For maintaining uniformity of values the base year is taken as 2005. The dependent variable considered for the analysis

is the growth of inward FDI/GDP from 2003-13, and the independent variables are all growth rates of GDP and Domestic Investment.

Many a times FDI to GDP ratios are used to control for the size of the economies while comparing FDI. It proxies for all the initial conditions the regressors might have on FDI growth, whether it is a low tariff rate at the start of the period, energy availability, or other factors.

Analysis of Data

Table 3. FDI as a Ratio of GDP (2003-2013)

Year	Afghanistan	Bangladesh	Bhutan	India	Sri-lanka	Nepal	Pakistan	South Asia
2003	1.2110	0.1100	0.5418	1.0737	1.2113	-0.0101	0.6415	4.7793
2004	1.2610	0.5168	1.2609	0.6991	1.1267	-0.0012	1.1411	6.0042
2005	3.5361	0.7937	0.7585	0.7999	1.1161	-0.0245	2.0100	8.9897
2006	4.3187	1.3493	0.6821	0.8714	1.6970	0.0368	3.1130	12.0682
2007	3.3723	1.1263	6.1748	2.1102	1.8639	0.0248	3.6683	18.3407
2008	1.9168	0.9542	0.2499	2.0366	1.8475	0.0410	3.1974	10.2434
2009	0.8564	1.2691	1.4469	3.5460	0.9603	0.0470	1.3927	9.5185
2010	1.7111	0.8201	4.7479	2.6060	0.9634	0.0195	1.1390	12.0072
2011	0.4747	0.9149	1.6917	1.6036	1.6153	0.0119	0.6125	6.9246
2012	0.5105	1.0168	1.3099	1.9413	1.5846	0.1637	0.3819	6.9088
2013	0.4584	1.0845	1.1189	1.2909	1.3628	0.0566	0.5523	5.9246

Source: World Bank data

Table 3 portrays the share of FDI in GDP of six countries of South Asia over the decade. The upward and downward pattern displayed by different countries with regard to this ratio is not uniform over the periods for these different countries. However after 2011, the South Asian countries in general have displayed somewhat steady pattern.

The next variable considered for the analysis is growth rate of GDP. As reflected in Table 4, the countries like Afghanistan and Bhutan are characterised by heavy ups and downs in FDI pattern, where as India and Pakistan have experienced comparatively mild fluctuations whereas Bangladesh and Nepal have somewhat steady pattern in the growth of GDP over the decade. India, which accounts for 85 percent of regional FDI inflows, is unique in its strong improvements to investment policy and trade liberalization, which played a positive role in enhancing growth in FDI/GDP.

Table 4. Growth rate of GDP

Year	Afghanistan	Bangladesh	Bhutan	India	Sri-lanka	Nepal	Pakistan	South Asia
2003	8.4442	5.2560	7.664	7.8604	5.9403	3.9450	4.8463	43.9565
2004	1.0556	6.2705	5.8964	7.9230	5.4451	4.6826	7.3686	38.6416
2005	11.1753	5.9555	7.1226	9.2848	6.2417	3.4792	7.6673	50.9263
2006	5.5541	6.6293	6.8494	9.2640	7.6683	3.3646	6.1775	45.5073
2007	13.7402	6.4278	17.9258	9.8014	6.7968	3.4116	4.8328	62.9364
2008	3.6114	6.1904	4.7683	3.8910	5.9501	6.1046	1.7014	32.2172
2009	21.0206	5.7412	6.6572	8.4798	3.5389	4.5331	2.8317	52.8025

2010	8.4333	6.0693	11.7309	10.260	8.0160	4.8164	1.6067	50.9325
2011	6.1137	6.7081	8.5545	6.6384	8.2459	3.4218	2.7859	42.4683
2012	14.4347	6.2337	4.6200	4.7363	6.3414	4.8525	4.0159	45.2345
2013	4.2338	6.0302	4.9819	5.0170	7.2509	3.7818	6.0695	37.3652

Source: World Bank data

Yet another variable considered for the study is Domestic Investment. Table 5 represents the trends in growth pattern of Domestic Investment in South Asian countries over the decade ranging from 2003 to 2013.

Table 5 : Domestic Investment in South Asian Region

Year	Afghanistan	Bangladesh	Bhutan	India	Srilanka	Nepal	Pakistan	South Asia
2003	-0.1554	5.1460	57.4410	25.0644	20.4128	21.4195	16.1165	145.4447
2004	9.9143	5.7537	60.6485	31.7551	23.6039	24.5324	15.4369	171.6448
2005	2.0180	5.1618	49.1537	33.4798	25.0202	26.4757	17.0713	158.3805
2006	9.4215	5.2800	45.4484	35.0003	25.6613	26.8151	16.2190	163.8456
2007	0.2391	5.3015	30.7238	35.9239	25.4420	28.6604	15.1188	141.4096
2008	19.1038	5.2362	39.5494	33.4888	25.2518	30.2746	16.0085	168.9130
2009	7.5768	4.4721	39.7612	32.7509	23.3328	31.6274	16.1568	155.6781
2010	4.4025	5.2492	47.4933	33.9224	26.2809	38.2517	14.6655	170.2656
2011	13.9601	5.7932	64.4447	34.783	27.7680	37.9753	13.5024	198.2267
2012	3.7233	5.2169	62.5819	32.7577	28.7134	34.3333	14.5338	181.8603
2013	4.7975	4.9458	68.1494	28.7252	28.1480	36.8469	13.6713	185.2842

Source: World Bank data

India and the rest of South Asia assigned to have a weak environment for attracting FDI. It had the lowest initial level of inward FDI/GDP. The reasons attributed are the lack of transparency with regard to investment policy, the low level of natural resources per capita, and deterioration in political stability.

The impact of FDI in terms of Crowding Out and Crowding In effects has been measured with the help of the coefficients derived from pooled one way Seemingly Unrelated Regression by following the methodology adopted by Agosin and Mayor (2000). World Bank Data of 2003 to 2013 has been used for performing panel data analysis as well as time series analysis of six South Asian countries. After estimating Seemingly Unrelated Regression coefficients the value of β_{LT} has been computed. If the value of β_{LT} which is greater than one, it indicates crowding in effect of FDI in the domestic economy while the less than one value implies crowding out effect of FDI in the domestic economy. (Agosin and Mayor, 2000; Kumar and Pradhan, 2002). The SUR results for the entire South Asian region indicate Crowding Out effect of FDI Inflows as the β_{LT} value is estimated to be -7.023. This implies that an additional one dollar of FDI displaces roughly seven dollars of domestic investment from the South Asian countries. From the table it can be confirmed that the coefficients significantly affect the domestic investment. However, it must be noted that current FDI negatively affects the domestic investment while its lag positively affects the domestic investment. The current FDI might reduce the market share of existing industries and on the other hand the current FDI will create future demand of ancillary products provided by domestic companies which is reflected by positive value of FDI lag. Displacement of domestic investment to this great extent has serious threat to the growth

of GDP of the South Asian Economy.

The first lag of domestic investment and GDP growth rate positively affect the domestic investment. However, the β_{LT} shows negative coefficient indicating that over a decade the FDI has crowded out the domestic investment to a large extent. In other words, it can be deduced that South Asian countries find it difficult to compete with MNC's capital and technological strength. From the table, it can be observed that there is crowding in impact of FDI in Bhutan and Afghanistan whereas India's is a border line case, while rest of the countries shows crowding out effect. The overall β_{LT} value represents crowding out effect for South Asia. In short, the crowding out impact of other countries supersedes crowding in impacts of Bhutan and Afghanistan.

Table 6 : Seemingly Unrelated Regression for the Pooled Data (South Asia)

Linear estimation after one-step weighting matrix				
	Coefficient	Std. Error	t-Statistic	Prob.
C(1)	-1.396914	1.631929	-0.855989	0.3951
C(2)	-1.396365	0.524953	-2.659982	0.0098
C(3)	1.217222	0.564698	2.155528	0.0348
C(4)	0.974493	0.036674	26.57179	0.0000
C(5)	0.426553	0.185247	2.302624	0.0245
Determinant residual covariance		22.54645		
R-squared	0.910706	Mean dependent var		24.22155
Adjusted R-squared	0.905211	S.D. dependent var		16.00485
S.E. of regression	4.927555	Sum squared resid		1578.252
Durbin-Watson stat	2.292793			

Source: Computed by the author from Eviews

In order to understand the phenomenon of crowding out impact of FDI on domestic investment, the socio-economic and political scenario of South Asian countries individually has been subjected to scrutiny.

Results on Six South Asian Countries

The following section narrates the results of SUR time series analysis performed with regard to six countries of the region.

India

Ever since the occurrence of financial crisis, service sector in India displayed a strong recovery. Most of India's FDI inflows are focussed on the service sector, that include financial services, banking, insurance, non-financial and business services, outsourcing, research and development, courier services, technical testing and analysis. Further, India emerged as the preferred outsourcing location for foreign companies for setting up call and service centres. A large influx of foreign capital into India's financial industry occurred in the past decade, mainly from international financial corporations.(UNCTAD, 2012) Though global financial crisis adversely affected this sector, in 2009 and 2010, there was steady recovery after that.

Table 7. Seemingly Unrelated Regression: India

Linear estimation after one-step weighting matrix				
	Coefficient	Std. Error	t-Statistic	Prob.
C(1)	25.54704	2.855878	8.945422	0.0003
C(2)	1.770927	0.432256	4.096942	0.0094
C(3)	-1.134487	0.337688	-3.359570	0.0201
C(4)	-0.020428	0.100533	-0.203194	0.8470
C(5)	0.927180	0.136334	6.800771	0.0010
Determinant residual covariance		0.536185		
R-squared	0.852389	Mean dependent var		33.25872
Adjusted R-squared	0.734299	S.D. dependent var		2.008983
S.E. of regression	1.035553	Sum squared resid		5.361852
Durbin-Watson stat	1.733386			

Source: Computed by the author from Eviews

Telecommunication is earmarked as a favoured destination for FDI, with most investments concentrated on the telephone services. Since 2005, up to 74 percent foreign ownership was allowed into the telecommunication and telecom sector. Inward FDI reached a peak in 2009 at 123.7 billion rupees. Like services, telecommunication was adversely affected by the crisis. The quantum of inward FDI numbers declined by nearly a half in 2010, but recovered quickly in 2011. Computer software and hardware, remains as a sector which lures a significant share of FDI into India. Many international IT firms have made investments in India in the last decade.

Prior to crisis, there existed strong growth of FDI into the real estate and construction sectors. After the crisis FDI experienced a drastic fall in real estate though infrastructure construction did not suffer adversely. After the government of India permitted 100 percent foreign ownership in real estate and infrastructure projects, large foreign capital in these sectors were received. Due to the deterioration of India's housing market, the amount of foreign capital flowing into real estate reduce significantly to the extent of more than 80 percent from 2009 to 2011. From April 2011 to March 2012, infrastructure FDI increased to larger level than FDI in telecommunications. (World Bank, 2013).

Although inflows weakened in 2011, the automobile industry remains as the sector with immense prospects to attract FDI. The automotive industry is 100 percent open for FDI, and the government has been pursuing a plan to accelerate and sustain the growth of automotive industry from 2006. Yet another area with great potential for attracting more FDI is India's pharmaceutical and chemical industries. Though pharmaceutical sector was opened to 100 percent FDI a decade ago, inward FDI has taken off only recently. A series of foreign mergers and acquisitions of Indian pharmaceutical companies has taken place since 2010. The analysis shows that India experiences crowding in effect to the extent of 0.623699. It may be observed that the magnitude of crowding in effect experienced in India during the earlier period is gradually at a decline when compared to the past.

Pakistan

Pakistan has long been suffered from the terrorism and is not an attractive investment destination even for its domestic investors because of constant militant attacks, unstable governments and anti-investment climate. The FDI inflows are very limited in Pakistan

and is restricted to specific industries and areas.

Table 8: Seemingly Unrelated Regression for Pakistan

Linear estimation after one-step weighting matrix				
	Coefficient	Std. Error	t-Statistic	Prob.
C(1)	7.312425	3.665331	1.995025	0.1026
C(2)	-2.647156	0.835214	-3.169434	0.0248
C(3)	2.145732	0.599033	3.581992	0.0158
C(4)	0.236623	0.244982	0.965880	0.3785
C(5)	1.164871	0.302501	3.850793	0.0120
Determinant residual covariance		0.186565		
R-squared	0.845882	Mean dependent var		15.23842
Adjusted R-squared	0.722587	S.D. dependent var		1.159757
S.E. of regression	0.610844	Sum squared resid		1.865649
Durbin-Watson stat	1.784364			

Source: Computed by the author from Eviews

Followed by the global financial crisis, FDI inflows to Pakistan's service sector has diminished. Telecommunications accounted for more than half of the total value of FDI inflows into the country in 2006. The financial services sector as well as the banking sector witnessed decline in FDI post-crisis. Pakistan's energy sector has the potential to attract more inward FDI flows, which may in turn alleviate the country's problem with electricity shortages. Despite its great potential for generating electricity with coal, Pakistan faces serious energy shortages. FDI to build more capacity in the power sector may be a good solution to the country's electricity deficit. The crowding out to the extent of -9.30258 indicates displacement of domestic investment in huge proportions, and that FDI inflows into this sector have not been stable due to uncertainty in the institutional framework so as to attract FDI into the country.

Sri Lanka

Due to several foreign investment promotion measures undertaken, Sri Lanka is regarded as a country encouraging foreign investment. FDI is permitted in all industries barring those on a negative list. Sri Lanka provides many tax concessions, including tax breaks on corporate profits, dividends, value-added taxes, and import and excise duties, so as to attract FDI.

Table 9 :Seemingly Unrelated Regression for Srilanka

Linear estimation after one-step weighting matrix				
	Coefficient	Std. Error	t-Statistic	Prob.
C(1)	11.03976	2.784450	3.964789	0.0107
C(2)	0.209207	1.075407	0.194538	0.8534
C(3)	-2.898091	0.801363	-3.616454	0.0153
C(4)	0.710953	0.136640	5.203117	0.0035
C(5)	0.118487	0.294802	0.401919	0.7043
Determinant residual covariance		0.587462		
R-squared	0.803665	Mean dependent var		25.92224
Adjusted R-squared	0.646597	S.D. dependent var		1.823350

S.E. of regression	1.083939	Sum squared resid	5.874618
Durbin-Watson stat	2.502696		

Source: Computed by the author from Eviews

The post-war period was marked by strong growth in FDI inflows, especially in the telecommunications, power, and manufacturing sectors. The service sector can be termed as more favoured destination for FDI. FDI inflows to Sri Lanka was impacted by the global financial crisis. The telecommunications and power sectors were the leading sectors to attract FDI inflows in 2009. In 2010, the growth shifted towards manufacturing services. Owing to huge investment of foreign capital into infrastructure and hotel projects, Sri Lanka's tourism industry has flourished. Sri Lankan government has moved toward a services-oriented economy, with particular emphasis on promoting tourism and Information, Communications and Technology (ICT). The telecommunication sector also attained predominance with 18 percent of total FDI.

The internal ongoing civil war between Sinhali and Tamilian communities adversely affected the growth of the country and distracted from keeping pace with foreign competition. The limited resources and aggregate demand hinder the domestic investments. As a result, Sri Lankan economy denotes crowding out impact of FDI to the extent of -9.30258.

Afghanistan

Afghanistan has long been suffered from the terrorism and is not a very attractive investment destination for the domestic investors because of constant militant attacks, unstable governments and anti-investment climate. The FDI inflows are very limited in these countries and are restricted to specific industries and areas.

Table 10 : Seemingly Unrelated Regression for Afganistan

Linear estimation after one-step weighting matrix				
	Coefficient	Std. Error	t-Statistic	Prob.
C(1)	11.04642	5.767524	1.915280	0.1136
C(2)	-2.550081	1.403221	-1.817306	0.1289
C(3)	2.647632	1.460688	1.812592	0.1296
C(4)	-0.487237	0.291282	-1.672734	0.1552
C(5)	-0.108419	0.305291	-0.355133	0.7370
Determinant residual covariance		19.98428		
R-squared	0.434314	Mean dependent var		6.990101
Adjusted R-squared	-0.018234	S.D. dependent var		6.265206
S.E. of regression	6.322069	Sum squared resid		199.8428
Durbin-Watson stat	2.023853			

Source: Computed by the author from Eviews

Over the past few years, Afghanistan has shown signs of recovering from its long war by attracting large inward FDI flows into resource-related projects. Maximum FDI has gone into extraction and the transport and logistics industries. Chinese and United Arab Emirates (UAE) company, have made significant investments in transportation and logistics which contributes to 0.065592 in terms of crowding out effect.

Bhutan

A very small economy like Bhutan, with its limited availability of data and highly underdeveloped nature, keeps very less scope for foreign as well as domestic investors.

Table 11: Seemingly Unrelated Regression for Bhutan

Linear estimation after one-step weighting matrix				
	Coefficient	Std. Error	t-Statistic	Prob.
C(1)	16.64951	18.84295	0.883593	0.4174
C(2)	-0.983852	1.298640	-0.757602	0.4828
C(3)	6.059145	2.896278	2.092045	0.0907
C(4)	0.826258	0.247630	3.336667	0.0206
C(5)	-2.012102	1.499334	-1.341997	0.2373
Determinant residual covariance		41.76049		
R-squared	0.705238	Mean dependent var	50.79543	
Adjusted R-squared	0.469429	S.D. dependent var	12.54659	
S.E. of regression	9.138981	Sum squared resid	417.6049	
Durbin-Watson stat	1.873851			

Source: Computed by the author from Eviews

A new FDI framework has opened Bhutan's doors to foreign investors, enabling them to take advantage of opportunities in the hydropower sector. Bhutan released its new FDI policy in 2010, encouraging foreign investors by allowing for 100 percent foreign ownership in some sectors. All activities not included in a negative list are open to FDI. The new policy allows 100 percent foreign ownership in certain activities, such as education, specialized health services, luxury hotels and resorts, and infrastructure facilities within the services sector. India entered into collaboration with Bhutan to exploit the country's valuable natural resources to solve the paucity of electricity. The strong policy measures undertaken by the country might have contributed to the extent of crowding in amounting to 29.21166. It implies that one dollar of FDI generates roughly \$ 29 in Bhutan.

Nepal

Nepal though a highly underdeveloped economy, well known for Everest excursion than for FDI. Nepal's FDI policy is based on the Foreign Investment and Technology Transfer Act of 1992, which falls in line with open and liberal economic policies. Under this Act, 100 percent FDI is allowed, except for small scale enterprises and a few security-related industries. A ten year tax holiday on profits is implemented. Nepal trails all other South Asian counties in attracting foreign capital, despite of measures like investment security, legal reform, improvement of investment climate, and laws for development of Special Economic Zones as well as Export Processing Zones.

Table 12 : Seemingly Unrelated Regression for Nepal

Linear estimation after one-step weighting matrix				
	Coefficient	Std. Error	t-Statistic	Prob.
C(1)	5.880616	3.912025	1.503216	0.1931
C(2)	-28.86725	14.84158	-1.945025	0.1094
C(3)	23.37471	11.57477	2.019454	0.0994
C(4)	0.871336	0.136772	6.370722	0.0014

C(5)	-0.026040	0.701208	-0.037136	0.9718
Determinant residual covariance		2.432597		
R-squared	0.893954	Mean dependent var		31.57928
Adjusted R-squared	0.809117	S.D. dependent var		5.048549
S.E. of regression	2.205718	Sum squared resid		24.32597
Durbin-Watson stat	2.377152			

Source: Computed by the author from Eviews

Regular transfers of money is reported to take place through informal channels in Nepal, against which some restrictive measures are initiated by the country. The country's tremendous potential in hydropower offers an untapped opportunity for foreign investors. Only 40 percent of the population has access to electricity in Nepal. More foreign investment in the power sector can ameliorate this problem. India and China have made significant investments in mega hydropower projects in Nepal. India contributed foreign capital to a huge extent to Nepal in telecommunications, transportation, hydropower, hotels, metals, food, ceramics, and textiles. However the country represents strong crowding out effect to the extent of -42.689.

Conclusion

Many factors, hindered FDI flows to South Asia which are, depression in the world economy, negative perceptions of the countries of the region, poor infrastructure, poor profitability due to a low rate of return or increasing costs, political instability and rigid labour regulations.

According to UNCTAD (2002) the factor which resulted in poor FDI flows into the region is the September 11 terrorist attacks which led to poor perceptions among foreign investors related to the stability of the region's investment scenario. To attract right type of FDI, sound investment climate is necessary, which requires a sound macroeconomic environment, appropriate institutions and basic infrastructure. Institutions, economic policies, macro stability, and legal and regulatory policies that enhance economic growth and development would also promote FDI flows.

Benefits from FDI could be maximised if efforts are concentrated on attracting long term productive FDI. Short-term profit making FDI may destabilise developing countries and certain types of FDI such as resource seeking FDI in mining activities, may not add any productive value to the economy. The host country can prosper only if right quality of FDI is encouraged. The quality of FDI could be gauged by considering some criterion such as the extent of localisation of investors' product, their contribution to the development of modern industries and extent of export-orientation and, research and development activity of companies.

The countries should take active interest in negotiating Investment Promotion and Protection Agreements. Owing to the regions comparative advantage in services sector, the composition of FDI inflows into South Asia is heavily focused on the service industry. FDI into other sectors, such as manufacturing, is low due to insufficient infrastructure and unwarranted regulations.

More than one million new job seekers are estimated to enter the South Asian labour market each month, as per the World Bank estimates. South Asian countries will have to rely on more than just public investment for generating meaningful employment to them. The private sector will have to play an important role in creating productive jobs for the new labour force entrants, and an integral aspect of this is to improve the economic climate to attract private investment, a vital factor in sustainable and broad-based growth. Foreign private capital flows in the form of bank lending, direct investment and portfolio investment which include debt and equity expand the potential sources of capital available to countries, raising productivity and boosting growth. As mentioned earlier, the right type of FDI has a major role in the provision of employment, to increase GDP and to spur domestic investment. In the ultimate analysis, it is considered vital for each South Asian country to determine its own national priorities and channel FDI in the manner best suited to achievement of these priorities.

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Wood Load Workers in Rubber Plantations: A Study Of Informal Sector Of Kerala, India

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Abstract

Informal sector based employment has received spectacular attention in all regions, world-wide. The paper focuses on wood-load workers as they are extremely vulnerable due to lack of skills, limited employment avenues and thus face problems in securing better employment opportunities in a globalising world. The paper highlights broad trends on the burning issues faced by wood-loaders on the basis of primary data collected in Elikulam and Thidanad Panchayats of Kottayam District of Kerala State. It also addresses the coping mechanisms adopted by wood-load workers during slack seasons. An econometric technique namely logistic regression is performed with the help of the data collected. Here, the variables like wages, education, membership of trade union and ownership of membership cards are considered for logistic regression. The research focuses on Kerala as it stands apart from other states in terms of the history of trade union movements. Globalization has cast its shadow worldwide and thus changes have penetrated across various fields. However, this sector alone has withstood changes brought about by Globalization by weakening the impact of trade unions. It was this fascinating aspect that is considered in detail in this paper.

Keywords: informal sector; wood-load workers; Elikulam; Thidanad; Panchayat

Introduction

The rubber plant originally hails from Dutch who cultivated it in their plantations at Indonesia. The Dutch introduced the rubber plant to Kerala, because of its similar tropical climate. Rubber trees which are tall slim trees, are a major revenue earner for the state of Kerala. Kerala accounts for 91.00 percent of natural rubber production of the country. Kottayam District has extensive areas producing and processing rubber. The District is one of the most prosperous plantation sectors in India. The Rubber plant produces a sticky, white latex, which is collected and processed to produce natural rubber. A rubber plant has to grow for about seven years to produce latex and the rubber tree can be productive for over 20 years. The rubber is harvested by rubber tappers who make a long curving cut on the outer bark of the trunk of the tree. The latex from within the tree seeps to the surface of the cut and trickles down the cut into a container, tied to the tree by the rubber tapper. Every morning the rubber tapper empties the container tied to each tree, in the area of the plantation that he works in. After a few days another cut is made just above or below the first cut, so as to extract more latex from the rubber plant. After about 20 years the rubber tree will stop producing latex, which will have to be replaced upon so as to plant a new one. The following section throws light on the demographic features of the state.

Demographic Profile of Kerala

Table 1 displays the density of population, literacy rate and the proportion of unemployed to the total population of Kerala as per the last census. Among Indian States, Kerala has the dubious distinction of being one of most thickly populated areas. If one takes into account the low birth and death rates and the high literacy rate, demographically Kerala may be well considered as the most modern state in India. But its demographic achievement has not been matched by provision of employment opportunities which affects the development of the state negatively.

Table 1: Selected Demographic Indicators of Kerala and India (2011 Census)

Indicators	Kerala	India
Density of Population	859/sq.km	382/sq.km
Literacy Rate	93.90	74.04
Sex Ratio	1084	940
Birth Rate	15.2	20.97
Death Rate	7.0	7.48

Source: Compiled from various Census Reports.

Literacy and Education

Thanks to highest literacy rate in the country, Kerala presents a fascinating picture of the impact of educational initiatives made by both Government and private agencies as indicated in Table 1. The state's large number of educated people can be associated with high amount of expenditure incurred by the Government on education.

The high level of education attained by people of Kerala can be cited as a reflection of the prescript of Rani Gauri Parvati Bhai (1817). (Census of India, 1931, Vol. XXVIII) As per that it necessitated that state should defray the entire cost of education of its people in order that they might be no backwardness in the field of education among people of Kerala or that they might be better objects and public servants so as to bring up the reputation of the state. It may be recollected by the end of eighties owing to farsightedness and steadfast efforts put in by then District Collector, Mr. K J Alphonse, Kottayam was the first District to attain 100 percent literacy in Kerala. This success has probably inspired those who succeeded in administration later to maintain the record of most literate District in Kerala even till today. Kottayam remained as a role model for the attainment of literacy by maintaining the record of near 100 percent literacy till date.

The Problem of Unemployment

Followed by the attainment of country's independence, Kerala's economic policy was mainly oriented towards securing higher economic growth and attainment of self-sufficiency. However, except for the spread of education, Kerala has not been able to achieve a single objective envisaged in its plans nor were the plans effective in creating employment opportunities. A disproportionate investment on education has tended to starve other productive sectors of the required investment funds in Kerala.

Highest unemployment rate is reported to be the negative factor retarding the economic development, which is almost three times that of all-India rate. According to the current daily status approach, Kerala's unemployment rate for those aged between 15-59 years was

16.5 percent against the national average of 5.8 percent. Though Kerala registered a growth of 8.24 percent in 2012-13, the state recorded the highest unemployment rate in the country. According to the live register of employment exchanges, unemployed constitute 39.78 lakh people in the state. The new statistics show that Kerala's unemployment rate is 7.4 percent, which is much higher than the national average of 2.3 percent. (Government of Kerala, 2013).

Educated unemployment among youth is an issue of concern for the state. The level of unemployment is reported to be higher in urban areas compared to the rural areas under all approaches of measurement. Since the living cost as well as rate of unemployment are high in the state, youth prefer to immigrate to foreign countries seeking high remuneration.

Employment in the informal Sector

The large number of educational institutions established in Kerala is instrumental in increasing number of educated who gets on added to the shrinking labour market of Kerala. When the job opportunities are limited in the state, a considerable number tend to migrate to other states and to the countries abroad. The remaining who chose to remain at home state try to engage themselves in agricultural activities or informal sector activities. Various studies have shown that contrary to developed countries, the informal sector in less developed countries generate low income and is mainly a survival sector.

Objectives of the Study

Majority of wood-load workers in India are engaged in informal/unorganised sectors and Kerala is no exception to it. According to reports given by various Welfare Boards of Workers of Kerala state the workers of informal sector have no written contracts, no benefits other than wages and so they are not covered under the Social Security benefits. The analytical focus of the study is the socio-economic profile of the wood-load workers who carry the rubber wood which are cut for replanting purpose of rubber trees.

The objectives of this study are given below:

1. To analyse the living condition of wood-loading workers.
2. To find out whether educational qualification is instrumental in securing the wood-loader more number of days of employment.
3. To examine whether an educated person earns more so as to improve their standard of living.

Hardly any microeconomic studies have been conducted for analysing the labour market scenario of wood-loaders. The present study is fundamentally aimed at filling this serious knowledge gap by attempting a micro level analysis of wood-loaders.

The Respondents of the Study

The respondents of the study constitute those who are involved in any loading activity related to rubber plantations located in Thidanad and Elikkulam Panchayats of Kottayam District of Kerala state. The respondents constituted those who were engaged in wood-loading activity till the cut-off period of May 2012. The respondents also included those who were involved in secondary job activities like selection of rubber wood, for tying the

coir to wood for carrying wood from the estate to the truck or to load the wood from the truck to the place of destination. The work associated with the selection of wood may be categorised further into two groups like selection of quality wood as well as rejection of non-quality wood and categorizing wood for price fixing with respect to quality

The Research Methodology Adopted

The universe of the study constitute 450 wood-load workers belonging to five trade unions affiliated to different political parties at Elikkulam and Thidanad Panchayats. The trade union leaders associated with the five political unions were contacted and detailed information regarding the profiles of the workers were collected. This was followed by an intensive survey of 200 wood-load workers and their family members which constitute a sample size of approximately 43.00 percent. A detailed questionnaire was prepared for dealing with the personal and social profiles of the wood workers, the nature and status of their employment, the income and expenditure pattern of the respondents, the profile of the wood-load workers, their affiliation to various unions and political parties in Kerala. The questionnaire was initially prepared in English and then translated into Malayalam.

The income (wage) received by the wood-loader was taken as the dependent variable. Level of education of the respondent, membership of trade union, work experience, number of hours of work and the status of card holder/non-card holder were taken as independent variables.

The Econometric Model

To study the likelihood of securing better wages for wood-load workers logistic regression is used in this study. Bi-variate distributions are generated to understand the profile of wood-load workers with selected background characteristics and work profile in the informal wood-loading sector. An appropriate technique to analyse the relationship between a set of predictor variables and a dependent variable, which is dichotomous, is the logit or logistic regression.

Menard (2001) stressed that for a dichotomous dependent variable, the numerical value of the variable is arbitrary which is a matter of convenience and is not intrinsically interesting. The probability of classification of the cases into one or the other of the categories of the dependent variable could be predicted by the independent variable is intrinsically interesting.

Hence, $P(Y = 0) = 1 - P(Y = 1)$

Where, $P(Y = 0)$: probability of being classified into first or lower valued category

$P(Y = 1)$: probability of being classified into the second or higher-valued category

Now, in order to model if, $P(Y = 1) = \alpha + \beta x$ then, there would be a problem as although observed values must lie between 0 and 1, the predicted values may be less than 0 or greater than 1.

But in order to solve the problem probability can be replaced with odds. Unlike probability odds has no fixed maximum value but exactly like probability, it has a minimum value of 0. Odds($Y = 1$) is the ratio of the probability that $Y = 1$ to the probability that $Y \neq 1$

Symbolically, $\text{odds}(Y = 1) = P(Y = 1) / [1 - P(Y = 1)]$

The natural logarithm of the odds is called the logit of Y which becomes negative and increasingly large in absolute value as the odds decrease from 1 toward 0 and become increasingly large in the positive direction as the odds increase from 1 to infinity.

Therefore, $\text{logit}(Y) = \ln\{P(Y = 1) / [1 - P(Y = 1)]\}$

On using the natural logarithm of the odds that $Y = 1$ as our dependent variable, the problem of the estimated probability exceeding the maximum or minimum possible values for the probability would not persist. The equation for the relationship between the dependent and the independent variables then becomes,

$$\text{Logit}(Y) = \alpha + \beta_1 X_1 + \beta_2 X_2 + \dots + \beta_k X_k \quad (1)$$

$$\text{By exponentiation, odds}(Y = 1) = e^{\ln[\text{odds}(Y = 1)]} = e^{(\alpha + \beta_1 X_1 + \beta_2 X_2 + \dots + \beta_k X_k)} \quad (2)$$

Converting the odds back to the probability by the formula;

$P(Y = 1) = [\text{odds that } Y = 1] / [1 + \text{odds that } Y = 1]$ produces an equation which is;

$$P(Y = 1) = [e^{\ln[\text{odds}(Y = 1)]} = e^{(\alpha + \beta_1 X_1 + \beta_2 X_2 + \dots + \beta_k X_k)}] / [1 + e^{\ln[\text{odds}(Y = 1)]} = e^{(\alpha + \beta_1 X_1 + \beta_2 X_2 + \dots + \beta_k X_k)}] \quad (3)$$

The above makes it clear that the probability, the odds and the logit are three different ways to express exactly the same thing. Though probability or the odds is probably the most easily understood, mathematically, the logit form of the probability best helps us to analyse dichotomous dependent variables.

For any given case, $\text{logit}(Y) = \pm\infty$ ensuring that the probabilities estimated for the probability form of the model in equation 3 will not be less than 0 or greater than 1. In equation 1 the linear form of the model has infinitely large or small values of the dependent variable due to which ordinary least squares (OLS) method cannot be used to estimate parameters. Hence, maximum likelihood techniques are used to maximize the value of a function, the log-likelihood function which indicates how likely it is to obtain the observed values of Y , given the values of the independent variables and parameters $\alpha, \beta_1, \beta_2, \dots, \beta_k$.

In the case of logistic regression, the coefficients are estimated using maximum likelihood method. That is, the coefficients are so estimated as to make the observed frequency distribution the most likely. This is achieved through an iterative procedure and SPSS package developed for this purpose readily provides the estimates.

The results suggest that the odds of high income for wood-load workers could be explained with only two variables; card holders and education of respondents among all the four predictors considered in this analysis. However, the results are better if 'Forward stepwise' method is applied instead of 'Enter' or 'Backward' method.

The $\text{Exp}(B)$ which is the odd ratio shows that odds of having higher income among trade union members who are card holders and educated to be nearly twice than those trade union members not having card or with little education.

Logistic Regression Results

The output table of the logistic regression analysis is given in Table 2. In the table, the parameter estimates summarizes the effect of each predictor; the ratio of the coefficient to its standard error, squared, equals the Wald statistic. In the table, Exp (β) represents the ratio-change in the odds of the event of interest for a one-unit change in the predictor.

Table 2: Variables in the Equation

	β	S.E.	Wald	df	Sig.	Exp(β)
Education	0.72	0.282	6.527	1	0.011	2.054
Cardholder(1)	0.699	0.337	4.303	1	0.038	2.011
Constant	-0.796	0.62	1.646	1	0.2	0.451

Source: Computed from SPSS software

The logistic regression was performed through forward stepwise method as well as backward method suggest that the odds of higher income for wood-load workers could be explained with only two variables. To summarize, the logistic regression results show that the likelihood of higher wages for workers engaged in wood loading sector for the study area depends on two factors; firstly, having education level of at least primary schooling and secondly, possession of card issued by Labour Officer. The result also suggests that the model employed is fairly good for the analysis as both the methods; forward and backward stepwise yield the same variables as significant predictors. The Exp (β) which is the odd ratio shows that odds of having higher income among card holders and educated wood-load workers to be nearly twice than those trade union members not having card or with little education.

Findings

The proportion of married respondents was reported to be high with 97.00 percent which leaves out only 3.00 percent of singles as reflected in Table 3. The married workers constituted the largest chunk of respondents since they are the major bread winners of the family. Since the job requires lot of physical strength, males predominate and only two females were found in the sample.

Table 3: Religion and Marital Status

Religion	Marital Status		Total
	Married	Unmarried	
Hindu (Upper Caste)	89 (44.50)	1 (0.50)	90 (45.00)
Hindu (Reserved)	52 (26.80)	0	52 (26.00)
Muslim	4 (2.00)	1 (0.50)	5 (2.50)
Christian	49 (24.50)	4 (2.00)	53 (26.50)
Total	194 (97.00)	6 (3.00)	200 (100.00)

* Figures in brackets indicate percentage

The low rate of concentration among the Hindus under reserved category as reported by way of sample survey is a probability on account of their comparatively higher status in

society unlike their less fortunate counter-parts in other backward states and due to greater availability of employment opportunities within the state as a direct result of early and effective implementation of the reservation policy in Kerala. The remaining categories of not so highly educated respondents who are not covered under reservation have to seek work in informal sector activities.

Literacy and Education

The literacy level of the workers is high in this labour market, owing to the fact that Kottayam District attained cent percent literacy. One of the important findings is that less educated people among wood-loaders constitute a small minority. Not only wood-loaders, but also their spouses and children constitute the educated category. The finding of the sample survey affirms the fact that Kerala has been experiencing an educational boom over the years. Yet another interesting feature of the wood-loaders profile is that out of 200 respondents as many as 126 i.e., 63.00 percent belonged to the age group of (35-44).

Table 4: Age and Education of the Respondent

Age of the respondent	Level of education of the respondent(*)			TOTAL
	Till V th	V th - 10 th	> 10 th	
25-34	5 (2.50)	17 (8.50)	4 (2.00)	26 (13.00)
35-44	23 (11.50)	102 (51.00)	1 (0.50)	126 (63.00)
45-54	10 (5.00)	34 (17.00)	0	44 (22.00)
55-64	1 (0.50)	1 (0.50)	0	2 (1.00)
TOTAL	39 (19.50)	154 (77.00)	5 (2.50)	198 (99.00)

* Figures in brackets indicate percentages

Status of Employment

Another significant observation of the study is that all respondents of this study are members of trade unions. However they may be classified into two ways on the basis of type of the membership card of the trade union issued: such as card holders and non-cardholders. The card holders are permanent workers possessing the card issued by the Labour Officer of District level located at Kottayam. The non-card holders are temporary workers whose position is more vulnerable as they are expected to participate in election work, demonstrations, and are at the mercy of the union leaders for their daily work. The Labour Officer stopped issuing labour cards for the last three to six years and hence the non-card holders outnumbered the card holders at the time of survey.

Table 5: Age and Possession of Card

Age of the Respondent	Card Holders	Non-card holders	Total
25-34	17 (8.50)	29 (14.50)	46 (23.00)
35-44	84 (42.00)	51 (25.50)	135 (67.50)

45-54	17 (8.50)	1 (0.50)	18 (9.00)
55-64	1 (0.50)	0	1 (0.50)
Total	119 (59.50)	81 (40.50)	200 (100.00)

* *Figures in brackets indicate percentages*

Employment was found to be quite limited among wood load workers. It was further observed that jobs held by wood-load workers were temporary in nature and therefore leading to insecurity and the income earned were insufficient for survival.

Table 6. Wage of Card Holders and Non-Card Holders

Wage (in ₹)	Card Holders	Non-card holders	Total
400-500	17 (8.50)	29 (14.50)	46 (23.00)
501-600	84 (42.00)	51 (25.50)	135 (67.50)
601-700	17 (8.50)	1 (0.50)	18 (9.00)
701-800	1 (0.50)	0	1 (0.50)
Total	119 (59.50)	81 (40.50)	200 (100.00)

* *Figures in brackets indicate percentages*

Disparity between wage earnings and age with respect to the status of holders of card issued by the Labour Officer and non-card holders. It was revealed that majority of card holders and non-card holders belonged to the same age group i.e. (35-44) and the lowest of both were from the age group (55-64). The wood load workers are entangled in poverty due to limited number of days of work.

Among the card holders as well the non-card holders the majority were securing daily wages in the bracket of ₹ (501-600) as reflected in Table 6. It was also brought to notice that only 0.50 percent (1 person) of the sample fell in the highest category of wages earned ₹ (701-800). The inference drawn from the sample indicated that higher wages had nothing to do with the age or work experience of the wood-loader, but was more dependent on his strong involvement in the union activities. It also depended to a certain extent on his capability to exert decision making. The leaders of the trade union and the card holders were reported to be in comparatively commanding position with regard to allocation of wages as well the stipulation of number of days of work. Owning a card issued by the Labour Officer will not affect the chance to secure higher wages or more number of hours of work in a labour market dominated by trade unions, as revealed by the study. It may be observed here in this context that the engagement in the activity of wood-loading can be considered as survival strategy of the workers since the number of days of work in a year is limited.

Days of Gainful Employment

Along with the details of the current work undertaken, it was pertinent to collect information related to total number of gainful employment of the wood-load worker. The information brought out somewhat somber picture in this regard. The minimum number of days which a wood-loader could secure the work was 35 and the maximum number of days work reported was more than 140 as brought out by Table 7. However the majority amounting 47.50 percent worked for (98-118) days. While only one wood-load worker reported to have more than 140 days of work, (which was stipulated as 150 days), the sad aspect here is that none of the wood-loader is employed at least for half working days of the year. Most of the respondents admitted that even in the absence of gainful employment large number of days of the years, they continue their work as wood-loader owing to two factors. Primarily, high rate of wages paid to a wood-loader and secondly, due to the absence of any alternative avenues of work.

Table 7. Number of Days of Work

Days of work in a year	Number	Percentage
35-55	17	8.50
56-76	15	7.50
77-97	29	14.50
98-118	95	47.50
119-139	43	21.50
More than 140	1	0.50
Total	200	100.00

An attempt was made during the survey to assess the respondent's perception about the wage rate for wood-loading by comparing the job of wood-loaders with other types of jobs as well as in terms of willingness to continue the present job. Most people seem to be happy with the wage that they received, large percentage amounting to 94.50 of the respondents expressed their willingness to continue with wood-loading as they believed that they were receiving wage more than any other job.

But the real problem they face is that they are employed for 50 to 55 days a year. The generally held stereotypes (impressions) concerning the wood worker is that he earns the highest wage per hour and they are doing well in the economic sense. Our empirical observations refutes this generally held impression concerning the wood worker as most of them earn an yearly income of ₹ 25 to ₹ 30 thousand only. They are as insecure as others who work for lower wages but find work more often in non-wood category employment.

The average wage rate of a wood-load worker in the village is much higher than an ordinary daily wage agricultural workers who earns ₹ (250-300) per day. The number of working days in a year/or number of days the wood-loaders get work in a year is half that of agricultural workers. The major problem faced by them in spite of a high daily wage is lack of availability of work. As a result, number of days without work in a year may vary between 300 to 310.

The simultaneous existence of piece rate contract and daily wage contract among wood-load workers have been observed in the informal labour markets in Elikulam and Thidanad. A daily wage contract for a wood-load worker involves working for a fixed wage and a fixed number of hours. In the piece rate contract wood-load workers are paid according to the amount of work accomplished. Among wood-load workers in Elikualm and Thidanad daily wage contract accounted for ₹ 600 whereas piece rate contract amount is higher which may go up to ₹800 for the remaining work.

Overtime and Part-time Wages

As revealed by the survey, the availability of overtime and part-time wages depend upon two factors, such as assignment of such opportunities by the trade union leaders and willingness to take up part-time and overtime jobs. It is observed that respondents having strong influence in trade union, who secured job through union and are card holders get the opportunity to do overtime work and receive overtime wages. The card holders of union enjoyed priority treatment over the non-card holders owing to their proximity to trade union leaders and the willingness to devote more time for union activities as well as to contribute in larger quantum for the trade unions.

The study also focussed on the number of dependents of wood-loaders which have a bearing on the motivation for taking up further jobs. Large number of dependents may provide as a disincentive to wood-loaders from opting for leisure and conversely less number of dependents may induce them to take up more odd jobs when they are free from wood-load related work. It was also revealed that some of the wood-loaders were engaged in repair work of their house and storing dried tapioca which is their staple food to take up hard work of wood-loading.

Monthly Expenditure of Wood-loaders

A wood-loader's expenditure has specified constituents such as household, repayment of loans, education, entertainment, saving and investment, rent, health, liquor and toddy, cigarette/beedi and other expenditures. The survey therefore was directed to determine the major items of expenditure and giving a fairly dependable picture on the level of economic independence of the informal workers while engaging into informal sector activities. The breakup of household expenditure is depicted in Table 8.

Table 8. Monthly Expenditure

Monthly Expenditure (In ₹)	On household	On repayment of Loans	On education	On entertainment	On saving and investment	On rent	On health	On liquor and toddy	On cigarette/ beedi	Other expenditures
4,000-4,999	36 (18.00)	19 (9.50)	33 (16.50)	20 (10.00)	13 (6.50)	1 (0.50)	32 (16.00)	24 (12.00)	17 (8.50)	21 (10.50)
5,000-5,999	32 (16.00)	12 (6.00)	29 (14.50)	15 (7.50)	9 (4.50)	3 (1.50)	22 (11.00)	17 (8.50)	25 (12.50)	22 (11.00)
6,000-6,999	89 (44.50)	49 (24.50)	80 (40.00)	45 (22.50)	52 (26.00)	4 (2.00)	77 (38.50)	66 (33.00)	57 (28.50)	59 (29.50)
7,000-7,999	39 (19.50)	18 (9.00)	37 (18.50)	25 (12.50)	24 (12.00)	0	36 (18.00)	34 (17.00)	25 (12.50)	25 (12.50)

8,000-8,999	2 (1.00)	0	2 (1.00)	1 (0.50)	2 (1.00)	0	2 (1.00)	2 (1.00)	1 (0.50)	1 (0.50)
9,000-9,999	1 (0.50)	1 (0.50)	1 (0.50)	1 (0.50)	1 (0.50)	0	1 (0.50)	1 (0.50)	1 (0.50)	1 (0.50)
10,000-10,999	1 (0.50)	0	1 (0.50)	0	1 (0.50)	0	1 (0.50)	1	0	1 (0.50)
Total	200 (100.00)	99 (49.50)	183 (91.50)	107 (53.50)	102 (51.00)	8 (4.00)	171 (85.50)	145 (72.50)	126 (63.00)	130 (65.00)

* *Figures in brackets indicate percentages*

The findings suggest that the maximum 44.50 percent households had spent ₹ (6,000-6,999) per month on household expenditure, 19.50 households up to ₹ (7,000-7,999) per month, while 0.50 percent up to ₹10,000 per month showing not so affluent pattern of expenditure.

Among the next pertinent regular item of expenditure the most prominent is the schooling of children. Among the respondents who reported expenditure, with large majority of 40.00 percent of them spent amount up to ₹ (6,000-6,999) and 16.50 percent up to ₹ (4,000-4,999). Amount in the range of ₹ (7,000-7,999) was spent by 18.50 percent of the population. As noted earlier, an average Keralite is desirous to educate his children. The unique feature of the respondent is reflected in the heavy expenditure on education. As many as 22.50 percent of respondents spent up to ₹ (6,000-6,999). While 0.50 percent spent up to ₹ 9,999. The figures suggest the need of respondents to create an environment for mental relaxation where little existed.

The next important concern of wood-loader is evidently on extravagant consumption in the pattern of expenditure under two counts namely liquor/toddy as well as cigarette/bidi. Significantly a high percentage of respondents were willing to spend heavy amounts on these items constituting a significant part of their regular income. It may however be observed that the initiative to spend further on intoxicant is prevalent and was more prominent among respondents in the absence of wives or family members.

Closely akin to the respondents predilections to repay loans, there is a tendency observed among respondents for building up savings and investment as an important component of their personal and security. The saving pattern can be improved if due care is taken by them in limiting their consumption of harmful items and diverting such expenses for better quality food. Obviously expenditures on unspecified items do not form a significant factor in the monthly income profile of the majority of wood-load households.

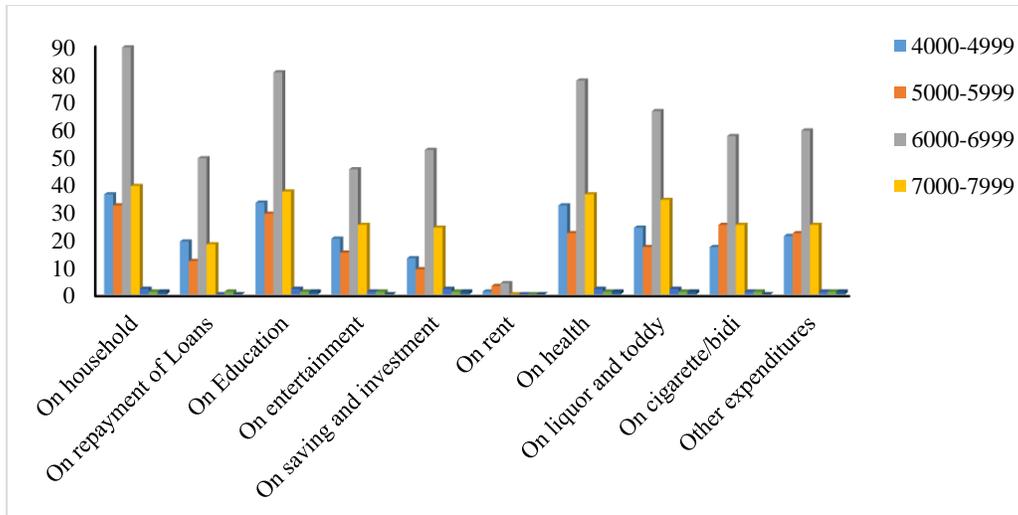


Figure 1: Monthly Expenditure

Not more than 30.00 percent of the requirements from medical help. So high degree of reliance for financing liquor/toddy and cigarette/bidi consumption was a matter of great concern.

The study highlights the fact that Kerala model of labour organisation by powerful trade unions acts as a countervailing weapon in the age of liberalisation. Major decisions undertaken in the wood-load workers of the study are shaped by the active support of the trade unions. An owner of rubber plantation with a single mature rubber tree to be sold has to meet a contractor who in turn has to obtain permission from all union leaders to finally cut the tree. This can be seen as the extreme form of rigidity that one might observe and shows the dominance and militancy of the trade unions in a globalising age in which union power is claimed to be weakening elsewhere. The strong union power visible in Kerala is the result of the historical process of labour unrest and organisation particularly by the leftists groups.

Conclusion

A major finding of the survey reveals that in Kerala's rural informal economy, union militancy is more pronounced than employer's militancy. There is certain underestimation of the human component in development by those who propagate labour market flexibility. The post reform period in India testifies that trade union power has weakened and as a result number of strikes have come down. As observed in many other studies, the employer's militancy has gone up in the post reform period as number of lock outs have come down significantly. The empirical data generated in this study strongly refutes the impact of labour market reforms on wood-load workers in Elikulam and Thidanad Panchayats led by powerful unions. The study brought to focus the existing patterns of labour organisation and institutions certain sectors of Kerala impedes restructuring of enterprises due to the rigidities created by powerful labour unions. Trade unions in Kerala are a force to reckon within the rural sector. They create rigidities and protect and enhance the interest of their union affiliated members which goes on to the extent of assigning work and fixing wages for workers as well as for different pieces of work.

For the sustainability of the so called Kerala model of development, policy makers have to pay more attention to the rural unemployed and underemployed. Globalisation and the growth of union led subcontracting pulled many into the informal sector. The wood-load workers' activity in the informal rural economy caters to strong markets and have strong production linkages with the formal economy. In light of the research findings on wood-load workers it is found that growth and efficiency oriented paradigms leave a large number of people untouched in the informal sector in rural areas. There is no single policy prescription for the informal economy in Kerala. The reforms must work in a more inclusive and socially responsible manner. Policy makers should draw their immediate attention for the sustainability of rubber based wood-loading activity on which Kerala's economy thrives.

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Innovation and Entrepreneurship – The Driving Force for the Search of Software Talent: Evidence from The City Of Mumbai

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Abstract

In the field of information technology (IT), the success of the software and services industry seems to have come at the time with the linking of software programs that are a customised product for the firm. This paper is an attempt to develop a model of the software and services industry based on an intersection of innovation and entrepreneurship that is the driving force for the search of software talent. The introductory section traces innovation in the software and services industry. Emphasis is laid on the selection of IT software and services firms in the city of Mumbai that highlights the correlation existing between innovation and entrepreneurship. Innovational policies and strategies throwing light on the industry skill requirement for this industry are designed for the enhancement of the Indian software and services industry.

Keywords: innovation; entrepreneurship; software talent; skills; software programs.

Innovation and Entrepreneurship in Software and Services Industry

The term software was coined in the year 1953 and was used by a few commercial and private computer vendors, namely International Business Machines (IBM). Software is an exemplar case of study for innovation in the software world that is composed of two types: Product and Process innovation. Product innovation involves developing new or improved products that will excite customers. Process innovation refers to the digitalisation of content as well as the ability to provide services that are driven by the writing and the maintenance of the software code. Application of software has become more varied and the usage ranges from those devices using computer chips namely, cell phones, personal digital assistance, smart household and business appliances. In order to facilitate the usage of application of software, vast data bases of knowledge, sophisticated search engines and computerised controls of almost all complex operating equipment have aided this activity. As a growth factor using processes of creative destruction, innovation has taken shape as one of the most significant explanatory factors for long-term growth. In the Schumpeterian sense, new products, new processes, new forms of organisation, new markets and new sources of inputs to production are the resultant effects of entrepreneurship. The developing growth theories used Solow (1956) as their basis, placing technological progress and therefore innovation processes at the core of economic analysis. With new theories of endogenous growth as stated by Romer (1986), technological progress is fully integrated as an endogenous variable, which is explained by learning-and knowledge-related elements.

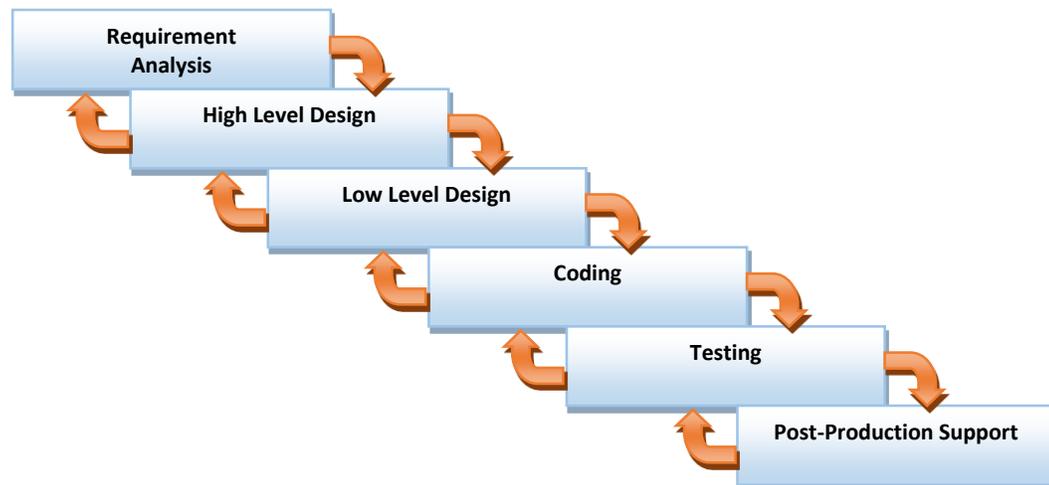


Figure 1: Waterfall Model of IT Software Development

Source: Arora Ashish, Arunachalam V. S., Asundi Jai, Fernandes Ronald (2001) “The Indian Software Services Industry”, in *Research Policy*, Volume 30, Number 8, October, pp. 1269.

The Waterfall Model as depicted in Figure 1 is a stylized view of programming that minimises the need for co-ordination and communication because it views the process of software development as a cascade of waves, the output of one being the input to the next. Software is the writing of symbolic code to achieve particular functions to be executed by computers and electronic devices. Since the capital investment consists largely of computers, software, and communication infrastructure, its production is heavily biased towards mental labour relative to traditional capital intensive industries. Much of software writing has, in fact, this characteristic, whereby differences in productivity and wages among classes of workers give rise to a "mental" division of labour (Babbage 1835). This division of labour is, consequently, a vertical hierarchy, in which less complex work is assigned to less productive and less expensive labour. The more skilled workers are reserved for more complex work, where their higher wages are justified by their higher productivity at mental labour.

Software research and development (R&D) spans a set of tasks including conception, design, specification, code development, testing and documentation as depicted in Figure 1. Software R&D culminates in a finished program or system, not in an input that gets combined with other inputs in some proprietary way and certainly not a discovery or invention whose commercial impact then depends on a secret process or methodology in the manufacture of the final product. It is easier to follow the evolution of these software programs if one takes part in the innovation process and it makes it easier to understand other people innovations (Cohen and Levinthal ,1989).

Data and Research Methodology

The study was based on the primary data collection that has involved a study conducted on the 114 software firms in the city of Mumbai. The city of Mumbai for the purpose of the study was divided geographically into four main areas identified as: Central Suburbs, South

Mumbai, Western Suburbs and Navi Mumbai shown in Tables 1 and 2. The main data analysis started from the period of December 2010 to January 2012 using SPSS version 18.0. The technique of logistic regression has been adopted for statistically testing the hypothesis and deriving the results.

Table 1: Surveyed IT Software Firms (2005-2009)

Sr. No.	Area	Universe	Sample	Percentage
(i)	Central Suburbs	108	15	13.89
(ii)	South Mumbai	89	12	13.48
(iii)	Western Suburbs	600	78	13.00
(iv)	Navi Mumbai	66	09	13.63

Source: Compilation of Survey Results conducted in the year 2010.

Table 2: Surveyed IT Software Firms (2005-2009)

Region	Firms Surveyed	Employees	Package d Software Product	Export of Package d Software Product	Domesti c Market for Package d Software Product	Applicati on Software Product	Export of Applicat ion Software Product	Domesti c Market for Applicat ion Software Product
Central Suburbs	15 (13.15)	15,642	04	03	01	14	05	09
South Mumbai	12 (10.52)	4,201	02	01	01	09	05	04
Western Suburbs	78 (68.42)	60,354	43	31	41	67	16	51
Around Mumbai	09 (7.89)	4,557	03	03	03	09	02	07
Total	114 (99.98)	84,754	52	38	46	99	28	71
Total Number of Export-oriented Firms (71 Firms) : Packaged Software Product (38 Firms for Export Market + 33 Firms for Domestic Market) Application Software Product (28 Firms for Export Market + 43 Firms for Domestic Market)								
Total Number of Domestic-oriented Firms (41 Firms) : Packaged Software Product (13 Firms) Application Software Product (28 Firms)								

Note: Figures in parentheses indicate percentage share.

Source: Compilation of Survey Results conducted in the year 2010.

Hypothesis:

H1: Externalities are observed when IT software firms concentrate on application or packaged software products.

Technique of Analysis

Named after Maurice Kendall, who developed the Kendall rank correlation coefficient in 1938, commonly referred to as Kendall's Tau (τ) coefficient; this is used as a test statistic in a statistical hypothesis test to establish whether two variables may be regarded as statistically dependent. The tau test is a non-parametric hypothesis test as it does not rely

on any assumptions on the distributions of X or Y and uses the coefficient to test for statistical dependence. Kendall's Tau Measure of association is symbolically represented as:

$$\tau_c = \frac{Ns - Nd}{\frac{1}{2}N^2 [(m-1)/m]}$$

where, Ns is the number of concordant pairs

Nd is the number of discordant pairs

N the total number of cases

m is the minimum value, whichever is less, of the number of rows or columns

Table 3: Driver for Innovation in Surveyed Software Firms (2008-2009)

Classification	Very Important (In Percent)	Fairly Important (In Percent)	Not very Important/ Of No Direct Importance (In Percent)	Number of Firms
Market	90.4	7.0	2.6	114
Strategy	77.2	21.1	1.8	114
Research and Development	46.5	50.9	2.6	114
Competition	66.7	24.6	8.8	114

Source: *Compilation of Survey Results conducted in the year 2010.*

The significance of Kendall's Tau association analysis tests is that for a 2-tailed test, if the p -value is below the acceptance level, that is, 5 percent level of significance then, the null hypothesis can be rejected. In this study, firms had to identify the various drivers that will enhance the productivity of the software firms. One such driver was innovation and it can be noted that the findings in the study indicate in Table 3 that organisations in order to compete and survive in the competitive market place must constantly innovate in their development of software products and services. Most of the firms in the study have rated market and strategy as the very important drivers required while, significant constraints have dominated the domestic software sector market that have included the problems of building credibility, product quality and security, difficulty and cost of marketing, lack of available skills, capital and technology, small size and poor quality of demand. This could be one reason for the lack of adequate R&D facilities.

Ordinal Logistic Regression

The binary logistic regression method is applied when we have a categorical response of the simplest possible form - dichotomous. It is natural to consider methods for more categorical responses having more than two possible values. A variety of methods have been developed for covering the various possibilities. The best known and most highly developed are methods for ordinal response variables.

Categorical variable is considered ordinal if there is a natural ordering of the possible values, for example Low, Medium and High. A number of proposed models for this type of data are extensions of the logistic regression model. The most well known of the ordinal logistic regression method is also called the proportional odds model. The basic idea underlying the proportional odds model is re-expressing the categorical variable in terms

of a number of binary variables based on internal cut-points in the ordinal scale. For example, if y is a variable on a 4-point scale, we can define the corresponding binary variables,

$$y_c^*, c = 1, \dots, 3 \text{ by } y_c^* = 1 \text{ if } y > c \text{ and } y_c^* \text{ if } y \leq c \quad (1)$$

If one has a set of explanatory variables, $x_j, j = 1, \dots, k$, then we can consider the 3 binary logistic models corresponding to regressing each of the y_c^* 's separately against the x 's. The proportional odds model assumes that the true β -values are the same in all three models, so that the only difference in models is the intercept terms, $\alpha_c, c = 1, 2, 3$. This means that the estimates from the three binary models can be pooled to provide just one set of β estimates. By exponentiating the pooled estimate relative to a given predictor, that is, taking α^β , we obtain an estimate of the common odds ratio that describes the relative odds for $y > c$ for values of x_j differing by 1 unit.

Thus, interpreting the proportional odds model is not difficult than a binary logistic regression. However, valid interpretations will depend on the assumption that the proportional odds assumption must be checked. The ordinal logistic regression model is, therefore, used for prediction of the probability of occurrence of an event by fitting data to a logistic function that can be represented as:

$$\text{logit}(p_1) \equiv \log \frac{p_1}{1 - p_1} = \alpha_1 + \beta'x \quad (2)$$

$$\beta'x = \beta_1x_1 + \beta_2x_2 + \beta_3x_3 + \dots + \beta_nx_n \quad (3)$$

where, β_0 is the intercept

$\beta_1, \beta_2, \beta_3$ are the regression coefficients of x_1, x_2, x_3 respectively

The intercept is the value of z when the value of all independent variables is zero. A positive regression coefficient means that the explanatory variable increases the probability of the outcome, while a negative regression coefficient means that the variable decreases the probability of that outcome; a large regression coefficient means that the risk factor strongly influences the probability of that outcome, while a near-zero regression coefficient means that that risk factor has little influence on the probability of that outcome.

Type of Software Activity

Referring to Table 4, it can be seen that there is the representation of 71.9 percent in the software services provider category. In-house development of software is the dominant activity with the representation of 77.2 percent and the export of software services has the representation of 60.5 percent. It can be noted that collaborations with foreign firms have a representation of 41.2 percent. Further observations from Table 2 reveal that 99 firms have concentrated on the development of application software while, 52 firms have engaged themselves into the development of packaged software products. The surveyed IT software and services firms had to identify the specific sector for the development of both packaged and application software that would be utilised to enhance the project-oriented services. It can be observed from Table 5 that the development of application software depicts the maximum concentration in the manufacturing sector, followed by health and

education. In Table 6 and 7, the representation of countries for the export of application software products by the surveyed firms is identified. A point to be noted is that 26 out of the 99 surveyed IT software and services firms have not exported application software products. The researchers have felt that most of the IT software and services firms have underutilised their capacity. As reflected from Tables 5 and 6, there is the need for more innovative R&D activity in the IT software and services sector.

Table 4: Characteristics by Type of IT Software Activity (2008-2009)

Characteristics	Yes (In Percent)	No (In Percent)	Total Number of Firms
Categorisation of Firm:			
Software Developer	76.3	23.7	114
Software Dealer	5.3	94.7	114
Software Services Provider	71.9	28.1	114
Software Firm Concerned With:			
In-house development of Software	77.2	22.8	114
Export of Software Services	60.5	39.5	114
Collaboration with Foreign Firms	41.2	58.8	114
Software Firm Engaged In:			
Development of Systems Software	25.4	74.6	114
Development of Application Software	83.3	16.7	114

Source: Compilation of Survey Results conducted in the year 2010.

Development of Application and Packaged Software Products

Table 5: Application Software Products by Surveyed Software Firms (2005-2009)

Type of Application Software Developed Sector-wise	Concerned Firm (In Number)						Total Number of Firms
	No Export	America	Europe	Asia	Oceania	Africa	
No Development of Application Software by Firm							15 (13.2) (100.0)
Banking, Insurance and other Financial Services	3	1	1	2	2	1	10 (8.8)
	(30.0)	(10.0)	(10.0)	(20.0)	(20.0)	(10.0)	(100.0)
Manufacturing	16	4	4	23	0	1	48 (42.1)
	(33.3)	(8.3)	(8.3)	(47.9)	(.0)	(2.1)	(100.0)
Government	1	0	0	3	0	0	4 (3.5)
	(25.0)	(.0)	(.0)	(75.0)	(.0)	(.0)	(100.0)
Transport and Hotel	1	0	2	2	0	1	6 (5.3)
	(16.7)	(.0)	(33.3)	(33.3)	(.0)	(16.7)	(100.0)
Communication	2	0	0	3	0	2	7 (6.1)
	(28.6)	(.0)	(.0)	(42.9)	(.0)	(28.6)	(100.0)
Health and Education	7	1	2	9	2	3	24 (21.1)
	(29.2)	(4.2)	(8.3)	(37.5)	(8.3)	(12.5)	(100.0)
Total Number	30	6	9	42	4	8	114

Note: Figures in parentheses indicate percentage share.

Source: Compilation of Survey Results conducted in the year 2010.

Table 6: Export of Application Software Products by Surveyed Firms (2005-2009)

Country	Percent	Number of Firms
No Export of Application Software Products	39.4	41
America	5.3	6
Europe	8.8	10
Asia	39.5	45
Oceania	3.5	4
Africa	7.0	8
Total Number of Software Firms	100.0	114

Source: Compilation of Survey Results conducted in the year 2010.

Table 7: Markets and Packaged Software Products by Surveyed Firms (2005-2009)

Markets	Yes (In Percent)	No (In Percent)	Number of Firms
Markets- Software Packaged Products Developed For:			
Domestic Market Only	12.3	87.7	114
Export Market Only	2.6	97.4	114
Both Domestic and Export Markets	24.6	75.4	114
First Domestic and then Export Market	5.3	94.7	114
First Export and then Domestic Market	1.8	98.2	114

Source: Compilation of Survey Results conducted in the year 2010.

From Table 8, it can be observed that the number of industry specific application software development by the firm and the overall turnover of the IT software and services firm are observed to be statistically significant, wherein, the p-value is 0.0135. Table 9 indicates that the total number of countries wherein, the export of application software products is undertaken by the firm and the overall turnover of the surveyed IT software and services firm are observed to be statistically significant, wherein, the p-value is < 0.0001 . It is further observed that the IT software firms with large turnover are focusing more into the export of application software products, that is, approximately 68 percent and hence, creating an opportunity for the companies with small turnover in the IT domestic software market. From Table 9, it can be noted that when the export of application software products is undertaken to more than four countries, the overall turnover of the IT software firm is the maximum as represented as 67.86 percent. Table 10 reveals that the total number of specific packaged software products development by the firm and the overall turnover of the surveyed IT software and services firm are observed to be statistically insignificant at 5 percent level of significance whereas, it is statistically significant at 10 percent level of significance and the p-value is 0.0614. It is to be noted that moderate and large turnover IT software and services firms are focusing more on industry specific application software and ignoring the development of specific packaged software. This creates an opportunity in the area of specific packaged software development. It can be noted from Table 11 that the total number of countries packaged software is exported to and the overall turnover of the surveyed IT software and services firm is observed to be statistically significant, wherein, the p-value is 0.0003. It is indicated that there is a positive correlation between

skilled employees and the number of software products by a firm. The inference that the development of IT software and services is largely dependent on the employment of indigenous entrepreneurship depends on the talent, knowledge and capability of the person employed.

Table 8: Association Analysis on Industry Specific Application Software Development (2008-09)

Total Number of Industry Specific Applications Software Development by the Firm	Overall Turnover of IT Software Firm (In ₹crore)				p-value
	Less than 15 N	Between 15 to 50 N	Between 50 to 500 N	500 and Above N	
None	9 (34.62)	7 (24.14)	3 (9.68)	1 (3.57)	0.0135
Between 1 to 2	6 (23.08)	9 (31.03)	13 (41.94)	10 (35.71)	
Between 2 to 4	7 (26.92)	9 (31.03)	7 (22.58)	9 (32.14)	
More than 4	4 (15.38)	4 (13.79)	8 (25.81)	8 (28.57)	

Note: Figures in parentheses indicate percentage share.

Source: Calculation through SPSS.

Table 9: Association Analysis on Export of Application Software Products (2008-2009)

Total Number of Countries: Export of Application Software Products undertaken by Software Firm	Overall Turnover of IT Software Firm (In ₹crore)				p-value
	Less than 15 N	Between 15 to 50 N	Between 50 to 500 N	500 and Above N	
None	20 (76.92)	21 (72.41)	6 (19.35)	2 (7.14)	<.0001
Between 1 to 4	3 (11.54)	6 (20.69)	12 (38.71)	7 (25)	
More than 4	3 (11.54)	2 (6.9)	13 (41.94)	19 (67.86)	

Note: Figures in parentheses indicate percentage share.

Source: Calculation through SPSS.

Table 10: Association Analysis on Industry Specific Packaged Software Products Development (2008-2009)

Total Number of Specific Packaged Software Products Development by the Firm	Overall Turnover of Software Firm (In ₹crore)				p-value
	Less than 15 N	Between 15 to 50 N	Between 50 to 500 N	500 and Above N	
None	16 (61.54)	23 (79.31)	17 (54.84)	13 (46.43)	0.0614
Between 1 to 3	7 (26.92)	3 (10.34)	8 (25.81)	8 (28.57)	
More than 3	3 (11.54)	3 (10.34)	6 (19.35)	7 (25)	

Note: Figures in parentheses indicate percentage share.

Source: Calculation through SPSS.

Table 11: Association Analysis on Export of Packaged Software Products (2008-2009)

Total Number of Countries Packaged Software is Exported to	Overall Turnover of IT Software Firm (In ₹crore)				p-value
	Less than 15 N	Between 15 to 50 N	Between 50 to 500 N	500 and Above N	
None	21 (80.77)	27 (93.1)	17 (54.84)	13 (46.43)	0.0003
Between 1 to 3	3 (11.54)	1 (3.45)	4 (12.9)	7 (25)	
More than 3	2 (7.69)	1 (3.45)	10 (32.26)	8 (28.57)	

Note: Figures in parentheses indicate percentage share.

Source: Calculation through SPSS.

Ordinal Logistic Regression Model

Ordinal Logistic Regression analysis is performed to model with the dependent variable the overall turnover of the software firms (OTSFA) represented in ₹crore for the year 2008-09 with seven independent variables namely:

1. Total number of industry specific application software development by the firm (TNAS)
2. Total number of countries: Export of application software products undertaken by the software firm (TNEASP)
3. Total number of specific packaged software products development by the firm (TNSPSPD)
4. Percent of total number of skilled employees employed in the firm (TNSE_pct)
5. Percent of total number of employees from national institutes employed in the firm (TNENI_pct)
6. Percent of number of employees in maintenance and support for services designation (NEMSSD_pct)
7. Percent of total number of permanent full-time employees in the firm (TNPFTE_pct)

Table 12: Ordinal Logistic Regression Model

Testing Global Null Hypothesis: BETA = 0			
Test	Chi-Square	DF	Pr > ChiSq
Likelihood Ratio	96.1054	11	<.0001
Score	60.3897	11	<.0001
Wald	52.1486	11	<.0001

*Note: *Predictors: TNAS, TNEASP, TNSPSPD, TNSE_pct, TNENI_pct, NEMSSD_pct, TNPFTE_new*

***Dependent variable: OTSFA*

Source: Calculation through SPSS.

Table 12 indicates that the overall significance of the model is tested. The chi-square values are calculated using Likelihood ratio, score and Wald tests. The Null Hypothesis is applicable when the effect of all independent variables equal 0, that is:

H₀ : all β's = 0

The Alternative Hypothesis is applicable when the effect of atleast one of the independent variables likely differs from 0. Therefore, the conclusion is that the Chi-square value for Likelihood ratio test is 96.1054 and p-value is < 0.001. Since the p-value is < 0.05, the null hypothesis is rejected. In order to test that the effect of at least one of the independent

variables is significant, ANOVA is utilised as depicted in Table 13 and the significance of the independent variable is tested using Type 3 analysis. Based on the individual Wald chi-square values, the significance of the variable is concluded.

Table 13: Analysis of Effects Using ANOVA

Type 3 Analysis of Effects			
Effect	DF	Wald Chi-Square	Pr > ChiSq
TNAS	3	2.7448	0.4327
TNEASP	2	26.1423	<.0001
TNSPSPD	2	0.3630	0.8340
TNSE_PCT	1	1.0116	0.3145
TNENI_PCT	1	22.6413	<.0001
NEMSSD_PCT	1	2.0328	0.1539
TNPFTE_PCT	1	1.6084	0.2047

Note: *Predictors: TNAS, TNEASP, TNSPSPD, TNSE_pct, TNENI_pct, NEMSSD_pct, TNPFTE_new; **Dependent variable: OTSFA

Source: Calculation through SPSS.

Table 14: Coefficients

Analysis of Maximum Likelihood Estimates						
Parameter	Category	DF	Estimate	Standard Error	Wald Chi-Square	Pr > ChiSq
Intercept	More than 500	1	-3.4805	1.3046	7.1177	0.0076
Intercept	50-500	1	-1.0371	1.2751	0.6615	0.4160
Intercept	15-50	1	0.8414	1.2670	0.4409	0.5067
Total Number of Industry Specific Application Software Development by the Firm	Between 1 to 2	1	0.2098	0.3320	0.3993	0.5275
	Between 2 to 4	1	-0.5293	0.3509	2.2744	0.1315
	More than 4	1	0.2930	0.3834	0.5839	0.4448
Total Number of Countries: Export of Application Software Products undertaken by Software Firm	Between 1 to 4	1	-0.0438	0.3165	0.0191	0.8900
	More than 4	1	1.5436	0.3388	20.7611	<.0001
Total Number of Specific Packaged Software Products Development by the Firm	Between 1 to 3	1	-0.1892	0.3492	0.2936	0.5879
	More than 3	1	0.0710	0.3923	0.0327	0.8564
Percent of Total Number of Skilled Employees Employed in the Firm		1	-0.0103	0.0102	1.0116	0.3145
Percent of Total Number of Employees from National Institutes Employed in the Firm		1	0.3067	0.0645	22.6413	<.0001
Percent of Number of Employees in Maintenance and Support for Services Designation		1	-0.0376	0.0263	2.0328	0.1539
Percent of Total Number of Permanent Full-time Employees in the Firm		1	0.0178	0.0140	1.6084	0.2047

Source: Calculation through SPSS.

Table 15: Odds Ratio Estimates

Odds Ratio Estimates				
Effect	Point Estimate	95	Percent	Wald
		Confidence	Limits	
TNAS Between 1 to 2 versus None	1.201	0.342		4.216
TNAS Between 2 to 4 versus None	0.574	0.154		2.132
TNAS More than 4 versus None	1.305	0.339		5.019
TNEASP Between 1 to 4 versus None	4.289	1.439		12.786
TNEASP More than 4 versus None	20.975	6.531		67.363
TNSPSPD Between 1 to 3 versus None	0.735	0.268		2.017
TNSPSPD More than 3 versus None	0.954	0.294		3.096
TNSE_PCT	0.990	0.970		1.010
TNENI_PCT	1.359	1.198		1.542
NEMSSD_PCT	0.963	0.915		1.014
TNPFTE_PCT	1.018	0.990		1.046

Source: Calculation through SPSS.

The inference that is drawn from Tables 14 and 15 is that the overall turnover of the IT software and services firm increases as the diversification to the total number of countries increases. The increase in the overall turnover of firm is noted where the export of application software products are undertaken by the IT software and services firms represented in the category 'More than 4' when compared with its base category 'None'. Similarly, it can be inferred that the overall turnover of the IT software and services firms increases as the percent of total number of employees from the national institutes employed in the firm increases.

Three Step Model for Enhancement of Knowledge and Creativity Process in Indian IT Software and Services Industry

Innovative performance has been measured in a variety of ways, using patents, trademarks, as well as R&D inputs. According to the Organisation for Economic Co-operation and Development Oslo Manual (OECD 2005), innovation refers to the implementation of 'technologically new products and processes and significant technological improvements in products and processes. An innovation has been implemented if it has been introduced on the market, that is, product or process innovation or used within a production process or process innovation. While technological innovation involves a series of scientific, technological, organisational, financial and commercial activities, it is important in this context to note that R&D is one important in the process of software innovation. In the software sector the main costs of developing products occur in the R&D phase that is based on the representation made in Figure 1.

In order to achieve the correlational existence between innovation and entrepreneurship, research and development is important to be considered. Considering the evidence from the city of Mumbai and co-relating the data findings to the Indian IT software and services industry, the researchers are of the opinion that the skill requirement for this industry can be developed through a three step model.

Step 1: Need for a visionary national IT Software and Services Policy

It can be emphasised that in order to promote the long-term progress in the Indian IT software and services activities, a visionary national IT software and services policy is essential. Active governmental participation can be effective through investment in government automation, e-government projects and adoption of competitive procurement practices for IT software products and services that should be included in the policy. The inclusion of intellectual property rights protection is also a necessity and should be included in the policy.

Step 2: Linkage Effect - Involvement of IT labour from the domestic IT software and services industry

Inferences drawn from the present study suggest the need for a well designed linkage effect. It is felt that in order to nurture the growth and sustainability of the IT domestic software and services firms, business linkages need to be developed in an increased association between small and medium-sized IT software and services firms. The business linkages, in turn, can result in increased cycles of innovation, productivity and can provide higher value added IT software products and services. Another area for a successful linkage effect would be a positive correlation between the IT domestic and export software and services market. The researchers have felt that the large IT software and services firms should contract out work activity to the small and medium-sized IT software and services firms. Through this joint participatory collaboration, the development of IT software products and services for the priority sectors of the economy can be designed. It is suggested that innovative technical ideas should be channelised through the participation of IT labour mainly from the domestic IT software and services industry. This strategy would ensure that the IT software and services export industry grows out of the IT domestic software and services industry.

Step 3: Software and Services Development Fund

On the basis of the findings in the present study, the researchers conclude the necessity for the creation of an IT software and services development fund. The IT software and services development fund should provide capital for startup IT software and services companies in the form of soft term loans for a minimum tenure. Modalities for the disbursement of the fund should be worked out after a credit appraisal of the business is conducted, found feasible and approved by the board of trustees. It is suggested that the financing of the fund should involve the Central government, the State governments, the oil and gas companies, the telecommunication sector, public-private partnerships and the financial services sector. Through the three step model proposed, the researchers envisage that India would become an innovational hub wherein, this activity would result in an increase of R&D work being undertaken in terms of low cost analysis. In conclusion, the requirements for innovation and entrepreneurship nexus are leadership and managerial skills, talent retention, workforce capability development and communication networking.

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Trends and Future Prospects of Indian and Chinese Software Industry: Aspects before Indo-China Diaspora

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Abstract

In the Asia-Pacific region, India and China have spectacular role in promoting software industry. India is a leading destination for Information Technology (IT) software while, China is strong in the hardware segment. Unfortunately, the bilateral engagements between the two countries have been limited. This paper traces the immense opportunity available for strengthening the diasporic relations in the Indo-China software market. The paper identifies the important difference between the Chinese and Indian software with respect to the usage and the determinants of software development in both countries. Both diasporas are privileged to have their human resources that can play an important role through software outsourcing. The paper throws light on the SWOT analysis of both the economies in the area of the factor inputs and the role of policy instruments, institutions and market forces needed for the promotion of the software industry. It also identifies the collaboration between companies from the point of view of the Indo-China economies that will be a win-win situation for competing and capturing the world market, if India's strength in software could be meshed with China's prowess in hardware. Based on the main features of the software industries in India and China, policy implications are enlisted from the point of view of business and government.

Key words: information technology; software; diaspora; economy.

Introduction

The Information Technology (IT) is a broad term covering development, production and all aspects of managing as well as processing information; basically comprises of computers, data processing equipment and peripherals, software products and services related to IT products. (Radhakrishnan, 2003). Using a programming language, software according to Heeks (1996) is initially written in human-readable form called source code and then is translated into a computer-readable string of ones and zeros called object code which operates the computer. Use-wise software can be broadly categorised into two, namely, System software and Application software.

Information Technology Industry in Both Countries

Globalisation has imposed both internal as well as external pressure on both India and China. As seen in Table 1 that represents an overview of the Indian and Chinese economies, it can be noted that one of the reasons for India's success is the fact that Indian businesses

generally speak at all levels, the international language of business, namely, English with a high degree of precision while, it is not in the case of Chinese businesses with Mandarin as the most spoken native language.

Table 1: Overview of Indian and Chinese Economy

	INDIA	CHINA
Population: (2014)	1.27 billion (#2)	1.36 billion (#1)
Population Growth (2014) (In Per cent)	1.25 (#94)	0.44 (#151)
Labor Force Occupation (2013) (In Percent)	Agriculture: 17.4 Industry: 25.8 Services: 56.9	Agriculture: 10 Industry: 43.9 Services: 46.1
GDP Growth (2013 In Per cent)	7.1	7.7 (#14)
Total Expenditure on Research and Development (R&D) (2008 In U.S. \$million)	3,743	15,558
R&D/GDP (2008 In Per cent)	0.85	1.2
Total R&D personnel (2008 1000 persons)	308	1,035

*Note: World comparison (#), for years 2008, 2009, 2010, 2011 estimated values stated
Source: Central Intelligence Agency (CIA) World Factbook (2009, 2011, 2013, 2014)*

The IT industry has played a crucial role in transforming China's industrial economy and in developing a vibrant high-tech industry based on policies that focus on providing infrastructure, incentives for research and development (R&D), a vibrant educational sector, a legal framework for intellectual property rights and standards, privatisation and a removal of barriers to foreign participation.

Development Strategy of Software and Services Industry

An important element of understanding the rise and growth of the Indian and Chinese software industry is to attain the historical perspective and study how the interaction of actors, institutions, markets as well as policies shape the development trajectories of software in various phases of their development.

Genesis of Software Industry

The development of the Indian and the Chinese software industry has been one important component to modernise and create the capability for technological innovation in the twenty-first century. An overview of the four main eras of the evolution of the Chinese software industry is analysed starting with the state-sponsored initiatives for software development in the 1970s and ending with the most recent era of rapid growth of firms exploiting markets generated by the internet boom and informatisation of the Chinese administration and economy.

Era 1: Bundled Software Development (1980s onwards):

The development of Chinese software followed a trajectory that lagged years behind software development in the West. Building on research efforts were launched after a major conference in August 1974 that identified Chinese language processing as a key priority. The first era of software bundled with mainframe or minicomputers continued to characterise software development in China until the 1980s. Most software during this era was being generated in a few geographical locations with advanced research institutes such

as Beijing and Shenyang for there was no concept of mass markets for software products. In addition to basic software research most actors were engaged in the development of bespoke applications. Software production was primarily regarded as a research activity that was concentrated in the Chinese Academy of Sciences and research institutes under the various sectoral ministries. Priorities for new software development were determined administratively under the planning process and appear to have been dominated by the demands of key economic sectors and defense. In significant ways, the evolution of software production in China in the era of bundled software until the middle of the 1980s was dominated by a few key characteristics of the traditional innovation system. (Baark, 2003)

Phase 1: Early Entry Pre-1984: The origin of the Indian software sector and the initial build-up of software skills in India during the early 1960s was intimately linked to the development of the Indian hardware industry and was integrated with the introduction of commercial computers that were largely employed by the big companies, namely, International Business Machines (IBM) and International Computers Ltd. (ICL) who have been able to afford the high costs of operating such technology. (Heeks, 1996). During this phase, there was neither any specific policy towards software development nor were the large investments invested in science and engineering areas directed at software. The establishment of the Santa Cruz Electronics Export Processing Zone (SEEPZ) in November 1972 had offered foreign investors a variety of incentives to locate within India that had included favourable rates of taxation of income, concessional land costs, duty-free imports of intermediate goods. The government was also able to use a general Indian protectionist policy innovation, a 1973 amendment to the country's Foreign Exchange Regulation Act (FERA) so as to obtain a new source of leverage over the foreign computer firms already in the country and indicated that a foreign firm could operate in India only with a minority interest while, foreign ownership had been restricted to a maximum of 40 percent. FERA of 1973 had closed the door to product software development in India by Trans National Corporations (TNCs).

Era 2: Microcomputer Systems (Early 1990s onwards): A major milestone for Chinese software development during the 1980s was the creation of Chinese language platforms for popular microcomputer operating systems such as the CC-DOS system. This program was available free of charge to the public and quickly became widely used. The era of microcomputer systems in the 1980s coincided with the transitional reform stage of the Chinese Network Information Service (NIS) evolution and provided a vital impetus for the establishment of software firms.

Phase 2: New Entry and Experimentation (1984-90): The post-1984 period had witnessed the conditions that were in place for a competitive as well as an innovative industry. Keeping the Computer Policy of November 1984 announced by Department of Electronics (DoE) as the point of reference, this policy had for the first time, explicitly acknowledged the importance of software development and had investment procedures streamlined to expedite the establishment of new ventures.

The 1986 Software Policy had specifically recognised the difficulty of marketing Indian products in the international market and the government had made a specific provision by designating the Export-Import (EXIM) bank as the agency to help identify markets, give credit for software exports, would also provide single window clearance for imports. The software movement gathered momentum ever since the National Association of Software and Services Companies (NASSCOM) had come into existence in 1988.

Era 3: IT Systems Diffusion (Mid-1990s onwards): While, the 1980s witnessed the birth of high-tech IT firms serving a new mass market in China much of the industry was still dominated by assembly of microcomputers and software that was bundled with the computer sales. During the 1990s, however, the production of computers in China grew explosively and a wide range of organizations installed computerised systems for financial or administrative purposes. One of the key initiatives of Science and Technology (S&T) policy reform, namely the establishment and expansion of high technology parks in China during the 1990s, also helped many software firms through the early stages of growth and ensured them of a favorable business environment in places like Beijing. As noted by Baark (2003), the progress of reforms in the S&T system was accompanied by extensive opening of the Chinese coastal economy to foreign direct investment and management during the 1990s that not only generated opportunities for emerging software producers in China to import foreign technology but also gave them a new sense of competition from established software vendors. The reform of institutions such as property rights and ownership of firms gave organisations producing software new prospects for expanding their operations.

During the era of widespread IT diffusion, there were a number of new locations like Shandong province and Xithat started to witness the growth of local software industries but the geographical concentration continued in central locations such as Beijing and Shenzhen. Some of the large software firms also expanded their network of branch offices but the market for software in China remained fragmented. This era of IT diffusion served important purposes in terms of providing a potentially large and growing market for software producers that became the fertile breeding ground for many of the independent software vendors that currently rank among the largest in China.

Phase 3: Imitative Entry and Financial Liberalisation (1991-99): The main highlights of this period can be described as a perceptible shift in the role of the government from ‘doer controller’ to ‘facilitator-intervenor’ of the industry and a number of governmental agencies that were involved in the different aspects of IT were integrated into the Ministry of Information Technology, followed by an IT act to deal with the wide variety of issues relating to the IT industry (Joseph and Harilal 2001, pp.3264). One notable institutional intervention by DoE in June 1991 under the aegis of the Software Technology Park of India (STPI) has been the establishment of a series of Software Technology Parks (STPs). The software industry was more influenced by the ‘post-liberalisation’ policy with reference to the tax policies of 1992, wherein, software exports that had been brought under the Income Tax Act had exempted exporters from income tax under Section 80 HHE of the IT Act; 100 percent export-oriented units was extended to software exports from companies taking part in these schemes which were established in or after 1993; import duties on imported software from 1992-95 had been reduced to 20 percent on applications, 65 percent on

systems software in 1994 and further been reduced from 110 percent to 10 percent in 1995 and were eliminated by 1997.

Era 4: Internet and Informatisation (2000 onwards): A distinguishing feature of this era of software development in China is the extensive role of government sponsored projects in fuelling the market. During the early 1990s, several ‘Golden Projects’ were launched for the development of advanced information networks such as the Golden Bridge for exchange of economic data, the Golden Card project aiming at the provision of a secure network for credit cards, and the Golden Customs Project with a network for foreign trade. These procurement projects sought both to support the domestic software industry and simultaneously to enhance key economic sectors such as finance and economic planning. Promotion of projects such as e-commerce and e-citizenry in China also intended to capitalise on the expanded telecommunications network and familiarise Chinese organisations and citizens with computerised transactions. The Internet craze that swept over China during the end of the 1990s resulted in a boom of internet service providers (ISP) and content providers (ICP) that emerged by the thousands. The Chinese government has also intensified its direct support for its software industry by encouraging the establishment of software parks or software bases in major Chinese cities. Statistics given by China Software Industry Association (CSIA 2003) have indicated that from 30 firms these software parks and bases earned total revenue of 95 billion RMB yuan.

Phase 4: Consolidation and Slowdown (2000 Onwards): The Indian software industry had been through a lot of changes during this period for there was a slowdown, on one hand, in the demand for software due to the recession in the U.S., the industry’s largest market while, on the other hand, in 2001 and 2002, there was an expansion in the demand for outsourcing projects secured by the leading domestic firms; many of whom had attempted to enter other markets, namely, the European, Japanese and African markets. A significant feature brought out by Mitra (2009) was that almost all major Indian IT service export companies did well despite the fact that they were heavily dependent on the United States (U.S.) and United Kingdom (U.K.) and the banking and financial services sector in these countries.

The patterns, the forces and the causes underlying the development of the software industry in both the economies has indicated that the Chinese software industry offers a strong contrast to its Indian counterpart, in terms of the role of the state and the choice of growth paths, in terms of language and business organisation. According to the software export success model, there are three levels:

LEVEL 1: National software vision, strategy that includes a government determined on progress to reach achievable preset goals that must be organized in the frame of five year plans.

LEVEL 2: National software-related infrastructure that includes powerful industrial and technological infrastructures such as fast, cheap and reliable internet networking, hi-tech servers and an industrially-oriented educational system; an up-to-date and modern banking and financial system; and above all, protective laws.

LEVEL 3: National software industry that is made up of an expert work force and efficient managers, which must be protected by a reliable financial system.

Considering the above three levels, there are a number of dimensions and significant differences relevant to understanding the composition of the software industry in India and China.

SWOT Analysis on Indo-China Software Markets

In order that effective strategies are developed for the collaboration between Indo-Chinese firms, the potential of Chinese and Indian domestic software market and software outsourcing services is analysed through the following information:

- (1) In terms of the export industry size, Indian market is U.S. \$ 9,500 million while, the Chinese market is U.S. \$ 1,040 million.
- (2) In terms of CMM Level 5 certified companies, India has 60 while, China has only 2.
- (3) In terms of IT employee costs, India is in the range of U.S. \$ 8,000 to 12,000 per year while, China is in the range of U.S. \$9,000 per year.
- (4) In terms of export focused professionals, India has 1,95,000 professionals while, China has 26,000 professionals.
- (5) In terms of infrastructure, India is weak in university-based research and links between universities and firms while, China has strong linkages and research laboratories as well as research institutions.

Factor Inputs in Software Market

Human capital is widely believed to have been the main force in the growth of the software industry in both India and China that has evolved over the years. It can be noted that the number of people employed in the Chinese software companies numbered around 3,00,000. Considering the demand-supply gap in 2002, the annual supply of IT professionals is estimated at 50,000 against a demand of 3,50,000. It can be stated that the software industry in China suffers a huge shortage of professionals even though the number of doctorates granted in China increased by 240 percent from 518 to 1247 between 1995 and 2000 even though China encourages educational universities to have R&D alliances with leading international companies and academia. India's share of global R&D spending rose to 2.7 per cent in 2013 from 2.6 percent in 2012 and is forecasted to be at 2.7 percent in 2014. In terms of purchasing power parity (PPP), Indian investment in science and technology during the year 2011-12 was \$36.2 U.S. billion whereas China had invested \$205.4 billion respectively.

Role of Policy Instruments, Economic Institutions and Market Forces for Promotion of Software Industry

The comparative analysis between India and China indicates that the Chinese software industry offers a strong contrast to its Indian counterpart and scores higher on parameters in terms of the role of the state, the overall economic situation, education level and human capital reserve, the size of the domestic market, quality of infrastructure as well as business organisation.

Extent of Telecommunication Network

With the software development delivery model increasingly moving toward outsourcing and offshore services, a robust and reliable telecommunications infrastructure has become a priority. Both China and India have advanced rapidly in their telecommunications industry, but China has a significant advantage as observed in Tables 2, 3 and 4.

Table 2: Fixed Telephone Lines per 100 Inhabitants

Country	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
China	11.41	14.11	16.66	20.31	23.97	26.80	27.98	27.67	25.62	23.50	21.95	21	20	19
India	3.08	3.60	3.80	3.80	4.11	4.40	3.52	3.34	3.18	3.07	2.87	3.0	2.0	2.0

Source: International Telecommunication Union (ITU) World Telecommunication /Information Communication Technology (ICT) Indicators Database

Table 3: Mobile Cellular Subscriptions per 100 Inhabitants

Country	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
China	6.72	11.33	16.02	20.87	25.74	30.09	35.07	41.42	48.28	55.97	64.04	72	81	89
India	0.34	0.61	1.19	3.05	4.65	7.91	14.35	19.90	29.13	43.48	61.42	73	70	71

Source: International Telecommunication Union (ITU) World Telecommunication /Information Communication Technology (ICT) Indicators Database

Table 4: Internet users per 100 Inhabitants

Country	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
China	1.78	2.64	4.60	6.20	7.30	8.52	10.52	16.00	22.60	28.90	34.30	38.3	42.3	45.8
India	0.53	0.66	1.54	1.69	1.98	2.39	2.81	3.95	4.38	5.12	7.50	10.1	12.6	15.1

Source: International Telecommunication Union (ITU) World Telecommunication /Information Communication Technology (ICT) Indicators Database

Comparing the size of the Indian population, it can be stated that India lags far behind in terms of the bandwidth necessary for people to simultaneously access information flow through the internet. According to the World Bank's World Development Indicators, in terms of home personal computer owner-China's 15.9 per 1,000 homes was more than three times that of India in 2000. In terms of internet spread or the number of users per 100 inhabitants, India with 0.7 was behind China at 2.6 (Saith and Vijayabaskar 2005, pp.63-64). While, every 100 Chinese people own 20 telephones and there are 45.8 million internet users in China, India has just three telephones for every 100 people and only 2 million internet users out of a population of 1 billion.

Policies Devised by Government

As many software firms have originated in the state supported sectors, it can be stated that Chinese government policies have been very supportive of science and technology where, the domestic-led focus software firms have provided a powerful impetus and ample

opportunities for foreign and local firms. The Chinese national industrial policy encourages the industry to develop towards the direction of hi-tech products. The software product market in China is dominated by foreign firms like Microsoft, IBM and the successes of domestic firms in the software product market have been very limited. China and India have similar percentages of package software in IT expenditure, that is, 4.6 percent in China versus 5.7 percent in India in 1995 while, the percentage of hardware expenditure in China was significantly higher than that of India, that is, 88.1 percent versus 62.2 percent in the same year. India has a high percentage of service, that is, 32.1 percent, which is significantly higher in contrast to China's percentage of services that has been only 7.3 percent. India has 16 percent of the global market in customised software and that more than 100 of the Fortune500 have outsourced software development to India. Application software such as, security systems, electronic publishing as well as educational products dominates the market and constitutes upto 65 percent of total sales.

The Indian software industry, on the whole, has predominantly specialised in relatively low-value activities that is reflected with reference to the industry revenue that is spent on training employees in the IT-BPO sector, approximately about 2 percent. The share of Indian software packages has been initially quite low at 8.1 percent, has increased thereafter, underwent ups and downs but finally, has declined drastically to 9.2 percent in 1999-2000, 8.0 percent in 2000-01 and have accounted for less than one third of the total in 2000 indicating that it has been confined only to the top players or certain select producer groups. India's lack of concentration on packaged software has been attributed to her unfamiliarity with the recent market trends and the environment in the U.S. and Europe; the differences in the computer systems that have presented impediments; the severe competition in the software industry with high costs in marketing and promotion that have made it difficult to compete effectively. India's technology including hardware is estimated to have generated US\$ 108 billion in revenue during 2013. The export of IT services has been the major contributor, accounting for 57.9 percent of total IT exports (excluding hardware) in 2013.

The software industry in Mainland China is the business of developing and publishing software and related services in China. The size of the industry including software and information services in 2013 was worth 3060 billion RMB (about \$493 billion) according to the Ministry of Industry and Information Technology. In the post-financial crisis period, China's economy has maintained strong growth, with the gross domestic product (GDP) expanding 11.1 percent in the first half of 2010. This growth has been accompanied by a solid increase in domestic demand in both the overall Chinese economy and China's software market. According to official data published by the Ministry of Industry and Information Technology (MIIT), China's software market was valued at RMB 951.3 billion (USD 142 billion)¹ in 2009.

Table 5: Regional Software Market Performance in China (2009)

City	Income of Software Industry (USD billion)	Growth rate (In Percent)	Income of Software Products (USD billion)	No. of Software Companies
Beijing	28.3	17.4	10	2,661
Jiangsu	24.1	24.0	5.8	2,432
Guangdong	29.7	27.2	10.2	2,864

Dalian	3.9	30	0.88	383
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Source: Market Analysis Report (2010) - "China's Enterprise Software Industry", presented to the Israel Ministry of Industry Trade & Labor and The Israel Export & International Cooperation Institute, November, pp. 6.

As revealed in Table 5, in 2013, China's software industry reported the revenue of RMB 3.1 trillion, jumping by 24.6 percent year on year, higher than global average of 5.7 percent. With respect to segments, software products, system integration and support services and data processing and operating services made up a large proportion of software business revenue, standing at 32.1 percent, 20.7 percent and 17.4 percent in 2013, respectively. In view of revenue growth rate, information technology consulting services and data processing and operating services kept growing fast in 2010-2013, with a Compound Annual Growth Rate (CAGR) of 39.2 percent and 35.3 percent separately.

Software Export Destinations

In 2007, China's overall software industry realised an export value of U. S. \$1.9 billion, recording a growth of 167.4 percent from the previous year. Within this figure, exports of software products reached U.S. \$928 million, accounting for 49.5 percent, while IT outsourcing services amounted to U.S. \$948 million, accounting for the remaining 50.5 percent. Japan, the U.S. and Hong Kong have been China's major software export destinations, with an export value amounting to U.S. \$818 million (62.8 percent), U.S. \$365 million (90.3 percent) and U.S. \$264 million (53.3 percent) respectively. Amongst the provinces and municipalities, the value of software exports from Beijing, Shanghai, Guangdong, Liaoning and Jiangsu exceeded U.S. \$100 million.

It can be noted that in the total global IT market of \$1,200 billion, India's share in software development, as stated in the Tenth Five-Year Plan (2002-07), is reported to be only 2 percent. Figures stated by Bhatnagar (2006), NASSCOM (2010) and NASSCOM Strategic Review (2011) have revealed the fact that India's software exports have been characterised by a consistent demand from the U.S. with 61.5 percent in 2011 and 69.4 percent in 2005, the United Kingdom (U.K.) with 18 percent in 2010 and 14.5 percent in 2005, Europe including U.K. with 12 percent in 2010, Japan 3.0 percent in 2005, Germany 2.8 percent and Singapore 1.8 percent in 2005, Asia-Pacific (APAC) with 7 percent and Rest of the World (RoW) with 2 percent in 2010. As reported in the Eleventh Five-Year Plan (2007-2012), while the U.S. and the U.K. have remained the dominant markets, Indian firms have been keenly exploring new geographies, namely, Japan and the Middle East for business development as well as to strengthen their global delivery footprint. The point to be stated is that India's skewed export profile makes it vulnerable in the future due to her lack of diversification in the area of software exports compared to China, a competing nation who is also still focused on conventional markets, namely, Taiwan.

Intellectual Property Rights and Software Piracy

In China, great importance is placed on the protection of Intellectual Property Rights (IPR) and technological innovations. It can be stated that the lack of process capabilities, piracy and human resource turnover have been a problem for the Chinese software industry even though China created a software policy in June 2000 to ensure growth in the sector. One problem that affects the Chinese software industry is the situation that most users including

the government lack the maturity to understand the usage of the software. China is ranked second in the world with a 94 percent software piracy rate and has been a major reason for the low software spending. In order to fulfill international protocols, the Chinese government has to work towards eliminating software copyright piracy.

In the case of the Indian context, the lack of intellectual property rights and protection from the government contribute to the low spending on software that further hinders software firms' incentives to innovate. The Indian government should enact attractive policies for the promotion as well as enhancement of the domestic software industry, such as initiatives that will include a proper incentive structure with respect to preferential investment policies, tax concessions, the certification for software companies and products, policies for curbing software piracy with more focused entrepreneurship, capital flows, interaction of the three actors namely, the industry, the government and the educational institutes so as to enhance business networks as well as the supply of technically skilled personnel.

Foreign Players

As compared to India, the political and social environment of China is more stable which has given the investors and enterprises more confidence for the software industry growth in the long run. By contrast, with great success, many multinationals in China are setting up their own captive facilities. It can be noted that the presence of multinationals with a software development center in Hangzhou, China uses computers lacking external drives, on a closed network with no external connection and no printers. Within the industry, the leading foreign software companies are Microsoft, IBM, Oracle and Sybase.

Analysing the entry mode of the Multinational Corporations (MNC) firms, it can be stated that the relationship between MNCs and the Indian software industry has been marked by two major events, namely, the exit of IBM in 1977 that was induced by restrictive policies on international trade and Foreign Direct Investment and the establishment of a Texas Instruments (TI) R&D laboratory in Bangalore in 1985 (NASSCOM, 2009). MNCs have contributed to the progress of organisational and technological capabilities of Indian domestic firms. In general, MNCs have carried out two types of activities in India, namely, the Business Process Outsourcing (BPO) or IT-enabled services like sales and customer support services, for instance, GE Capital and Citibank and secondly, R&D activities, for example in the case of TI and Motorola.

Future Collaboration of Software Companies: The Role of Indo-China Diaspora

According to the Software Export Success Model, the first step to increase the software production in both the economies must be to establish the correct policy in information technology; then building infrastructures and also attracting international trust and cooperation as well as reduce the high rate of brain drain. The term Diaspora carries with it the sense of an ongoing transnational network which it includes the homeland, not as something simply left behind, by necessitating continued interaction between the place of origin and the ultimate destination. The role of diaspora has been critical in the context of international linkages with markets and overseas customers. There is scope for diasporic linkages that have been built through marketing operations set up by industry associations like NASSCOM. Another issue is trust which was facilitated by the diasporan links and by

the reputation of famous companies such as Microsoft or Intel who set up subsidiaries. The Indian software industry can take inspiration from China's software industry because of the similarities of the two countries stages of economic development and the clear divergence in their Information Communication Technology (ICT) structures and development paths even though, the language barrier has often been singled out as the major obstacle for China's software exports.

Context of Indo-China Economic Cooperation

It can be noted that China scores higher in government investments in education, research and development, venture capital and infrastructure as well as on parameters such as the size of the domestic market, cost of telecom bandwidth and equipment. On the other hand, India scores higher on parameters such as size and quality of the talent pool, cost of talent, project management skills, quality processes, domain skills and customer access. Scope for Indo-China collaboration of software companies can take place because both the economies are known for IT prowess where, India is a leading destination for IT software and services sourcing while, China is strong in manufacturing or hardware segment.

Indo-China economic cooperation is essential in the case where companies are seeking to cut their software-development costs for which diasporas of both countries can act as catalysts. In the case of China, co-operation is needed in view of the software industry's fragmentation and quality problems as well as the country's weak intellectual-property laws. To compete effectively in the global IT outsourcing market, the software industry in China will have to consolidate with the software industry in India. Chinese managers have little experience with mergers, acquisitions and alliances while, several Indian companies have expanded their operations in this area by acquiring Chinese firms. In order that an increased expansion and software industry consolidation is undertaken, the state participation of both the two economies is needed. With greater government support, China's software services industry will be better able to address the other issue such as its talent base, its quality standards and software piracy that inhibit global growth. M

Scope of Developing Indo-China Business Friendly Policies

The two economies of China and India present a huge and fast growing domestic market for a range of goods and services and thus export opportunities for producers in the rest of the world. Large and growing market opportunities in China and India are widely seen by the large flows of foreign direct investment (FDI) to China, both for the domestic market, but also to use China as a low cost platform for exports to the rest of the world. The performance gap between the Indian and Chinese software industry has a great deal to do with investment climate. Interrelated sets of regulatory and institutional reforms are needed in order to improve the Indian investment climate. The first comprises a set of regulatory reforms, including reducing entry and exit barriers to manufacturing industries, addressing impediments to the smooth functioning of labor, land, product markets and streamlining the regulation of business startups, bankruptcy procedures, and industrial and trade routines. The second reform set would address institutional and regulatory impediments, physical infrastructure and financial and other business services.

A few Tips for Capturing the World Market

In order to develop both the Chinese and the Indian software industry, strategies at the national level, the industry level as well as the firm level needs to be taken since the issues related with the software industry involve the government, the software industry and the software firm.

Government

The government has played and continues to play a very important role in the growth of the Chinese software industry. The Indian and Chinese governments should encourage joint ventures between Indian and Chinese companies. Chinese firms can learn from Indian firms and simultaneously, Indian firms should be given access to the vast domestic software market in China. Inadequate access to financial resources has remained a serious constraint for the development of the software industry in both India and China. This problem can be solved if both countries software firms are allowed to participate in the joint funding of major state-sponsored research projects in key software programmes that involve domestic or foreign clients. Stock markets and venture capitalists can aid in the funding programme.

Software Industry and Software Firm

Indian and Chinese software enterprises need to be more innovative and exhibit the ability to identify growth markets and to access necessary inputs. The Chinese software industry needs to build a firm foothold in the domestic software service while, the Indian software industry needs to develop strategies for the domestic sector. The Chinese IT industry is dependent on consolidation and government intervention in order to increase the share of the global outsourcing market. The underdeveloped domestic user base in the context of India can be improved if Indian firms can play to their own strengths in process control and project management, perhaps forging alliances with Chinese companies strong in product development and with a sophisticated domestic customer base as a means of penetrating an increasingly important regional market. Such tactical alliances in the future could evolve into something more strategic, with Indian-Chinese joint venture companies competing with multinationals in certain global market niches.

Build a consistent legal system and increase the quality and process maturity

In China, software piracy is rampant and building a consistent legal system is the top priority for China to ensure the development of software industry. When Chinese software companies enter the global outsourcing market, the outsourcing contracts will give rise to many legal problems that should be considered in the international context. In the outsourcing market, cost is the most important factor driving customers to outsource their software projects. By developing an Indo-China collaboration program with Indian universities and engineering institutes, China can train people with skills in both management and computer science so they have the expertise as well as professional training to be employed in Indian software companies. In order to increase the quality and process maturity in order to meet the demand of the outsourcing providers, subcontracting Indian and Chinese companies need to adopt the advanced project management concepts for their businesses through a more focused research environment. As the domestic software market is gradually merging to the international market, the demand from the

domestic market will raise the same requirements as that from the international market. This will eventually push Indian and Chinese software companies to align their project management to the world standard. By building the correct channels to the global outsourcing market with the qualified software companies in India as well as in China, the government and software companies can attract the foreign providers by preferential policies and the elimination of red tape.

Linkages between Software Product firms and Software Services Firms

It is essential to develop linkages so as to enhance and sustain growth in revenues for both the economies, a collaboration can be struck between the Chinese product software firms and the Indian software services firms so that these firms can fund their own development efforts in their particular area. China's success include its emerging strength in hardware related technologies like embedded software while, on the Indian side, to sustain their performance, the leading Indian firms are making strong efforts to move up the value chain by acquiring better software project management capabilities and deeper knowledge of business domains, and by reducing costs and improving quality through the development of superior methodologies and tools. Most Chinese software companies do not have the domain expertise or project management skills that Indian companies have acquired. Building on their strengths such as deep expertise in the area of call centers, the world's best software engineers, CMM software quality, software project management skills and its huge presence in Silicon Valley, the Indian software industry will have good opportunities to tap these opportunities in the Chinese market. China and India should be able to participate in the international division of software labour through software collaboration. These are aspects before Indo-China Diaspora to ponder over.

Policy Implications for Business and Government in the Two Economies

Social, ethical and policy implications of the software industry in the two countries must focus on the human impact of information systems, including ethical challenges, social implications, legal issues and unintended costs and consequences. The focus of this collaboration is about establishing the facilitating framework through putting in place appropriate policies and regulations. Both the governments of India and China should reduce unnecessary costs and regulatory burdens on firms to create a business environment that promotes productive investment. This involves policies to enable organisational change, to strengthen education and training systems, to encourage good management practices, and to foster innovation, e.g. in new applications, that can accompany the uptake of information and communications technology (ICT). Moreover, policy should foster market conditions that reward the successful adoption of ICT and a competitive environment is the key for this to happen. Governments will also need to work with business and consumers to shape a regulatory framework that strengthens confidence and trust in the use of ICT, notably electronic commerce. Policies to foster growth in services are important too, as ICT offers a new potential for growth in the service sector, providing that regulations that stifle change are adjusted or removed.

In other words, a regulatory environment is needed to:

- Enable fair competition in the software market that is conducive to achieving accessible and affordable communications for the citizens of the two economies
- Adopt pricing, policies and regulation to promote universal access

The main stakeholders in the collaborated software industry would include:

Industry/Private Sector:

To create an enabling environment conducive to the promotion of investment towards the development of the economy as well as assist in the integration of ICT in its processes and encourage the use of ICT.

Government: Major partner in the economy and has a crucial role, should develop necessary capacity for collection of data to provide indicators for effective review of policies and provide incentives for innovation and experimentation

The implications of the above policy will result in many industries for instance, banking, insurance, telecommunications and so on will gain competitive advantage and create barriers to entry because competitors will not be able to hire the talent they require in order to offer competitive products and services. As a result, mundane work will be outsourced and internal projects will be more important. The need of the hour when recruiting top talent is an academia-industry interaction where corporations must cooperate with academic institutions to produce the talent they need. Another solution would be to nurture alliances with outsourcing partners and contractors since there are sometimes huge project failures and cost overruns. For a proper functioning of the software industry through a collaborative effort between India and China, it is essential that a backbone network connecting the whole country is available; information infrastructure including telecommunication infrastructure is reliable and secure; operational personnel are skilled; and there is the existence of proper legal and regulatory framework between the governments of the two economies. For attaining this goal, the management of the software industries in both the economies must ensure that there is adequate internet penetration. With respect to this issue, the government can subsidise the information communication technology infrastructure; organise training facilities for the employees through public private partnership agreement. The government not only needs to widen multiple access facilities like web, telephone, and so on but also needs to initiate motivation programs for the users and the target population. Furthermore, the government of both these economies need to formulate a package of required rules, acts, laws, and regulations pertinent to the proper legal framework and security networks for the successful collaboration of the software industry.

Conclusion

Globalisation has had a profound impact in shaping the software industry. An important difference between the Chinese and Indian software sectors is that the software industry in China has close links to domestic users, notably industrial and commercial users. This has fostered intensive learning in the area of product development for a large and rapidly growing domestic market. India's software sector, lacking such a dynamic domestic user sector until very recently, has thrived on exporting software services. If Indian firms can play to their own strengths in process control and project management, perhaps forging alliances with Chinese companies strong in domestic user base can constitute a long-term asset for India. Over the years, verticals like manufacturing, telecom, insurance, banking, finance and so on have been the growth drivers for this sector. To achieve this growth, the

sector has to continue to re-invent itself and strive for that extra mile, through new business models, global delivery, partnerships and transformation.

The need for India and China to build alliances and collaboration with other foreign software superpower is also important for the growth of both the economies software industry. Like NASSCOM in India, the CSIA needs to play a more important role in China's software industry. One way this can happen is by contributing a significant amount to the revenue of China's software industry. CSIA should act as a catalyst for the growth of the global competitiveness of software-driven IT industry in China. CSIA should avoid the notion of profit making and devote its attention to incorporating as many member companies as possible so as to ensure development and growth in the industry, for which diasporas of both countries should take an active roles.

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Examining Relationship between Employee Satisfaction and Customer Satisfaction: The Case of Food and Beverage Establishments

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Abstract

Along with the economic shifts, the intensity and the form of the competition in domestic and international market have been shifted significantly. Establishing strategies for customer satisfaction has become a necessity for the establishments that operate business in the service industry. Kotler and Levy (1969) explained that employees are a vital component of service providers' marketing efforts (cited in Oakley, 2012). Hence internal marketing strategies encompass the practices that focus on increasing employee satisfaction that will eventually build customer satisfaction. As such, the importance of the relationship between employee and customer is related to the value created by employees (Heskett et al., 1994; Larivière, 2008). Satisfied employees, in turn, will be more likely to seek every possible option to enhance delivering better service and increase customer satisfaction (Oakley, 2012). The study examines the extent to which there is a relationship between employee satisfaction and customer satisfaction within the field of food and beverage industry. The data was collected through a questionnaire from 229 from employees, and 229 from customers. Job Satisfaction Survey (Spector, 1985) which was adapted to Turkish by Yelboga (2009) was used to assess employee satisfaction level. The study adopted the customer satisfaction items from previous research (Oliver, 1980; Duman, 2002, 2003). Results indicate that there seem to be a link between employee satisfaction and customer satisfaction. Recommendations are given that may help industry practitioners so as to design service delivery processes and to meet expectations of employees more effectively. Theoretical implications are also discussed.

Keywords: employee-employer relationship, employee satisfaction, customer satisfaction, food & beverage establishments.

Introduction

There seems to be a consensus indicating organizational culture in hospitality industry helps employees to be eager to serve excellent service (Ford & Heaton, 2001). However it is hard to say that increasing satisfaction levels of customer and employee together is not accomplished easily. Yet, no matter what the scale of business is, improving employee satisfaction will likely to make them more loyal (Khalaf, Rasli & Ratyan, 2013). This is also important for customer loyalty (Julius, 2008). Research indicate a positive relationship between employee and customer satisfaction (Reynierse & Harker, 1992; Schmitt & Allscheid, 1995; Schneider & Bowen, 1985; Johnson, 1996). Indeed, if an organization can

turn negative attitudes of employees into positive ones successfully, this will enhance positive satisfaction (Bulgarella, 2005). As for financial performance of the establishments, a study conducted by Brooks (2000) found significant relationships among employee attitudes, customer-related variables, customer, and employee satisfaction and loyalty.

Service providers attempt to understand relationship between employees and customer behaviors, and its possible impacts on their financial goals (Oakley, 2012). For establishments to achieve their visions, it is important to focus on customers' perceptions and differentiate the product and service quality with those of competitors. The executives tend to try different techniques in pursuance of customer attention. These techniques would include: developing marketing strategies according to consumers' needs, wants and expectations, diversifying service and product, and branding. However, as these efforts are being taken, the importance of employee satisfaction should not be neglected. In service industry, the establishments should have an aptitude for anticipating what customers are expecting, setting standards according to customers' expectations and figuring out in what circumstances they will be likely to make a purchase. These are indisputably some of the most vital components of creating a healthy business environment. Furthermore, an organization, whose employees feel as a part of the big-picture, is more likely to ensure customer satisfaction. Competition is the dynamic of the globalization and is fierce in food and beverage industry. Increased level of household income made consumers more conscious about their alternatives and allowed them to consider different options. These facts may force establishments to implement different marketing strategies in order to reach high standards and satisfy customers. Before ensuring a customer satisfaction level in a continuous manner and attracting new customers, the establishments should first put considerable emphasis on employee satisfaction. In this regard, this study examines the extent to which there is a relationship between employee satisfaction and customer satisfaction within the field of food and beverage industry, to propose strategies for industry practitioners and to make recommendations for future research. Based on this, the study attempts to answer following research questions:

- Is there a relationship between employee satisfaction and customer satisfaction?
- What are the differences in customer satisfactions and employee satisfactions towards demographic variables such as gender, marital status, education and dining-out behavior?
- What is the level of customers' perceived value, service quality and fulfillment of expectations pertaining to food and beverage establishments in which they dine-out?

Literature Review

Customer satisfaction plays an important role on the organization's development process. Given the marketing strategies, the customer satisfaction has been a key element for executives. Studies on consumer behavior usually focus on post-purchase behaviors. Post-purchase behaviors are predominantly important for marketers because behavioral intentions may ultimately lead to positive word of mouth intentions (Markovic & Horvat, 1999). "A customer satisfaction emerged from customers' subjective evaluations is a key element for customers loyalty. This fact can motivate organization to perform better" (Gronholdt, Martensen & Kristensen, 2000).

Contemporary marketing strategies indicate that the notion of satisfying customer needs and desires constitutes the core of marketing strategies. Ensuring customer satisfaction depends on the ability of thinking through customers perspectives and ability to establish good relationship with the customers. Marketing strategies encompass consumers' purchase patterns as well as presenting consumers numerous options. Increasing customer satisfaction also helps establishments to create good public relations. If the organization's products and services serve the customer needs appropriately, then the overall community's welfare can also be maximized.

Service providers should not inhibit themselves from extending their customer satisfaction level. In other words, it is always advantageous for establishments to take actions to enhance the customer satisfaction level. Marketing strategies should not only be all about attracting the customers but should also be about making them spread the positive words about the products/services. This also indicates that avoiding the possible negative customer feedback is also highly crucial. The establishments suffer customers' negative word-of-mouth intentions and these feedback damage the establishments' reputation in the long run. Therefore, when a problem occurs, establishments should work on the problem diligently (Goldman, 1997).

Employees are valuable assets of the establishments to represent the organization with its utmost potential. The communication between customers and employees has critical effect on customers' feedback on establishments' quality. In other words, service quality can be only generated and maintained by the employees. Satisfying customers can only be achieved by the establishments that satisfy their employees first. Kelley & Davis (1994) states that: "The more satisfied the customers are the more they willing to keep the relationship active". Hence, the importance of having consistent customer satisfaction level is indisputable (Kalemci & Devrani, 2008).

If only employees and managers of the organization mutually respect each other, customer satisfaction is obtainable. An interactive communication, mutual respect, transparency of the facts, focusing on positive things rather than negative ones and rewarding employees based on their success are all important elements of creating a healthy work environment. Employees should be seen as a part of the company, not the servants of the company. Managers then can inspire the employees and can reach high customer satisfaction level (Turgut, 2006). In service industry, employees directly affect customers' perception of the organization. Therefore, the quality of the relationship between employees and guests reflect the quality of the relationship between the organization and its employees (Paulin, Ferguson & Payaud, 2000 cited in Kalemci & Devrani, 2008).

A satisfied employee means an employee who is satisfied with his/her employers (Lawler, 1976). The attitudes that an employee has towards his/her organization and employers' attitudes towards employees should be parallel to each other. Those managers who create a positive communication among the employees can best serve to his/her organization (Silah, 1996). Service providers that fail to focus on employee satisfaction are more likely to be unsuccessful about maintaining customer satisfaction. Employee satisfaction and customer satisfaction are two parallel things that lead to organizations' success (Pfau,

Detzel & Geller, 1991). Moreover, those establishments that put emphasis on the relationship between employee and employer relationship become competitive in the market that they operate their businesses.

Long-term relationships can only be built upon satisfaction, loyalty, quality of the service/product, the presentation and the eagerness of the employees. In addition, databases that evaluate consumer behaviors help establishments to directly serve to the customers based on their individual preferences. These initiatives that directly characterize the consumers' demands create a long-term relationship between consumers and establishments (Karakas, Bircan & Gok, 2007). The employees should help their co-workers at the end of their shifts to maintain the same level of quality. This kind of teamwork ensures the quality of the establishment that can ultimately be realized by customers. The actions, when effectively taken, to create a trustworthy employee communications, determine the quality of the products/services (Guney, 2007).

The primary goal of the organizations is to remain in the market while increasing the revenue. This goal is obtainable only if establishments pay attention to customer satisfaction. Any implication of a problem should therefore be taken seriously in order to avoid its potential harm. In order for establishments to be competitive in the market that they operate their businesses and in order for them to increase their revenues, they need to accurately implement strategies that will make employee and employer relationship intact.

The relationship between employee and customer satisfaction has long been studied (Koys, 2003; Matzler & Renzl, 2007; Wangenheim, Evanschitzky & Wunderlich, 2007; Kamakura et al., 2002; Schneider et al., 2003; Schneider et al., 2009). Research indicate employee satisfaction is an important component to understand customer satisfaction and it is also critical issue in terms of financial goals (Anderson, Pearo & Widener, 2008; Heskett et al., 1994; Larivière, 2008). Service providers could utilize motivated employees in accordance with business needs (Sorensen, 2002). This is also true for superior customer service (Oakley, 2012). Highly motivated employees care the most about the organization's service quality and their input significantly impacts the organization's standing in the market (Gagne & Deci, 2005). Customers will also be more likely to become aware of these efforts and appreciate excellent service (Chi & Gursoy, 2009).

Furthermore leisure and recreational establishments face with critical issues in competitive market that they operate their businesses (Wagenheiml & Rood, 2010). Hospitality and tourism products are heterogeneous and inseparable in nature (Chi & Gursoy, 2009). So, employees' involvement and interactions with customers have become very important issue for customer satisfaction (Bitner, Booms & Tetreault, 1990). But, in hospitality and tourism industry, customer satisfaction is considered to be a "given" factor indicating it is a natural phenomenon of regular operations (Gursoy & Swanger, 2007). Yet, it would not be sufficient to enhance customer satisfaction in a highly competitive business environment; hence firms in hospitality and tourism industry are supposed to pay attention to maintain customer and employee satisfaction in a continuous manner (Chi & Gursoy, 2009).

Customer satisfaction is a crucial factor to develop customer relationships (Kotler & Armstrong, 2006). Correspondingly, Parker (2008) explains that it is impossible for the firms to provide sustainability unless the employees are happy. Therefore if there are satisfied and motivated employees, they will be happier while dealing with customers and try to meet customers' needs and desires (Quirke, 2008) as they are pillars of the firms. Besides, they will eager to show their potentials to do their best (Khalaf, Rasli & Ratyan, 2013). In this vein, some benefits such as good salary, training opportunities and job security issues are important to make employees happier, in exchange; they are more likely to focus on service delivery processes (Chi & Gursoy, 2009). Loveman (1998) highlighted that the service providers that pay extra attention to their employees' satisfaction will be more likely to gain positive financial performance in the long run. For instance, "service with a smile" has a great potential for a meaningful service experience (Kim & Yoon, 2012). On the other hand, the study found no significant relationship between front-line employee in travel agencies' overall job satisfaction and customer satisfaction (Homburg et al., 2009). Moreover, front-line employees' customer orientation was found significantly positive relationship with external customers' tendency to leave firm (Jones, Bush & Dacin, 2003). Findings of Killic & Dursun (2008) are also consistent with this research.

Methods

This study has chosen to focus on food and beverage establishments due to the characteristics of the service industry. In service industry, customers seek personalized items the extent to which personalized service affect customers' expectations from service (Bowen, 1990). It is anticipated that those food and beverage establishments that fail to personalize their services will have to deal with detrimental outcomes such as losing the customer or not being able to keep the customer loyal to the establishment. It is therefore this study's intention to highlight that employees (especially of service industry such as food and beverage establishments) play a crucial role on building superior customer satisfaction level.

It was assumed that collecting data from the same F&B establishments to understand the extent to which there is a relationship between employee and customer satisfaction would shed more realistic lights on this relationship. This assumption was based on previous studies (Chi & Gursoy, 2009; Bulgarella, 2005; Parker, 2008; Kim & Yoon, 2012; Quirke, 2008; Khalaf, Rasli & Ratyan, 2013). To do this, the data was collected and analyzed from two populations by using convenience sampling to recruit participants. The first was 'employees who work at the food and beverage establishments' and the second population was 'the customers who dine-out at the same food and beverage establishments'.

This study has a descriptive nature. The primary data for this survey was collected through a questionnaire in the Spring of 2014. The survey was conducted in a city of Aydin, Kusadasi in Turkey. Having a large number of F&B establishments, Kusadasi was deemed to be a great destination for this case study. According to Aydin Provincial Directorate of Tourism, there were 344 cafeterias and 1,064 food and beverage establishments in Kusadasi. After the initial investigations, it was found out that the vast majority of the establishments on the list were not being operated during the off-season (February 7 - March 31, 2014). Additionally, some discrepancies were identified between the actual

addresses of some locations and the addresses that were on this official record. Correspondingly, some of them were eliminated. Over two month's data collection period, the researchers asked potential participants' willingness. The survey was distributed at selected F&B establishments after gaining required permissions from the owners. Consequently, a total of 229 customers and 229 employees from 68 F&B establishments participated in the survey.

The survey instrument was based on research conducted in previous studies, feedback from experts, and pilot test results. A total of three experts reviewed the survey instrument and then a pilot study was conducted with randomly selected 18 employees and 11 customers to find out whether the participants understand the questions and gauged the length of time taken. It was revised and finalized according to the feedbacks.

The survey instrument was divided into four sections. Section 1 consisted of 36 items that asked for employee satisfaction through Job satisfaction Survey (Spector, 1985) which was adapted to Turkish by Yelboga (2009). The items 2, 4, 6, 8, 10, 12, 14, 16, 18, 19, 21, 23, 26, 29, 31, 32, 34 and 36 were reversed before analyzing. Section 2 consists of a total of ten items that were used to measure customer satisfaction. Items adapted from previous studies (Oliver, 1980; Duman, 2002, 2003). Section 3 involved three questions to understand value, expectation and service quality of the customers. All items were measured on a five-point Likert scale (1= strongly disagree, 5= completely agree). Section 5 consisted of demographics and dining out behaviors. The data were coded and entered into SPSS and analyzed using descriptive statistics (Frequency, Mean, Mode, Median, Standard deviation, Variance, Skewness, Kurtosis, and Range), Independent Sample T-Test and One-way ANOVA.

Large proportion of the employees was male (88.2%) aged from 18 to 35 years (72.1%) and more than half were single (56.3%). About half of the employees interviewed had high-school degrees (54.1%). Most of the employees had less than 10 years of experience in the F&B industry (72.5%). 75.1% had about three years of experience at the establishments in which data collected. 47.2% of the employee was working as server. Given the customers' demographics and dining out behaviors, there were slightly more males than females. The customers between the age of 26, and 35 resulted in highest level (33.6%) to enjoy dining out. The customers, 56 years old or above, represented the lowest percentage rate of the sample. Of those, 52% were married, 45.9% hold high-school degree, and 7% hold graduate and doctorate degree. Regarding annual household income level, 76% indicated they would be belonging to middle-class, and 24% would be in upper-class. The majority of the customers responded "sometimes" when asked "how frequently do you dine out?" whereas the minority of the customers responded "seldom". 34% of the customers had medium level of revisit intentions to the food and beverage establishments in which the survey was conducted and coincidentally 34% of had high revisit intentions to those organization. 41% of the customers stated that they were likely to suggest the organization to others and of those, 62% they would spread positive words about the organization.

Findings

Overall mean score of employee satisfaction was 3.64, while median 3.77, mode 4.17, and standard deviation 0.62. Cronbach's Alpha was used to measure the internal consistency of the items, was confirmed in this study with 0.92 while adapted version to Turkish yielded 0.78. Overall mean score of employee satisfaction, when compared with the mode, seems as medium. On the other hand, overall mean score of customer satisfaction was 3.99, while median 4.10, mode 4.00, and the standard deviation 0.70. Cronbach's Alpha was confirmed with 0.94. The overall mean score employee satisfaction, when compared to the mode, and median, show slightly higher than employee satisfaction (see Table 1).

Employees gave the highest scores to the satisfaction in the following items: 'I like the people I work with' (M=4.24, SD=0.93), 'I enjoy my coworkers' (M=4.15, SD=0.83) and 'Communications seem good within this organization' (M=4.06, SD=0.99). These may simple imply that they are happy to be others. The lowest scores are as follow: 'My efforts to do a good job are seldom blocked by red tape' (M=2.60, SD=1.36), 'People get ahead as fast here as they do in other places' (M=2.94, SD=1.24), and 'Raises are too few and far between' (M=3.00, SD=1.38). These are, in general, related to inadequate career development for the employees. On the other hand, regarding to customer satisfaction scores, the highest one is as 'freshness of food and drink' (M=4.10, SD=0.87) while the lowest score is as 'speed of the service' (M=3.77, SD=0.96).

Table 1 presents there seems to be a relationship between employee satisfaction and customer satisfaction. Descriptive statistics such as mean, median and mode represent similarity. As aforementioned, in the light of previous studies (Chi & Gursoy, 2009; Bulgarella, 2005; Parker, 2008; Kim & Yoon, 2012; Quirke, 2008; Khalaf, Rasli & Ratyan, 2013), it was assumed that collecting data from the same F&B establishments may be useful to understand a possible relationship. One possible explanation is that service providers (e.g. owners, managers) could have been pleased their employees, in exchange; employees might attempt to satisfy their customers. This is consistent with previous research. For instance, Quirke (2008) points out if there are satisfied employees, they will be happier while dealing with customers and try to meet customers' needs and desires. Gagne & Deci (2005) indicate that highly motivated employees care the most about service quality. In addition to these, Chi & Gursoy stress that customers would be more likely to become aware of these efforts and appreciate excellent service.

Table 1: Descriptive Statistics by Employee and Customer Satisfaction

	Employee Satisfaction (N=229)	Customer Satisfaction (N=229)
Mean	3.64	3.99
Median	3.77	4.10
Mode	4.17	4.00
Std. Deviation	0.62	0.70
Variance	.85	.558
Skewness	-.745	-0.99
Kurtosis	.126	0.95
Range	3.03	3.50
Minimum	1.78	1.50
Maximum	4.81	5.00

Independent samples t-test was used to see the differences between demographic variables (e.g. gender, marital status) and employee satisfaction. T-Test results show no significant relationship between gender and employee satisfaction. There is a significant relationship between marital status and employee satisfaction ($t = -2.59, p < 0.05$). The satisfaction level of married employees was higher than that of single employees. Due to the additional responsibilities, a married employee could be more likely to dedicate himself/herself to increase the household income. This statement is more applicable to a married employee when the stress level of the work environment is low, therefore the employee feels safe within the organization he/she works. Independent samples t-test results show a significant relationship between marital status and customer satisfaction ($t = 3.49, p < 0.05$). Looking at the relationship between the marital status and customer satisfaction, the level of satisfaction of single customers ($M = 4.13$) was higher than that of married customers ($M = 3.77$). Single customers dine out more frequently. It seems reasonable to assume that the single customers are less likely to eat at home than married customers. This may be another reason of the difference of the satisfaction levels. One-way ANOVA results show that there is significant relationship between education level and customer satisfaction ($F = 6.84, p < 0.05$). The analysis demonstrated that the customers who had a bachelor's degree ($M = 4.13$) and graduate degree ($M = 4.37$) were more satisfied than other customers with other levels of education. Additionally, there was significant relationship between perceived annual income level and customer satisfaction ($F = 13.99, p < 0.05$). The satisfaction level of the customers with high-income ($M = 4.32$) was higher than those with others. It is also reasonable to assume that customers with high income levels are more likely to try different restaurants and be loyal of the restaurants that focus on customer satisfaction. Correspondingly, the results indicate that there was a relationship between the frequency of dining out and the customer satisfaction ($F = 28.05, p < 0.05$). Those who dine out more frequently at a particular restaurant ($M = 4.38$) had higher level of satisfaction than those who dine-out less frequently. It is assumed that these customers have already tried multiple restaurants and choose the ones that they found most attractive. Those food and beverage establishments that consistently provide better service could the establishments that go ahead in the competition. Finally, there was a significant relationship between frequency of dine-out the F&B establishment in which the survey carried out and customer satisfaction ($F = 30.41, p < 0.05$).

Table 2 presents perceived value, service quality and fulfillment of expectations. It shows the mean score of customers sacrificing their income for enjoying F&B establishment is 3.74. Of the respondents, 73% ($f = 165$) value the service that they received from food and beverage organization. The overall mean score of 3.93 shows that service quality is above the average. This implies the customers perceive the quality of the service as adequate ($M = 3.93$). Of the respondents, 80% ($f = 181$) perceive the service quality satisfying. This could be reasonable with the fact that the customers, perceiving the quality of the service adequate, could more likely to have satisfaction. Given the fulfillment of expectations, it can be argued that the participants are adequately pleased ($M = 3.94$). Of the respondents, 80% ($f = 183$) state that they receive the service as they expect. The mean score of 3.94 demonstrates that the establishment in which the survey was conducted seemed to be successful about maintaining the customer satisfaction.

Table 2: Descriptive Statistics by Perceived Value, Service Quality and Fulfillment of Expectations

	Perceived Value	Service Quality	Fulfillment of Expectations
	N=229	N=229	N=229
Mean	3.74	3.93	3.94
Median	4.00	4.00	4.00
Mode	4.00	4.00	4.00
St. Dev.	1.03	1.07	1.09
Variance	1.06	1,15	1,19
Skewness	-.824	-1.232	-1.210
Kurtosis	.010	1.068	.839
Range	4.00	4.00	4.00
Minimum	1.00	1.00	1.00
Maximum	5.00	5.00	5.00

Conclusion

The study focuses on the evaluation of the relationship between employee and customer satisfaction within the field of food & beverage industry. The results show that there seems to be a relationship between levels of customer and employee satisfaction. This is consistent with the previous studies (Reynierse & Harker, 1992; Schmitt & Allscheid, 1995; Schneider & Bowen, 1985; Johnson, 1996). Additionally, results represent a consistency with the studies being conducted in Turkey (Sanlıtürk, 2011; Simsek & Yurdakul, 2005).

The results also highlight the freshness of food and beverages followed by appearance of employees and cleanliness of the property were the most important factors that affect customer satisfaction. Yet, service providers are supposed to ensure service delivery processes more accurately. Additionally, following the hygiene standards, cleaning the property conscientiously, adjusting the lights and the air conditioner are some of the important factors that will likely make the organization stand out in the competition. However, without the dedication, self-devotion and the hard work of employees, it is almost impossible to achieve high quality standards that mentioned above and customer satisfaction. The establishments that inherently focuses on improving their competitiveness within the food and beverage industry should therefore first focus on employee satisfaction.

The results help F&B administrations by conducting constant research to keep up with new trends and customers' expectations, developing employee training programs that will likely help employees to better understand new trends, updating customer database, showing meticulous efforts about recording and examining the employee performance, and informing the employee about physical layout of the organization, the procedure of obtaining the food and beverage, the preparation, presentation and the storage of the products. In addition, the administrations are supposed to focus on the practices that will improve the employee satisfaction to compete with other establishments. The owners should also provide an environment such that the employees' expectations are perceived as important as those of customers, making them feel that they are indispensable. These practices will likely motivate the employees and they will be more likely to attach themselves to the tasks given. Finally, the establishments that empower their employees in accordance with their vision will have a giant step towards the customer satisfaction.

This study has raised issues for further investigation about relationship between customer employee satisfactions. As the most research, this study has some limitations. First, the sample size was far from making any generalizable conclusions since convenience sampling method was used. Moreover the period (off season) in which data collected could be in summer. Second, only descriptive statistics were used. In addition to this, Cronbach's Alpha scores seemed suspiciously. Future studies can employ qualitative and quantitative research designs to further understand the relationship in detail. Third, types of benefits for employees could be asked owners and/or administrations to find out satisfaction level of employees more detail. Finally, even though it is crucial to build relationship with customer and employee satisfaction, future research needs to conduct to explore other underlying dimensions.

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Risks, Crises and Time Losses Caused by Technology: A Case Study in Seasonal and Year - round Hotels

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Abstract

Tourism is one of the most vulnerable industries. Tourism can find itself in a downward spiral that may be difficult to control. Many hotels are at extreme risk of unforeseen circumstances that might prove harmful since they have become highly dependent on technological applications which have become increasingly more complicated. They may threaten the normal operations, in turn; inevitably can cause crises and time losses. Thus, it is more difficult to anticipate and to manage effectively. The purpose of this study is to understand how technology based risks, crises, and time losses are being managed by hotels' administrations. A total of 275 questionnaires (145 from year-round hotels, 130 from seasonal hotels) were collected through face-to-face interviews with top managers, IT managers, chief engineers, assistant managers, and switchboard - operation managers who appeared sensitive to issues of risks, crises and time losses caused by technological failures/errors. Results indicate that risks because of technology seem to be managed properly by the hotel administrations, and those are not allowed to turn into technological crises. Finally, it is understood that there is very little time losses caused by technological problems. Specifically, there are significantly relationships between crises, time losses, and duration of operations of the hotels. Seasonal hotels are faced with crises and time losses more than year-round hotels. The results make a contribution to the growing body of research on strategies in risk and crisis management. Recommendations for industry practitioners and researchers are discussed.

Keywords: technology, risk, crisis, time loss, hotel, hospitality.

Introduction

Information Technologies (IT) has a constitutive role (Bilgihan et al., 2014), and the development of IT shows crucial challenges and opportunities for tourism industry (Buhalis, 2003). It has also restructured management approaches, models, and business climate in the industry (Law, Buhalis & Cobanoglu, 2014). This is due to the fact that, routine operations have become depend on technological systems, tools, devices (Squires, 2008; Ham, Kim, & Jeong, 2005; Kasavana & Cahill, 2007). In addition, customers became

more demanding for the service delivery process (Cecil et al., 2013). Through IT developments, service providers can take competitive advantage, enhance productivity, improve financial performance, meet customers' needs and desires properly (Collins & Cobanoglu, 2008; Okumus, 2013). Yet, it is important to highlight that hospitality administrations are facing many challenges with regards to technology. Given this, technological changes and too much dependency may create risks (Shin & Lee, 2013), and can cause crises in the organizations, particularly operations of tourism businesses which are vulnerable and sensitive to risks and crises. This is also true particularly for small and medium enterprises since they do not have enough advantages (Shin & Lee, 2013) competing to the big players in the industry. In this context, even though IT managers could take important responsibility to manage entire technological systems in the tourism organizations (Nyheim, McFadden, & Connolly, 2005) they also need to become more aware of the ongoing technological developments. Additionally, they are supposed to know and learn how to deal with risks and crises because of technology. Those, in turn, may cause time losses which are so important resource in terms of operations and customer satisfaction. Intensively usage of technology in the hotel industry; risks, crises and time loss require examining so that proper coping with strategies can be made. Yet It seems that a holistic approach to risk and crisis management is lacking, no research has been conducted to evaluate the impacts and results with each other. In this regard, the purpose of this study is to understand how technology based risks, crises, and time losses are being managed by hotels' administrations. The study has three objectives: (1) to identify the risks caused by technology in the hotels, then to understand whether the risks turn into technological based crises, and, ultimately, to examine if hotels face with time loss problem (2) to compare to seasonal and year-round hotels in terms of risks, crises and time loss because of technology (3) to make a contribution to the technological based issues in hotel industry. Based on this, this research aims to examine and answer the following questions:

- Do hotels face risks associated with technology? If any, to what extent is faced with risk pertaining to technology?
- Do hotels suffer from time losses because of system downs, technological failures, interruptions or errors?
- Is there a relationship between risks and crises caused by technology using?
- Do risks, crises and time losses vary across various hotel features such as seasonality (seasonal/year-round), duration of operation and number of employee?

Literature Review

Due to the rapid developments in IT, the twenty first century is called the information age. Inevitably the tourism industry is one of the most affected industries by the technological revolution (Ma, Buhalis & Song, 2003). The revolutionary changes to the structure of hospitality industry were caused by the Internet development (Berne, Gonzalez & Mugica, 2012). Gradually, the ICT driven re-engineering has generated a new paradigm-shift, altering the industry structure and evolving a whole range of threats and opportunities (Buhalis & O'Conner, 2005). Both tourism destinations and enterprises are rapidly adopting innovative methods to enable their competitive edge (Buhalis, 1998). In this sense, ICTs are increasingly playing a critical role for their competitiveness (Buhalis & Law, 2008).

Yet, the use of technology in the tourism industry has currently revealed three main areas of concern: ICT, environment, and energy technologies. Tourism enterprises have become heavily dependent on information technologies. Furthermore, adapting technology makes the industry heavily dependent, and reveals the risks associated with the technology used within the organizations. These technology based risks may easily turn to technology based crises unless necessary preventative steps are taken. Additionally, technology based crisis could causes time losses. This also has a negative trigger for escalating other problems such as low performance, low customer satisfaction, or suffer a loss in reputation.

Since its inception, risk has been examined from a range of disciplines, such as geology, sociology, marketing, insurance, tourism, etc. “Risk is a measure of the potential inability to achieve overall program objectives within defined cost, schedule and technical constraints and has two components: (1) the probability (or likelihood) of failing to achieve a particular outcome and 2) the consequences (or impact) of failing to achieve that outcome” (Conrow, 2000).

Risk points out potential problems, threats, and dangers for the future. The risk sources could be natural or the result of human activity. They can be uncorrelated or connected among people, over time or with the addition of other risks; and they can have low frequency but severe welfare effects or high frequency but low welfare effects (Holzmann & Jorgensen, 2001). Risk can be categorized as money risk, presentation risk, group risk, bodily risk, emotional risk, time-loss risk, personal risk, privacy risk, and source risk (Lim, 2003). Risk factors may also be largely grouped into the ensuing categories: shop risk, credit risk, liquidity risk, working risk, legal and regulatory risk, commercial risk, planned risk, and character risk (Crouhy et al., 2006). Operational risks can be grouped into staff risk, organization risk, law risk (Boyacıoğlu, 2002).

Slovic (1987) defines technological risk as ‘the probability of occurrence times the impact of a harmful technological event’. In the context of technology, machinery risk, principally computer network risk falls into the operational risk category (Crouhy et al., 2006). In addition those, computer and communication systems error or interrupts (Boyacıoğlu, 2002), virus problems, insufficient or old systems (Keck & Jovic, 1999), data losses resulted from inadequate technology usage, hackers, software or hardware problems, firewall, backup insufficiency, poor data, fax, phone lines are most common faced with technology based problems.

On the other hand, tourism seems to be high-risk industry in terms of technology; hence it is supposed to be used effectively. A 2012 study by Spencer et.al found that a good leadership indicates having higher level of technology adoption. Scholars attempt to compartmentalize risks such as preventable risks, strategy risks, and external risks (Kaplan & Mikes, 2012), or externally driven issues, internally driven issues, externally driven incidents, and internally driven incidents (Griffin, 2015), or consequential, organizational and behavioural risk (Brown & Osborne, 2013). Given those, technological risks in hotels may be evaluated in the context of preventable risks, and internally driven incidents since they would likely to be more controlable, and be eliminated or be avoided if the measures (active prevention, monitoring, guiding) are taken properly (Kaplan & Mikes, 2012), and

they, in general, would arise from within the organization (Griffin, 2015). Yet, external factors (e.g. surprise cyber attacks technological systems in hotels) could also play active roles to cause risks which arise outside the organizations. Additionally, as Griffin (2015) emphasizes although each risk category has unique challenges, technology related risks can be fall into category of interrelated risks which means various factors are involved in. Therefore, tourism operators are supposed to take into account the technological risks and take measures systematically to avoid crises driven by technology. Because of that, risk analysis and risk management have become important management capabilities, otherwise, possible risks in property may turn into organizational crises.

ICT is used extensively in hospitality and tourism industries. Hotel administrations use technology because they try to ensure service delivery processes, obtain more efficient operations and increase revenue (Law, Buhalis & Cobanoglu, 2014). Examples can be given for different functional units and for different applications such as back of the house technologies (e.g. payroll, inventory and purchasing accounting, reports module), human resource management (e.g. database, training programs), hotels' revenue management activities (e.g. reporting, analysing), property management systems (e.g. reservations, confirmations), central reservation system (CRS). In a study carried out by Cobanoglu et al. (2013) ICT steering committees in hotels were related to level of IT integration comparing to hotels did not have such committees was found. On the basis of these findings, they emphasize that such structured approach is vital for strategic planning process. This simply implies that it is also crucial for reducing risks and coping with crises because of technology. Hence, security issues regarding ICT implications should be taken into account. In fact, these issues are very important for hotels' strategic information. Kim et al. (2013) found that there were significance relations between the number of security systems and the extent of technologies currently in use, the availability of IT department and hotel class.

A typical life cycle of management of reputation risks follows as predicting, preventing, and preparing for the risks. But, although management shows great efforts, there still incidents might appear, then management can try to resolve issues in this instance. If there is a probability that incident may become crisis, responding immediately and recovering from a crisis is important (Griffin, 2015). This approach can be also useful for technological risks in the hotels.

In general, crisis simply indicates a time of intense difficulty, trouble, or danger. Crises can be defined as any incidence which has the ability to endanger the usual operation and conduct of tourism related business; damage a tourist destination's overall reputation for safety, attractiveness, and comfort by negatively affecting visitor's opinion of that destination; and, in turn, cause a downward turn in the local travel and tourism economy, and interrupt the continuity of business processes by decrease in tourist comings and expenses (Sonmez, 1998). Mitroff & Pearson (1993) recommend that crises are events which pose fears to the feasibility of organizations. Like many other types of business, the tourism industry can find itself in a regretful turn of events that are hard to correct. In other words, most businesses are threatened by a variety of unforeseen events that could cause major harm, very quickly and tourism is one of the most vulnerable industries.

Technology is one of the most important factors in modern business operations. Technological crises and disasters have become important threats since they have potential to cause major damages (Shrivastava, 1994). In fact, insufficiency to manage, control and renew or renovate technology, in other words, failure to control technology based risks could be a very serious issue that business may face. Hacking, viruses, online identity hijacking is the most commonly seen examples of organizational technological crises. Instances for tourism operators could be collapsing computer reservation systems (travel agency, hotels); functional interruption used technological tools (etc. heating/cooling system error).

Organizations need to understand causes and outcome of technological crises to deal with. Mitroff & Pauchant (1990) associate crisis with an ‘onion model.’ According to the model, factors creating crises in the organization are similar to embedded layers of an onion. We can liken the complicated technological systems to an onion since there are invisible numerous complex elements within these systems. On the other hand, the 4Cs of crisis are such as causes, consequences, (pre)cautionary measures and coming measures (Shrivastava, 1994). In addition those, developing crisis management teams, crisis communication, crisis policies and strategies are seen as crucial guideline within the context of crisis management. Yet, managers are supposed to need have a creative decision-making, not blind rule-following (Griffin, 2015). Moreover, hotel administrations do not need to pay the high price of lessons from technological risks and crises. As Shrivastava (1994) implied trial-and-error learning can cause high costs. Thus preparing for crises all time is essential. Preparing for a crisis is the key to surviving in the corporate world, however; it is not enough to just prepare the plan and take no further action. The plan must be updated and reviewed regularly to prevent it from becoming obsolete and forgotten. It’s also vital for hotel administrations so that they have a plan to manage crises when they arise (Scott, 1988). Organizations should use a systematic approach to minimize the disruption and lower the damage instigated by the crisis event as much as possible (Fink, 1986). Proactiveness is essential when introducing new products or services ahead of the competition and acting in expectation of future demand to create change and shape of the environment (Lumpkin & Dess, 2001).

Methods

Data were collected by means of a questionnaire. Initially, a total of 12 statements were created through reviewing previous studies by graduate students, who taken the course of Risk and Crisis Management in Tourism Industry at Adnan Menderes University. The statements then developed and refined by means of a pilot study. During the pilot study, researchers discussed with industry professionals and faculties to evaluate the statements to make sure whether the scope and wording were suitable within the context of risk and crisis management. Minor changes in wording were made to the survey instrument. The survey instrument included two parts. The first part was designed to assess the level of risks, crises and time losses associated with technology. The second part included such features of hotels as number of employee, duration of operation (see Table 1). The same structure was used for three separate variables– risk, crisis and time loss. For example, a statement such as ‘we back up data in timely manner’ used in risk management section, again ‘we experienced problems because of not backing up data in timely manner’ was

used in crisis management section by rewording, and ‘we lost time because of not backing up data in timely manner’ does the same in time loss section. Industry professionals were asked to rate the statements considering last operation year on a 5-point Likert-type scale ranging from ‘strongly disagree’ to ‘strongly agree’. A higher mean indicate more effective risk management presentation, and lower means imply more effective crisis prevention capability, and low possibility to face with time-loss problem resulting from technological failures in the hotels.

Seasonal hotels and year-round operated hotels were in the sampling. However, the researchers couldn’t have reliable and updated database determining year around operated hotels and seasonal hotels, that’s why hotels located inIzmir downtown considered as year-round operated hotels while hotels in Kusadasi and Didim destinations were considered as seasonal hotels. Convenience sampling was used by obtaining a list of hotels from the directory of Kusadasi and Izmir Tourism Information Bureaus. Out of 1,115 hotels of which tourism operation licensed by Ministry of Tourism and municipality licensed, a total of non-random sample of 275 questionnaires (145 from year-round hotels, Izmir; 130 from seasonal hotels, Kusadasi and Didim) were collected, yielding a 24.6% response rate, through face-to-face interviews with top managers, IT managers, chief engineers, assistant managers, and switchboard - operation managers who appeared sensitive to issues of risks, crises and time losses caused by technological failures/errors or system down. The planning and development of the research started on February, 2012, and data collection process continued through April, 2013.

Analysis started firstly to examine the data for normality and distrubitions of variables. In doing so skewness, kurtosis, mean, mode, median, std. deviation, range, Kolmogorov-Simirnov were utilized. But results show that assumptions of normality and distribution are not met whereat outliers, logarithm and square root have been applied. Yet it could not receive normality scores. Because of not meeting assumptions of distrubition of normality, the study utilized the nonparametric statistical Spearman’s Correlation Rho, Mann-Whitney U and Kruskal- Wallis H analysis to examine how the duration of operation, number of employee, and type of hotels differed across risks, crises and time losses. The study used Mann-Witney U test to examine if seasonal and year-round hotels would vary across three dependent variables of risk, crisis, and time loss. In order to perform the Kruskal-Wallis H test, we used an independent variable divided into sub groups between duration of operations, and number of employees so that it can be determined if there was any significant differences between the means of two or more independent groups. Spearman Rho correlation was used to examine the extent to which there are relationships and directions among dependent variables (risk, crisis and time loss).

Table 1 presents features of hotels in sample. The number of employee during the high seasons is between 1- 50 (74.8%) whilein hotels employed a maximum number of 20 employees (75.2%) during the off seasons. Of the hotels in sample, more than half the hotels (55%) had about 10 years of operation experience in the hotel industry which implies seem to be relatively new hotels. This, in turn, could indicate they have up-to date technological equipments/tools.

Table 1: Hotels in Sample

Variables	f	%	Variables	f	%
<i>Hotels by location</i>			<i>Duration of operation (year)</i>		
Seasonal hotels (Kusadasi, Didim)	145	52.7	1-10	149	55
Year -round hotels (Izmir)	130	47.3	11-20	89	32.8
<i>Total</i>	275	100	21-30	28	10.3
			31 and above	5	1.8
			<i>Total</i>	271	100
<i>Number of employee in season</i>			<i>Number of employee in off season period</i>		
1-50	205	74.8	1-10	122	53
51-100	44	16.1	11-20	58	25.2
101-150	12	4.4	21-30	19	8.3
151 and above	13	4.7	31 and above	31	13.5
<i>Total</i>	274	100	<i>Total</i>	230	100

Findings

Descriptive statistics show overall means of risk, crisis and time loss caused by technology. Overall the findings of Table2; hotel administrations seem to control the risks caused by technology well and they appear to not allow risks to turn into crisis and time loss. In this sense, industry professionals gave the highest scores to the technological risk in the following statements ‘We build good relationship with our vendors and suppliers’ (Mean = 4.84, SD = 0.52), ‘We have emergency plan for any incident that might cause by technology’ (M=4.80, SD=0.47), ‘We update all soft wares, programs in timely manner’ (M=4.75, SD=0.52), ‘We maintain all technologic items, products and renew them in timely manner if needed’ (M=4.75, SD=0.53) while ‘We train our employees for technologic tools and products ‘ (Mean = 4.07, SD = 1.16) was the least agreed statement which raises the matter of inadequate staff training. Overall, results imply that hotel administrations seem to attempt to reduce risks associated with technology through suppliers by establishing good relationship and invest on technology. Yet it is interesting to note that they could increase their risks by not enough emphasis on staff training related to technological risks. On the other hand, ‘We experienced problems because of not having good relationship with vendors, suppliers’ (M=1.15, SD=0.50), ‘We experienced problems because of not backing up data in timely manner’ (M=1.21, SD=0.53), and ‘We experienced problems because not being ready for possible incidents and errors caused by technology’ (M= 1.21, SD=0.59) are the statements having the least scores, beside those ‘We experienced problems, because our staff not trained well enough on technical stuff’ (M=1.56, SD=0.92) was the statement has highest score within crisis management, simply implies that there are consistency with the statements which have the highest scores in risk management. With regard to the experience of time losses, respondents gave the least scores to the time loss in the following statements ‘We lost time because of not having good relationship with vendors, suppliers’ (M=1.28, SD=0.77), ‘We lost time because not to insure our monetary high valued items’ (M=1.34, SD=0.87), and ‘We lost time because of not protecting or securing our data system’ (M=1.35, SD=0.88). The statement which has the highest score was ‘We lost time, because our staff not trained well enough on technical stuff’ (M=1.77, SD=1.19). Hence, each of these four prominent statements was found to exhibit a logical consistency with each other.

Table 2: Descriptive Statistics of Risk, Crisis and Time Loss Caused by Technology

Descriptives	Risk	Crisis	Time loss
N	226	275	273
Mean	4.6253	1.3072	1.4503
Std. Error of Mean	.01922	.02519	.03979
Median	4.6667	1.1667	1.2500
Std. Deviation	.28900	.41765	.65741
Variance	.084	.174	.432
Skewness	-.947	2.359	2.668
Std. Error of Skewness	.162	.147	.147
Kurtosis	.427	7.479	8.224
Std. Error of Kurtosis	.322	.293	.294
Range	1.25	2.92	3.75
Minimum	3.75	1.00	1.00
Maximum	5.00	3.92	4.75
Sum	1045.33	359.47	395.92
Kolomogorov-Smirnov Z	.000 (2.242)	.000 (3.831)	.000 (4.076)

Spearman's correlation Rho results revealed a negative significant correlations between technological risks and crisis ($r = -.543, p < 0.05$), and technological risks and time loss ($r = -.423, p < 0.05$). Possible reason of that hotel administrations could attempt to manage to minimize the risks of technological failure or error, it seems to decrease the probability of experiencing crises and time losses related to technology using.

Regarding technological risks, crisis and time loss from seasonal hotels and year-round hotels, Mann-Whitney U test results are applied to determine whether the differentiation between seasonal and year-round hotels. Significant differences were seen across three dependent variables. Considering the risks ($U=4663, Z=-3.512, p < .05$), crisis ($U=7107, Z=-3.583, p < .05$), and time loss ($U=7047, Z=-3.496, p < .05$) there is a significant differences between seasonal hotel year-round hotels. In this sense, it implies that year round hotels seem more successful in terms of managing risks (Mean rank=128.15), crisis (Mean rank=119.55) and time loss (Mean rank=120.17) comparing to seasonal hotels.

Kruskal-Wallis H test results show no significant difference between duration of operations and risks, and crises, only for time losses ($X=8.587, df = 3, p < .05$). Given this hotels operating more than 31 years (Mean rank = 191.00) show suffer from time loss compare to hotels operating less than older hotels. This may be due to the technological resources they do enough business operations or inability to renew old technological tools. In addition to this, there are significant relationships between risk ($X=10.380, df=3, p < .05$), crisis ($X=12.280, df=3, p < .05$), and number of employee in season. Given this, hotels employed 51-100 employee seem to manage technological risks better than other groups (Mean rank=142.55), and hotels employed more than 151 employee could manage technological crisis better than other groups (Mean rank=161.42). Furthermore it is seen that only significant difference in number of employee during the off season period occurred across crisis associated with technology ($X=10.272, df = 3, p < .05$). Hotels with 1-10 employees placed significantly differed than the other sub-groups (Mean rank = 126.38).

Conclusion

It is an inevitable fact that managing the time, technological risks and crises are vital for the businesses. So both tourism destinations and enterprises are rapidly adopting innovative methods to enable their competitive edge (Buhalis, 1998). ICTs are increasingly playing a critical role for their competitiveness (Buhalis & Law, 2008). Hotel administrations use technology because they try to ensure service delivery processes, obtain more efficient operations and increase revenue (Law, Buhalis & Cobanoglu, 2014). The purpose of this paper was therefore to understand how technology based risks, crises, and time losses are being managed by hotels' administrations. This study was the first attempt to examine the relationship among risk, crisis and time loss caused by technology in hotel industry which heavily depend on technological systems and it is important because technological changes and dependency can create risks (Shin & Lee, 2013) also technological crises and disasters have become important threats since they have potential to cause major damages (Shrivastava, 1994).

The results show that hotels seem to be succeeded in controlling the technological based risks. In this case, hotel administrations comprehend the technology as risk and they may take their precautions to avoid crisis. So it can be argued that those are not allowed to turn into technological crises. In addition to this, it is understood that there is very little time losses problem arising from various system downs, technological failures or errors. Given the small and medium enterprises do not have enough advantages (Shin & Lee, 2013) study results seem critical for the hotels reflecting their capabilities and indicating a good leadership which makes easy to adopt technology (Spencer et al., 2012). There are significantly relationships between crises, time losses, and duration of operations of the hotels. Seasonal hotels are faced with crises and time losses more than year-round hotels. Yet the results of the study highlighted that raising the awareness of the hotel staff about the significance of technological risks, crisis and managing time should be taken into account to deal with technological issues since employee seemed inadequately trained. However, as stressed by Nyheim, McFadden, & Connolly (2005), although IT managers could take important responsibility to manage entire technological systems in the tourism organizations, they also need to become more aware of the ongoing technological developments. Beside ICT steering committees in hotels were related to the level of IT integration (Cobanoglu et al., 2013) so security issues regarding ICT implications should be taken into account.

The results present both practical implications for the hotel administrations as well as theoretical contribution to the growing body of research on information technology and its relations to risk and crisis management. An important theoretical contribution of the research is that there seem an empirical links among risks, crises and time losses in terms of technology using. But there need exists to develop more research designs to understand in detail these possible relationships.

Hotel administrations are supposed to need have a creative decision-making, not blind rule-following (Griffin, 2015). As Shrivastava (1994) highlighted trial-and-error learning can cause high costs. Thus preparing for crises all time is essential. In doing so, firstly they should consider the technological risks, and then take precautions for the crisis. In this

sense, risk analysis and risk management have an important role to avoid possible risks which may lead to organizational crises. Hoteliers should perceive the lack of maintaining technology may create risk and cause crises and time-loss within company. In addition, technology is a crucial factor for the businesses since failure to control technological tools such as hacking, viruses and identity hijacking may result in organizational technology based crises. Hotels should always be prepared for any possible risks and crises. Another factor that may cause to the technological crisis is time issue. Managing the time is critical issue in business operations since bringing back the time is not possible. In addition to these, hotel employees need better training to develop different functionality to manage risks and crises related to technology.

There are several implications for future research. It is a small and non-random sample at only 275 professionals. So it can not be used to generalize the results. Since it is only being conducted in hotels through management employees, its external validity is low. If this study could be generalized to other industries have all employees participate it, there could be reached out to external validity. The results of this research may not apply to other industries. However, it is important to conduct studies in other industries to be generalized. To enhance professional implications of the study, thirty six statements in three dimensions reflecting risks, crises and time losses related to technological issues were presented. But a critical need exists for researchers to add new attributes.

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Leadership Orientations of Turkish Tourist Guides

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Abstract

Tourist guides having an important role in destinations are considered as professionals who manage, direct and conduct not only individual visitors or groups, but also subordinates. They have also an important role in communication between host community and visitors. Thus they are supposed to exhibit leadership abilities. The purpose of this research is to examine the dimensions of leadership orientation of tourist guides. The data was collected by means of a questionnaire. Leadership Questionnaire (Luthans, 1995) which was adapted to Turkish by Taşkıran (2005) was used to understand leadership dimensions which fall into two categories: people orientation and task orientation. A total of two-hundred questionnaires from 502 registered guides in Aydın, Turkey were collected through both face-to-face interviews with tourist guides and online. The data were analyzed by using descriptive statistics, Independent samples t-test and one-way ANOVA. Results indicate that tourist guides seem to be more task oriented rather than people orientation which implies that they are supposed to go along with the tour programs that strictly scheduled and operated by the travel agencies. In this sense, results are surprising since tourist guiding is involved in highly intensive social interactions so as to meet visitors' needs and desires, and to take responsibility and control as a middleman among stakeholders. Specifically, the study found that there were no significant relationships between demographic characteristics of the professional tourist guides, except for 'working in the travel agency', and leadership dimensions. Recommendations are given that can help travel agencies' administrations better understand leadership orientation. It is also concluded with a discussion of theoretical implications.

Keywords: leadership, orientation, travel agencies, tourism, tourist guides, Turkish tourist guides

Introduction

People should be able to keep in step with today's competitive environment by being open to new ideas and self perpetuation. Staying standing in tourism industry where human relations are dominant depends on continuity of tourists in some way. Maintaining continuity in today's world is one of the most important things that business care. At this point, a lot of duties and responsibilities fall to tourist guides being regarded as heart of tourism because tourist guides are considered as 'cultural ambassadors' forming interaction between their own country and visitors (Batman, 2003).

Positive image of a destination may sometimes turn into negative conversely; negative may turn into positive because of a tourist guide. Hence qualifications that tourist guides have are of vital importance. 'Being able to lead, guiding' may be ranked among those qualifications required. Given the tourist guiding literature, it is seen that authors touching on this topic have handled leadership and tourist guiding as a whole. Megeed (2010:21) states that Cohen (1985) divided roles of tourist guides into leadership and mediation and that both roles had intrinsic and extrinsic components. In this regard, Randall & Rollins (2005) points out intrinsic roles of tourist guides focus on leadership in the form of social interaction and information dissemination. On the other hand, though leadership styles of tourist guides exhibit in the form of service, Wong & Lee (2012) emphasize that tourist guides should not only show around places of interest but they should also care for visitors from the beginning to the end of the tour. Thus, the task taken on by a tourist guide may be defined as a type of leadership. However, this type of leadership could be different from superior-subordinate relationship in organizations (Wong & Lee, 2012). Pond (1993) ranked being a leader having the ability of taking responsibility among the roles of a tourist guide (cited in Ap & Wong). Koroğlu (2013) acknowledged that not only resource managing and leadership roles of tourist guides, but also cultural mediation and interpretivism have been emphasized in natural oriented tourism activities. Consequently, leadership can be among the roles of tourist guides and an indispensable part of tourist guiding profession. In this term, the study aims at examining the leadership orientations of professional tourist guides within the scope of 'people oriented' and 'task oriented' dimensions.

Literature Review

Leadership

The concept of leadership has been identified throughout history. The concept of leadership was used as 'usage of power and rulership' in ancient and medieval times while it was started to be associated with management of organizations and business in the 20th century. At the beginning, the concept was equal to 'managing people with power', the concept was then to be identified with such other concepts as affecting followers, initiating a procedure, creating added value, directing to common purposes and being creative (Tabak, Yalçınkaya & Erkuş, 2007). Koontz, O'Donnell & Weihrich (1986:397) define leadership as a process making people strive for fulfilling the group's objectives willingly and pertinently while Eren (2001:427) identifies leadership as gathering a score of people around specific objectives and total abilities and information fulfilling those objectives. On the point of fulfilling leadership objectives of the organization, Kozak (2008:486) draws attention to the leadership as a process forming interactions, communication and ensuring coordination between individuals and departments by making certain arrangements on relationships between individuals, groups and environment. As for Aytürk (2010:91), leadership could be defined as representing organization in a good way, act and function to motivate, affect and orient the employees in the direction of objectives of the organization.

Elmuti, Minnis & Abebe (2005) highlight leadership has been not only among the major ingredients of business school curricula, but also the topic of many bestselling books. The authors also stress that leadership has been accepted as both a skill and behavior exhibiting

that skill, however, the subject whether the leadership could be able to be taught effectively or not may be said to be the most debatable leadership question at the present time. As for Mullins (2005: 281) leadership could be based upon a function of personality or be evaluated within the frame of a behavior category while it could also be evaluated with regards to the role of leader and the ability to show effective performance from others. Vroom & Jago (2007) state that leadership is not a process belonging to a person and that this process comprises a particular form of influence known as motivating and collaboration in pursuit of a common goal as a consequence of the influence. According to Tabak, Yalçınkaya & Erkuş (2007), management and leadership are not interchangeable concepts, but a process competing each other systemically. So, there need to set certain targets organize a group or team and then prompt this group or team to reach the objectives of the organization by motivating them in order to form leadership.

Tourist Guiding

Yarcan (2007) states that human relations have importance in tourist guiding profession and that this profession is such a working area where job income and satisfaction are high. According to Mancini (2001:22), although tour conducting has an eye catching place in the travel industry for some people, tourist guiding is seen as more satisfying occupation in the eyes of some others. In addition to this, he mentioned that a tourist guide do not take responsibility for the around-the clock needs of the group compared with a tour leader despite seen as people oriented activity within the scope of the occupation. According to Cohen (1984), the roles of modern tourist guiding has been composed of leadership and mediator and tourist guides are people educating, spiritually guiding and helping tourists find meanings in what they see instead of being pathfinder tending to the camp and reading the trail markers. Today, tourist guides are supposed to have to professionalize and receive good education in the fields of sociology and psychology such as group dynamics, motivation and cultural/ethnic background as well as geography and history of the region where they are guiding (Cohen, Ifergan & Cohen, 2002). According to Köroğlu (2013), guides make explanations not only about the interesting things where they visit, but also the visitors are informed about their behaviors in certain areas such as historical or spiritual sites. On the other hand, Ahipaşaoğlu (2001:113) points out that guiding has some disadvantages as compared with other occupations although this profession is considered as ‘money spinner’ by others. Being predicated on physical force, having seasonal characteristics, being an occupation under without guarantee, depending mainly on extrinsic factors (e.g. museum not being visited owing to breaking down of the bus, or some external factors such as riots, crises, natural disasters) having requirement of self perpetuation, having no or delay of retirement could be ranked among those disadvantages. In addition to this, Mancini (2001:23) states that being both regional and city guides carry a number of liabilities and that the potential for boredom in city guiding is very high because of repetition the same information several times a day. Thus, they have the opportunity to anticipate questions asked by visitors. Mancini also indicates that such technological developments as handsets and portable audio players have made the guides obsolete because visitors have the opportunity to rent those portable audio players and move through the archaeological sites or museums listening to the taped commentary via earphones or cell phone like handsets. Above all, as for Mancini, a tourist guide has the ability of personalizing a tour in such a way that that no machine could.

Tourist guides have a number of distinctive abilities just as leaders. As for Mancini (2001), a tourist guide supposed to be a psychologist, an envoy, a steward, an animator, an anchorman, a speech giver and even a translator. According to the Tourist Guides Catalogue, knowledge, communication skills and responsibility are ranked among the qualifications which tourist guides should have (TUREB, 2012: 427-432). Güzel (2007:12-18) ranks extraversion, hospitality, having a good sense of speech and humor, broadminded, honesty, self confidence, having leadership spirit, taking responsibility, having conscious of work ethics among the skills. Çolakoğlu, Epik & Efendi (2010: 142-148) handle the skills of tourist guide as three categories which are leadership and social skills (friendliness, self confidence, good communication skills, determination), presentation and verbal skills (body language, voice, language and elocution) and visualizing (interpreting information stress, feeling of passion for people, regions and subjects, skills of making-up and telling stories, knowing when to keep silent etc.). Tetik (2006: 52-67) categorizes the abilities that a tourist guide should have as information (knowledge of foreign language, liberal education, first aid knowledge, information about the vicinity, information about other cultures), skills (expression, communication, interpretation, being able to make wisecrack, facilitating coordination, overcoming the problems, asking questions to be the centre of attraction, self perpetuation) qualification and physical appearance (leadership role, extraversion, hospitality, business ethics, wearing). Like other authors, Batman (2003) states that a tourist guide should have such skills as leadership, behavioral flexibility, patience, sensibility, sense of humor, determination, physical appearance and professional ethics. As is seen from the literature of tourist guiding, authors emphasize on leadership as well as some other personal characteristics.

People Oriented and Task Oriented Dimensions of Leadership

Among the leadership theories, it is no doubt that Hawthorne studies and writings of the Mayo group made a significant contribution to the literature of leadership. Three leadership styles (authoritarian, democratic and laissez-faire) were suggested according to a series of studies conducted in Iowa University in the 1930's. The concept of 'authoritarian leadership' suggested in Iowa studies was described as directive, production-centred and nomothetic while democratic leadership participatory, employee-centered and idiographic (Pffner & Sherwood, 1960:363). Under the chairmanship of Ralph Stogdill in 1945 with the participation of such researchers as Fleishman, Halpin, Winer, Hempill, Seman and Bass, a series of studies about leadership behaviours were conducted. In the end of those studies in Ohio State, two dimensions, which were task oriented or people oriented (initiating structure) and recognition of individuals needs and relationships (consideration), were suggested (Luthans, 1995:344; Kamgür, 2009: 33 cited in Can, Aşan & Aydın, 2006:300-301). In those years when Ohio State University studies were conducted, a series of studies in Michigan University were carried out to employees working in different industries. As a result of the studies, leadership behaviour was gathered around 'employee-centered style' and 'job centered style'. Given this, study findings show similarities with the studies conducted in Ohio State University (Koçel, 1993:344). Although some studies were conducted in the laboratories (Harvard), some of them were carried out in the field (Ohio and Michigan). Some research used ratings made by observers (Harvard), some used questionnaires filled out by group members (Ohio) and by the leaders themselves

(Michigan). However, differently conducted, results of those studies seemed to be in the same direction. Thus, two leadership styles, task oriented (task ability, initiation of structure, job centred) and interpersonally oriented (likability, consideration, employee centred) were suggested (Mitchell, 1982: 371-372).

Although there have been numerous studies, few researchers highlight people oriented and task oriented dimensions of leadership. Acar (2001) found a relationship between emotional intelligence and people oriented and task oriented leadership dimensions of employees working in banking sector. The results show that there is a relationship between people-oriented leadership dimension and emotional intelligence abilities of managers. As for a study aiming at determining relationship between job satisfaction and leadership styles of managers of small sized enterprises, it is found out that there is not a relationship between leadership styles of managers of small sized enterprises and job satisfaction, but there exists a significant relationship between leadership styles and performances of managers (Bozkuş, 2004). A 2007 study by Yuksel finds that there is a significant relationship between task oriented and people oriented leadership dimensions and information production, information sharing, information assessment and that task oriented leadership behavior has more influence on information production than people oriented leadership behavior (Yüksel, 2007). According to a study in the health sector, it is suggested that people oriented leadership dimension of nurses in charge working both in private and public hospitals has been low and that they have not taken enough education about leadership (Erkan & Abaan, 2006). Studies about people oriented and task oriented leadership dimensions are not limited to health sector. A study in education, it is determined that teachers evaluating leadership dimensions of school administrators have generally been undecided and that these viewpoints have no significant difference across some variable of gender, marital status, professional seniority, branch and educational level (Hayri, 2010).

A 2005 study by Taskiran found that both leadership orientations of male managers have been higher as compared with female managers in hotel industry. Study results indicate that task oriented and people oriented leadership behaviors correlate with educational level and age (Taskiran, 2005). It is also found there is a significant relationship between leadership orientation and job performance of hotel managers (Akbaba & Erenler, 2008). The study results highlight that male managers are seen more task oriented as compared with female managers. This is consistent with the results of study by Taşkıran (2005). Another research aiming at determining the effects of task oriented and people oriented leadership perceptions of hotel employees on their performance, it is suggested that there is a significant difference between task oriented and people oriented leadership perceptions and gender, educational level and emotions; that people oriented leadership perceptions of employees have been higher comparing to task oriented leadership perceptions and that people oriented leadership behavior has had a higher level of impact upon both task and contextual performance (Kanigür, 2009). Nigmatullina (2011) suggests that female hotel managers have shown lower level of leadership orientations in terms of both task oriented and people oriented leadership dimensions as compared with male hotel managers. In addition to this, it is also found that there is a significant relationship between leadership orientations and education level and age.

Methods

Leadership is of vital importance not only for business but also for organizational management. The key elements of leadership are to bring people to determined targets and conduct them. Given professional tourist guides having an important place in tourism industry, they are considered as professionals who manage, direct and conduct not only individual visitors or groups but also subordinates. They are also supposed to exhibit leadership abilities.

Leadership is one of the subjects broadly handled in today's world. There are numerous research in different fields such as business, health, education, tourism and economy. Considering the studies conducted until today, leadership behavior qualities of administrator nurses working at public and private hospitals (Kerim, 2010), and relationship between leadership traits and work productivity levels of employees working in seven hospitals in Isparta (Uysal, 2012) could be cited as example in the field of health. Determining the relationship between crisis management and leadership (Balkan, 2004); relationship between leadership and teamwork in business (Toprak, 2006); impacts of leadership and organizational culture on information management (İpçioğlu, 2004); impacts of task oriented and people oriented leadership behaviors on information management (Yüksel, 2007); environmental effects on foreign trade and strategies to be followed for regional economic leadership process (Apaydın, 2009) could be also considered as examples in the field of business management. In addition to them, there are also such studies about banking sector aiming at determining managers' leadership behaviors from non-crisis process to crisis process (Kurtuluş, 2009) and examining relationship between emotional intelligence skills and task oriented and people oriented leadership behaviors of bank branch managers (Acar, 2001). Within the context of education, there are studies conducted to find out relationship between leadership orientation and perception of professional ethics of elementary school administrators (Hayri, 2010) and relationship between leadership and instructional leadership (Görkem, 2008). There are also studies as determining effect of culture in preference of leadership style (Erdoğan, 2009). Nevertheless, studies carried out on the subject of leadership seem to focus on mostly leadership orientations of hotel managers in the field of tourism. As a matter of fact, people oriented and task oriented leadership behaviors of hotel managers working in five star hotels (Taşkiran, 2005); leadership orientations of hotel managers working in international hotel chains (Nigmetullina, 2011); the effect of task oriented and people oriented leadership perceptions of employees working in four and five star hotels on their performances (Kanıgür, 2009) and relationship between leadership styles of managers working in travel agents and conflict management (Nebioğlu, 2011) could be regarded as examples about the subject in the field of tourism. Yet there has been no study about tourist guides having an important part of tourism industry and their leadership orientations. When viewed from this aspect, this study is supposed to make a contribution to both future research and industrial executives so as to help them better understand leadership orientation.

Data collection was used by means of a questionnaire. Leadership Questionnaire (Luthans, 1995:411) was used to determine leadership orientations of professional tourist guides with regards to 'people oriented' and 'task oriented' dimensions. The questionnaire included

two sections. Thirty-five statements were used in the first section. Eight closed ended and one open ended question aiming at determining the demographic information of professional tourist guides included in second section. The Leadership Questionnaire was translated from English, its original source language, to Turkish. The translation of the questionnaire firstly was made by the researcher and then it took its final form by taking advantage of academicians having taken English language training and researchers conducting the questionnaire to hotel managers (Taşkıran, 2005; Nigmatullina, 2011). A 5- point scale was used (always, often, sometimes, rarely and never). "Always" and "often" have been considered as positive while "rarely" and "never" as negative to measure the scores of the statements in the Leadership Questionnaire. On the other hand, "sometimes" has been evaluated as neither positive nor negative, so it has not been taken into consideration. As stated in the original scale (Luthans, 1995), if the boxes across the 8th, 12th, 17th, 18th, 19th, 30th, 34th, and 35th statements have been checked as "rarely" and "never", 1 should be written in front of the them, then if the boxes across the other statements have been checked as "always" and "often", 1 should also be written as well. Then, the number 1's across 3th, 5th, 8th, 10th, 15th, 18th, 19th, 22nd, 24th, 26th, 28th, 30th, 32nd, 34th and 35th statements should be counted. In this way, level of people oriented leadership could be determined, then level of task oriented leadership could be determined with the number 1's across the remained statements. Task oriented leadership corresponds to "high productivity" while people oriented leadership associates with "high morale" (Taşkıran, 2005:109). In task oriented dimension, scores between 0 and 8 indicate low while 9-16 middle level and 17-20 high level within the context of task orientation. Given the people oriented dimension, scores between 0 and 7 mean low while 8-13 middle level and 14-15 high level of people orientation. In the end of the scoring, points of tourist guides in terms of "task oriented" and "people oriented" dimensions were interpreted by means of overall mean by giving frequency and percentage distribution severally. Tests of statistical significance were used to determine the extent to which there are significant differences by demographic variables. On account of the normal distribution of the data, Independent Samples t-test was applied for the variables of "gender", "how to practice tourist guiding profession" and "whether taking education on the subject of leadership or not". One way ANOVA was used for such variables as "educational status", "age", "how long practicing tourist guiding profession", "in what way the education of tourist guiding profession have been taken" and "marital status".

Professional tourist guides being members of Association of Aydın Tourist Guides and working actively are of target population of the study. Total number of professional tourist guides being member of ATRO was 502 as of the date of February 2014. So, 431 of the professional tourist guides stated that they will work actively whereas 71 of them mentioned that they will not work throughout the year. To measure the reliability of the scale, the questionnaire form was conducted to 43 professional tourist guide chosen randomly from the target population in March, 2014. Some changes have been made based upon expressions in consideration of given answers. By assuming that guides could be able to be reached easily, all tourist guides in the target population and working actively were tried to be reached on March and April 2014. For that purpose, the questionnaires were distributed through both face to face and website of Online-Anket (www.online-anket.gen.tr). By the end of two months, the questionnaires had been sent to 431 tourist

guides working actively. 200 of the guides having been reached by means of both face to face and online filled out the questionnaire. On the other hand, 30 of the guides declined to fill out the questionnaire for some reasons. Thus, 46% of the target population has been reached that implies response rate seems high.

Internal consistency of Cronbach's alpha was used with the aim of measuring the reliability of the questionnaire form. Reliability coefficient was seen as 64.6 according to the results of those 43 questionnaires included in pilot study. After refining survey instrument, questionnaires were handled as a whole, and then Cronbach's alpha was seen as 80.2. In addition to this, Kurtosis and Skewness were found to be between -3 and +3. Overall mean (3.41), the median (3.37) and the mode (3.34) were approximately equal to one another and the sampling distribution of the range (2.69) was quite high.

Findings

Majority of the participants was male (70.5%), aged from 26-35 (47%) and more than half were married (57%). 78% of the tourist guides had undergraduate degree, while 10% had graduate degree. Furthermore 58% of the respondents had taken education of tourist guiding by way of the courses by Ministry of Tourism, 10% by means of associate's degree and 31.5% through undergraduate education. Those results show that large majority of the participants took their tourist guiding education through the courses by Ministry of Tourism.

Within the scope of practicing tourist guiding profession, it was found out that 52 of the guides taking part in the study stated that they had been working in the travel agents whereas 147 of them as freelance. In terms of professional experience, 35% of the participants had been working between 2 and 5 years as a tourist guide (26%: 6-10 years, 12%: 11- 15 years and %2: 0-1year). With regards to whether having any education about leadership or not, 74.5% had not having taken any education about leadership.

Task Oriented Leadership Dimension

Scores by professional tourist guides in terms of task oriented dimension vary between 0 (minimum) and 20 (maximum). As the scores get high, task orientation increases in accordance with directions of Leadership Questionnaire by Luthans (1995). In this study, the lowest point by tourist guides measured with regards to task orientation was 2 and 19 at most. The results show the scores are between 7 and 15 in general. In addition to this, there are not any respondents getting 0-1 points (the lowest points) and 20 (the highest point) in terms of task oriented dimension. As stated in the data analysis, scores between 0-8 indicate low; 9-16 middle level and 17-20 high level of task orientation. So, 73% of the participants seem in the middle level of task orientation while only 9% of them are in high level (Table 1).

Table 1: Level of Task Oriented Leadership Dimension of Professional Tourist Guides

Levels	Frequencies	Percent (%)	Cumulative Percent
Low	36	18	18
Middle	146	73	91
High	18	9	100
Total	200	100	

People Oriented Leadership Dimension

Scores by professional tourist guides in terms of people oriented leadership dimension vary between 0 (minimum) and 15 (maximum). As the scores get high, people orientation increases (Luthans, 1995). As presented in Table 2, the lowest score measured with regards to people orientation was 0 and 13 at most. In general, the scores by professional tourist guides seem to be between 2 and 10. 70.5% of the tourist guides have shown low level of people orientation while 29.5% of them have shown middle level of people orientation. Furthermore, it is seen that there are not any tourist guides showing high level of people orientation and getting 14 and 15 which are the highest scores in terms of people oriented leadership dimension.

Table 2: Level of People Oriented Leadership Dimension of Professional Tourist Guides

Levels	Frequencies	Percent (%)	Cumulative Percent
Low	141	70.5	70.5
Middle	59	29.5	100
High	-	-	-
Total	200	100	

Results show professional tourist guides taking part in this research seem to be more task oriented than people oriented. In this sense, results are surprising since tourist guiding is involved in highly intensive social interactions so as to meet visitors' needs and desires, and to take responsibility and control as a mediator among stakeholders. In addition to this, timing and organization are two important factors for practicing this profession. So, this may be shown as the reason why task oriented leadership of professional tourist guides have been higher than people oriented leadership.

Given the demographic variables, using Independent Samples t-test, there are no significant differences between gender, the way they practice tourist guiding profession, having education about leadership and leadership orientation dimensions (task orientation and people orientation). Additionally, the results of One-way ANOVA show there are no significant differences between education, age, marital status, industrial experience and leadership orientation dimensions. On the other hand, the results indicate significant difference by task oriented leadership dimension ($t=2.72$, $p<0.05$). As presents in Table 3, tourist guides working in the travel agents have higher means in task oriented dimension ($\bar{X}=12.78$) as compared with freelance tourist guides ($\bar{X}=11.33$).

Table 3: Comparison of Task Oriented and People Oriented Leadership Orientations of Professional Tourist Guides with Way Practicing Tourist Guide Profession

Leadership Orientations	In what way practicing tourist guiding profession	N	Mean	s.d.	Std. Error Mean	t
Task Oriented	Working in the Travel Agent	52	12.7885	3.41471	2.72	0.007
	Freelance	147	11.3333	3.27785		
People Oriented	Working in the Travel Agent	52	6.0769	2.52708	0.39	0.69
	Freelance	147	5.8980	2.88533		

Conclusion

Given the leadership literature, it has been suggested that there has not been only one leadership style being valid in any case. Thus, a leadership style being appropriate for a condition may show differences under different conditions. Although conditions may vary, people are always in search of people who could direct and motivate them with regards to fulfilling certain objectives. When the nature of tourist guiding profession is examined, it may be said that this profession is not only to introduce a place or destination but also to have an important role in communication between host country people and visitors, for this reason, tourist guides need to be "leader" at the same time. Consequently, leadership in this profession where human relations are intensive has a great place and importance.

% 46 of professional tourist guides working actively and being members of Association of Aydın Tourist Guides took part in this study aiming at examining "task orientation" and "people orientation" leadership dimensions. Results show that leadership orientation of the tourist guides within the context of "people orientation" have been "0" score at least and "13" score at most. However, tourist guides getting "14" and "15" scores are corresponding to "high level of people orientation" were not found. Consequently, it is seen that a great majority of tourist guides (70.5%) have shown "low level" of people orientation. This result seems to be consistent with study by Kanıgür (2009). According to leadership dimensions of professional tourist guides within the context of "task orientation", task-oriented scores have been "2" at least and "19" at most. There has not been any guides getting "0" and "1" the lowest score and "20" maximum score, so 73% of professional tourist guides seem to be in task orientation dimension at a medium level.

With regards to gender, results show that scores by males within the context of people oriented and task oriented dimensions (task orientation, $\bar{X}= 11,77$; people orientation, $\bar{X}= 5,96$) are close to the scores by females (task orientation, $\bar{X}=11,67$; people orientation, $\bar{X}= 5,96$). So the results show similarities with the research of Nigmatullina (2011). However, they seem to be not consistent with the results of the study by Taşkıran (2005). Taşkıran (2005) found that males had higher scores than females with regards to gender. The reason why the results obtained in this research seemed different from the research of Taşkıran (2005) is that tourist guiding could be a bit more independent profession than hotel management.

According to the results of the study, any statistically significant differences were not been found between scores of people oriented, task oriented leadership and gender, educational status, age, marital status, in what way having taken tourist guiding education, professional experience, having/ not having any education about leadership. Given this, this results show similarities with studies by Hayri (2010) and Yalınkılıç (2010). On the other hand, a significant difference found between scores by professional tourist guides within the context of "task oriented" dimension and "in what way they practice tourist guiding profession". This implies that tendency of tourist guides working under travel agents about the "task oriented" leadership dimension could be considered more crucial as compared with free lance tourist guides. This is consistent with the result pertaining to examining leadership orientation. Thus tourist guides seem to be more task oriented rather than people orientation which implies that they are supposed to go along with the tour programs that

strictly scheduled and operated by the travel agencies. Moreover the study results also support the results by Taşkıran (2005), Erkan & Abaan (2006), Yüksel (2007) and Nigmatullina (2011) on account of the fact that scores by professional tourist guides with regards to "task oriented" dimension seemed higher than "people oriented" dimension. It is easily seen that the research aiming at determining leadership orientations of managers working in not only tourism industry but also other industries have been mainly task oriented.

Recommendations for the future research may be as to determine whether leadership orientations of professional tourist guides would effect on personality traits, and try to understand evaluating of leadership skills of professional tourist guides by visitors. Additionally, future studies could employ qualitative research designs to further understand the leadership dimensions. This study carried out to the professional tourist guides being members of Association of Aydın Tourist Guides, so conducting the same research to other tourist guides working throughout the country would make it possible to compare the findings of this study with the others. Given the practical implications, based upon 74.5% of the professional tourist guides taking part in this research did not take any education on the subject of leadership, hence it would be useful for tourist guides to be oriented to take education (seminars, conferences, congress etc.) for gaining viewpoint on this subject.

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An Empirical Critique of Regulatory and Managerial Inefficiency Behind the Bank Failures in Turkey

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Abstract

By drawing on 33-year long data (1970-2003), we developed five alternative efficiency measures and six different prediction models to study the determinants of bank failures in Turkey. We found that failed banks had much lower efficiencies than surviving banks and the performance between the groups widens rapidly as banks get closer to failure. Managerially induced (technical) inefficiencies dominate regulatory induced (allocative) inefficiencies in Turkish bank failures, making bank managers somewhat more blameworthy. Consistent with the theory of asymmetric information and principal-agent problems, banks affiliated with holding groups are more likely to fail. The results caution that liquidity and currency risks combined with poor management are a fatal mix ahead of crises. Furthermore, the fact that observed inefficiencies and most bank failures took place in a quasi-liberal environment implies that regulators also had their fair share in the causalities.

Keywords: failures; crisis; efficiency, regulation; Turkish banks; emerging markets

Introduction

Something is clearly going wrong in banking in both developed and developing worlds. The 2008 financial crisis has just led the US, the most developed economy in the world, to shut down 465 of its banks between 2008 and 2012 (FDIC, 2013). The experience of developing countries has been historically more agitating. Such that; it is difficult to identify an emerging market that did not experience (not only one but) a series of banking crises recently. Between 1970-2002, researchers pinpointed 117 *systemic* bank crises worldwide, involving about 100 countries, in which most or all bank capital was exhausted (Demirguc-Kunt and Detragiache 1997; Caprio et al., 2005). These studies demonstrate that banking crises have not only been more frequent but also much more expensive to resolve, some costing as much as one half of a nation's annual income (Argentina, 1980-82; China, 1990s; Indonesia, 1997-99).

Social, political and economic costs of bank failures are enormous as banks are not just ordinary institutions. They dominate finance virtually everywhere. They are the repositories of a nation's savings, conduits of its financial payments, managers of its risky assets, monitors of its businesses, and financiers of its economic growth (Levine, 2005). Thus, when banks stumble or collapse, so do the entire economies they support. As the

main custodians of our savings, they are charged with loaning these funds to their most productive uses. If they succeed in allocating these funds to positive NPV (value creating) projects, they *healthily* enrich not only themselves but also others. However, as evidenced in recent crises, problem loans often precede banking collapses (Wheelock and Wilson, 2000; Assaf et al., 2013). Apparently, banks everywhere have been failing in their core function. Why have they become such poor allocators of national funds all of a sudden? As known, banking everywhere is one of the most heavily regulated industries. While banks have been apparently wasting scarce resources, where were their supervisors? As Beim and Calomiris (2001) rightly wonder, has there been a global outbreak of “incompetence or stupidity” among bank managers and regulators lately? What in the world was going on?

Naturally, the immense global wave of bank failures in recent years has attracted a great deal of interest from academic circles, governments and international authorities. In the light of these developments, we study the experience of Turkey over the 33-year period from 1970 to 2003, in which more than half of the private banks disappeared. The graphic example of the Turkish saga during this period is full of important lessons. Afflicted with notorious ‘boom and bust’ cycles in its economic trajectory, nearly every decade in Turkey ended with a major crisis accompanied by bank failures. In the wake of Ponzi-like schemes following the deregulation of interest rates, 5 banks along with many brokerage houses were forced to liquidate between 1982-85. The rescue cost of this first post-liberalization accident was equivalent to 2.5% of GDP (Atiyas, 1990). After a slight turbulence in its economy following the 1991 Gulf crisis, the culmination of chronic budgetary problems and escalation of internal debt stock to alarming levels resulted in another, but more devastating twin crises by the mid 1990s. The economy shrunk by 6%, the highest to that date, the Central bank ran out of reserves and banks lost one third of their assets by 1994. These second and third quakes victimized 6 more banks between 1990-94 with a total rescue cost of 3.1% of GDP (Isik and Hassan, 2003a). However, retrospectively, these early distresses were just the footsteps of the country’s most disastrous crisis in its 80-year republican history. The long build-up of the systemic problems beneath the Turkish economic and financial system, such as macroeconomic instabilities, high public sector borrowing requirements, negative externalities created by state-owned banks, connected lending, moral hazard and adverse selection problems, overcapacity, quasi-liberalization, failures in understanding and managing modern financial risks, politically driven regulatory apparatus and forbearance, finally erupted with a “big bang” between 2000-2001 (Denizer et al, 2000; Alper and Onis, 2004; BRSA, 2009). Eventually, the Turkish economy contracted by about 10% on TL basis (and 24% on \$ basis) in 2001. This latest blow wiped out one third of Turks’ personal incomes and led to the failure of more than half of private banks in the industry. The resolution cost of the 27 bank failures during this period was a staggering \$53.6 billion (34% of GDP), of which some \$47 billion had to be borne by the Treasury (ultimately by ordinary taxpayers). Yet, the real cost of these banking crises was not monetary but rather the legacy of mistrust they created, which still haunts the system today.

The research about banking failures in developing countries is very limited due to the lack of data available and the associated problems of working with a very small number of

banks (Brown and Dinc, 2005; Dinc, 2005; Baum et al, 2010). The purpose of this paper is to study the determinants of bank failures in an emerging market setting, with a special focus on regulatory and managerial inefficiencies. To the best of our knowledge, this will be the first paper to study the empirical association between banking failures and efficiency in a developing country covering such a long time horizon. The underlying reasons for each banking crisis may differ across time. Thus, in search of the major commonalities behind bank failures, we intentionally chose a long span of time because we did not wish to focus on failures from a specific period or from a specific incident. Some earlier studies focused mainly on the causes and costs of financial crises using a cross-country or time-series macroeconomic data and applied multivariate logit or probit regressions to identify which factors have the greatest influence on a crisis (e.g.; Canova, 1994; Demirguc-Kunt and Detragiache, 1997 and 1998; Tunay, 2010). Aside from the macroeconomic discussions of Turkish bank crises (Atiyas, 1990; Celasun, 1998; Alper and Onis, 2001 and 2004) and analyses of their impacts on the industry performance of banks before and after a crisis (Isik and Hassan, 2003a; Ozkan-Gunay and Tektas, 2006), there is no specific micro-level productive efficiency study of bank failures in Turkey. Most of the failures in our sample are either the precursor to or the result of a financial crisis. Although lots of banks failed during these crises, many survived. Thus, our main goal is to identify what distinguishes the extinct banks from the survivors in Turkey. We also try to determine if there are apparent signs of deterioration in bank performance ahead of actual failure. By constructing a simulated time path, we regressively track management inefficiencies of banks up to 10 years before failure. Hence, this study could be beneficial for configuring current and future banking policy in Turkey and elsewhere by identifying the poor regulatory and managerial practices observed at the eve of past failures.

Since Thomas (1935), bank failure studies concluded that the primary cause of bank failures is the quality and efficiency of bank management (e.g.; Barr et al., 1996; Wheelock and Wilson, 1995 and 2000; Li et al., 2012). However, some newly emerging streams of papers accuse the distortions induced by regulators and politicians as the cardinal source of bank problems (e.g.; Denizer et al., 2000; Alper and Onis, 2004; Brown and Dinc, 2005; Dinc, 2005 and 2006; Baum et al, 2010). In order to investigate the degree to which regulatory and managerial inefficiencies are responsible for bank failures, we employ 5 DEA-type productive efficiency measures, namely overall (OE), allocative (AE), technical (TE), pure technical (PTE) and scale efficiencies (SE), where $OE = AE * TE$ and $TE = PTE * SE$. According to the literature, regulatory errors are the major causes of allocative inefficiencies, while managerial errors are the main drivers of technical inefficiencies in banking (e.g.; Evanoff and Israilevich, 1991; Berger and Humphrey, 1997; Isik and Hassan, 2002a, 2003a,b; Coelli et al., 2003; Isik, 2008). Hence, we dub technical efficiency (TE) as technical management efficiency (TME), allocative efficiency as regulatory management efficiency (RME) and overall productive efficiency (OE) as overall management efficiency (OME). Accordingly, TME becomes the product of pure technical management (PTME) and scale management (SME) efficiencies ($TME = PTME * SME$). These efficiency scores proxy the dual roles of managerial and regulatory qualities in the efficient provision of financial services. Bank managers must determine the right *levels* of bank inputs and outputs to get the most out of the existing inputs or to economize the most for the same outputs (technical management efficiency). Regulators may distort managerial

decisions in selecting the right *mix* of inputs and outputs by influencing market conditions where the prices of these inputs and outputs are set (regulatory management efficiency). Hence, unlike the previous studies (Barr et al., 1996 and Wheelock and Wilson, 1995 and 2000) that generally used technical efficiency as a proxy for management quality in predicting bank failures, we utilize 5 different managerial efficiency scores to examine the distinct roles of managers and regulators in causing bank troubles.

Our results indicate that all efficiency scores of the failed banks are statistically and invariably lower than those of the survived banks whether compared in a 33 year long time period, one year prior to failure or during the most recent 2000-2001 crises. The managerial underperformance is generally detectable as far as 5 years before the eventual failure. Both regulatory and managerial mistakes were jointly responsible for this outcome; however, the shares of bank managers stand out: technical inefficiencies tend to surpass allocative inefficiencies in failed banks. The mismanagement of liquidity and operational scales seem to be the major culprits of failures. Also, confirming moral hazard and adverse selection problems, we found that the banks affiliated with major holding companies are more likely to fail. The increased intensity of failures in the neo- (but quasi-) liberal financial environment also suggests that regulators must have erred in their priorities or execution.

Data and definition of banking technology in Turkey

We define *failed banks* as the banks that voluntarily or involuntarily declared bankruptcy or whose charter is revoked or assets seized by the regulators. *Survived banks* are those banks that passed through the study period alive. Our dataset (1970-2003) on these banks is coming from the 'Banks in Turkey' annual books of the Banks Association of Turkey (BAT), which houses all banks in Turkey as members. We cover all bank failures that happened after 1970 in Turkey. The issues of data unavailability and inconsistency did not allow us to include the earlier episodes of the republican era. We did not cover the period after 2003 on purpose, as no bank has failed afterwards. The processing of data took a few months due to the unavailability of the soft data for the majority of the years before 1990. Not to bias the construction of the non-parametric efficiency frontier against which the efficiency of banks in the sample is relatively measured, we eliminated some observations due to their either suspicious values or outlier nature, e.g., for some banks, input prices could not be constructed because either the required relevant stock value for the input or flow value for the expense was reported zero. Therefore, we excluded those observations whose input prices could not be obtained and/or are more than 2.5 standard deviations away from the mean value, if obtained. As a result of this data filtering process, we lost approximately three to four observations each year. Due to such data issues and filtering, we were able to use 30 of the total 38 commercial bank failures between 1970-2003; a total of 1,431 observations, of which 623 belong to failed banks and 808 to survivor banks. Rather than estimating a common frontier across time, we preferred 33 separate annual frontiers. This is a critical issue in a changing business environment because the technology or bank that is most efficient in one year may not be the most efficient in another year (Isik and Hassan, 2002a,b). In a performance analysis, the subjects of comparison should be relatively homogenous, employing similar outputs and inputs. Since their technology is quite different from that of commercial banks, we excluded the central bank, export & import banks, clearing house bank and development & investment banks.

Adopting the intermediation approach to measure managerial efficiency, we model Turkish banks as multi-product/multi-input firms, transforming 3 financial inputs into 2 financial outputs. The input vector comprises (1) [LABOR], the number of full-time employees on the payroll, (2) [CAPITAL], by the book value of premises and fixed assets, and (3) [FUNDS], loanable funds by the sum of TL and FX denominated deposits (demand and time) and non-deposit funds. Hence the total costs include both interest expense and operating costs and are proxied by the sum of labor, capital and loanable funds expenditures. Obviously, all input prices are calculated as flows over the year divided by these stocks: (1) [P(LABOR), total expenditures on employees such as salaries, employee benefits and reserves for retirement pay divided by the total number of employees], (2) [P(CAPITAL), total expenditures on premises and fixed assets plus depreciation expense divided by gross value of premises and fixed assets], and (3) [P(FUNDS), total interest expenses in deposit and non-deposit funds divided by loanable funds]. Expenditures on these inputs account for the vast majority of all banking costs in Turkey. The output vector includes (1) [LOANS], the total of short-term (ST) and long-term (LT) conventional loans to private and public entities & loans to special sectors and (2) [SECURITIES]; all non-loan earnings assets such as investment securities (treasury bills, bonds and private securities) and others.

Some recent Turkish efficiency studies separated loans into ST and LT loans and used off-balance-sheet activities (e.g., Isik and Hassan, 2002a,b, 2003a,b; Assaf et al., 2013). However, the BAT reported only *total* loans before 1980 and did not report off-balance-sheets until 1986. So to be consistent throughout the study period (1970-2003), we utilized the aggregates of various loans and securities as bank outputs. Thus, our model of Turkish banking may suffer from some shortcomings, however, in other ways, it improves the way to represent banking technology in Turkey. For instance, our inclusion of preferential credit within LOANS output is specifically of value for state banks, which are heavily engaged in subsidized loans and thereby ignoring their directed lending might lead to the underestimation of their productive efficiency. Also, the usage of SECURITIES output signifies the periodic realities of Turkish banking. As discussed, funding the Turkish Treasury has occasionally displaced traditional banking in Turkey. Investments of Turkish banks got highly skewed towards government securities in the 1990s (e.g.; 13% of total bank assets in 1996). On dollar basis, the average *real* interest rates for 3, 6 and 9-month government securities in 1995 were a whopping 9% and 27% and 43%, respectively (BAT). Thus, the effect of utilizing SECURITIES as bank output is critical particularly for new and small banks as most of their operations often revolved around the management of government securities (Isik, 2008).

Table 1: Sample Statistics Of Bank Outputs, Inputs And Input Prices [1970-2003]

	Failed Banks		Survived Banks		All Banks	
	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.
OUTPUTS						
Total Loans	1035.91	1822.67	2768.87	5465.06	2021.80	4376.03
Securities	1390.97	2275.55	3475.36	8513.81	2576.78	6671.60
INPUTS						
Capital	334.01	1049.07	547.12	1403.67	455.25	1267.04
Funds	2111.63	3805.46	5473.76	11265.59	4024.35	9009.56

Labor	1359.58	2143.29	4011.80	7516.78	2868.43	5985.89
INPUT PRICES						
Price of Capital	0.161	0.183	0.185	0.212	0.175	0.200
Price of Funds	0.166	0.197	0.164	0.193	0.165	0.195
Price of Labor	0.048	0.043	0.066	0.051	0.058	0.049

Note: Variables are in million TL and adjusted for inflation using the 1968 prices.

Table 1 presents the summary statistics of the outputs, inputs and input prices of the survived and failed commercial Turkish banks. Except for labor, all variables are expressed in 1968 Turkish Lira. The first noticeable observation is that failed banks' average inputs and outputs are invariably much lower than those of the survivors, implying that failed banks were smaller than survived banks. While the survivors employed 4,011 individuals between 1970-2003 on average, the failed banks employed 1,360. Another crucial observation is that the volume of securities output, skewed to government securities, exceeds the volume of loans output during the period for both failures and survivors by a factor of 1.34:1 and 1.25:1, respectively. Failed banks converted only 42% and survived banks 44% of their liabilities into loans in Turkey during the study period; both reflecting the decline of traditional banking and crowding out by the state that has been addicted to deficit spending. Also, the visible security-oriented portfolios of failed banks did not provide the vital liquidity needed during the crises when the markets collapsed and their value melted in response to the surges in interest rates (this kind of policy mainly sealed the fall of otherwise solvent Demirbank during the 2001 crisis). Relatively lower volatility of failed bank's variables means that the failures were a more homogenous group, perhaps underlining their common fate. As for input prices, failed banks paid lower salaries and occupational expenses but higher funding costs with respect to the survivors. As far as prices reflect marginal quality and value, failed banks apparently did not utilize skilled and educated bankers and versatile and modern infrastructure (technology / buildings) as much as the survivors. While failed banks were economizing on labor and capital, they did not refrain from paying highly on expensive funds.

Table 2: The Snapshot Of The Turkish Failed Banks At Their Deathbeds (After Their Seizure)

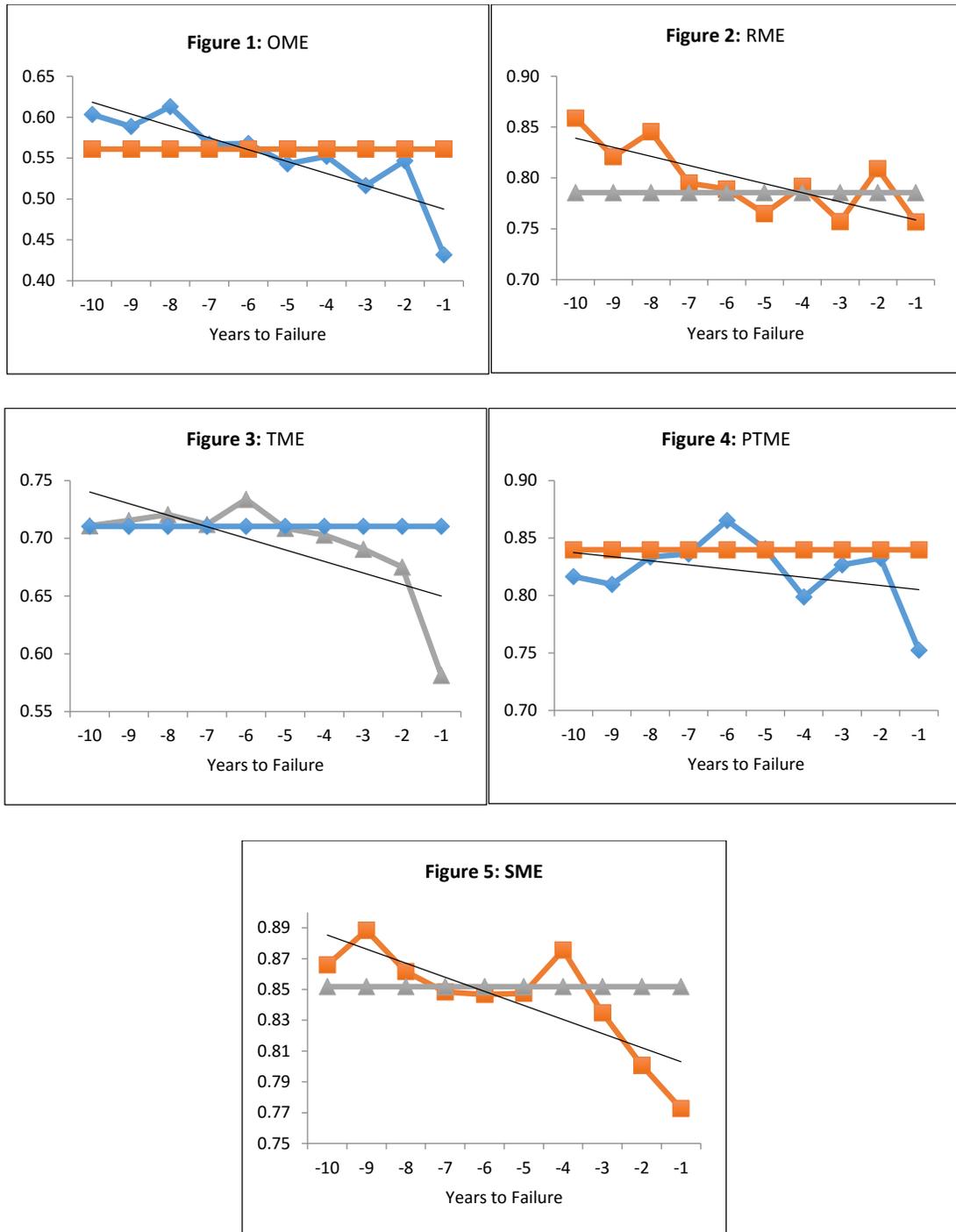
	Failed	Survived	Failed	Survived	Failed	Survived
Assets	28,093,478	529,959,573	583	907	100	100
Loans	5,378,661	136,464,884	112	234	19.1	25.8
Non-Performing Loans	6,060,210	25,563,275	126	44	21.6	4.8
Deposits	26,363,527	376,215,348	548	644	93.8	71.0
Equity	-5,965,398	42,712,959	-124	73	-21.2	8.1
Off-Balance Sheets	39,149,271	475,516,347	813	814	139.4	89.7
Interest Income	4,892,463	123,757,816	102	212	17.4	23.4
Interest Expense	6,698,001	91,342,623	139	156	23.8	17.2
Non-Interest Income	-80,648	5,293,980	-16	9	-2.8	1.0
Non-Interest Expense	4,159,339	26,698,795	86	46	14.8	5.0
EBT	-10,252,600	-3,861,915	-213	-7	-36.5	-0.7
Net Income	-10,245,058	-7,327,136	-213	-13	-36.5	-1.4

Note: The statistics belong to the banks between 1997-2003 failures after being seized by the Savings Deposit Insurance Fund [SDIF].

Our analysis of input and output statistics of the survived and failed banks in Table 1, based on their either 33 year or lifetime averages, in fact presented interesting initial highlights. To put the later discussion into further perspective, we also took a snapshot of the failed banks after the FDIC of Turkey (TMSF/SDIF) had just put them to final rest. Table 2 displays the assortment of balance sheet and income statement ratios of the twenty-seven failed banks while at their deathbeds between 1997 and 2003. The initial autopsy of these failed banks indicate that they were asset- and wealth-destroyers. The level of bad loans they made reached the 21.6 % of their total assets (TA) [TL 126,000 per employee], which undoubtedly eradicated their total equity (-21% of TA). The failed banks (survivors) were also comparatively less (more) productive; they generated TL 583,000 (TL 907,000) assets, TL 112,000 (TL 234,000) loans, TL 102,000 (TL 212,000) interest income and TL16,000 (TL 9,000) negative non-interest income per employee. The failed banks were also poor cost managers; their interest (24% vs 17%) and non-interest expenses (15% vs 5%) as percentage of assets were much higher than those of the survivors. Given their lower productivity and higher costs, the bottom-line of the failed banks would be inevitably in the red: they lost about 37 kuruş per 1 TL invested in assets during the 2000-01 crisis (ROA=-36.5%). These casual diagnoses of the failed banks at their deathbeds perhaps pinpoint poor management, inexperience, poor guidance or worse, indifference (if the losses would be borne by others) as the causes of their perishment. This is what we will explore next.

Analysis of managerial efficiencies of failed banks

As we saw, the Turkish experience after 1980 is a typical case of quasi-liberalization. In this semi-competitive environment, the survival of banks not only should depend on how well they streamline and expand their operations, but also how well they manage regulatory and political risks and rewards. Thus, their managerial ability to adapt and operate efficiently, both technically and allocatively, would determine their success. Accordingly, we hypothesize that the failed banks would significantly underperform the survived banks in all forms of managerial efficiency. More plainly, as compared to the survivors, the failed banks would be poorer in effectively combining productive inputs given their prices (RME), converting them into more outputs (TME), choosing the right scale of outputs in terms of costs (SME), underutilizing productive resources even at the current scale (PTME), and managing overall operations (OME). Another proposition is that the inaptitude and inefficiency of poor managers would escalate as banks approach failure due to asymmetric information problems.



In order to test how rapidly managerial performance deteriorates (if it ever does), as banks get closer to failure, we classify the failed banks based on how many years they have until the failure date and compare their managerial efficiency scores with the long-term average performance of the survived banks. Figures 1 to 5 display the simulated 10-year regressive time paths for the pre-failure OME, RME, TME, PTME and SME scores of the failed banks, respectively. The stylized trend lines to summarize the tendency in their performance are also provided. We observe that there is a general trend towards lower

efficiency values as the banks approach their failure date. All trend lines have a negative slope, as though pointing the way to the exit. Accordingly, despite the occasional oscillations in between, the efficiency scores of the failed banks that had begun with a 'high note' all ended with a 'low note', i.e.; the Year -1 scores are all lower than the Year -10 scores [OME: $0.43 < 0.60$; RME: $0.76 < 0.86$; TME: $0.58 < 0.71$; PTM: $0.75 < 0.82$; SME: $0.77 < 0.87$]. Furthermore, the final 5-year (YR-1 to YR-5) average performance of the failed banks is also all short of the distant 5-year (YR-6 to YR-10) average performance [OME: $0.52 < 0.59$; RME: $0.78 < 0.82$; TME: $0.67 < 0.72$; PTM: $0.81 < 0.83$; SME: $0.83 < 0.86$]. In spite of some stops on the way, the prolonged and steady downfall of the failed banks was perhaps unstoppable by the poor managers or worse, foreordained. The figures also show that the failed banks underperformed the survived banks starting from 5 years before failure in terms of OME, TME and PTME and 3 years before in terms of SEM and 1 year before in terms of RME. The performance gap between the survivors and the failures is the widest when they have one year to failure. Also, the one-year greatest drop in the efficiency of failures occurred in the final year prior to failure [OME by 22%, TME by 15%, PTM by 10%, RME by 6%, SME by 4%].

Apparently, the managerial inefficiency of the failed banks has slowly deteriorated over time, however, nearer the finish, it began to accelerate and reached its extremity. In our opinion, the moral hazard and adverse selection problems we discussed earlier arising from the weak and short-lived governments, large fiscal deficits, heavy politicization of the bank entry and exit decisions, and strong government safety nets must have all played their distinct roles in this outcome. Especially, regulatory forbearance was at its peak between 1985-99. As aforementioned, there were always 15 or so ailing banks under the regulatory surveillance during this period and the average duration of these banks in rehabilitation was an astonishing 9 years (Soral et al., 2003). The regulators under heavy political influence and conflicting goals engaged in bureaucratic gambling and refrained from closing these zombie banks until the crisis hit in 2000-01. As zombie banks became aware of the regulatory forbearance, moral hazard problems accentuated and banking practices were increasingly abandoned. As the ailing banks were approaching the finish line (having increasingly nothing to lose), they bet the bank by taking on greater risks. Towards the end, moral hazard was at its climax, the inefficiencies were the least concern, and so the losses were the greatest.

This kind of landscape attracts risk-loving entrepreneurs into the banking business. Even worse, the 100% deposit insurance, regulatory forbearance and political patronage might have lured the 'outright rogues' to the industry because it would be demonstrably easy for them to get away with fraud. Expressively, some politically connected Turkish groups rushed to have their own banks in the neo-liberal environment. The very fact that most of these new entries were among the fatalities in less than a decade verifies that they were purely adverse selection. Their intentions could be debated. These groups had perhaps no intention of continuing the bank in business but were simply taking a short-term gain. Alternatively, these groups perhaps did not plan on failure, but neither would they be greatly injured if failure ever happened. These newcomers used group banks to finance their existing firms and/or acquiring new firms. So, the ultimate goal of these groups was perhaps never the well being of the bank but the enlargement of their business empires.

Regardless of the bank's fate, they would continue to own their empires in any way. Isik (2008) studied the productivity, technology and efficiency of these de novo banks and found that unlike their American counterparts (DeYoung and Hasan, 1998), the new Turkish banks started with a superb performance from the onset but their performance worsened, as they got mature. He reports that excluding the ten largest banks, the average life expectancy of Turkish banks is roughly 10 years. Very plausibly, morally hazardous owners of these banks might have bet the bank and/or drained their capital down the road. For these banks, managerial efficiency and good banking practices might have lost their relevance over time or never been a priority. Hence, the damage was the greatest near the end, as our efficiency indexes captured.

Table 3 (Panel A) shows the long-term averages of the managerial efficiency scores of the failed and survived banks during the period of 1970-2003, along with the results of the statistical tests of equality between the scores. For each efficiency measure, we tested the hypothesis that the different samples (failed and survivor) are drawn from the same distribution or from a distribution with the same median by means of four methods: Median Test, Kruskal-Wallis and Mann-Whitney (non-parametric tests) and ANOVA (parametric test). Except for SME, the alternative measures of managerial efficiency for the failed banks are invariably lower than those of the survived banks (and also the industry) [OME: $0.52 < 0.56$; RME: $0.78 < 0.79$; TME: $0.66 < 0.71$; PTM: $0.76 < 0.84$; SME: $0.87 > 0.85$]. The mean differences are statistically significant for OME, TME and PTME predominantly at the 1% level. The average 52% OME of the failed banks implies that the managers of these banks wasted almost half of the bank resources during the intermediation process; i.e., if they had been fully efficient, they could have used only 52% of the resources actually employed to produce the same level of outputs during their lifetime. Although superior to failed banks, neither the 56% OME of the survivors nor the 54% OME of the overall industry does shine. After surveying 130 efficiency studies on financial institutions, Berger and Humphrey (1997) reported 72% global efficiency based on non-parametric techniques like ours. Nearly 20% overall less productive efficiency than global peers implies that Turkish banks have been wasting resources extravagantly and with no consequences, confirming the *quiet life theory*. Under political patronage, deposit insurance, regulatory forbearance and weak competition, understanding that they were not required to operate very efficiently to remain in business, Turkish bank managers/owners might have been involved in *expense preference behavior* to maximize their own well-being to the detriment of depositors or taxpayers. Yet, overprotected subjects hardly mature and develop survival skills [against the crises (act of nature) or stronger rivals (act of men) visiting from home or abroad or above].

Table 3: Mean Managerial Efficiencies Of The Turkish Failed And Survived Banks

	Failed Banks		Survived Banks		All Banks	
	Mean	SD	Mean	SD	Mean	SD
<i>Panel A. All years [1970-2003]</i>						
OME	0.528 ^{a,a,a,a}	0.227	0.573	0.233	0.554	0.232
RME	0.800 ^{x,x,x,x}	0.182	0.803	0.197	0.801	0.191
TME	0.676 ^{a,c,a,a}	0.240	0.725	0.221	0.703	0.230
PTME	0.776 ^{a,a,a,a}	0.233	0.858	0.199	0.823	0.218
SME	0.890 ^{b,x,x,x}	0.150	0.871	0.177	0.879	0.166

Panel B. 1-year prior to failure [1970-2003]						
OME	0.431 ^{a,b,a,a}	0.187	0.568	0.231	0.563	0.231
RME	0.758 ^{x,x,x,x}	0.180	0.796	0.195	0.794	0.195
TME	0.586 ^{a,x,a,a}	0.219	0.719	0.219	0.714	0.220
PTME	0.758 ^{b,b,b,b}	0.225	0.851	0.197	0.847	0.199
SME	0.784 ^{b,a,a,a}	0.149	0.862	0.175	0.860	0.174
Panel C. Most recent years [1997-2003]						
OME	0.385 ^{a,a,a,a}	0.158	0.573	0.211	0.552	0.214
RME	0.700 ^{c,x,b,b}	0.170	0.783	0.178	0.774	0.178
TME	0.583 ^{a,b,a,a}	0.242	0.739	0.182	0.722	0.195
PTME	0.768 ^{a,a,a,a}	0.230	0.904	0.146	0.889	0.162
SME	0.762 ^{c,c,c,c}	0.162	0.831	0.153	0.823	0.155

Note: a, b, c & x stand for 1%, 5%, 10% & more than 10% significance for the mean difference tests for the failed and survived bank groups, respectively. The four consecutive letters represent the test results for the parametric ANOVA, and non-parametric, Median Test, Kruskal Wallis and Mann-Whitney equality of means tests, respectively.

The subcomponents of the overall management efficiency (OME) score indicate that average regulatory management inefficiency (RME) was 22%, whereas average technical management inefficiency (TME) was 34% for the failed banks in the study period (1970-2003). Moreover, each year up to 10 years prior to failure, technical inefficiencies always dominate the allocative inefficiencies of failed banks. These findings suggest that the major source of overall inefficiency in the failed banks is technical (managerial / internal) rather than allocative (regulatory / external). The failed banks appear to have wasted too much input per unit of output. The higher technical management inefficiency (TME) also implies that the managers of failed banks were relatively good at choosing the proper input mix given the externally determined prices but they were not that good at utilizing all factor inputs. We also found no statistically significant difference between the regulatory management efficiencies (RME) of the failed and survived banks under 4 different tests. To the extent that we accurately measured productive efficiency, these results suggest that the larger inefficiencies of failed banks in Turkey are not the result of regulation but the result of poor management. In other words, the misfortunes of failed banks were mostly their own doings, not others'. The survival of many banks under the same onerous conditions proves that good managers distinguish themselves in hard times.

Summary and concluding remarks

The average lifespan of Turkish banks is 14 years. Excluding the 10 largest banks, it drops to about 10 years. The industry houses 45 banks now, whereas it had a record number of banks (81) by 2000. Following the proliferation of new entries in the 1990s, the country experienced its deepest crisis ever in 2000-01, which claimed the lives of more than one half of the privately owned banks, caused a one third dent in the national income and created serious repercussions that still haunt the financial system in Turkey. The overwhelming majority (50) of the total bank failures (75) in the history of the country happened in just 20 years after 1980. Some accuse weak and distorted regulatory environment, some blame incompetent and wicked managers for this gigantic outcome. In this paper, using a long dataset from 1970 to 2003, we investigate the major causes of bank

failures in Turkey. The 33-year study period makes this analysis one of the longest productive efficiency studies on Turkish banks.

Unlike the earlier bank failure studies, we use 5 separate non-parametric managerial efficiency indexes, namely, overall (OME), regulatory (RME), technical (TME), pure technical (PTME) and scale management (SME) efficiencies, as proxies for different facets of management quality. Our purpose is to understand what deficiencies of managers most increase the risk of bank failures. Banking literature attributes allocative inefficiencies to poor regulatory and market conditions and technical inefficiencies to poor management. Thus, their relative magnitudes and prediction capabilities should indirectly signal the roles of regulators (external factors) and managers (internal factors) in causing bank failures. Our results based on 33 year record, one year prior to failure and the most recent period, suggest that failed banks had much lower managerial efficiencies, regardless of the measure, as compared to survivors. They were producing the same services with higher cost (OME), using more input per output (TME & PTME), poorly allocating bank resources in response to regulatory and market changes (RME) and making wrong scale decisions (SME). Many of these inefficiencies were apparent as far as 5 years ahead, implying supervisory forbearance and were the greatest one-year prior to failure, implying the acceleration of moral hazard problems near the exit. Also, we found that technical inefficiencies (TME & PTME) dominate allocative inefficiencies (RME) in failed banks, suggesting that poor management was the main suspect of their decease. Managerial problems in failed banks to some extent originate from scale inefficiencies, indicating that bloated scales in good times hurt these banks dearly in times of crisis.

In addition, we developed six bank failure prediction models, using a multivariate probit framework, to examine the predictive power of managerial efficiency indexes after controlling for other bank traits. We observed that when the management variable (one of the efficiency scores) was removed from the model, the results were poorer in terms of the model classification accuracy. The best accuracy was achieved when using the overall management efficiency index (OME), the nexus of all other forms of efficiency scores ($OME = RME * PTME * SME$). These results emphasize the vitality of management quality in dealing with internal and external challenges. We also found that banks affiliated with holding companies, carrying poor asset portfolio, running large FX open positions, controlled by Turkish entrepreneurs tend to have higher probability of failure. Albeit weak, the results also suggest that small and young banks are more likely to fail. Given the long forbearance and loose standards elicited by poor regulators, the important factors such as capitalization seem to have lost their discerning capability between survivors and failures. We also observed that among the explanatory variables we used, only liquidity variables dominated the managerial efficiency indexes in terms of significance and prediction power. This suggests that in times of extraordinary events (when foreign capital flies, interest rates soar and local currency plummets), the combination of liquidity and currency risks becomes a fatal mixture whose effects are accentuated with both regulatory and managerial errors. Our overall results suggest that both bank managers and regulators have their fair shares in triggering bank failures in Turkey. However, the sheer existence of many survivors that passed through these distorted and tumultuous periods with little or no scratch point the blame (to an important degree) towards the former.

In retrospect, Ahmet Ozturk, the former head of the Savings Deposit Insurance Fund (SDIF) in charge of the clean up from 2004 to 2010 tells it all: “In just five years between 1998-2001, 25 banks failed in this country. Some perceived this tragedy as a divine punishment, some as a traffic accident. All these troubles would not be possible without a foul play by politicians. The intricate cobweb of the relations between politicians and bankers and between politicians and businessmen is the major reason of the wreckage of the system and loss of billions of dollars” (Turkiye Daily, 07/22/2007). It appears that politicians and regulators reaped what they sowed. The adoption of full deposit insurance after 1994 financial crisis for ten years, heavy reliance of the Treasury on banks, regulatory forbearance and political meddling inflamed risk appetite, and turned the Turkish banking industry into a mecca of risk and rent seekers. These bankers under skewed incentives gambled the banks, neglected the best banking practices, wasted resources, wrecked the system and charged the bill to the public at large. Crime rarely goes unpunished, however. Most of the prime accomplices of these failures, be it politicians or businessmen, were wiped out of the Turkish public sphere by creative destruction. No bank has failed since the change of the political and regulatory team in 2003. However, it is perhaps the nature of development in emerging markets. After a decade, the newcomers, having creatively destroyed the inefficient political, regulatory and business practices of old timers, now show some tendencies to intervene with banking and business for political reasons. Perhaps, the story of the so-called “lost 1990s” should be reminded to them.

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Moroccan Human Ecological Behavior: Grounded Theory Approach

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Abstract

Today, environmental sustainability is everyone's concern as it contributes in many aspects to a country's development. Morocco is also aware of the increasing threats to its natural resources. Accordingly, many projects and researches have been discussed pointing mainly to water security, pollution, desertification, and land degradation, but few studies bothered to dig into the human demeanor to disclose its ecological behavior. Human behavior is accountable for environment deterioration in the first place, but we keep fighting the symptoms instead of limiting the root causes. In the conceptual framework highlighted in the present article, 22 interviews have been conducted using a grounded theory approach. Initially this study will serve as a pilot study and a cornerstone to approve a bigger project now in progress. Beyond the existing general ecological measures (GEM), this study has chosen the grounded theory approach to bring out firsthand insights, and probe to which extent an ecological dimension exists in Morocco as a developing country. The discourse of the ecological behavior within the Moroccan context is seen in more realist, social, and community philosophy. Insights from interviews have revealed the existence of the following external factors: institutional, economic, social, and cultural; and the following internal factors: knowledge, locus of control, and values. Two new variables have emerged about half way over the coding process; Islamic environmental ethics and place attachment.

Keywords: Moroccan ecological behavior; grounded theory; internal factors; external factors; Islamic environmental ethics; place attachment.

Introduction

The alarming pressure on nature and the numerous environmental problems have raised many questions about the pro-environmental strategies that would prevent further natural deterioration. Pollution and shrinking natural resources are now genuine problems that compromise the quality of life. Human psychology and other different disciplines, have attempted to build a society less oppressive on their natural resources (Krause, 1993), but still no definite response has been given to clarify the whole picture of environmentalism (Stern & Gardner, 1981). The ecological Footprint has more than doubled between 1961 and 2008. The human pressure is persistently impacting the earth's dwindling resources, dropping the resources curve remarkably year over year. "The Ecological Footprint is a measure of the load imposed by a given population on nature. It represents the land area necessary to sustain current levels of resource consumption and waste discharge by that population" (Wackernagel & Rees, 1998). Morocco, along with Kenya, Tunisia, Senegal, Ethiopia, Nigeria, South Africa, Uganda, and Zimbabwe, are nine African countries that have been living beyond their natural capacities (<http://wwf.panda.org> [2011]). Indeed the sustainability of Moroccan natural resources is becoming hard to ensure, this is an undeniable obstruction for social and economic development. The degradation of its coasts,

forest overexploitation, and the agony of the oasis, reflect the unsettling threats towards its biodiversity (Laouina, 2006).

Morocco being aware of the significant decline of the environment conditions has signed numerous international conventions to promote sustainable development, mainly on desertification, maritime pollution, protection of the ozone layer, and protection of endangered species (Omari, 2014). After the United Nations conference on Environment development held in Rio de Janeiro (Brazil) in 1992 and in Johannesburg (South Africa) in 2002, Morocco has set up the guidelines to progress a sustainable development by promoting multiple changes in political, legal, institutional, and socio-economic fields. In 2009, the Moroccan Solar Plan has been launched within the energy strategy and sustainable development. This project aimed at decreasing energy dependence and the emission of greenhouse gases (GHG) (www.environnement.gov.ma[2010]).

The measures adopted have proven to be effective to improving Moroccan environmental conditions. However more proficient results would of came up if morocco has given as much effort on shaping ecological Moroccan behavior and has involved the human factor in progressing sustainable development. Human behavior is the root cause for the environmental deterioration. The fears related to the environmental degradation like global warming, unsustainable cutting down of forests, and water pollution are nothing but the result of human behavior (Stern, 2000). Morocco has a substantial potential in the environment ground, and ambitions project for environment safeguard but wouldn't assure a successful path to sustainable development without taking into consideration the human factor; has declared the president of the association of teachers of life sciences and earth (<http://www.aesvt-maroc.org/> [2013]).

The achievability of ecological behavior seems to have been given little interest by the scientific community; very few references have been examining the Moroccan environmental conduct. The approach of this study is exploratory; the article's objective is not to evaluate the Moroccan society's ecology conduct, but more modestly to understand why ecological behavior in not likely within the Moroccan behavioral context and what are the plausible barriers that hinder Moroccans from acting ecologically?

Literature and conceptual framework

The primary concern of this research paper is the human ecological behavior itself; which is, the "activities that take into consideration the protection and conservation of the environment" (LJ Axelrod, DR Lehman, 1993). Ecological behavior is a controversial topic; many studies have been conducted to explore the probable variables that would affect a responsible environmental behavior. For the sake of simplicity, two elemental categories have been distinguished, intrinsic factors e.g.; attitude, locus of control, traits of personality, and environmental knowledge; and extrinsic factors that are out of people's control and distress the environmental behavioral process e.g.; local infrastructure, social, economic and cultural factor.

Internal influences on ecological behavior

Personality traits, certain personality traits have been proven to be linked to the pro-environmental behavior. (Borden & Francis, 1978) have suggested that selfish people are less likely to behave ecologically. To be concerned about environment issues people should care about the community at large (Geller, 1995), someone who is aware of others' suffering and feels the necessity for doing something to ease their pain, is more likely to behave ecologically. This is supported by the *altruism theory* in the model of (Stern, Dietz, & Kalof, 1993) as mentioned in (Kollmuss & Agyeman, 2002). In the same vein, (Hirsh & Dolderman, 2007) have suggested that openness and agreeableness measured on the new ecological paradigm (Dunlap, Van Liere, Mertig, & Jones, 2000) are associated with an environmental behavior. They have described an agreeable person as altruistic and warm with tendency to behave in an environmentally friendly fashion because of his/her empathetic concern. They also advocated that open individuals would have experienced more in natural surroundings, so they exhibit a more friendly behavior toward the environment.

Knowledge, some writers on sustainable development highlight the big role of information about the ecological threats (Hansen & Schrader, 1997), and the awareness of the natural environmental degradation (Kilbourne, McDonagh, & Prothero, 1997). *Environmental knowledge* is considered as a predictor variable to pro-environmental behavior (Kempton, Boster, & Hartley, s. d.), proper behavior can't take place without proper knowledge (Frick, Kaiser, & Wilson, 2004). The increased knowledge about the associated benefits is related to the employment of a pro-environmental behavior. People who have demonstrated more knowledge about the environmental issues and concerns seem to behave more ecologically (Kollmuss & Agyeman, 2002). (Schultz, 2002) has stated that the non-recyclers have limited information about the benefits of recycling. Knowledge is an important element indeed, but has been proven not to be sufficient to predict ecological behavior (Schahn, 2002). Some mediators when present, seem better at converting ecological knowledge to environmental action e.g., attitude (F. G Kaiser, Wölfling, & Fuhrer, 1999), intention (Schwepker Jr & Cornwell, 1991), and values (Corraliza & Berenguer, 2000).

Locus of control has been defined as someone's perception of being able to make changes via behavior (Newhouse, N., 1990). Thus people having strong internal locus of control are more willing to behave ecologically, they believe that their actions have an influence and can indeed bring change contrary to those with external locus of control who believe that their individual actions are insignificant. The notion of "locus of control" has been compared to 'responsibility' in Blanke's model (1999).

Values, norms, attitude and other intrinsic variables influence people's ecological behavior. (Bilsky & Schwartz, 1994) define values as concepts guiding the selection of behaviors or events. In the environmental theory of *values-beliefs-norms* (VBN), (Stern, 2000) has explained that our values impact our general outlook about the environment, which is the *general beliefs*; then, it effects the beliefs about the damages of environment alterations on things valued by people, that in turn impacts their perception of their capacity to counter these threats; and finally, this impacts their norms of taking action.

Attitude is proven to be a key element in numerous behavioral models, e.g. Theory of reasoned action, theory of planned behavior (Ajzen & Fishbein, 1980), model of responsible environmental behavior (Hines, Hungerford, & Tomera, 1987). Attitude was found to be associated with pro-environmental behavior, people with strong ecological/environmental attitude are more willing to engage in ecological behavior (Kollmuss & Agyeman, 2002). Although, the relationship between ecological attitude and pro-environmental behavior ranges from weak (Midden & Ritsema, 1983), to really strong (McGuinness, Jones, & Cole, 1977). To sort this out, it's been recommended to measure both concepts, *attitude and behavior*, at the same level of specificity (F. G Kaiser et al., 1999).

External influences on ecological behavior

Human ecological behavior is very problematic, the individual's desire to behave ecologically doesn't effectively mean that he will do so, beyond the willingness and intention there are some other factors and conditions that might help or hinder the conversion from desire to real ecological action.

Institutional factor. Regarding certain technical installations people would use, there are much potential equipment efficiency, waste decrease, reducing the level of the ambient noise and energy saving (Von Weizsacker, Lovins, & Lovins, 1997). However, the adoption of such eco-technology would be fairly expensive for less developed country. For example, ecological behavior would be more revealed in countries that are involved in environmental measures (e.g., recycling facilities; facilitating recycling with accessible bins, promoting composting wastes ...) than those that are not. Numerous environmental behaviors couldn't be undertaken without the required infrastructure. Florian G. Kaiser (1998) calls this variable as *influences beyond people's control* and explains them in two points, the first is people's tendency of acting ecologically and the second the difficulty/easiness to carry out certain behavior (*behavior difficulty*). Fietkau, Kessel, & others (1981) refer in their model to *possibilities to act ecologically* as the set of the external factors e.g. infrastructure and economic elements that affect people's ecological behavior.

Social and cultural factors, in which people evolve, influence their behavior. Family values are transferred to oneself and contribute to shaping opinions, attitudes, and behaviors. Often people's demeanor is affected by their surroundings, for example the neighborhood's behavior, that is observed quite often, is more likely to impact an individual's behavior, specifically when the behavior described is considered as norms advocating how someone should act (Dietz, Fitzgerald, & Shwom, 2005), like showing an exemplary behavior toward the environment .

Ecological behavior is explained by different dimensions and illustrated by a multitude of factors; the facts are often vague and broad and leave the gate wide open for more investigations.

Grounded Theory Approach

The inconsistency of the ecological measures available is not overlooked. Indeed, The ecological behavior measures are fairly large, some authors put forward the ecological

behavior as a multitude of behaviors (Newhouse, N., 1990), in some other studies the ecological behavior can be broken down into a single measure (e.g., (Maloney & Ward, 1973). Grounded theory is more appropriate in the present article, as it is intended to understand a compound multifaceted phenomenon. Indeed, grounded theory (GT) proposes too many advantages in investigating as complex a topic as the ecological behavior that is related to too many factors e.g. psychological, social, and institutional. This methodical research approach, is rigorous and at the same time allows flexibility and freedom (Jones & Alony, 2011), and it permits to the researcher to broaden its investigation, often beyond the classical disciplinary boundaries (McCallin, 2003).

From the ecological behavior perspective, why ecological behavior seems far from being achieved within Morocco? It can be assumed that the discourse of the environmental behavior needs to be considered more as a multifaceted critical-realist-social philosophy (Dolan, 2002). This article seeks also to determine the factors that better shape the Moroccan ecological behavior and the elements that encourage or prevent people from behaving ecologically.

Methodology

In the conceptual framework highlighted in the present article, interviews have been chosen to gather information. Initially this study will serve as a pilot study, a cornerstone step to approve a bigger project now in progress. Interview methodology is more suitable due to the nature of the subject. Ecology behavior has been a physiological and sociological matter for centuries; hence people are realistically more qualified to describe their own environmental behavior.

For ethical consideration a readable sheet of information is provided to the participants, with the project outlined, and a consent section to be signed to approve their voluntary participation, along with a right of withdrawal at any time without giving a reason. In the consent form sheet the participant is invited to tick the box of a yes/no answer to agree or not on the interviews being audio-recorded and the use of anonymized quotes in publication. The interviews were conducted in both Arabic and French depending on the participant choice.

Sample and procedure

Eight participants (students, lecturers and school administrators) have been interviewed using purposive sampling. The power of using purposive sampling lies in identifying information-rich cases, which would disclose important amounts of information useful for the purpose of the research (Patton, 1990). Half hours in depth interviews were conducted, aiming to learn the Moroccan general behavior towards their environment. Open questions have been asked to know to which extent Moroccan people care about their environment and what would promote or prevent them from behaving ecologically. The interviewee is invited to express him/herself freely. Brief set of prompts have been created to intervene and keep the interviewee within the boundaries of the topic, and to react to arguments that are worthy to be followed up.

During and after each interview, notes has been written down summarizing the interviews main ideas, the impression about the participants, comments and reflections about the interviews progress. After the eight interviews, analytical memos have been written down summarizing ideas, comparing similarities and differences between data and emerging patterns. It helps to make a comparison between the data collected, and raise more relevant questions to be asked in continuing interviews. Essentially, this elementary step permits to develop core focused codes to be expanded and refined afterwards via the theoretical sampling. It determines who to select next and the type of questions that should be asked in the additional interviews.

Selecting additional cases to collect more information has followed after the first set of interviews. The theoretical sampling process has been described by (Taylor & Bogdan, 1998) as an important procedure to the three levels of coding advocated by (Corbin & Strauss, 1994) in the grounded theory approach. For this matter, fourteen further semi-structured interviews were conducted. The number of the participant has been identified based on the theoretical saturation, which is usually interpreted by qualitative researchers as meaning that the interviewers are not hearing anything new from the participants (Sbaraini, Carter, Evans, & Blinkhorn, 2011). An interview guide has been designed in fairly open framework, containing a set of questions that need to be investigated based on the previous code development.

Analysis

After being carefully recorded, the interviews were thoroughly transcribed and read. The analysis consisted on breaking the transcriptions down into fragments and labelling those fragments using open codes. Initially, the codes are generated based on information collected, inductively from early data. In focused coding, we continued on picking central codes within the whole dataset. A more hierarchical approach has been undertaken, and successive data arrangement has been made to categorization. Then, relevant codes have been selected. Subsequent coding stages have followed to refine the categories, some were subdivided and others integrated to move towards the explanation of the research focus.

Moroccan ecological behavior influences

According to the literature review, many environmental models have separated the pro-environmental behavior factors into internal and external (Kollmuss & Agyeman, 2002). Insights from interviews have revealed the existence of the following external factors: institutional, economic, social, and cultural; and the following internal factors: knowledge, locus of control, and values. Two new variables have emerged about half way over the coding process; Islamic environmental ethics and place attachment. The literature shows support for these emergent variables. Actually, Florian G. Kaiser & Fuhrer (2003) have explained that the degree of the pro-environmental behavior depends on the level of a person's attachment to a place, that is to say when someone is eager to live in that certain place; he/she is more disposed to take care of it. As far as Islamic environmental ethics are concerned, Islamic fundamentals discuss the behavior toward the environment and how Muslim people would maintain the safety of the Earth's resources. The panel on Islamic perspectives proclaims the reasonable utilization of the natural resources, and asserts the preservation of a healthy environment (Abu-Hola, 2009).

Social desirability has also been noticed through the analysis of the interviews, in fact social desirability has been considered for a long time by many authors as a response bias before starting to consider it as a substantive variable in its own right (Ones, Viswesvaran, & Reiss, 1996). Socially desirable responding (SDR) is defined as the tendency of subjects to qualify themselves in self-description with socially desirable scale values, and to reject those with socially undesirable scale values (Edwards, AL, 1957). Social desirability has in fact been identified as a variable rather than a bias.

External Moroccan ecological behavior influences

Within the external factors many interviewees have showed an inconsistency in explaining their pro-environmental demeanor. Even they assert to be ecologically oriented; no ecological action seems to have been taken. Their disposition to ecological actions seems definite, nonetheless they have ascertained a wide range of factors beyond their control that obstruct pro-environmental actions to take place (F. G Kaiser et al., 1999) . They have pointed out the difficulty of carrying out many ecological activities due to lack of facilities and conveniences. Blake (1999) has defied these barriers as situational, social, and economic constraints that stop people from behaving ecologically regardless of their intentions and their drive.

“I do care about the environment but we lack a lot of arrangements that would have facilitated the preservation of the environment.” (5)

“I was in France I always preferred riding a bicycle instead of a car; in Morocco cycling inside the city is impossible if not crazy”.(1)

“Common transport would have contributed tremendously to the wellbeing of the environment”. (11)

Economic factor has proven to affect Moroccans’ decision to undertake some ecological actions. The interviewees have identified some ecological measures and products as very expensive and beyond their financial capacity. They have also suggested the role of the economic factor as a way of putting pressure on people to force them to behave in a more friendly way towards the environment. For example, interview 4 has suggested significant fines for people caught red-handed polluting the environment, or impose some kind of taxes/eco-taxes.

“Being ecological includes buying ecological product, though Moroccans would not be willing to pay more for a product that respect the environment. Even when they are sure that these products are truly green”. (3)

“Take the example of the wipes known as biodegradable; they are just more expensive than the normal ones.” (1)

Social and cultural factors, (Kollmuss & Agyeman, 2002), have point out the role of social and cultural factors in explaining some pro-environmental actions and attitudes, they have hypothesized that social and culture factors in densely populated small countries are likely

to be more resource conscientious than large societies. Within Moroccan community, social and cultural factors show an influence on the Moroccan ecological behavior too. Pro-environmental behaviors seem to be influenced by the social tendency, especially within less educated individuals. As mentioned in the interviews, the Moroccan society does not praise any good behavior toward the environment. It represents the last concern of the greater majority of Moroccans.

“We grow up in an environment where everyone is throwing trash everywhere; no one cares about the environment...”. (2)

Internal ecological behavior influences

Knowledge, values and other intrinsic influences have been proven to determine the Moroccan pro-environmental behavior. In this study, different types of ecological knowledge have been identified within Moroccans. As mentioned in the literature, that it's not the level of knowledge available to the community that defines behavior, but rather the different types of knowledge that ought to perform together (in a convergent way) to determine ecological behavior (Florian G. Kaiser & Fuhrer, 2003). The first form is called declarative environmental knowledge which refers to answers about different environmental systems (schahn, 1996) that's mean to decrease ambiguity and doubt, and stimulate the behavior to take hold (lanternamann et al 1992), for example the ozone layer destruction by chlorofluorocarbons (CFC) used as a refrigerant. The second is procedural environmental knowledge which encompasses the way to complete a specific conservational action, such as the action that should be taken to shrink household waste (Florian G. Kaiser & Fuhrer, 2003). Effectiveness knowledge, which denotes people's knowledge about certain ecological behavior to efficiently get some outcome, for example curtailing driving behavior has less impact on the environment than a fuel efficient car (Stern & Gardner, 1981); and finally social knowledge which is related to common and shared social beliefs and contains motives and intentions (Florian G. Kaiser, Ranney, Hartig, & Bowler, 1999), it also depends on what people might think about others or expect from them in a given situation (Ernst, 1994). From the interviews, Moroccans couldn't have answers about the causes that deteriorate the environment. They ignore the conservation actions that should be taken to positively affect the nature and don't know how to act efficiently to limit the environmental degradation. They have also showed very narrow knowledge about the environmental problems. In the other hand, there has been an error of Moroccan perception about the natural resources; they have shown this old pattern of thinking about the unlimited natural resources instead of thinking about limited use within an ecological limit.

“We are kind of proud of our countries' biodiversity, we possess so many natural resources that we are the first exporter of many products ...offering best quality”. (20)

Locus of control, Moroccans perceive their contribution as not enough to bring change. As stated previously in the literature review, their external locus of control believes that what's happening is due to other external factors or a force from outside (Mulyadi, 2011).

“... I am not going to change anything by keeping garbage in my purse, I would just be making my purse messy and heavier (laugh)”. (9)

“You are just wasting your time; instead of interviewing me you should have asked more powerful people whose action would effectively impact the situation of the environment.”(19)

Values, the interviews came up with the values that would be responsible for shaping ones behavior. For example, a family who would inculcate the respect of nature from early childhood would subsequently induce an ecological behavior in adulthood.

“Good manners include respecting the environment and not throw the trash everywhere, we have been thought my brothers and I that we should treat elsewhere like your own space.”(18)

Emergent variables

Some interviews have attracted our attention on the central role that religion might play in shaping one’s behavior. Research on *religiousness* has been tied up to a positive prosocial behavior. Morgan (1983) has found that the likelihood of moral and proper behavior varies according to the frequency of prayers. The prayerful shows more humanitarian behavior, e.g. lending money to a friend in need, or consoling a crying child. They are less predisposed to “intensively dislike anyone”, getting “angry or irritated”. Religious people (prayerful) are more likely to behave righteously despite the fact they are not waiting for any return from others (Morgan, 1983). As far as ecological behavior is concern, Islamic fundamentals have emerged from interviews to highlight the Islamic commandment about the good use of the environment resources.

Quran [7:85]: *“And do not mischief on the earth after it has been set in order that will be better for you, if you are believers”.* (20)

Quran [2:205]: *“And when he turns away (from you O Muhammad), his effort in the land is to make mischief therein and to destroy the crops and the cattle, and Allah likes no mischief.* (20)

The second emerge variable is *place attachment*, previous findings have stated that the stronger the place attachment is, the stronger the environmental behavior (Ramkissoon, Smith, & Weiler, 2013). Other scholars have discussed the link between place attachment and pro-environmental intentions and behavior (Scannell & Gifford, 2010). Interview 7 expressed his detachment toward morocco and has stated more than once his willingness to run away if he had the opportunity to do so. He showed an indifferent behavior to any ecological measure that would make the country or the environment better.

“Morocco is dirty and messy and we feel already we are living in a huge open air trashcan; nothing is working in this country and I tried many times to flee but unfortunately it did not work out. The country is so disorganized and everyone’s’ big dream is to cross the ocean to live gracefully in a developed country”. (22)

Conclusions and futures research directions

Researchers in the ecological field have been developed considerably in recent years. Morocco has very often linked the disruption of the earths' equilibrium to the mass industrialization and to many other factors except its ecological behavior. The current study has modestly highlighted relevant factors that would explain the Moroccan ecological behavior. A grounded theory approach has uncovered many intrinsic and extrinsic factors: the intrinsic factors are comprised of knowledge, locus of control, values, religious, and place attachment and the extrinsic factors are a combination of institutional, social, economic, and cultural.

Some participants in this study have offered some recommendations about how to impact the environment in a meaningful way. They have stated that, the intrinsic factors can be shaped with the raising of the awareness of citizens by the government through advertising and education. While, some of the extrinsic factors can be molded using education (like social and cultural factors), but other factors such as the institutional and economic factors require massive budgets to create the infrastructure necessary to facilitate a better environmental behavior.

The concern about the leading respondents in the research were of a particular interest, because the possible social desirability bias turned out to be, as mentioned previously in the literature, an explicative variable that elucidates the ecological behavior process in many pro-environmental behavior studies.

Personality traits have been proven to impact the ecological behavior. However, due to lack of time and the complexity of a proper psychological assessment, personality traits were not highlighted though the interviews undertaken, which leaves the gate open for further investigations.

Based on this initial research, a full-scale interview is in progress to dig deep into the identified variables considered as potential predictors for the Moroccan ecological behavior. More interest would be dedicated to the inductively emerged variables (place attachment and religion). Further researchers will follow to better shape the Moroccan human ecological behavior qualitatively and quantitatively.

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The Role of Psychographic Characteristics in Predicting Hotel Guest In-House Expenditures

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Abstract

This research aims to investigate if psychographic traits may improve the prediction power of guests' in-house expenditures beyond the traditional models that reference only socio-demographic characteristics and trip-related factors. The variables included in the study were hotel guest socio-demographic characteristics (gender, marital status, number of children, education level, and age), trip-related factors (room rate paid, number of nights spent at a hotel, number of people in the party, and distribution channel), and psychographic traits (price consciousness, financial constraints, spending self-control, quality consciousness, innovativeness, variety-seeking, impulsiveness, market mavenism, and brand loyalty). A total of 301 usable responses were collected for the purpose of this study via an online cross-sectional survey. Both linear and non-linear regression models were built in order to predict hotel guest in-house expenditures. The results of the study revealed that non-linear models significantly outperform linear models. It was identified that adding psychographic characteristics to the baseline model of socio-demographic characteristics and trip-related factors may improve model performance. Using three psychographic characteristics leads to the best performing model among all. This model includes quality consciousness, impulsiveness, and price consciousness psychographic characteristics.

Keywords: hotel guest expenditures; psychographic traits; prediction; regression trees; least squares boosting.

Introduction

Advances in Information Communication Technologies (ICT) have created new distribution (O'Connor & Frew, 2004) and pricing opportunities for businesses (Grewal et al., 2011). For the hotel industry, such opportunities may include direct e-marketing campaigns, as well as distribution via online travel intermediaries that offer capabilities of dynamic pricing, name-your-own-price (NYOP), and flash sales. A majority of the ICT distribution involves marketing channels that offer sales promotions to move distressed room inventory. These new electronic distribution and marketing channels are believed to contribute to the hotel's revenue maximization by means of stimulating sales and attracting new customers to hotels. The stimulation of sales and new customers encourages a manager to evaluate the hotel's profitability based on total revenues. Total revenues are all those

revenues that are generated across all revenue generating departments, including rooms and other non-room operating departments (e.g. spa, golf course, restaurants, etc.) (Anderson & Xie, 2010).

A central focus, then, of hotel managers as perceived by many practitioners and researchers is total revenue maximization. Given the perishable nature of hotels' core and supporting products, a manager may like to acquire those guests who may patronize multiple operating departments that extend beyond the consumption of the core product (room night). With the new distribution and pricing opportunities that have emerged due to ICT, it seems imperative that in order for managers to maximize total revenues there is a need to predict the guests' expenditures during their stay. In other words, it seems beneficial for managers to learn which type of guest may spend the most across multiple operating departments within the hotel.

Previous research has discovered a connection between customer socio-demographic characteristics and travel expenditures (Jang, Ismail, & Ham, 2001; Legoherel, 1998; Mok & Iverson, 2000; Pizam & Reichel, 1979). The current research applies the concept of previous travel related expenditure literature to that of hotel guest in-house expenditures but advances the research with the inclusion of customer psychographic traits that may influence in-house expenditures. Therefore, the purpose of the study is as follows:

1. Investigate if psychographic traits may improve the prediction power of guests' in-house expenditures beyond the traditional models that reference only socio-demographic characteristics and trip-related factors;

If the inclusion of psychographic traits improves the prediction power of guests' in house expenditures the study will move to:

2. Identify which psychographic traits may make the best contribution to the model of predicting customer in-house expenditures

Literature Review

Customer segmentation based on travel expenditures

Several studies focused on identifying the relationship between traveler types and travel-related expenditures (Jang, Ismail, & Ham, 2001; Legoherel, 1998; Mok & Iverson, 2000; Pizam & Reichel, 1979). These studies have categorized travelers into different groups based on their level of spending, such as big spenders and little spenders (Pizam & Reichel, 1979), or heavy, medium, and light spenders (Jang et al., 2001). According to Pizam and Reichel (1979), demographic and socio-economic factors may be used in order to discriminate between big spenders and little spenders. Jang et al., (2001) included trip-related factors (e.g. type, purpose, duration, travel companions) along with socio-demographic characteristics (e.g. gender, age, education, occupation, annual income) to build the profiles of heavy, medium and light spenders. Based on past literature, the current study builds and references a predictive model of guest in-house expenditures based on socio-demographic characteristics and trip-related factors.

Customer response to sales promotions

When attracting customers via online promotional methods (e.g., online marketing campaigns, flash sales), it becomes important to understand what type of customer may respond to the sales promotions. Previous research on sales promotions have suggested that consumers respond to promotions based on perceived benefits and costs (Bawa & Shoemaker, 1987; Blattberg, Buesing, Peacock, & Sen, 1978; Chandon, 1995; Chandon et al., 2000; Mittal, 1994). The benefits of sales promotions include utilitarian/economic and hedonic benefits. Each of the benefits includes several subcategories. For example, utilitarian benefits include the following subcategories: savings, quality, and convenience. Whereas hedonic benefits include the subcategories of: value expression, entertainment, exploration, and self-expression. The costs of sales promotions also include several subcategories, such as switching cost, search cost, and inventory cost. Further, the benefits and costs of sales promotions were also associated with particular psychographic characteristics that define consumer response to promotions (Ailawadi et al., 2001; Martínez & Montaner, 2006). Therefore, it seems likely that introducing psychographic characteristics may improve the prediction power of guests' in-house expenditures beyond that of those models that include only socio-demographic characteristics and trip-related factors.

Utilitarian benefits of sales promotions. Literature suggests that the savings benefit of sales promotions is particularly attractive to price conscious, financially constrained customers with high spending self-control (Ailawadi et al., 2001; Ayadi, 2013; Chandon et al., 2000; Haws, Bearden & Nenkov, 2012; Kim & Martinez, 2013; Lichtenstein, Netemeyer, & Burton, 1990; Lim, Kim & Runyan, 2013; Martinez & Montaner, 2006). The second utilitarian benefit associated with sales promotions is a quality benefit. A quality benefit of sales promotions refers to customers' ability to take an advantage of a higher quality product sold at a lower promotional price (Ailawadi et al., 2001; Chandon et al., 2000; Martinez & Montaner, 2006). Therefore, sales promotions may be appealing to price sensitive and quality conscious customers. If this is the case, then sales promotions distributed via ICTs may attract a type of guest that may buy distressed room inventory but would not likely maximize a hotel's total revenue.

Hedonic benefits of sales promotions. From the perspective of hedonic benefits, consumers may be driven to sales promotions for exploration and self-expression. The psychographic traits associated with exploration include innovativeness, variety-seeking, and impulsiveness (Ailawadi et al., 2001; Chandon et al., 2000; Kim & Martinez, 2013; Martinez & Montaner, 2006; Rook & Fisher, 1995). Self-expression presents another hedonic benefit associated with using sales promotions. Self-expression may become an attractive hedonic benefit of sales promotions for market maven consumers (Ailawadi et al., 2001; Chandon et al., 2000; Feick & Price, 1987; Lim et al., 2013; Martinez & Montaner, 2006). Market maven describes a person who possesses information about products and prices on the market, and enjoys sharing the information with others.

Costs of sales promotions. Literature recognizes that affiliated costs of sales promotions include the following: switching cost, search cost, and inventory cost (Ailawadi et al., 2001; Martinez & Montaner, 2006). It is possible that these affiliated costs may turn some

customers away from responding to sales promotions. A review of literature reveals that among the affiliated costs of sales promotions, only switching costs were found to be connected to consumer psychographic traits, such as brand loyalty. Brand loyalty refers to customer's commitment to products or services of a particular brand. When such commitment is present, a customer is less likely to switch to other brands and try their product, even if it is being promoted with a price discount (Ailawadi et al., 2001; Martinez & Montaner, 2006).

The current study has extracted from literature multiple psychographic traits that may be associated with guests' in-house expenditures: price consciousness, financial constraints, spending self-control, quality consciousness, innovativeness, variety-seeking, impulsiveness, market mavenism, and brand loyalty. This research will continue by building predictive models for guests' in-house expenditures based on the socio-demographic characteristics, trip-related factors, and identified psychographic traits.

Research Method

Instrumentation and data collection

An online cross-sectional survey was built for the purpose of this study using a Qualtrics platform. The first qualifying question checked whether respondents stayed at a hotel in the last 12 months, so that they would have their experience fresh in their minds, and would be able to answer other survey questions. Next, the survey collected all independent variables to be included in the predictive models. These variables included hotel guest socio-demographic characteristics (gender, marital status, number of children, education level, and age), trip-related factors (room rate paid, number of nights spent at a hotel, number of people in the party, and distribution channel), and psychographic traits (price consciousness, financial constraints, spending self-control, quality consciousness, innovativeness, variety-seeking, impulsiveness, market maven, and brand loyalty) that may influence hotel guest's in-house expenditures.

The data was collected through use of the Mechanical Turk website. The data was collected in May 2014 in four batches (during week days/weekends, and morning/evening hours) to eliminate potential biases associated with a particular day of the week and time. Participants were paid 90 cents for participation in the study. A total of 301 usable responses were received and used for the data analysis in this study.

Data analysis strategy

Based on the overall purpose of this research, which is to predict hotel guest in-house expenditures, regression methods were used in this study. In the attempt to identify whether psychographic traits may improve the results of predicting guest in-house expenditures, this study utilizes both linear and non-linear regression methods. The least squares linear regression was selected for this study as a classical approach to solve prediction problems (Hair et al., 2010). The non-linear prediction models of guests' in-house expenditures were built using a boosting on regression trees method (Hastie, Tibshirani, & Friedman, 2009).

The regression trees method was selected as a suitable prediction for a continuous variable (in-house expenditures) based on the combination of categorical (e.g., gender) and continuous (e.g., room rate paid) variables (Hastie, Tibshirani & Friedman, 2009). In the case of this particular research, the categorical independent variables include gender, marital status, education level, and distribution channel; while the continuous independent variables are age, number of children, room rate paid, number of nights spent at a hotel, number of people in the party, and all psychographic traits. The boosting on regression trees produces an ensemble of sequentially built regression trees models, and generates a final solution as the weighted sum of the produced models. In other words, the final model is built and improved by taking into account the entire ensemble of the regression trees models. Such approach allows the final model to achieve a higher predictive performance compared to all models in the ensemble. The least squares boosting (LSBoost or L2Boosting) algorithm used in this study optimizes the performance of every sequential model by minimizing the squared residuals as compared to its preceding model (Bühlmann & Hothorn, 2007). This is important because such approach allows to reduce error in predictive performance of every sequential model.

Overall, boosting algorithms are known for their ability to offer a wealth of models and a higher generalization level (Bühlmann & Hothorn, 2007; Hastie, Tibshirani & Friedman, 2009). The high generalization ability protects a model from overfitting. This quality is important due to a relatively large ratio of the number of predicting factors (18 independent variables) to the sample size (301 usable responses).

The quality of the selected linear and non-linear methods was ensured by means of a k-fold cross-validation (Hastie, Tibshirani & Friedman, 2009). This approach splits a sample into k sub-samples of equal size. A regression model is trained on (k-1) sub-samples, and tested on the k-th sub-sample. The overall performance of a method is measured as a sum of performance measures for k sub-samples. In this study the overall performance was evaluated based on the coefficient of determination, R². The selected evaluation method based on the coefficient of determination is consistent with the applied least squares boosting algorithm, since minimization of the sum of squared errors (SSE) is equivalent to the maximization of R².

Note that

$$R^2 = 1 - \frac{SSE}{SST} \quad (1)$$

where

$$SSE = \sum (y_i - \hat{y}_i)^2 \quad (2)$$

and the sum of squares total

$$SST = \sum (y_i - \bar{y})^2 \quad (3)$$

In the aforementioned formulas the following notations were used: y_i – observed values of the dependent variable, \bar{y} – average of the dependent variable, \hat{y}_i – predicted values of the dependent variable, $(y_i - \hat{y}_i)$ – regression residuals.

In order to address the first purpose of the study and identify whether psychographic traits may improve the results of predicting customer in-house expenditures, a set of socio-demographic characteristics and trip-related factors was used to build a baseline model. Next, the baseline model was compared to the regression models that also included customer psychographic traits. The judgement about the model performance and the ability of psychographic traits to improve the results of predicting customer in-house expenditures was made based on the R^2 .

In order to address the second purpose of the study and identify which psychographic traits may make the best contribution to the model of predicting customer in-house expenditures, the authors tested the models with all possible combinations of customer psychographic traits. Based on the performance of the developed models, the most informative and useful for expenditure prediction psychographic traits were identified.

Findings

1. Investigate if psychographic traits may improve the prediction power of guests' in-house expenditures beyond the traditional models that reference only socio-demographic characteristics and trip-related factors.

Socio-demographic characteristics and trip-related factors were used as a baseline set of factors for the regression models. In order to check whether psychographic traits may improve the baseline model, all nine psychographic characteristics were added one at a time to the baseline factors. All of the developed models were k-fold cross-validated and the average sum of squared regression residuals was measured. Based on the sum of squared regression residuals and the sample variance, the R^2 , was calculated. According to the proposed data analysis strategy, this research presents the linear regression models followed by non-linear regression models.

Table 1 below shows the corresponding R^2 values for the baseline linear regression model compared to the nine models built with baseline factors plus one psychographic characteristic. Column name “ $\{B,i\}$ ” corresponds to the model with the baseline set of factors complemented with the i -th psychographic characteristic. Psychographic characteristics were numbered as follows: 1) quality consciousness; 2) impulsiveness; 3) price consciousness; 4) financial constraints; 5) spending self-control; 6) market mavenism; 7) variety-seeking; 8) innovativeness; 9) brand loyalty. The results of the linear models testing demonstrate that adding a psychographic characteristic (e.g., quality consciousness) to the baseline model has significantly increased the performance of a linear regression model. The R^2 value for the baseline model is 7%, while the best performing linear model that was obtained by adding quality consciousness to the baseline provides R^2 value of 11.3%. Adding impulsiveness (7.2%), price consciousness (7.9%), spending self-control (8%), or brand loyalty (8%) also provided some improvement to the model performance compared to the baseline. However, adding other psychographic characteristics did not yield any improvement of the baseline models.

Table 1. R^2 Values for Linear Regression Models

Factors	Baseline	{B,1}	{B,2}	{B,3}	{B,4}	{B,5}	{B,6}	{B,7}	{B,8}	{B,9}
R^2	7%	11.3%	7.2%	7.9%	6.7%	8%	6.2%	6.4%	6.7%	8%

Next, according to the proposed data analysis strategy, non-linear regression models were built using the same sequence of psychographic variables. Table 2 presents the results for the non-linear regression models built using least squares boosting algorithm on regression trees.

Table 2. R^2 Values for Non-Linear Regression Models

Factors	Baseline	{B,1}	{B,2}	{B,3}	{B,4}	{B,5}	{B,6}	{B,7}	{B,8}	{B,9}
R^2	16.8%	18%	16%	18.8%	16.8%	16.6%	16.2%	17%	17.2%	16.2%

Table 2 shows that non-linear regression using psychographic characteristics may outperform the baseline set of factors (for example, when “price consciousness” or “quality consciousness” characteristics are used). Comparison of Tables 1 and 2 reveals that non-linear models significantly outperform linear models. Such finding may be explained by the ability of non-linear models to provide a better representation of the variation in the data. Therefore, the focus of this paper will remain on finding the most informative psychographic characteristics for the expenditures prediction using non-linear models.

2. Identify which psychographic traits may make the best contribution to the model of predicting customer in-house expenditures.

In order to identify which characteristics are the most informative for the expenditures prediction, a careful selection among various combinations of psychographic factors needs to be performed. If a sample size is much larger than the number of factors, then adding a new factor to the model would not reduce the model’s performance (measured here with k-fold cross-validation), and the model with all available factors included in a dataset would be the best model. For example, in application to this particular research this might mean that the model with all independent variables (baseline + all psychographic traits) may yield the best results. However, the same is not true for smaller samples. Table 3 demonstrates that including all available factors in the dataset is not the best strategy in the current case.

In order to find psychographic traits that may make the best contribution to the model of predicting guest in-house expenditures, the full search procedure was performed. The full search procedure considered all possible $2^9=512$ combinations of psychographic characteristics joined with the baseline factors. This means that the following models were built: baseline, all possible combinations of baseline + one psychographic characteristic (B+1), all possible combinations of baseline + two psychographic characteristics (B+2), ..., baseline + all nine psychographic characteristics (B+9).

The goal of this analysis was to find the best combination of psychographic characteristics in terms of cross-validated R^2 values. From the perspective of hotel managers, measuring all psychographic traits of hotel guests is a costly procedure, since it requires substantial time and effort to collect such information from the hotel guests via surveys. Therefore, it

is also of interest to find the best combinations with a limited number of psychographic characteristics. Table 3 below shows the R^2 values for the best factor combinations. The first row in the table presents the number of factors included in the models. For example, B+1 means that the model included all baseline factors plus one psychographic characteristic. The second row in the table specifies the factor set included in the best model with a given number of factors. For example, {B,3} stands for a combination of baseline factors with price consciousness (see the previous numerical assignments for each variable, top of page 5).

Table 3. R^2 values for best non-linear regression models

Number of factors	Baseline	B+1	B+2	B+3	B+9 (All)
Best factor set(s)	{B}	{B,3}	{B,1,3}, {B,3,4}	{B,1,2,3}	{B,1,...,9}
R^2	16.8%	18.8%	18.8%	18.9%	18.5%

The results presented in Table 3 demonstrate that the coefficient of determination may be increased by 2.1% (1.125 times) when psychographic characteristics are included in the regression model. Using a single psychographic characteristic (price consciousness) leads to the increase of 2% (1.12 times), which corresponds to 95% of maximal possible increase (2.1%). Using the sets of two psychographic characteristics (quality consciousness and price consciousness; financial constraints and price consciousness) leads to the same optimal performance as using a single characteristic. Using three psychographic characteristics leads to the best performing model among all. This model includes quality consciousness, impulsiveness, and price consciousness psychographic characteristics.

This model provides an increase of 2.1% (1.125 times) compared to the baseline, which is the maximal possible increase. The models with combinations of baseline factors with four, five, six, seven, and eight psychographic traits were excluded from consideration in this manuscript, since they included more factors, but did not provide an increase in the model performance. Similarly, it may be seen from Table 3 that a model with all possible factors (baseline plus nine psychographic characteristics) demonstrates lower R^2 than the models with one, two, and three psychographic factors. Such observation may be explained by the sample size, which may not be large enough to generate an optimal solution with all available factors.

Implications and Conclusions

The current study sought to investigate if the inclusion of psychographic characteristics may improve managers' predictive ability regarding guests' in-house expenditures during their time of stay. The regression methods used in this study included both linear and non-linear models. The use of both linear and non-linear models allowed researchers to compare the performances of two model classes and to identify the one that yields the best results.

The application of regression trees used in this study advances the extant literature through the inclusion of the traditional socio-demographic characteristics and trip-related factors as well as nine psychographic characteristics that may influence the total consumption (expense) of a guest during a hotel stay. This statistical technique is largely amiss in tourism and hospitality literature. However, the technique may prove useful given its

ability to siphon specific psychographic traits that may provide managers with the ability to predict the type of hotel guests that may be the most lucrative from a total revenue perspective.

Based on the results of this study, the model that included the baseline variables (gender, marital status, number of children, education level, age, room rate paid, number of nights, number of people, and distribution channel) as well as three psychographic characteristics (quality consciousness, impulsiveness, and price consciousness) outperformed the other models' predictive abilities with regards to guest in-house spending. The major managerial contribution from these results, is that it may behoove hotel management teams to collect data not only pertaining to socio-demographic and trip-related factors; but also information that pertain to a guest's interest in quality, impulsive buying, and price conscious purchase behaviors. This information may then be used to reach these guests in an effort to convert them to loyal guests given their more potent overall contribution to total revenue.

The most significant aspect of managing a perishable product whose sales are influenced by fluctuating demand, involves an accurate prediction of the concentration level of consumer flows to the location of the hotel and an optimal room rate that will sell during relatively short periods of the year as well as stimulate consumption from additional revenue generating departments. These short periods may be characterized by varying demand patterns that create high, low, and shoulder seasons that are sensitive to market demand conditions. ICTs have provided hotel managers with a means to release distressed inventory for quick sale especially during low demand seasons in order to avoid a room night sale from perishing. With the development of this research, it is possible for managers to construct advertisements using ICTs that are more alluring to a more profitable type of guest that may spend more in the hotel than others. It is suggested that future research confirm the results of the current study within a larger sample population.

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Levels and Correlates of Awareness of Point-of-Purchase Tobacco Displays and Advertising

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Abstract

This study examined smokers' awareness of tobacco displays and advertising at point-of-purchase (POP), and whether the association between noticing POP tobacco displays with prompted purchase of cigarettes and quit intentions varied by socioeconomic status (SES). Cross-sectional analyses undertaken with a sample of 2,272 current smokers (aged 18+) from the Netherlands and the UK, who completed the International Tobacco Control Surveys between July 2010 and June 2011. Results showed that overall 76.9% of smokers were aware of POP tobacco displays comprising 88.3% in the UK and 67.4% in the Netherlands. After adjusting for covariates, younger smokers in both countries were more likely to be prompted to purchase cigarettes than older smokers. In the Netherlands, smokers with low SES were more likely to indicate that noticing tobacco displays and advertising prompted them to purchase cigarettes than those with high SES (OR = 2.34, 95% CI = 1.28 – 4.27), but UK smokers with low SES were less likely to be prompted to purchase cigarettes (OR = .49, 95% CI = .25 – .95). These findings suggest that retail tobacco displays at POP are still noticeable, and influence cigarettes purchased and quit intention, particularly among those in low social groups. Tobacco legislation should aim at putting cigarettes completely out of sight in retail environments.

Keywords: tobacco displays; adult smoking; POP restrictions.

Introduction

Tobacco marketing influences tobacco use (Davis, Gilpin, Loken, Viswanath, and Wakefield, 2008; Hoek, Jones, Edwards, Maubach, Crane, and Youdan, 2011). In the face of increased restrictions on most forms of tobacco marketing, point-of-purchase (POP) promotion has become an important avenue to create brand awareness and recognition among current, former and potential smokers (Hoek, Gifford, Pirikahu, Thomson, and Edwards, 2010; Lavack and Toth, 2006). Despite the tobacco industry argument that seeing POP tobacco displays simply encourage brand switching among current smokers (Carter, 2003; Carter, Mills, and Donovan, 2009), evidence suggests that POP displays create cigarette awareness and stimulate prompt purchase especially among smokers and recent

quitters (Germain, McCarthy, and Wakefield, 2009; Paynter, Edwards, Schluter, and McDuff, 2009; Wakefield, Germain, and Henriksen, 2008). However, less is known about whether these effects differ by socioeconomic groups (Carter et al., 2009; Germain et al., 2009; Siahpush, Jones, Singh, Timsina and Martin, 2010).

Given the harmful effects of tobacco use and the dose-response association between visible smoking cues and promptings for cigarette brands (Carter et al., 2006; Donovan, Jancey, and Jones, 2002; Wakefield et al., 2008), there have been calls for comprehensive bans on tobacco marketing, including point-of-purchase promotion (WHO, 2008). In the UK, the Tobacco Advertising and Promotion Act (TAPA), implemented between February 2003 and July 2005, banned most forms of tobacco marketing (Spanopoulos, Ratschen, McNeill, and Britton, 2012). This placed restrictions on print and electronic media advertisements, and on various forms of promotions. However, in-store tobacco promotions remained somewhat unregulated, and displays of tobacco at point-of-purchase as well as in-store advertising, which were restricted to A5 size, have become a potent communication channel usually situated in prominent and observable locations. The Health Act (2009) however required the complete removal of tobacco advertising and displays at point-of-purchase in England by April 2012 in supermarkets but not until April 2015 in small shops (Kasza et al., 2011).

In the Netherlands, in 2003 the Tobacco Act prohibited all forms of tobacco advertising and promotions, with a number of significant exceptions (The Dutch Tobacco Act, 2003). Tobacco displays and advertising at POP are permitted in supermarkets, gas stations, book and magazine shops, drug stores, and the hospitality industry via vending machines. On the façade of tobacco retail stores a maximum of 2 squared metres of advertisement is allowed, whereas in-store tobacco products displays are permitted against a neutral background. Tobacco advertisements within the retail environment are restricted to the area where tobacco products are displayed and may only target people at the point-of-purchase.

Although restrictions take different forms the overall level of the POP restriction has been classified as the same in both countries as of July 2010 (Joossens and Raw, 2010). Drawing from the UK and Netherlands data therefore provides a basis to understand how POP tobacco displays and signs act as a promotional tool for smoking.

Despite studies showing association between exposure to cigarette displays and impulse purchase behaviour (Germain et al., 2009; Wakefield et al., 2008), there is limited research on whether influence of retail tobacco displays on adult smokers' purchase and smoking behaviour differ by social grade, particularly among current smokers in European countries (Burton, Clark, and Jackson, 2011; Carter et al., 2009; Wakefield et al., 2008). An Australian study found that the influence of POP tobacco displays on unplanned purchasers was apparent for both sexes and across all socioeconomic groups (Carter et al., 2009). This study adds to the tobacco control literature by examining whether the association between noticing POP tobacco displays and advertising with prompted purchase of cigarettes or quit intentions differ by smokers' socioeconomic status (SES). Specifically, the present study addressed three questions: (1) what was the level of awareness of tobacco advertising and displays at POP in both countries, and were there variations by SES groups? (2) was there

any association between noticing POP tobacco displays and advertising with prompted purchase of cigarettes? and (3) did smokers' socioeconomic status moderate the relationship between noticing tobacco displays and advertising at POP and quit intentions?

Methods

Sample

The sample was adult smokers only (aged 18 and older) who were interviewed in a multi-cohort study as part of the International Tobacco Control (ITC) Europe survey. Cohort members from the UK are recruited by geographically stratified probability sampling, and surveyed via computer assisted telephone interview (CATI). In the Netherlands, participants were surveyed via computer assisted web interviewing (CAWI). The Netherlands web sample was drawn from a large probability-based database with respondents indicating their willingness to participate in research on a regular basis (Nagelhout, Willemsen, Thompson, Fong, Van den Putte, and De Vries, 2010). Apart from the UK wave 8 data, respondents lost to attrition are replenished by recruiting additional participants at each wave. Despite the lack of replenishment in the UK wave 8 data, the sample is fairly representative of the smoker population on account that replenishment samples are generally not recruited at random. A full description of the ITC project conceptual framework and methods can be found elsewhere (Fong et al., 2006; Thompson et al., 2006). Only current smokers are included in this study, comprising respondents who reported 'daily', 'weekly' or 'monthly' smoking and who have smoked at least 100 cigarettes in their lifetime.

In the two countries the survey was conducted after the implementation of the Tobacco Advertising and Promotion bans. However, tobacco displays at point-of-purchase were still permitted in both countries when the surveys occurred. To permit comparisons of smokers' reported awareness of tobacco displays and advertising at point-of-purchase, waves occurring at similar times are selected. Therefore data from wave eight in the UK, which was collected between July 2010 and June 2011, and data from wave five in the Netherlands, which was obtained between May and June 2011 was utilized in the analyses.

The study was approved by the Institutional Review Board or Research Ethics Board at the University of Stirling (Scotland), the Open University (UK), and the University of Waterloo (Canada). The ITC Netherlands Survey was cleared for ethics by the Central Committee on Research Involving Human Subjects in the Netherlands.

Measures

Awareness of point-of-purchase tobacco advertising and displays

Current smokers were asked two specific questions about their awareness of tobacco displays and signs in stores or shops: 'In the last month, have you seen cigarette packages being displayed, including on shelves or on the counter?' (also termed POP tobacco displays) and 'In the last month, have you seen any signs or pictures or other things like clocks with cigarette brands or logos inside shops or stores?' (POP tobacco advertising). Responses to both questions were dichotomised: (1) 'yes' and (0) 'no'.

Perceptions that noticing POP tobacco displays and advertising prompted respondents to buy cigarettes

One item was used to assess whether tobacco packs or signs at POP prompted respondents to buy cigarettes: 'have you ended up buying cigarettes because you noticed cigarette packs displayed in the store or other signs that cigarettes were sold there? Responses were dichotomised as: (1) yes: comprising 'yes, this happened once', 'yes, this happened twice' and 'yes, this happened more often' and (0) no, this did not happen.

Intention to quit

A four-point scale based on the stages of change (de Vries and Mudde, 1998; Prochaska, Redding, and Evers, 1997) was used to capture quit intentions and for analyses was dichotomised to determine whether or not smokers have any intention to quit in the next six months.

Covariates

Control variables were country of residence, age, sex, heaviness of smoking index (HSI) (categorised as: 0-1 = low, 2-3 = moderate, and 4-6 = high), and socioeconomic status of respondents, which comprised education and income. These two indicators were categorised into three levels (low, moderate, and high) respectively that were only partly comparable across the two countries because of differences in educational systems and income levels. Consistent with Kasza et al. (2011), a three-category indicator of SES was created in this order: if both education and income were low, then SES was defined as low, if either education and income was low, then SES was defined as moderate, and if neither education and income were low, then SES was defined as high. Participants who responded to only one of the two items were included in the SES category called for by the answered item. Those who did not respond to any of the items were excluded from SES-specific analyses.

Analyses

A sample of 2,272 participants consisting of 1,295 current smokers from the Netherlands and 977 current smokers from the UK was used in the analyses. All analyses were based on weighted data to ensure that the sample is represented in proportion to the target population in both countries. Multivariate regression models examined the association between the outcome variables of interest and the above mentioned covariates. In some analyses, socioeconomic status was used as covariate as well as interaction variable with awareness of cigarette packages being displayed and signs. Separate analyses were performed for all models with moderating effects. Data analyses were performed using IBM SPSS version 19.

Results

The sample characteristics of current smokers in the two study countries (data not shown) suggested that both samples were evenly distributed with respect to gender (chi-squared test [χ^2] (1) = 2.21, $p = .14$) and age (χ^2 (3) = 1.92, $p = .59$). However, those in the Netherlands were more of moderate socioeconomic status whereas smokers in the UK were more of low socioeconomic groups (χ^2 (2) = 122.58, $p < .001$).

Salience of point-of-purchase tobacco displays and advertising

As depicted in table 1, a multivariate regression analysis was used to examine whether current smokers' awareness of POP tobacco displays varied by country, age, sex, heaviness of smoking index (HSI) and socioeconomic status. In total, 76.9% of smokers were aware of POP tobacco displays: 88.3% in the UK compared to 67.4% in the Netherlands (Odds Ratio (OR) = .38, 95% Confidence Interval (CI) = .20 – .42).

Socio-demographic variations emerged in the respective countries. In the UK, smokers with low socioeconomic status were less likely to report salience of POP tobacco displays than those with high socioeconomic status (OR = .36, 95% CI = .18 – .73), but salience was evenly balanced among Dutch smokers with low and high SES. In both countries, no significant association were observed by age, sex and heaviness of smoking index. However, smokers of low SES overall were less likely than those of high SES to notice tobacco displays (OR = .64, 95% CI = .42 – .97).

Table 1: Demographic Characteristics of Participants Noticing Point-of-Purchase Tobacco Displays by Country

Variables	Noticing cigarette pack displays				Overall (76.9%) OR [95% CI]
	Netherlands (W5) n=1168		United Kingdom (W 8) n = 970		
	n (%)	OR [95% CI]	n (%)	OR [95% CI]	
Overall	787 (67.4)		875 (88.3)		
NL vs. UK					.38***(.20 – .42)
Age					
18-24	87 (64.0)	.88 (.57–1.36)	117 (92.1)	1.57 (.73–3.40)	1.02 (.70–1.47)
25-39	209 (68.1)	1.02 (.69–1.43)	252 (87.5)	.73 (.43–1.26)	.91 (.67–1.22)
40-54	268 (69.6)	1.20 (.86–1.67)	274 (87.5)	.87(.52–1.48)	1.09 (.82–1.45)
55+	192 (65.8)	Ref	214 (88.1)	Ref	Ref
Sex					
Male (M)	406 (66.0)	Ref	428 (87.9)	Ref	Ref
Female (F)	380 (68.8)	1.13 (.87–1.46)	429 (88.6)	1.08 (.73–1.62)	1.19 (.73–1.98)
SES					
Low	245 (63.5)	.72 (.50–1.04)	468 (85.7)	.36** (.18–.73)	.64* (.42–.97)
Moderate	354 (69.0)	.91 (.65–1.28)	233 (90.0)	.57 (.26–1.24)	.91 (.59–1.40)
High	185 (70.6)	Ref	156 (94.0)	Ref	Ref
HSI					
Low	227 (69.2)	1.03 (.74–1.44)	147 (89.1)	1.14 (.60–2.16)	1.02 (.76–1.37)
Moderate	261 (65.6)	.90 (.66–1.22)	499 (88.5)	1.13 (.70–1.83)	.94 (.73–1.22)
High	271 (67.9)	Ref	188 (87.0)	Ref	Ref

Notes: * $P < .05$, ** $P < .01$, *** $P < .001$. OR= Odds Ratio; CI=Confidence Interval. Ref = Reference category.

Analyses are based on weighted data.

In terms of noticing POP tobacco advertising (table 2), overall 15.7% of smokers reported being aware, but this varied by country; 22.2% of smokers in the UK noticed POP tobacco advertising compared to 9.7% in the Netherlands (OR = .32, 95% CI= .24 – .43).

Comparison by socio-demographics showed that in the UK, smokers aged 25-39 were more likely to notice POP tobacco advertising than their older counterparts aged 55+ years (OR

= 1.71, 95% CI = 1.10 – 2.67), whereas in the Netherlands salience was uniformly balanced by age. In both countries, females were less likely to report salience of POP tobacco advertising than males (NL: OR = .52, 95% CI = .33 – .82, and UK: OR = .54, 95% CI = .40 – .75). Smokers in the Netherlands with low socioeconomic status were less likely to notice POP tobacco advertising than those with high SES (OR = .43, 95% CI = .23 – .82), whereas salience was evenly balanced among UK smokers with low and high SES. In the Netherlands, smokers with low scores on HSI were less likely to report salience of POP tobacco advertising than those with high HSI (OR = .46, 95% CI = .25 – .85). However, in the UK, salience was greater among smokers with low HSI than those with high HSI (OR = 1.93, 95% CI = 1.19 – 3.14).

Overall salience of tobacco advertising was more likely among smokers aged 25-39 than those aged 55+ (OR = 1.67, 95% CI = 1.16 – 2.30). Females were less likely to notice POP advertising overall than males (OR = .55, 95% CI = .42 – .71), whereas those with low SES were less likely to notice tobacco advertising in stores than smokers with high SES (OR = .67, 95% CI = .47 – .94).

Table 2: Demographic Characteristics of Participants Noticing Point-of-Purchase Tobacco Advertising by Country

Variables	Noticing signs/pictures in stores				Overall OR [95% CI]
	Netherlands (W5) n=1045	United Kingdom (W 8) n = 971		Overall 15.7%	
	n (%)	OR [95% CI]	OR [95% CI]	OR [95% CI]	OR [95% CI]
Overall	101 (9.7)		215 (22.2)		
NL vs. UK					.32***(.24 – .43)
Age					
18-24	15 (12.4)	1.82 (.85–3.91)	25 (19.7)	1.21 (.69–2.12)	1.34 (.85–2.09)
25-39	30 (11.1)	1.53 (.81– 2.88)	78 (27.2)	1.71* (1.10–2.67)	1.67** (1.16–2.30)
40-54	33 (9.5)	1.23 (.66–2.89)	71 (22.7)	1.40 (.90–2.17)	1.33 (.93–1.90)
55+	17 (6.4)	<i>Ref</i>	41 (17.0)	<i>Ref</i>	<i>Ref</i>
Sex					
Male	65 (11.8)	<i>Ref</i>	135 (27.8)	<i>Ref</i>	<i>Ref</i>
Female	36 (7.3)	.52** (.33–.82)	81 (16.7)	.54***(.40–.75)	.55***(.42–.71)
SES					
Low	23 (6.7)	.43* (.23–.82)	109 (20.0)	.77 (.50–1.18)	.67* (.47–.94)
Moderate	49 (10.5)	.79 (.47–1.34)	57 (22.2)	.85 (.53–1.36)	.85 (.60–1.20)
High	26 (11.4)	<i>Ref</i>	48 (29.3)	<i>Ref</i>	<i>Ref</i>
HSI					
Low	20 (6.8)	.46* (.25–.85)	54 (32.7)	1.93** (1.193.14)	1.10 (.76–1.58)
Moderate	37 (10.2)	.79 (.48–1.30)	114 (20.2)	1.06 (.71–1.59)	.90 (.66–1.22)
High	41 (11.7)	<i>Ref</i>	41 (19.1)	<i>Ref</i>	<i>Ref</i>

Notes: *P < .05, **P < .01, *** P < .001. OR= Odds Ratio; CI=Confidence Interval. Ref = Refers to reference category. Analyses are based on weighted data.

Relationship between noticing tobacco displays and advertising at POP and promptings to purchase cigarettes

Table 3 presents current smokers' responses regarding whether noticing tobacco displays and advertisements at POP prompted them to buy cigarettes. Overall, 10.1% of current

smokers reported that being aware of tobacco displays and advertising at POP prompted cigarette purchases: 6.4% of UK smokers compared to 13.3% of Dutch smokers (OR = 2.47, 95% CI = 1.72–3.45).

Table 3: Sample Characteristics of Participants Who Were Prompted to Purchase Cigarettes

Variables	Displays prompted purchase of cigarettes				Overall 10.1% OR [95% CI]
	Netherlands (W5) n=152		United Kingdom (W 8) n=63		
	n (%)	OR [95% CI]	n (%)	OR [95% CI]	
Overall	152 (13.3)		63 (6.4)		
NL vs. UK					2.47*** (1.72–3.45)
Age					
18-24	30 (23.8)	2.60** (1.474.59)	13 (10.3)	4.13** (1.587.80)	2.68*** (1.67–4.30)
25-39	36 (12.2)	1.21 (.71–2.06)	22 (7.6)	2.52* (1.02–6.19)	1.42 (.92–2.21)
40-54	45 (11.9)	.97 (.59–1.61)	21 (6.7)	2.27 (.92–5.59)	1.21 (.79–1.85)
55+	33 (11.1)	<i>Ref</i>	7 (2.9)	<i>Ref</i>	<i>Ref</i>
Sex					
Male	82 (13.9)	<i>Ref</i>	33 (6.8)	<i>Ref</i>	<i>Ref</i>
Female	70 (12.7)	.90 (.71–1.50)	30 (6.2)	.98 (.58–1.66)	.98 (.73–1.32)
SES					
Low	49 (13.1)	2.34** (1.28–4.27)	26 (4.8)	.49* (.25–.95)	1.27 (.81–2.01)
Moderate	81 (16.2)	2.70*** (1.56–4.67)	19 (7.4)	.75 (.37–1.51)	1.72* (1.12–2.62)
High	21 (8.1)	<i>Ref</i>	17(10.2)	<i>Ref</i>	<i>Ref</i>
HSI					
Low	53 (16.2)	2.20** (1.333.62)	13 (7.9)	1.40 (.61–3.21)	1.89** (1.23–2.88)
Moderate	60 (15.5)	2.05** (1.273.29)	36 (6.4)	1.10 (.56–2.19)	1.67* (1.13–2.47)
High	34 (8.9)	<i>Ref</i>	12 (5.6)	<i>Ref</i>	<i>Ref</i>
Noticed Displays					
<i>Yes</i>	109 (14.5)	1.32 (.87–1.99)	55 (6.4)	.87 (.39–1.97)	1.20 (.83–1.74)
Noticed Signs/Ads					
<i>Yes</i>	19 (20.2)	1.36 (.72–2.57)	16 (7.4)	1.07 (.57–1.99)	1.21 (.78–1.87)

Notes: *P < .05, **P < .01, *** P < .001. OR= Odds Ratio; CI=Confidence Interval. Ref= Reference category. SES (L) and SES (M) signify respondents with low and moderate socioeconomic status respectively. Analyses are based on weighted data.

In the respective countries, younger smokers aged 18-24 years were more likely to report that noticing tobacco displays and advertisements prompted them to purchase cigarettes than those aged 55+ (NL: OR = 2.60, 95% CI = 1.47 – 4.59, and UK: OR = 4.13, 95% CI = 1.58 – 7.80). Similarly, in the Netherlands, smokers with low and moderate SES were more likely to indicate that noticing tobacco displays and advertising prompted them to purchase cigarettes than those with high SES (OR = 2.34, 95% CI= 1.28 – 4.27, and OR = 2.70, 95% CI = 1.56 – 4.67, respectively), whereas noticeability was less likely among smokers with low SES in the UK compared to those with high SES (OR = .49, 95% CI = .25 – .95). In the Netherlands, and not in the UK, smokers with low and moderate scores on HSI were more likely to indicate that noticing tobacco displays and advertisements prompted them to purchase cigarettes than those with high HSI (OR = 2.20, 95% CI = 1.33 – 3.62, and OR = 2.05, 95% CI = 1.27 – 3.29) respectively. For these models no association with gender and seeing tobacco displays and signs in both countries were found.

Overall, younger smokers aged 18-24 who noticed tobacco displays and advertisements were more likely to be prompted to purchase cigarettes than those aged 55+ years (OR = 2.68, 95% CI = 1.67 – 4.30). Smokers with moderate SES overall who noticed POP tobacco displays and advertising were more likely to be prompted to purchase cigarettes than smokers with high SES (OR = 1.72, 95% CI = 1.12–2.62), whereas those with low and moderate scores on HSI were more likely to be prompted to purchase cigarette than those with high scores on HSI (OR = 1.89, 95% CI = 1.23 – 2.88, and OR = 1.67, 95% CI = 1.13 – 2.47).

Noticing tobacco displays and advertising at POP and intention to quit

As shown in table 4, 28.7% of current smokers intended to quit smoking within the next 6 months, with variation by country; 25.8% in the Netherlands compared to 31.6% of UK smokers (OR = .66, 95% CI = .52 – .84).

Table 4 : Association between Quit Intention and Noticing Point-of-Sale Tobacco Displays or Advertising by Country

Variables	Intention to quit				
	Netherlands (W5) n= 262		United Kingdom (W 8) n =306		Overall 28.7%
	n (%)	OR [95% CI]	n (%)	OR [95% CI]	OR [95% CI]
Overall	262 (25.8)		306 (31.6)		
NL vs. UK					.66** (.52–.84)
Age					
18-24	29 (26.6)	1.05 (.56–1.96)	45 (36.0)	1.81* (1.11–2.94)	1.37 (.97–1.95)
25-39	99 (36.9)	2.27** (1.43–3.61)	110 (38.3)	1.61* (1.08–2.40)	.85 (.59–1.20)
40-54	80 (24.4)	1.32 (.83–2.09)	88 (28.1)	1.12 (.75–1.67)	.72 (.50–1.05)
55+	50 (18.7)	Ref	63 (26.1)	Ref	Ref
Sex					
Male	141 (25.9)	Ref	131 (27.1)	Ref	Ref
Female	121 (25.7)	.94 (.70–1.36)	174 (36.1)	1.68*** (1.26–2.26)	1.33** (1.07–1.66)
SES					
Low	56 (16.6)	.32*** (.20–.52)	147 (27.0)	.53** (.36–.78)	.47*** (.35–.63)
Moderate	123 (27.5)	.53** (.36–.79)	87 (33.9)	.72 (.47–1.10)	.65** (.48–.86)
High	56 (37.2)	Ref	72 (43.4)	Ref	Ref
HSI					
Low	86 (30.0)	1.12 (.73–1.72)	82 (49.7)	3.18*** (2.00–5.03)	1.76*** (1.30–2.39)
Moderate	86 (24.9)	1.04 (.70–1.56)	165 (29.4)	1.38 (.94–2.01)	1.14 (.87–1.49)
High	76 (22.0)	Ref	48 (22.2)	Ref	Ref
Noticed displays (Yes)	183 (28.4)	1.11 (.77–1.58)	260 (30.5)	.55** (.36–.85)	.86 (.65–1.12)
Noticed Signs/ads (Yes)	30 (33.7)	1.45 (.86–2.43)	74 (34.6)	1.17 (.83–1.67)	.80 (.60–1.07)
Moderating Variables					
Displays x SES (L)		.85 (.29–2.51)		.10* (.02–.58)	.38* (.18–.82)
Displays x SES (M)		.94 (.37–2.37)		.33 (.05–2.30)	.74 (.34–1.60)
Signs/ads x SES (L)		.32 (.04–2.38)		.92 (.38–2.25)	1.09 (.53–2.28)
Signs/ads x SES (M)		1.52 (.47–4.92)		.64 (.23–1.76)	1.06 (.51–2.24)

Notes: * $P < .05$, ** $P < .01$, *** $P < .001$. OR= Odds Ratio; CI=Confidence Interval. Ref = Reference category.

SES (L) and SES (M) signify respondents with low and moderate socioeconomic status respectively. Analyses are based on weighted data.

Demographic comparison suggested that in the respective countries smokers aged 25-39 years were more likely to intend to quit than those aged 55+ (NL: OR = 2.27, 95% CI = 1.43 – 3.61, and UK: OR = 1.61, 95% CI = 1.08 – 2.40), respectively. In the UK, females were more likely than males to intend to quit, but this was comparable in Netherlands (UK: OR = 1.68, 95% CI = 1.26 – 2.26). Those with low SES in the UK and the Netherlands were less likely to intend to quit than those with high SES (UK: OR = .53, 95% CI = .36 – .78, and NL: OR = .32, 95% CI = .20 – .52). Smokers in the UK, and not in the Netherlands, who reported low scores on HSI were more likely to indicate intentions to quit smoking (UK: OR = 3.18, 95% CI = 2.00 – 5.03). Those in the UK who noticed POP tobacco displays were less likely to intend to quit (OR = .55, 95% CI = .36 – .85), but noticeability was not significantly associated with quit intentions among Dutch smokers.

In terms of moderating effects, smokers in the UK with low SES who noticed tobacco displays were less likely to indicate intentions to quit smoking than those with high SES who noticed displays (UK: OR of interaction with low SES = .10, 95% CI = .02 – .58). No moderating effects were found with respect to smokers in the Netherlands. Nonetheless, overall smokers with low SES who noticed tobacco displays were less likely to intend to quit than those with high SES who noticed displays (OR of interaction with low SES = .38, 95% CI = .18–.82).

Discussion

Although enactment of tobacco marketing regulation has led to reductions in exposure to pro-smoking cues in Europe and elsewhere (Kasza et al., 2011), salience of tobacco displays at point-of-purchase remains prominent among smokers in the Netherlands and UK. Around three quarters of smokers overall were aware of retail tobacco displays, after adjusting for demographic factors. In addition, salience of tobacco advertising in stores, including depictions of cigarette signs or pictures was reported by approximately 16% of smokers overall, comprising 22.2% in the UK and 9.7% in the Netherlands. These results showing relatively low reported awareness of tobacco advertising reflect the limited advertising at point-of-purchase in both countries. In the UK, for instance, in-store tobacco advertising is restricted to depictions of cigarette signs on A5 size, while in the Netherlands tobacco advertisements within the retail environment are limited to the area where tobacco products are displayed. The Netherlands and the UK should therefore, aim to establish legislation that removes tobacco advertising completely from retail outlets.

In total, just over a tenth of smokers indicated that they were prompted to purchase cigarettes as a consequence of noticing retail tobacco displays and advertising, with Dutch smokers (13.3%) being more likely to report that salience prompted purchase than their UK counterparts (6.4%). Among this group, younger smokers (aged 18-24 years) in the respective countries were more likely to indicate that visible displays of tobacco at POP prompted them to buy cigarettes than older smokers aged 55+. Thus, noticing POP tobacco displays and advertising seems to play a significant role in stimulating prompt purchases of cigarettes, particularly among younger smokers in both countries. Smokers in the UK but not in the Netherlands, who noticed POP tobacco displays were less likely to intend to quit smoking.

This study has important policy implications. First, the extent of awareness of tobacco displays at POP in both countries suggest that retail tobacco displays serve as a form of advertising for cigarette brands (Feighery, Ribisl, Clark, and Haladjian, 2003; Wakefield et al., 2008). Hence, unless POP promotions are restricted, the tobacco industry will continue to exploit this unregulated channel. Evidence shows that there is a profusion of smoking cues in most retail outlets in several jurisdictions, with tobacco displays positioned at point-of-purchase for maximum salience (Kasza et al., 2011; Wakefield et al., 2008).

This study demonstrating that Dutch smokers of low and moderate socioeconomic status who noticed POP tobacco displays and signs tended to be prompted to purchase cigarettes, compared to those with high SES, is consistent with research showing that in-store displays may increase sale of consumer products (Carter et al., 2009; Chevalier, 1985; Curhan, 1974). Although in the UK reported salience among those with low SES were rather less likely to be prompted to purchase cigarettes, these findings and others (Kasza et al., 2011; Paul et al., 2010; Wakefield et al., 2008) strengthen the evidence base for implementing effective POP marketing regulation by putting tobacco displays and signs out of sight in retail outlets.

Finally, the finding that those who noticed POP tobacco displays in the UK were less likely to indicate quit intentions suggest that salience of retail tobacco displays may discourage smokers from attempting to quit smoking. More so, the findings that overall, salience of POP displays among smokers' with lower socioeconomic groups affected negatively their likelihood of quitting is indicative that tobacco displays may undermine quit intentions especially among those in the low social groups. This finding is consistent with studies that found that tobacco advertising might weaken attempts to quit smoking (Basil, Basil, and Schooler, 2000; Wilkinson, Mason, and Paksoy, 1982).

A limitation of the study included use of self-report of noticing tobacco displays and signs as well as promptings to purchase cigarettes, which may be under-reported. For instance, unplanned or prompt purchases are by definition not conscious acts. Therefore, they might be under-estimated. Moreover, it was not possible to make causal inferences because cross-sectional data was used. Furthermore, it is important to note that the survey was conducted in countries which have some form of POP advertising restrictions and therefore suggests that POP displays promotion might be even more noticeable in countries without any regulation.

In conclusion, the current results indicate that tobacco displays at point-of-purchase clearly act as a form of advertising on account that these maintain prominence, and influence cigarettes purchased and quit intention, particularly among those in low social groups. These results provide further evidence that support legislation for complete removal of cigarette displays in retail environments as this would reduce exposure and promptings to purchase as well as encourage quit intentions.

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Performance Based Logistics and Applications in Turkey

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Abstract

Defense sector is one of the most important areas where logistics is used extensively. Nations give importance to their defense spending in order to survive in their geography. Parallel to the rising crises around the world, governments increase their defense spending; however, resources are limited while the needs are infinite. Therefore, countries try to develop a more effective use of their defense budget. In order to make logistics more effective and efficient, performance-based logistical system was developed. This article explains the Performance-based Logistical System, its employment process and applications in the Turkey.

Keywords: performance, performance based logistics, performance based logistics applications.

Introduction

The National Defense Strategy of the United States of America (NDS) establishes a set of overarching defense objectives that guide DoD's security actions and provides direction for the National Military Strategy (NMS). It was developed based on the Quadrennial Defense Review (QDR) process and is focused on preparing DoD to meet 21st century challenges. One of the four-implementation guidelines, which it details, is "Continuous Transformation." The purpose of continuous transformation "is to extend key advantages and reduce vulnerabilities." ¹

The current Defense logistics budget is well over a \$100 billion and is very big business. It requires more than a million government people that receive more than 54,000 requisitions, process nearly 8,200 contracts, and conduct business with approximately 24,000 suppliers each day supporting 1,312 major weapon systems. DoD maintains an inventory of 5.2 million different items and 60 inventory reporting systems (Home Depot has around 50,000 items and one inventory system). While each element of the process (ordering, procurement, transportation, maintenance, finance, etc.) is digitized, these processes are often segmented, and are spread out across 600 different and non-interoperable information systems. Optimization, when it occurs, takes place at the element or sub-element level, rather than the system level. The current "system" is largely an ad-hoc mix of government and industry, with little cost visibility or performance accountability. An integrated (end-to-end) system does not exist (as it does in "world-class" commercial systems). ¹

The DoD has been making progress, albeit slowly. During the Gulf War in 1991, it took five months to deploy troops and equipment to the Persian Gulf, and the logistics support was developed while forces were not engaged in hostilities. The average order to receipt time was 49 days. Based on the supply chain improvements over the last 15 years the average order to receipt time has been reduced to 21 days (with a still significant variation, from within days to up to a year). This is an impressive improvement, except when one considers the performance of world-class commercial distribution that can guarantee delivery within 1-2 days domestically, and 2-4 days internationally, with over a 99 percent reliability.¹ This progress is shown in Figure-1.

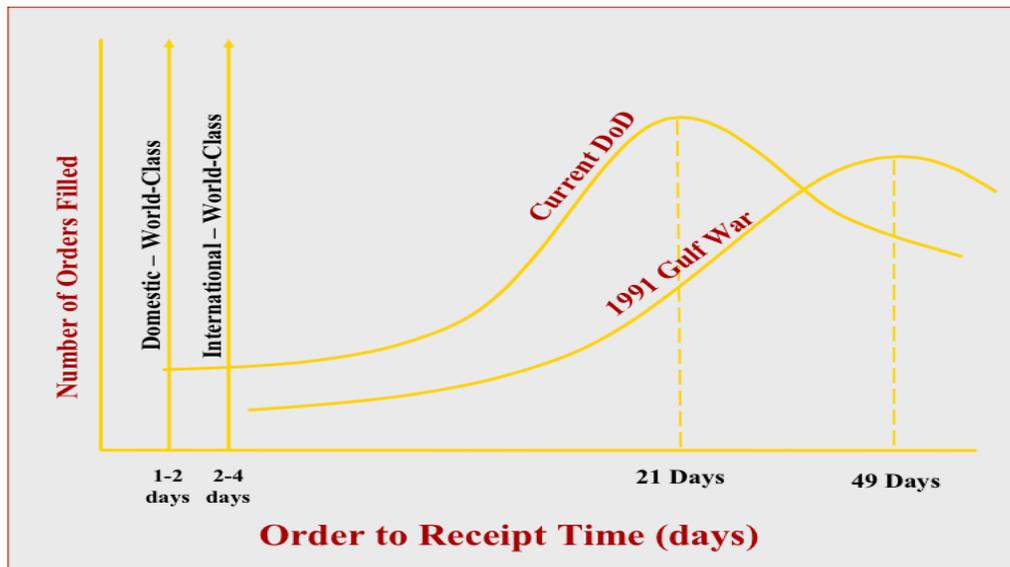


Figure 1: Logistics Development Process¹

This statistical information is considered; the rising cost of maintenance and support for new and legacy systems; and long customer wait times in support of war-fighters, and the increased flexibility/agility required in the new (and largely unpredictable) military environment.¹

Definition of Performance-Based Logistics

The key points are that new and legacy weapon systems are; Expensive to maintain, difficult to upgrade with new technology and take a long time to deploy to the field.²

Performance Based Logistics (PBL) is the purchase of support as an integrated, affordable, performance package designed to optimize system readiness and meet performance goals for a weapons system through long-term support arrangements with clear lines of authority and responsibility. Simply put, performance based strategies buy outcomes, not products or services.³

The intent of PBL is to form a long-term partnership between industry and the government early in the development of a system or product that is focused on enhancing warfighter capability over the life of the system or product. The belief is that if industries' long-term profitability is in play, then industry will use its special talents to optimize profit while meeting the government's performance objectives. This will be done by improving Reliability and Maintainability in design, and designing and operating highly efficient support systems.⁴

The transition to PBL as a product support strategy will evolve based on determination of the provider's product support capability to meet set performance objectives. The major shift from the traditional approach to PBL product support emphasizes what program managers provide to the user. Instead of buying set levels of spares, repairs, tools, and data, the new focus is on buying a predetermined level of availability to meet warfighter objectives.³

This effort stated that between government, industry, and government-industry partnerships the best-value providers should be selected, that is, the companies or entities whose support activities would yield, for the money spent, the maximum operational effectiveness of the system.⁵

Given that the focus of PBL-based contracts is results and not material resources, the prime contractor must find a way to trace down this intent to the various subcontractors, if that is applicable. From the primary customer's perspective, however, the prime contractor assumes the overall responsibility for delivering the results. It is the intent of this alternative contractual paradigm to make it easier to realize the goal of reducing the logistics footprint for complex systems, while achieving a higher operational effectiveness for the systems themselves. The framework for articulating and assessing system operational effectiveness is depicted in Figure-2.⁶

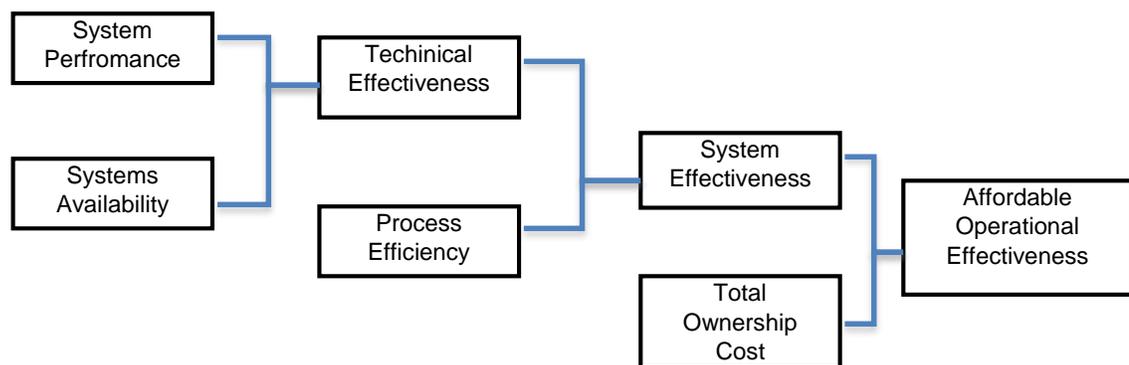


Figure 2: The Concept Of System Operational Effectiveness⁶

Benefits of Performance-Based Acquisition and PBL

Performance-based service acquisition has many benefits. They include ⁷:

- Increased likelihood of meeting mission needs
- Focus on intended results, not process
- Better value and enhanced performance
- Less performance risk
- No detailed specification or process description needed
- Contractor flexibility in proposing solution
- Better competition: not just contractors, but solutions
- Contractor buy-in and shared interests
- Shared incentives permit innovation and cost effectiveness
- Surveillance: less frequent, more meaningful
- Variety of solutions from which to choose

According to a strategic research project issued in USA War Academy, below are benefits of PBL systems supply to management ⁸:

- Providing Logistics Management Information that would be helpful in the program success.
- Implementing Automated Identification Technology to improve asset visibility.
- Using contracted integrated technical information system to reduce government expense.
- Implementing long-term contracts that will reduce administrative time.
- Embedding diagnostics and prognostics that will assist in sustainment and predictability of failures.
- Establishing temporary waivers for Contractors on the Battlefield due to new technology development.
- Establishing performance based agreements policy that provides metrics to measure results.

Under the traditional inventory based systems our “response to failure” has often been to buy more inventory. Product support providers are not incentivized to do anything to improve the services provided or the performance and reliability of the components that they produce in response to this traditional business model. In fact, with traditional approaches, product support providers are incentivized to actually sell the government more inventory and components. PBL is about changing this relationship. We need to create a relationship where the product support provider is incentivized to reduce material consumption. Accordingly, if the product support provider can reduce consumption within the contract structure, we need to address the impact this will have on revenue and profit.
9

According to traditional approach, below are factors that supply to be successful of PBL approach ⁸:



- Establishing a cost accounting system that allows the PM to secure funding to capture needed data.
- Providing PBL payment up-front reduces commander's flexibility regardless of precedence for weapon system sustainment.
- Collecting specific data and performing evaluations will be rigorous.
- Increasing the reliance on contractors could impact weapon system's readiness during deployments.
- Identifying organic logistics systems not designed for performance specifications.
- Establishing procedure for incentivizing and penalizing government organizations.

Disadvantages of PBL

Below are the disadvantages of PBL ¹⁰ :

Supplier opportunism; From the buyer's perspective, there is a major risk that the supplier will become too complacent and lose motivation to maintain or improve performance as the contract progresses.

Selecting the wrong supplier; If a thorough and informative business case analysis is not conducted prior to establishing a performance-based contract, an agreement could be reached with a sub-optimal supplier.

Supplier foregoes other business; When a company agrees to provide support to the government, that support often uses up a large amount of the company's business capacity. This is especially true in PBL. Therefore, commercial organizations that engage in long-term PBL contracts are taking the risk of possibly having to turn down other profitable business opportunities that arise due to a lack of capacity.

Implementing Performance Based Logistics

Performance Based Logistics (PBL) implementation has 12-steps. In an actual PBL implementation, the order in which these steps are taken is flexible and not necessarily sequential. Some steps may be carried out in parallel, omitted, or reordered as appropriate to the system and its corresponding operational environment. ³

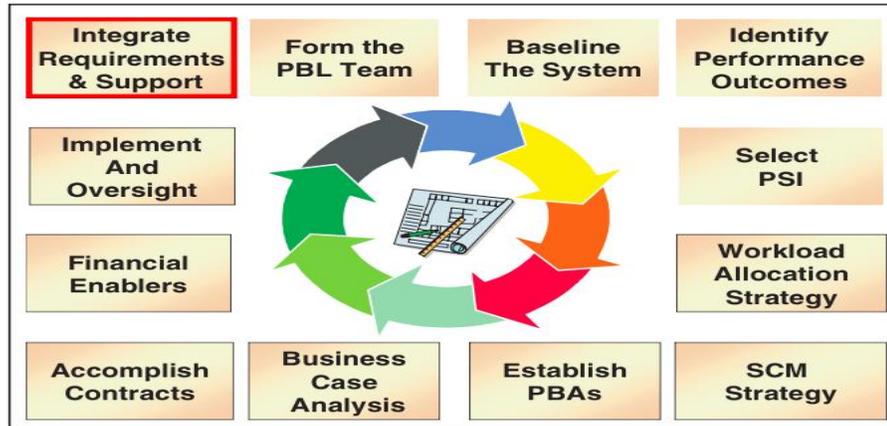


Figure-3 PBL Implementation Model ³

Integrate requirements and support

An effective PBL implementation begins in the Joint Capabilities Integration and Development System (JCIDS) process by focusing capabilities needs on overall performance and linking supportability to performance. Understanding warfighter needs in terms of performance is an essential initial step in developing a meaningful support strategy. The PM team consults with the operational commands and organizations that support the warfighting combatant commanders. ³

Form the performance based logistics team

A critical early step in any PBL effort is establishing a team that includes the user to develop and manage the implementation. Although the PM is the total life cycle systems manager, the foundation of PBL strategies relies on ensuring the participation and consensus of all stakeholders, especially the customer, in developing the optimum sustainment strategy. ³

Baseline the system

Defining and documenting the system baseline answers four key questions: What is the scope of your support requirement? Who are the key stakeholders? What are your cost and performance objectives? For fielded systems, what are the historic readiness rates and Operations and Support (O&S) costs relative to the upgraded or new system? To develop an effective support strategy, a PM needs to identify the difference between existing and desired performance requirements. Accordingly, the PM identifies and documents the current performance and cost baseline. The life-cycle stage of a program determines the scope of a baselining effort. ³

Develop performance outcomes

At the top level, the performance outcomes and corresponding metrics should focus on the warfighter's needs: a system that is operationally available, reliable, and effective, with minimal logistics footprint and a reasonable cost. ³ The PBL approach uses metrics that measure whether the system is meeting the capability requirements for the warfighters. ¹¹

Select the product support integrator

A fundamental tenet of PBL is single-point accountability for support. That role is encompassed by a PSM or one or more Product Support Integrators (PSIs), who are responsible for integrating all sources of support, public and private, to meet the identified performance outcomes.³

Develop workload allocation strategy

An effective support strategy considers best competencies and partnering opportunities. Building on the previously developed System Baseline, the PM and PBL team must address each discrete workload and assess where, how, and by whom it can best be accomplished, while considering statutory, regulatory, and pertinent Military Department (MILDEP) guidance. In general, support workloads will include both system-unique subsystems, commodities, or components; and common subsystems, commodities, and components. Within these categories, there will be various characteristics to be considered as the workload allocation and sourcing decisions are accomplished.³

Develop the supply chain management strategy

A Supply Chain Management (SCM) strategy is critical to the success of any PBL effort. Materiel support is a critical link in weapons systems supportability. All the skilled labor, advanced technology, and performance mean little without the ‘right part, in the right place, at the right time.’ The supply chain is also a primary target for utilizing industry flexibility, capability, and proprietary spares support.³

Establish performance-based agreements

The intent of the PBA is to ensure that all stakeholders (the user/warfighter, the PM, and support provider) enter into a formal relationship for levels of support. With a clear delineation of performance outcomes, corresponding support requirements, and the resources required to achieve both, the PBA creates a clear understanding of the outcomes and the commitments required to achieve those outcomes among all stakeholder parties.³

Conduct a performance based logistics business case analysis

In conducting the PBL Business Case Analysis, alternative solutions are assessed in terms of the cost to meet the logistics performance objectives of the warfighters compared particularly to existing support strategies.³

Award contracts

A PBL contract specifies performance requirements; clearly delineates roles and responsibilities on both sides; specifies metrics; includes incentives as appropriate; and specifies how performance will be assessed. PBL contracting strategies prefer an approach characterized by use of a Statement of Objectives versus early development of a detailed Performance Work Statement. Ideally, PBL contracts will be implemented as fixed price, guaranteeing needed outcomes at a known price.³

Employ financial enablers

In executing performance agreements, the PM must implement a financial process strategy that is an enabler. The PM must estimate annual costs based on operational requirements and review funding streams for applicability.³

Implement and assess

The PM’s oversight role includes developing the performance assessment plan, monitoring performance, and revising the product support strategy and PBAs as necessary.³

The Four stages of PBL

The most well-known method of classifying PBL arrangements according to their “level” of strategy implementation is shown in Figure-4.

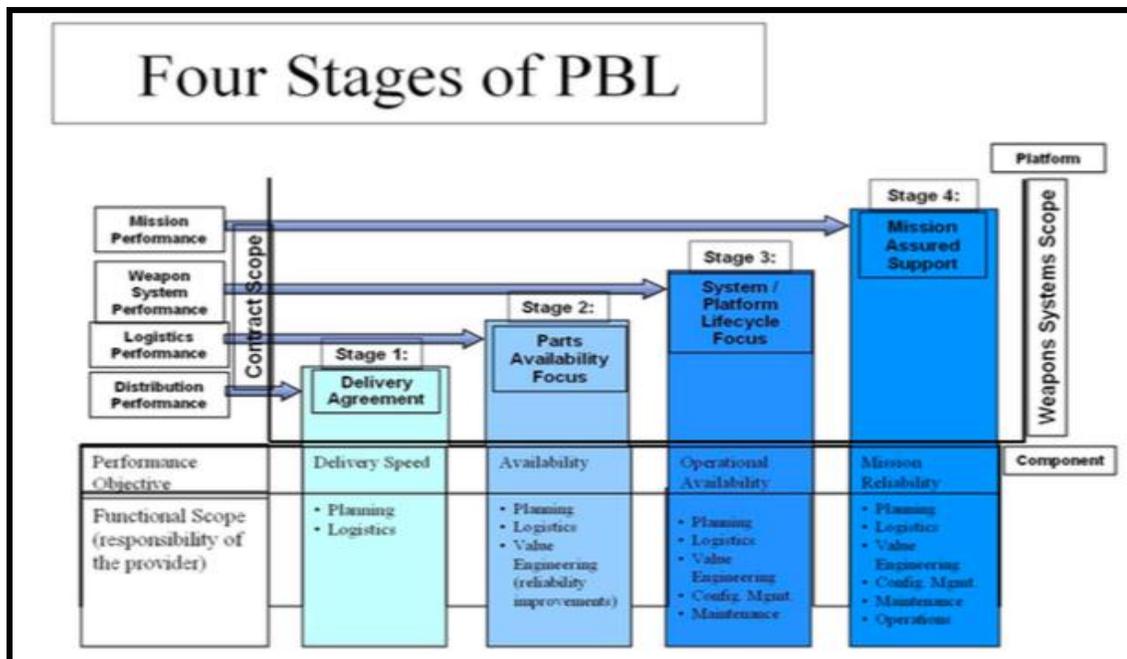


Figure 4: The Four Stages of PBL¹⁰

In short, Stage 1 describes support at the component level, Stage 2 describes support at the major subsystem level, Stage 3 deals with the weapon system platform level, and Stage 4 assures mission availability/support at the system level. While the Four Stages do not exist to provide any sort of prescription for PBL contract structure, the possibility of conceptual correlations between the different stages and varying types and lengths of contracts warrants investigation.¹²

The Use of PBL in Key Geographical Regions and Applications in Turkey

Major Characteristics & Trends for the use of Performance-based Logistics in Key Geographical Regions in Figure-5.¹³

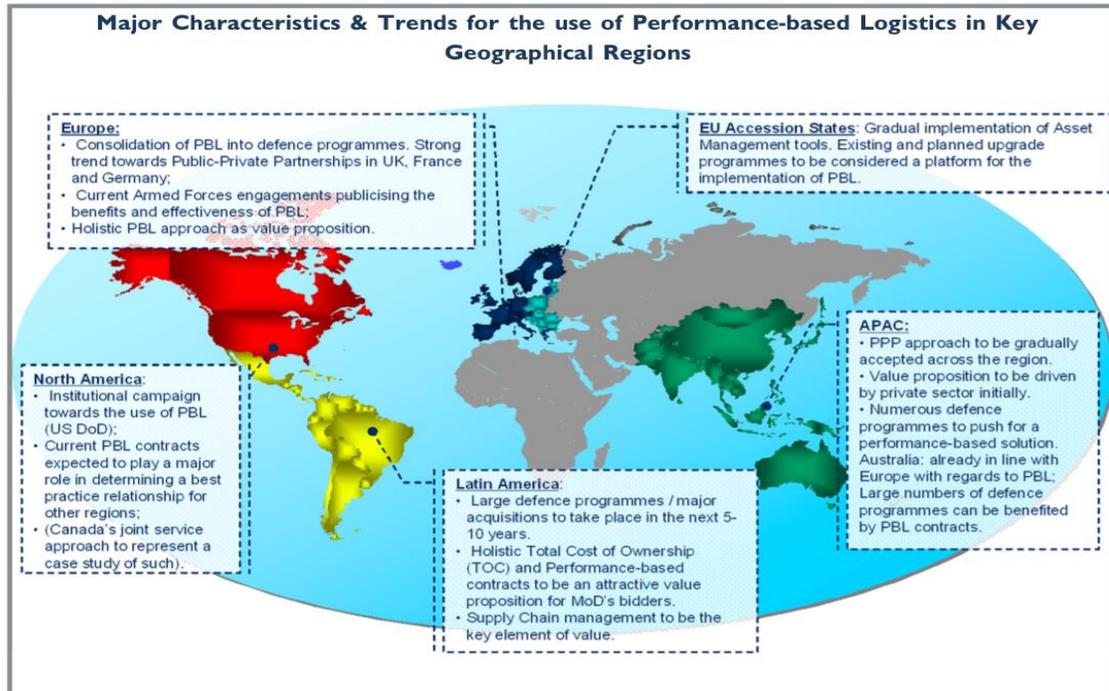


Figure 5: Major Characteristics & Trends for the Use of Performance-Based Logistics in Key Geographical Regions ¹³

Relating to the defense sector, the turnover of the last five years has increased by 60% and the share of domestic ratio of the Turkish Armed Forces' needs in meeting reached 52%. From that point of view, the future defense equipment will be in inventory of the Turkish Armed Forces;

- Turkish Unmanned Air Vehicle (ANKA)
- Small Unmanned Air Vehicle (İHA)
- Attack Tactical Recon Helicopter (ATAK)
- Basic Training Plane (HÜRKUŞ)
- Turkish Main Battle Tank (ALTAY)

PBL service contracts talking about 9 T-129 EDH Attack and Tactical Reconnaissance Helicopter (ATAK) Produced by TAI for 36 months with 80% based on the stocking material basis continues. However, For systems without adequate infrastructure, logistics and maintenance which purchased directly from the market the PBL services procured from domestic and foreign suppliers. ¹⁴

For example; PBL services for AB412EP helicopter of the Turkish Coast Guard from 2002-2006 provided by the helicopter company Agusta Westland is a good example in this context. During the program 80% helicopter readiness ratio targeted and provision of supplies and helicopters presence percentage was above 90%. ¹⁴

Below it is explained some important projects especially in terms of Performance-Based Logistics applications in our country.

Cost Guard Helicopter – Martı Project

Agusta during the program, has been responsible for providing material support to planned and unplanned maintenance, to give job training, providing technical and logistical support, to support the Coast Guard in the first and second levels of all maintenance activities. The Coast Guard personnel, under the guidance of Agusta, has been responsible for providing the fuel and oil and to perform the first and second levels of care.

Performance measured by 90-day period according to the agreement on the basis of 80% operational readiness level. In 90-day periods penalties were applied to the firm that take place on the 20% rate not readiness conditions for every hour. 39-month duration of the contract has expired in October 2006. Overall, after the program-received service with a rate over the target under the contract, due to firm's high price request per hour, the contract did not extend.

Coast Guard had planned to perform with classical logistics approach of the helicopter's logistical support after the LSSP. In this context, the necessary studies have been conducted toward the creation of reserves materials. The materials other than operation needs are met using the required reserves in domestic and overseas opportunities. Helicopters depot level maintenance has envisaged using structural opportunities in the Turkish Armed Forces Maintenance Repair Centers, and other maintenance scheduled to be provided from domestic and foreign sources.¹⁵

A400M Transportation Plane Project

It is planned to replace C-160 aircraft in the inventory of the Turkish Air Force with A400M Aircraft. Memorandum of Understanding (MOU) on aircraft's design, including the development and production and the program signed on 22 May 2003. Then A400M contract was signed by on behalf of the participating countries the Joint Armaments Cooperation Organization (Organization Conjointe de Cooperation en matiere d'Armement-OCCAR) and the main contractor Airbus Military Sociedad Limitada (AMSL) came into effect on 27 May 2003. Turkey will supply 10 aircraft according to agreement.

Integrated Logistic Support Working Group (ILSWG) was established in order to take steps to conduct studies about A400M's logistics needs throughout the life cycle of the aircraft and planned to collect regularly with the participation of national experts in the OCCAR's leadership. Various logistics sub-groups under the working groups (Life Cycle Cost Study Group, Material Management Working Group, Technical Data Working Group, Education Working Group, etc.) is provided for a detailed study in each sub-area.¹⁵

Joint Strike Fighter JSF

US's emergence needs of a new generation of fighter aircraft beginning from 2010 will meet the needs with the US led to Britain, Italy, Holland, Turkey, Canada, Australia, Norway and Denmark's participation JSF Project.

Under the project, the performance based contract is expected to be fix price, lean for- 8 years and be reviewed every three years. While the pricing of fixed and variable parts separately specified, prices are expected recovery rate of 1-2% per year. In addition the first low density criteria for the production phase is determined as follows: activity rate, the success rate of duty, sortie production rate, logistics transferring size.

PBL approach laid out in the JSF Project has two important features that Autonomic Logistics and Global Support. First, autonomously designed system, the second is multinational JSF fleet in this system envisaged to be supported as necessary.¹⁵

Conclusion

Today, Defense sector is one of the sectors in which countries allocate most of their resources. Developments in weapon systems and Technologies have made it difficult for the modernization Project and increased maintenance and repair costs. In line with these developments, together with the changing logistics strategies over time the PBL approach. have emerged. PDL's management is a recommended method for being ready, and for increasing the rate of operational readiness; system, subsystem or all of the products reducing the cost of strategic logistics management throughout the life cycle. With the application of PDL management to high performance values, while users of both systems and products will achieve the highest performance with a lower cost , with incentives to be applied in contracts, contractors will also achieve maximum profit and will provide growth with new investments.

In recent years, rather than the purchasing of foreign models, there are studies on the design and production of domestic defense systems. These efforts are in line with the evolving needs of our country and the completed projects shows us that our defense industry grows steadily. Foreign purchases are made also for the supply of domestic production capacity to agreements and the development of substances domestically. Because overseas purchases available in many models also have disadvantage in terms of logistical support. The planned maintenance activities and the needs identified in this system are made by foreign companies. In line with the life cycle of the system, these companies are forced to make large investments in order to ensure domestic supply, which leads to the high cost. The cost over the life cycle must be essential to ensure effective logistics support. Because of the costs of logistics support's being too large and the needs to be present in every moment, tactics, techniques and designs of our needs must be produced by our domestic companies. In this case, correct identification of needs means that the Ministry of Defense and manufacturers work in close collaboration with design firms and the need to reflect them correctly.

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The Role of Gateway Drugs among Adolescents

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Abstract

This paper examines the effects that marijuana, cigarette, and alcohol use have on the probability that an individual will use harder drugs. We also attempt to determine if the use of multiple drugs increases the magnitude of the gateway effect. A linear probability model with individual fixed effects and hazard model analysis are used to estimate gateway effects. The results indicate cigarettes, alcohol, and marijuana all play a statistically significant gateway role. Perhaps the most interesting result is that if an individual has tried multiple potential gateway drugs there is a large increase in the magnitude of the gateway effect.

Keywords: gateway theory, drugs, risky behavior, fixed effects, hazard model

Introduction

There is a long held belief that some drugs serve as a gateway to the use of other “harder” drugs.¹ One typical assertion is that marijuana, cigarettes, and alcohol use tends to lead to the use of harder drugs, such as cocaine or heroin. The belief that marijuana is a gateway drug, for example, has been used as justification for making its use illegal.² Between 1996 and 2005 the prevalence of illegal drug use among adolescents remained fairly constant while marijuana, alcohol, and cigarette use fell, highlighting the need for a reevaluation of the gateway hypothesis.³

There are two general schools of thought on the gateway effect (Beenstock and Rahav 2002). The first is that the gateway effect is causal: Cigarette or alcohol use causes marijuana use and marijuana use causes cocaine use. If the gateway effect is causal, then smoking restrictions should decrease marijuana use and the legalization of marijuana would lead to an increase in cocaine use. The second school of thought is that the gateway effect is merely descriptive: Individuals have a preference for drug use and the fact that individuals typically use marijuana first is due to some unobservable factor, such as marijuana being more readily available.

Estimating the magnitude of the gateway effect has proven difficult due to unobservable characteristics, such as a propensity for drug use, biasing estimates of the effect of past

¹ See Kandel (1975) for a seminal discussion of the gateway effect.

² Source: Department of Justice’s Drug Enforcement Agency. Accessed on December 12, 2007 <http://www.whitehousedrugpolicy.gov/publications/pdf/fedreg041801.pdf>

³ Among High School seniors marijuana use fell by approximately 10%, alcohol use fell by approximately 11%, and cigarette use fell by approximately 32%. Source: Monitoring the Future Data. Accessed on December 12, 2007 <http://www.monitoringthefuture.org/data/05data/pr05t3.pdf>

marijuana use on the use of harder drugs. Attempts to adjust for these biases using instrumental variables and other approaches provide mixed results. In an attempt to estimate the existence and magnitude of these effects to determine if there is a policy prescription to be made, we evaluate the gateway effect using two approaches. We first estimate the effect of past tobacco and alcohol use on current marijuana use and the effect of past tobacco, alcohol, and marijuana use on current hard drug use using a linear probability model with fixed effects to control for time-invariant unobservable characteristics, such as an unobserved or latent propensity for drug use. We then utilize a hazard model to estimate the effect of past tobacco and alcohol use on the probability that an individual will begin using marijuana in a given period and the effect of past tobacco, alcohol, and marijuana use on the probability that an individual will start using hard drugs in a given period. Interaction terms are then inserted into both the hazard model and linear probability regressions to account for the use of multiple potential gateway drugs.

Using data from The National Longitudinal Study of Adolescent Health (Add Health), we find that smoking, drinking, and marijuana use play gateway roles. Marijuana, specifically, appears to play a large statistically significant gateway role for hard drug use. Results also suggest that as the number of potential gateway drugs (cigarettes, alcohol, and marijuana) tried in the past increases, the probability that the individual will use hard drugs increases dramatically.

The remainder of the paper is organized as follows: Section 2 discusses the theory and previous findings. Section 3 is a description of our methodology. Section 4 is a discussion of our results. Section 5 concludes.

Theory

Gateway theory was originally developed by Kandel (1975) and has been analyzed in the economics literature, sociology literature, psychiatry literature, and by authors in other disciplines.⁴ Essentially, the gateway theory states that the use of softer drugs (cigarettes, alcohol, marijuana, etc) serves as a “gateway” to harder drug use (cocaine, heroin, etc). This sequence is observed in many datasets and is present in the data used for this study (see Table 1). Nevertheless, there remains a question of causation. Does marijuana use cause cocaine use, or is marijuana simply consumed first due to availability? If the answer is yes, marijuana use causes cocaine use, legalizing marijuana would increase cocaine consumption.⁵ If the answer is no, it is availability rather than causation, the lack of causation indicates that there is some unobservable individual specific propensity for drug use and fear of the gateway effect becomes a less powerful argument against the legalization of marijuana (Morrall et al. 2002).

⁴ For an example of some of the better work done outside the economics literature see Fergusson et al. (2006); Fergusson and Horwood (2000), and Morrall et al. (2002).

⁵ Assuming the legalization of marijuana would lead to an increase in the number of marijuana users.

Table 1: Percentage of Marijuana and Hard Drug Users that Used Cigarettes, Alcohol, or Marijuana First

	Currently Marijuana	Uses Currently Drugs	Uses Hard
Smoked Cigarettes Previously	68.23%	73.14%	
Drank Alcohol Previously	80.86%	81.94%	
Smoked Marijuana Previously	--	70.11%	
Used Cigarettes and Alcohol Previously	60.37%	65.02%	
Used Marijuana and Cigarettes Previously	--	62.14%	
Used Marijuana and Alcohol Previously	--	69.12%	
Used Marijuana, Cigarettes, and Alcohol Previously	--	55.61%	

Current use is defined as use within the last 30 days.

Hard Drugs are defined as cocaine, LSD, PCP, ecstasy, mushrooms, inhalants, and/or injection drugs.

The presence of an unobserved taste for drug use creates an identification problem when attempting to empirically estimate the magnitude of any gateway effect. Generally, an instrumental variables approach or an approach using fixed effects or hazard modeling to account for individual level heterogeneity is used, with mixed results, to adjust for the spurious correlation that may bias estimates of the gateway effect. DeSimone (1998) and Pacula (1998) employ an instrumental variable analysis to examine the gateway effects of marijuana on cocaine and alcohol on marijuana, respectively. DeSimone (1998) finds a statistically significant gateway effect between marijuana and cocaine and Pacula (1998) finds a significant gateway effect of alcohol use on marijuana use.

Pudney (2002) and van Ours (2003) use hazard model analysis with frailty modeling and find that the majority of the gateway effect vanishes when unobserved individual level characteristics are accounted for. Beenstock and Rahav (2002) utilize a “domino” instrumental variables approach using cigarette prices as an instrument for cigarette usage and find that there is a causal gateway effect between cigarettes and marijuana, but not between marijuana and hard drugs. However, Fergusson and Horwood (2000) and Fergusson et al. (2006) show that, although the magnitude of the gateway effect decreases when unobserved heterogeneity is accounted for, a statistically significant effect remains.

Using data on adolescents and young adults from the United States, this study examines the gateway effect of tobacco and alcohol on marijuana use, and tobacco, alcohol, and marijuana on hard drug use using linear probability analysis with individual specific fixed effects and an analysis utilizing a hazard model. Interaction variables intended to measure the effect of having used multiple potential gateway drugs are also included in the analysis.

Methods

This study uses data from waves 1, 2 and 3 of the National Longitudinal Study of Adolescent Health (Add Health). Add Health is a survey of a nationally representative sample of adolescents in grades seven through twelve from 134 schools.⁶ Add Health contains three waves of in-home surveys administered in 94-95, 96, and 2001-02, two school administrator questionnaires, and a parent’s survey. The wave 1 in-home survey

⁶ See Harris, et al. (2003) for a discussion of the design of the National Longitudinal Study of Adolescent Health.

includes responses from 20,745 students and approximately 18,000 parents. The wave 2 in-home survey contains information on 14,738 adolescents. The wave 3 in-home survey contains information on 15,197 individuals.

Table 2.: Summary Statistics

	Mean (Std. Dev.)		Mean (Std. Dev.)
Use Marijuana (Last 30 Days)	0.1682 (0.3740)	Drugs in Home	0.0492 (0.2163)
Use Hard Drugs (Last 30 Days)	0.0440 (0.2050)	Alcohol Awareness in School	0.9480 (0.2221)
Start Marijuana Use	0.0543 (0.2266)	Alcohol in Home	0.3909 (0.4880)
Start Hard Drug Use	0.0201 (0.1403)	Tobacco Awareness in School	0.9336 (0.2490)
Smoked in the Past	0.3944 (0.4887)	Drug Awareness in School	0.9669 (0.1789)
Drunk Alcohol in the Past	0.5126 (0.4998)	Male	0.4822 (0.4997)
Used Marijuana in the Past	0.2624 (0.4399)	White	0.5787 (0.4938)
Age	18.1364 (3.0774)	Work Missing	0.0004 (0.0208)
In School	0.7763 (0.4168)	State Cigarette Tax Rate	32.94 (16.35)
Work	0.6108 (0.4876)	State Education Spending	352.51 (129.03)
Ever Had Sex	0.5477 (0.4977)	Family Income	36.70 (49.92)
Height (Inches)	66.71 (4.15)	# Adolescents in Household	0.6260 (0.9294)
Weight (Pounds)	150.61 (39.76)	Highest Parent Education	5.37 (2.93)
Married	0.3239 (0.4680)	% of the State that Smokes	23.06 (2.72)
Parent(s) Drink	0.6078 (0.4882)	School Percentage White	79.36 (24.82)
Parent(s) Smoke	0.6642 (0.4723)	School Public	0.9233 (0.2662)
State AFDC Avg. Payment	123.07 (51.12)	School Size Category*	2.31 (0.73)
Biological Dad Present	0.6222 (0.4848)	School Urban	0.2872 (0.4525)
Biological Mom Present	0.9008 (0.2990)	State Unemployment Rate (from 1995)	0.0205 (0.0081)
Cigarettes in Home	0.3992 (0.4897)	Observations (person years)	29,985
		Number of individuals	9,995

*School size categories by number of students: 1 ≤ 100 , 2 = 100 - 299, 3 = 300 - 499, 4 = 500 - 749, 5 = 750-999, 6 $\geq 1,000$

Add Health contains information on individual smoking, drinking, marijuana use, and hard drug use. Table 2 contains summary statistics for the sample of 9,995 individuals from the

Add Health used in this study.⁷ The current marijuana usage rate (as defined by usage in the last 30 days) for the full sample is 17% with approximately 4% of the sample using hard drugs, such as cocaine and heroin. 39% of the individuals in this sample have smoked in the past, 51% consumed alcohol in the past, and 26% used marijuana in the past. The age of the individuals in this survey ranges from 12 to 27 years old and the average age is 18 years old. 55% of the sample reports having had sex. 5% of the sample starts using marijuana in any given year and 2% starts using hard drugs. These variables (*Start Marijuana Use* and *Start Hard Drug Use*) are dummy variables that are equal to one if the individual reported that he/she had never used the specific drug in a previous wave of the survey, but reports that he/she has used it in the current period (t).

The Add Health data also contains some other key variables that have been missing from a number of past studies; parents are asked if they smoke and/or drink, individuals are asked about the presence of cigarettes, alcohol, and drugs in the individual's childhood home, and there is a variable indicating whether or not a child learned about the dangers of these behaviors in school.⁸ 40% of individuals report having cigarettes easily available in their home, 5% report drugs are easily available, and 39% report alcohol is easily available. For 66% of the individuals in the sample at least one parent reports that they smoke and for 61% at least one parent reports that they drink. The percentage of individuals in the sample who report that they learned about the dangers of smoking, drinking, and drug use in school are 93%, 95%, and 97%, respectively.

As mentioned in Section 2 of this paper, it is possible that estimates of the gateway effect may be upwardly biased by an unobservable propensity for drug use. In order to control for this propensity for drug use, individual specific fixed effects are included in linear probability regressions.⁹ If the coefficient on past drug use significantly diminishes or disappears completely, then that implies that there may be little causation in the move from lower level drugs to harder ones and that the gateway effect may simply be caused by availability differences between drugs or other unobservable determinants of drug use.

To estimate the gateway effect of alcohol and cigarettes on marijuana use, the following equation is estimated using a linear probability model:

$$\begin{aligned} MarijuanaUse_{i,t} = & \beta_0 + \beta_1 PastAlcoholUse_{i,t} + \beta_2 PastCigaretteUse_{i,t} + \beta_3 X_{i,t} + \\ & + \beta_4 SchoolCharacteristics_{i,t} + \beta_5 StateCharacteristics_{i,t} + \beta_6 Wave_t + e_{i,t} \end{aligned} \quad (1)$$

where *MarijuanaUse* is a dummy variable that equals 1 if individual i used marijuana during wave t . *PastAlcoholUse* is a dummy variable that equals 1 if individual i used alcohol at any point before wave t . *PastCigaretteUse* is a dummy variable that equals 1 if individual i used cigarettes at any point before wave t . X contains age, gender, height,

⁷ Observations were dropped if the individuals were not in the sample for all 3 waves or if any of the key variables had missing values.

⁸ Pacula (1998), Fergusson and Horwood (2000) and Fergusson, et al. (2006) used variables measuring parental drug behavior, but they did not utilize the other variables listed.

⁹ A probit analysis with approximately 10,000 individual specific fixed effects proved computationally unwieldy. The sample was split by race to make the fixed effects probit computationally feasible, but the results were not exceptionally different from those presented here.

weight, the number of individuals present in the individual's adolescent home that are in grades 7-12, a dummy variable that equals 1 if the individual is white, a dummy variable for marital status, a dummy variable that equals 1 if the individual has ever had sex¹⁰, a dummy variable for employment status, a dummy variable for school enrollment, dummy variables for the presence of the individual's biological father and mother during the individual's adolescence, a measure of the parents' highest education level, and family income. X also contains dummy variables for parental drinking and smoking, the dummy variables for the presence of tobacco products, alcohol and drugs in the individual's home while growing up, and dummy variables for the individual having received education about the effects of tobacco, alcohol, and drugs during school. *SchoolCharacteristics* contains a dummy variable that equals 1 if the school the individual attended in wave 1 of the study is located in an urban setting, the percentage of that school that is white, a categorical variable for school size, and a dummy variable that equals 1 if that school is public. *StateCharacteristics* contains the variables for the state the individual lived in during wave 1 of the survey. The variables contained in *StateCharacteristics* are average AFDC payment, the cigarette tax rate, the percentage of the state that smoked, the state per capita education spending, and the state unemployment rate from 1995.

The gateway effect of alcohol, cigarettes, and marijuana on hard drug use is estimated via a linear probability model using the following equation:

$$\begin{aligned}
 \text{HardDrugUse}_{i,t} = & \alpha_0 + \alpha_1 \text{PastMarijuanaUse}_{i,t} + \alpha_2 \text{PastAlcoholUse}_{i,t} + \alpha_3 \text{PastCigaretteUse}_{i,t} + \\
 & + \alpha_4 X_{i,t} + \alpha_5 \text{SchoolCharacteristics}_{i,t} + \alpha_6 \text{StateCharacteristics}_{i,t} + \alpha_7 \text{Wave}_t + \varepsilon_{i,t}
 \end{aligned} \quad (2)$$

where *HardDrugUse* is a dummy variable that equals 1 if individual i used hard drugs (cocaine, LSD, PCP, ecstasy, mushrooms, inhalants, and/or injection drugs) during wave t . *PastMarijuanaUse* is a dummy variable that equals 1 if individual i used marijuana at any point before wave t . The other variables are defined as in equation 1.

Equations 1 and 2 model the gateway effect as the effect of past drug use on the probability that an individual uses a harder drug in the current period, an approach that does not fully take into account sequencing. In order to properly model the sequencing predicted by the gateway theory a hazard model is also estimated. Equation 3 is individual i 's hazard for initiating marijuana use (λ_M , variable name: *Start Marijuana Use*) and equation 4 is individual i 's hazard for initiating hard drug use (λ_H , variable name: *Start Hard Drug Use*). The dependant variables for these two models (*Start Marijuana Use* and *Start Hard Drug Use*) are dummy variables that are equal to one if the individual reported that he/she had never used the specific drug in a previous wave of the survey, but reports that he/she has used it in the current period (t).

$$\begin{aligned}
 \lambda_M(t_i) = & \lambda_{M0}(t_i) \exp(\phi_1 \text{PastAlcoholUse}_{i,t} + \phi_2 \text{PastCigaretteUse}_{i,t} + \phi_3 X_{i,t} + \\
 & + \phi_4 \text{SchoolCharacteristics}_{i,t} + \phi_5 \text{StateCharacteristics}_{i,t})
 \end{aligned} \quad (3)$$

where $\lambda_{M0}(t_i)$ is the "baseline" hazard and the other variables are defined as in equation 1.

¹⁰ The dummy variable for having had sex is included in all the estimation models presented in this paper despite the fact that it may be endogenous. Its inclusion does not significantly change the magnitude or statistical significance of the coefficients measuring the gateway effect.

$$\lambda_H(t_i) = \lambda_{H0}(t_i) \exp(\gamma_1 PastMarijuanaUse_{i,t} + \gamma_2 PastAlcoholUse_{i,t} + \gamma_3 PastCigaretteUse_{i,t} + \gamma_4 X_{i,t} + \gamma_5 SchoolCharacteristics_{i,t} + \gamma_6 StateCharacteristics_{i,t}) \quad (4)$$

where $\lambda_{H0}(t_i)$ is the “baseline” hazard and the other variables are defined as in equation 2. The primary advantage of using hazard model analysis is that it more accurately models the sequential aspect of the gateway theory hypothesis.¹¹ As mentioned above, Beenstock and Rahav (2002) and van Ours (2003) both utilized a hazard model. This research also uses hazard model analysis to take advantage of the sequential nature of the gateway effect.

Equations 1 and 2 were also modified to allow us to measure the effect that using multiple gateway drugs has on the probability of marijuana and hard drug use. Interaction terms are added to account for previous use of multiple potential gateway drugs in the following fashion:

$$MarijuanaUse_{i,t} = \tau_0 + \tau_1 PastAlcoholUse_{i,t} + \tau_2 PastCigaretteUse_{i,t} + \tau_3 PastA * PastC_{i,t} + \tau_4 X_{i,t} + \tau_5 SchoolCharacteristics_{i,t} + \tau_6 StateCharacteristics_{i,t} + \tau_7 Wave_t + v_{i,t} \quad (1b)$$

$$HardDrugUse_{i,t} = \mu_0 + \mu_1 PastMarijuanaUse_{i,t} + \mu_2 PastAlcoholUse_{i,t} + \mu_3 PastCigaretteUse_{i,t} + \mu_4 PastA * PastC_{i,t} + \mu_5 PastM * PastC_{i,t} + \mu_6 PastA * PastM_{i,t} + \mu_7 PastA * PastC * PastM_{i,t} + \mu_8 X_{i,t} + \mu_9 SchoolCharacteristics_{i,t} + \mu_{10} StateCharacteristics_{i,t} + \mu_{11} Wave_t + v_{i,t} \quad (2b)$$

where $PastA * PastC$ is the interaction of past alcohol use and past cigarette use and equals 1 if an individual has used both cigarettes and alcohol in the past, $PastM * PastC$ is the interaction of past marijuana use and past cigarette use and equals 1 if an individual has used both cigarettes and marijuana in the past, $PastA * PastM$ is the interaction of past alcohol use and past marijuana use and equals 1 if an individual has used both alcohol and marijuana in the past, and $PastA * PastC * PastM$ is the interaction of past alcohol use, past cigarette use, and past marijuana use and equals 1 if an individual has used cigarettes, alcohol, and marijuana in the past. Equations 3 and 4 were also modified in the same fashion to account for the use of multiple potential gateway drugs. Interaction terms of this nature have not, to the best of our knowledge, been used in previous studies to examine the effect using multiple gateway drugs has on the magnitude of the gateway effect.

Results

Table 3 contains the results of estimating equation 1 using ordinary least squares with and without individual specific fixed effects and with interactions indicating the use of multiple potential gateway drugs. Past tobacco and alcohol use appears to be a significant indicator of current marijuana use. Including individual specific fixed effects reduces the magnitude of the effect of past tobacco and alcohol use on marijuana use, but the effects remain statistically significant. The coefficient on past tobacco use is 0.05, indicating that an individual who used tobacco in the past is 5 percentage points more likely to use marijuana than an individual who has not used tobacco. Likewise, the probability that an individual

¹¹ The `stcox` command in STATA© was used to estimate equations 3 and 4. We had hoped to include frailty modelling when estimating the hazard models, but with over 9,000 individuals in the sample this proved computationally impossible. However, a 3% sample of the data was run with and without frailty modelling and the results were not significantly different across the two models.

uses marijuana is 6 percentage points higher if that individual drank alcohol in the past. The effects of past tobacco and past alcohol use fell by approximately half when individual specific fixed effects were included in estimation. These findings indicate that 58% and 41% of the original gateway effects of tobacco and alcohol on marijuana use were caused by unobservable individual specific characteristics.

When including individual specific fixed effects and interaction terms to account for individuals' prior use of multiple potential gateway drugs, the coefficient on past smoking remains 0.05, meaning that if an individual has smoked in the past, but has not consumed alcohol, then they are 5 percentage points more likely to use marijuana. An individual who has consumed alcohol in the past, but has not smoked is 6 percentage points more likely to use marijuana. An individual who has consumed alcohol and smoked in the past is 11 percentage points more likely to use marijuana.¹²

Table 3: OLS Results for Marijuana Use

	No Fixed Effects Coefficient (Std. Error)	Fixed Effects Coefficient (Std. Error)	Fixed Effects & Interactions Coefficient (Std. Error)
Smoked in the Past	0.1202*** (0.0047)	0.0505** (0.0222)	0.0502** (0.0242)
Drunk Alcohol in the Past	0.1034*** (0.0048)	0.0600*** (0.0082)	0.0598*** (0.0098)
Smoked and Drank in Past	-- --	-- --	0.0005 (0.0148)
Age	-0.0156*** (0.0013)	-0.0089** (0.0037)	-0.0089** (0.0037)
In School	-0.0052 (0.0064)	0.0215*** (0.0072)	0.0215*** (0.0072)
Ever Had Sex	0.1198*** (0.0050)	0.0943*** (0.0065)	0.0943*** (0.0065)
Married	-0.0481*** (0.0046)	-0.0368*** (0.0076)	-0.0368*** (0.0076)
Observations (Person Years)	29,985	29,985	29,985
Individuals	9,995	9,995	9,995

* indicates significance at the 10% level, ** indicates significance at the 5% level, and *** indicates significance at the 1% level.

For all results tables: State Controls, School Controls, and Family Controls are also included in the analysis, but the results are not listed for the sake of brevity. For full results contact the author.

Table 4 contains the results of estimating equation 2 using OLS with and without fixed effects and with the interaction terms discussed in section 4. The results indicate that past marijuana use, past smoking, and past alcohol consumption all increase the probability that an individual will use hard drugs in the current period. Including individual specific fixed effects in the estimation of equation 2 causes the coefficient on past marijuana use to decrease by 52%, while the coefficient on past smoking increased by 52% and the coefficient on drinking did not change significantly. The coefficient on past marijuana use is 0.0358, indicating that if an individual used marijuana in the past, that individual is 3.6

¹² This number is obtained by summing the coefficients on past smoking, past drinking, and the interaction term indicating that the individual smoked and drank in the past.

percentage points more likely to use hard drugs now. An individual who smoked in the past is 3 percentage points more likely and an individual who drank in the past is 1 percentage point more likely to use hard drugs in the current period.

Table 4: OLS Results for Hard Drug Use

	No Effects Coefficient (Std. Error)	Fixed Effects Coefficient (Std. Error)	Fixed Interactions Coefficient (Std. Error)	Effects &
Used Marijuana in the Past	0.0741*** (0.0031)	0.0358*** (0.0098)	0.0605*** (0.0095)	
Smoked in the Past	0.0186*** (0.0028)	0.0283** (0.0135)	-0.0193 (0.0144)	
Drunk Alcohol in the Past	0.0100*** (0.0028)	0.0120** (0.0049)	-0.0148** (0.0059)	
Smoked and Drunk in Past	--	--	0.0219** (0.0092)	
Marijuana and Smoked in Past	--	--	0.1844*** (0.0127)	
Marijuana and Alcohol in Past	--	--	0.1402*** (0.0083)	
Marijuana, Smoked, and Alcohol in Past	--	--	-0.1522*** (0.0159)	
Age	-0.0046*** (0.0008)	0.0010 (0.0022)	0.0028 (0.0022)	
In School	-0.0013 (0.0037)	0.0075* (0.0043)	0.0062 (0.0042)	
Ever Had Sex	0.0240*** (0.0029)	0.0269*** (0.0039)	0.0164*** (0.0038)	
Married	-0.0256*** (0.0026)	0.0166*** (0.0046)	-0.0104** (0.0044)	
Observations (Person Years)	29,985	29,985	29,985	
Individuals	9,995	9,995	9,995	

* indicates significance at the 10% level, ** indicates significance at the 5% level, and *** indicates significance at the 1% level.

Including both fixed effects and interactions indicating multiple past drug use changes the story slightly. An individual who has used marijuana, but not cigarettes or alcohol, is 6 percentage points more likely to use hard drugs in the current period. Individuals who have only smoked in the past, but have not used marijuana or alcohol, are not significantly more or less likely to use hard drugs than the rest of the sample. If an individual drank in the past, but has never smoked or used marijuana, the probability that individual uses hard drugs decreases by 1.5 percentage points. An individual who has smoked and consumed alcohol appears to be 1 percentage point less likely to currently use hard drugs, but the

effect is not statistically significant.¹³ If an individual smoked and used marijuana in the past, the probability that individual currently uses hard drugs increases by 23 percentage points.¹⁴ The probability that an individual currently uses hard drugs increases by 19 percentage points if that individual has used marijuana and consumed alcohol in the past.¹⁵ An individual who has used marijuana, smoked, and consumed alcohol in the past is 22 percentage points more likely to currently use hard drugs than those who have not.¹⁶ These findings indicate that as the number of “soft” drugs an individual has tried in the past increases, the probability that the individual will use hard drugs increases dramatically.

As mentioned in Section 2, the use of linear probability does not take into account the sequential nature of gateway effect theory as well as a hazard model for initial use of marijuana and hard drugs. Table 5 contains the results of the estimation of the hazard model for initial use of marijuana (equation 3) with interactions to capture the effects of having used multiple potential gateway drugs. Past smoking and drinking are both statistically significant with the expected positive effect on the likelihood that an individual will start using marijuana in time t (hazard ratios of 1.4 for smoking and 1.6 for drinking).

Table 5: Hazard Model Results for Marijuana Use

	Hazard Ratio (Std. Error)	Hazard Ratio With Interactions (Std. Error)
Smoked in the Past	1.373*** (0.100)	2.423*** (0.281)
Drunk Alcohol in the Past	1.595*** (0.123)	2.212*** (0.209)
Smoked and Drank in Past	-- --	0.440*** (0.061)
Age	0.800*** (0.024)	0.799*** (0.024)
In School	1.106 (0.170)	1.092 (0.167)
Ever Had Sex	1.496*** (0.110)	1.496*** (0.109)
Married	1.118 (0.125)	1.117 (0.125)
Number of Eventual MJ Users	1,026	1,026
Individuals	9,995	9,995

* indicates significance at the 10% level, ** indicates significance at the 5% level, and *** indicates significance at the 1% level.

¹³ This number is obtained by summing the coefficients on past smoking, past drinking, and the interaction term indicating that the individual smoked and drank in the past. These 3 coefficients are not jointly significant at the 10% level.

¹⁴ This number is obtained by summing the coefficients on past marijuana use, past smoking, and the interaction term indicating that the individual used marijuana and smoked in the past.

¹⁵ This number is obtained by summing the coefficients on past marijuana use, past drinking, and the interaction term indicating that the individual used marijuana and drank in the past.

¹⁶ This number is obtained by summing the coefficients on past marijuana use, past drinking, past smoking, the interaction term indicating that the individual smoked and drank in the past, the interaction term indicating that the individual smoked and used marijuana in the past, the interaction term indicating that the individual used marijuana and drank in the past, and the interaction term indicating that the individual smoked, drank, and used marijuana in the past.

When interaction terms are included, the hazard ratio for past smoking increases to 2.4, meaning that if an individual has smoked in the past, but has not consumed alcohol, then they are significantly more likely to start using marijuana in the current period. The hazard ratio for past drinking is 2.2, meaning that an individual who has consumed alcohol in the past, but has not smoked, is significantly more likely to start using marijuana than those who have not consumed alcohol. The interaction term indicating that the individual has both smoked and drank in the past has a hazard ratio of 0.44, so the cumulative hazard ratio for an individual who has smoked and consumed alcohol is roughly 5, meaning the estimated hazard of the initiation of marijuana use is 5 times that of individuals who did not smoke or drink.¹⁷ Again it appears that experience with multiple potential gateway drugs significantly increases the magnitude of the gateway effect.

Table 6 contains the results of estimating equation 4, the hazard model for initial hard drug use. As predicted by gateway theory, past smoking, drinking, and marijuana use all have a statistically significant positive effect on the likelihood that an individual starts using hard drugs in time t (hazard ratios of 2.5 for marijuana, 1.97 for smoking, and 1.7 for drinking). These results reinforce the finding from the linear probability analysis. Marijuana, cigarettes, and alcohol all play statistically significant gateway roles, with marijuana having the largest effect on the likelihood of hard drug use.

The results obtained by estimating the hazard model with interaction terms to control for the past use of multiple “soft” drugs support the findings of the linear probability analysis, indicating that past experience with multiple gateway drugs significantly increases the magnitude of the gateway effect. For example, an individual who smoked, drank, and used marijuana in the past has a cumulative hazard ratio from those three activities equal to 24.1, meaning the estimated hazard of that individual starting hard drug use is 24 times that of individuals who did not smoke, drink, or use marijuana.¹⁸ The magnitude of the effect found here is quite large, as is the magnitude of the effect found using linear probability analysis. Individuals using multiple gateway drugs appear to be at the greatest risk of using hard drugs.

Table 6: Hazard Model Results for Hard Drug Use

	Hazard Ratio (Std. Error)	Hazard Ratio With Interactions (Std. Error)
Used Marijuana in the Past	2.549*** (0.308)	1.444*** (0.184)
Smoked in the Past	1.967*** (0.255)	1.083 (0.383)
Drunk Alcohol in the Past	1.705*** (0.242)	1.493* (0.362)
Smoked and Drank in Past	--	1.697

¹⁷ This number is obtained by summing the hazard ratios on past smoking, past drinking, and the interaction term indicating that the individual smoked and drank in the past.

¹⁸ This number is obtained by summing the hazard ratios on past marijuana use, past drinking, past smoking, the interaction term indicating that the individual smoked and drank in the past, the interaction term indicating that the individual smoked and used marijuana in the past, the interaction term indicating that the individual used marijuana and drank in the past, and the interaction term indicating that the individual smoked, drank, and used marijuana in the past.

	--	(0.700)
Marijuana and Smoked in Past	--	12.718***
	--	(4.703)
Marijuana and Alcohol in Past	--	5.651***
	--	(1.431)
Marijuana, Smoked, and Alcohol in Past	--	0.056***
	--	(0.026)
Age	0.778***	0.816***
	(0.035)	(0.037)
In School	0.856	0.895
	(0.156)	(0.163)
Ever Had Sex	2.120***	1.788***
	(0.261)	(0.219)
Married	1.681**	1.681**
	(0.352)	(0.353)
Observations (Person Years)	439	439
Individuals	9,995	9,995

* indicates significance at the 10% level, ** indicates significance at the 5% level, and *** indicates significance at the 1% level.

Conclusions

This paper examines the effects marijuana, cigarette, and alcohol use have on the probability that an individual will use harder drugs. A linear probability model with individual fixed effects and a hazard model analysis are used to estimate gateway effects. Interactions are utilized in an attempt to capture the effect of having used multiple drugs in the past on the magnitude of the gateway effect. Both the linear probability analysis and hazard model analysis yield results that indicate there is a significant gateway effect for smoking, drinking, and marijuana use, with smoking and drinking increasing the probability that an individual starts using marijuana, and smoking, drinking, and marijuana use all increasing the probability that an individual will start using hard drugs.

The inclusion of fixed effects in the linear probability analysis generally diminished the magnitude of these gateway effects, but not the statistical significance. When interactions are used to account for the use of multiple potential gateway drugs we find that if an individual has used multiple “softer” drugs in the past the probability of hard drug initiation increases dramatically. An individual who has smoked cigarettes, drank alcohol, and used marijuana is much more likely to start using hard drugs than an individual who has never tried any of these drugs.

The estimates obtained here suggest that policies that target smoking, drinking, and marijuana use will, if effective, decrease the number of new hard drug users. The findings of this study also indicate that as the number of potential gateway drugs (cigarettes, alcohol, and marijuana) that an individual has tried in the past increases, the probability that the individual will use hard drugs increases dramatically. One policy prescription of these findings is that adolescents who are currently using more than one of the three gateway drugs studied here should be targeted first and foremost in any policy (advertising campaigns, policies that require drug counseling, etc) hoping to decrease hard drug use. We need to get the point across to these young men and women that they are on a slippery slope.



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Comparative Analysis of Hedge Funds

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Abstract

Hedge funds are categorized by four investment sectors: Equity, Fixed Income/Relative Value, Global Macros, and Fund of Funds. Strategies are composed of sub strategies that seek return in small segment of the market. The growing acceptance and empirical evidence of behavioral biases have shifted investment methodologies. Furthermore this analysis shows sub strategies that are able to incorporate behavioral biases do not outperform traditional strategies; however they do provide significant risk management and diversification. Investors with large piles of cash such as pension funds, endowments, and high net worth individuals seek alternative investment strategies for high excess returns. Hedge funds are a specific type of alternative investment class that delivers a large array of returns based on whatever strategy the hedge fund employs (Anson 2006). Hedge funds operate in four different areas: equity, fixed income, fund of funds, and global macros where managers pursue a variety of strategies which are determined by factors including type of instrument, market sector, specialty, methods, diversification, and many others. For evaluating success of different strategies used managers, hedge funds are grouped together by common characteristics. This process is notoriously difficult because any classification is subjective and inconsistent with others (Ineichen 2008). Scholars and organizations put together different collections of strategies to create hedge fund indices. The proprietary knowledge with how each hedge fund enacts their strategies make identifying exactly what they do improbable and therefore they are grouped based on whatever information or description they wish to reveal (Lo 2001). The recent outpour of behavioral research has shifted the investing methodologies of hedge funds from traditional investment strategies to strategies that incorporate behavioral biases. The most frequently used behavioral strategies are gamblers fallacy (or house money effect), hot hand fallacy, and recognition of glamour stocks. Equity funds are able to take advantage of investors that fall into these behavioral traps and short overvalued stocks taking advantage of mean reversion while purchasing value assets at fundamentally sound asset at low prices

Keywords: Hedge funds, behavioral biases, global macros



Reluctant Professors: Why are we avoiding the teaching-tech web parade?

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Abstract

Let's face it, #1: many of our faculty would rather have their teeth filed down than tap into the extensive array of available educational web tools. Let's face it, #2: many of their students would happily do that teeth filing than experience another death-by-PowerPoint lecture. Why are these professors so reluctant? In this session, we will explore the most powerful barriers keeping many from experimenting with the new teaching tech tools. Then, more importantly, we will identify multiple ways to overcome these barriers and get those professors (and you?) riding on the parade's front float. The presenter's own psychological baggage will be offered as fodder for both ridicule and discussion springboard. BYOB (barrier!).

Keywords: motivation, technology, professors, teaching, theory



Engaging Faculty in Accreditation and Assessment: Insights from the Organizational Change Literature

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Abstract

Accreditation has become vital for many universities in different countries. Accreditation often influences students in their school choice, provides external validation, and assures accountability to stakeholders. The Association to Advance Collegiate Schools of Business International (AACSB) is a leading international accreditor of business and accounting programs, with accredited institutions located in 48 countries and territories (<http://www.aacsb.edu>). AACSB standards require faculty engagement (e.g., Andrade, 2011; Eschenfelder, Bryan, & Lee, 2014). Yet, many faculty are reluctant to participate in accreditation-related activities and the “normal” degree of faculty participation varies greatly across institutions. Thus, in addition to persuading individual faculty, substantive organizational change at the college level is crucial to sustaining faculty engagement. The authors use Kotter’s (1996) eight-step model for organizational change to develop a suggested roadmap designed to create and sustain faculty engagement. Kotter’s eight steps are: 1) create a sense of urgency; 2) build a guiding team; 3) get the vision right; 4) communicate the vision for buy-in; 5) empower action; 6) create short-term wins; 7) don’t let up; and 8) make change stick. This roadmap describes each step, identifies the behavior that needs to be cultivated for each stage, provides suggestions on how to develop that new behavior, and presents specific implementation examples from accreditation activities. The paper concludes with a discussion of lessons learned as well as identification of key opportunities and challenges in using this approach.

Keywords: association to advance collegiate schools of business; accreditation; change management; faculty engagement; persuasion.



Physical Activity Behavior in a Psycho-Social Viewpoint

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Abstract

This study aimed to identify differences in individual, social, and physical environmental factors across the stages of physical activity and explore the effect of those variables on physical activity among older adults. 290 adults aged over 65 years were recruited from the Seodaemun district of Seoul. Standardized scales were used to measure physical activity, stage-of-change, self-efficacy, decisional balance, social support, and the physical environment. The results indicated that 70.7% of older adults engaged in regular physical activity. Based on the MANOVA, only the psychological variables of self-efficacy and perceived benefits and the environmental variables of family support and the physical environment increased significantly across the stages of physical activity change. Based on the regression analysis, the most important predictors of physical activity in a descending order of significance were self-efficacy, perceived benefits, family support, and the physical environment. The total variance in physical activity explained by these variables was 40%.

Keywords: physical activity; psychological variable; social variable; environmental variable

A Computational Comparison of Double Barrier Option Prices

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Abstract

A double-barrier option is characterized by a lower barrier and an upper barrier; the option is knocked either in or out if the underlying process touches one of the barriers. Under the Black-Scholes environment, we can derive the fair price of a double barrier option as follows. Since the transition probability of a generalized Brownian motion satisfies the Fokker-Planck-Kolmogorov equation, it can be represented by the fundamental solution or the Fourier series solution of the heat equation. Moreover, since there exist two absorbing barriers, we can represent the trivariate joint probability density of a generalized Brownian motion and its maximum and minimum by an infinite series of Gaussian probability densities or a Fourier series using Lord Kelvin's method of images. Therefore, the risk-neutral value of a double barrier option is represented by an infinite series of Gaussian cumulative distribution functions, which is called a Gauss solution, or by an infinite Fourier series, which is called a Fourier solution. In practice we should decide how many terms of an infinite series solution be included to obtain necessary accuracy. We present a very sharp stopping criterion for each of the Gauss and Fourier solutions. German and Yor (1996) represent the double barrier option price using the inverse of a Laplace transform, and propose to calculate it numerically. We call it a Laplace solution. Our purpose is to compare computationally the three solutions of an up-and-out-down-and-out call option. We calculate the Gauss and Fourier solutions using the proposed stopping criteria, and do the inverse Laplace transform using Gauss-Laguerre quadrature. Based on intensive experiments, we can conclude as follows. First, the Laplace solution is computationally inferior to either the Gauss solution or the Fourier solution. Secondly, for a fixed tenor, the number of terms of a Gauss solution necessary to keep accuracy increases as volatility increases. But, the number of terms of a Fourier solution decreases as volatility increases. Thirdly, for a fixed volatility, the number of terms of a Gauss solution necessary to keep accuracy decreases as tenor decreases. But, the number of terms of a Fourier solution does not change so much as tenor decreases. Finally, if neither the volatility nor the tenor is small, the Fourier solution is computationally more efficient than the Gauss solution. Otherwise, the Gauss solution needs less computational time and is numerically more stable than the Fourier solution.

Keywords: Double barrier option, Gauss probability density, Fourier series, Laplace transform, Computational efficiency, Fokker-Planck-Kolmogorov equation

Cross Contamination Effects in Sports Marketing

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Abstract

Sports sponsorship in North America is big business, with an estimated \$14.35 billion spent on the activity in 2014 alone. This number represents 70% of the total sponsorship dollars spent by companies in North America (IEGSR, 2014), and this is a 4.9% increase over 2013, which saw a 5.1% growth over 2012. While impressive, these numbers pale in comparison when one considers that in 2013, Americans spent 25.4 Billion dollars on professional sports alone. While several different models relating to endorsement marketing have been developed and tested, namely Source Credibility, Source Attractiveness and Product Match, few studies have taken existing marketing efforts and tested their effectiveness on actual consumers of the marketing materials. The current project is an on-going effort to measure how college football fans react to advertising by a company that targets rival fan bases. For example, Ford Motor Company currently sponsors at least four head football coaches in the highly competitive Southeastern Conference. The television ads are remarkably similar and always involve the head coach advocating the Ford F-150 pickup truck with highly visible attachments to a specific college football team. Previous research has indicated that team identity has a strong influence on both sponsor image and purchase intentions (Tsiotsou & Aleandris, 2008). However, no previous studies have addressed the issue of cross-contamination, i.e. what happens when the highly identified fan sees the same company, sponsoring a rival sports team? Eight respondents, 4 men and 4 women were randomly selected to participate in the study. Their inclusion was based off the fact that they are not a current University student and that they identified themselves as fans of the same team. The subjects were screened for participating in fMRI research and once cleared, then completed a brief paper based survey. The respondents were then inserted into the fMRI machine, and shown a series of images and advertisements. The first set of images were generic images of 4 different companies, two major multi-national companies and two regional companies, all of which participate in college football related advertising. The second set of images, were actual advertisements used by the same companies, but branded with the participants favorite college football team. The third set of images were the same companies marketing materials, but this time branded with two of the participants greatest rivals on the football field. The preliminary analysis indicates that some brain regions increase activation from the generic advertisements to the images of advertisements branded with the participant's favorite team. These participants however do realize a subsequent decrease in activation when exposed to the same companies advertisements but branded with a rival. The preliminary results indicate that companies may not be using their money the best way possible when it comes to their current branding and marketing efforts within college football. As noted by Abosag, Roper and Hind (2010), "Consumers are not just passive receivers of marketing information; they are active in the production of meaning and do things with marketing messages". The current results seem to support this notion, and indicate that the positive traction that is gained by branding a product with an individual's favorite sports team can be lost if that same individual sees the same company supporting a rival.

Keywords: sports marketing, neuromarketing, consumer behavior, functional magnetic resonance imaging



Financial Literacy and Retirement Planning: A Survey Analysis of College Students

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Abstract

Previous studies support the notion that financial literacy is an important factor in the retirement planning and saving process. In this research, we propose to conduct a comprehensive survey of a sample of college students from the greater Houston area to assess their level of financial literacy and to ascertain whether their savings and retirement planning process is or will be affected by their level of financial literacy. In addition, based on the survey results, we will provide a comprehensive approach to mitigate retirement savings problems among target groups by proposing education programs and informational sessions that can be presented by universities, financial planners, pension fund companies, and local and federal agencies in order to increase awareness about appropriate approaches to building retirement savings.

Keywords: financial literacy, retirement planning, survey

The Business Plan Competition Schemes as a Trend Marker of the Innovative Start-up Companies' Market: The Case of the “Premio Nazionale Innovazione” and of the “Start Cup Sardegna”

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Abstract

The European policies on innovation and research of the past 15 years have focused their funding efforts in favor of the creation of the so-called knowledge-based economy. The local/regional response to such policies however are sometimes irregular and inconsistent, partly because of the inhomogeneous distribution of subjects capable to acknowledge and effectively adopt such innovative directions. This delay in the harmonization of the strategic goals of Universities, SMEs, Investors and Public Bodies has been tackled partly thanks to dedicated governance projects, mostly funded by the EU, and through other initiatives, such as the Innovation Prizes aimed at the selection and tutoring of innovative business ideas. The competition applicant's data make for a very interesting data base in order to analyze the trends of the innovation market. With the aim to understand which sectors have attracted the larger share of interest in term of studies and testing aimed at the creation of business in Italy in the past 12 years, this paper analyzes the innovative proposals submitted both to the regional selections and the ones selected for the National finals. Regarding the regional contest, the region of Sardinia has been chosen as a test region. The analysis has been carried out in several directions: an historic perspective, a sectorial overview and a geographic analysis.

Keywords: innovation, innovation policy, innovation market analysis, business plan competition, technology transfer, start-up.

Introduction

The European policies on innovation and research of the past 15 years have focused their attention and their funding in favor of the creation of the so-called knowledge-based economy, an economic model destined to replace the manufacturing-based industrial production model that guided the western world's economy until the end of the 20th century.

The local/regional response to such policies however are sometimes irregular and inconsistent, partly because of the inhomogeneous distribution of institutional actors as well as private operators capable to acknowledge and effectively adopt such innovative directions.

Furthermore, not always the scientific community on one side and the entrepreneurial world on the other have been able to adequately communicate one with the other and with the governing institutions, with the aim to create virtuous environments capable to

stimulate innovation and the creation of new high-tech businesses, as theorized by Etzkowitz and Leydesdorff at the end of the nineties.

This delay in the harmonization of the strategic goals of Universities, Businesses, Financial Institutions and Public Bodies has been tackled somehow thanks to dedicated governance projects, mostly funded by the EU, and through other initiatives, such as incentives' system for the selection and the tutoring of innovative business ideas.

The rationality behind the Innovation Prizes (or Business Plan Competitions) is to allow the organizers, often Universities or Academic Business Incubators, to use the drivers of competition and financial reward to stimulate the promoters of innovative entrepreneurial project to give shape to their ideas starting from a set of knowledge intensive assets, developed within the universities, and to confront them and test their feasibility against the international market and the potential investors.

In Italy the Premio Nazionale Innovazione (National Innovation Prize), organized by the national association of business incubators PNICube has recently closed its 12th edition. Since its creation it has supported the founding of over 400 new companies that employ approximately 3,000 people.

With the aim to understand which activity sectors have attracted the larger share of interest in term of studies and testing aimed at the creation of business in Italy in the past 12 years, this paper analyzes the innovative proposals submitted both to the regional selections (Start Cup), and the ones selected for the National finals. Regarding the regional contest, the region of Sardinia has been chosen as a test region.

Sardinia is a 24,000 sq. km. insular region of Italy, inhabited by 1,6 million people. Its economy is mainly rural and connected to tourism. Nevertheless, the region is home to two universities and hosts a system of public agencies dedicated to promoting innovation and technology transfer from the academic to the industrial system.

The choice of Sardinia as a touchstone of this research is justified by the fact that it is usually not considered among the “industrialized” or “innovative” regions of the Italian economy. This allows to focus mainly on the ideas submitted to the Business Plan Competitions without the influence that may interfere with a neutral analysis when it comes to other more industrialized regions of Italy, such as Lombardy, Piedmont or Veneto.

Theory and research objective

The innovation ecosystem in Italy aims to support the research and to transform its results in economic activities. This ecosystem is composed by several actors that develop, each one within their mission and statutory limits, actions and initiatives aimed at fostering the creation and the growth of innovative SMEs (PMII, Piccole Medie Imprese Innovative).

On a general level the top level of the innovation building is made by the national research institutions as the CNR (Consiglio Nazionale della Ricerca, National Council for Research) or the ISS (Istituto Superiore della Sanità, Superior Institute of Health). Such entities carry

out the national research policies following the instructions and the directions planned by the government.

On a regional level, other operators interact within the market of innovation:

Table 1. Innovation Actors

Innovation Policy Actors	Provide for	Support the creation/management of
Universities	training and education basic and applied research technology transfer	Scientific and Tech Parks (STPs) Business Incubators and Accelerators
Regional Governments through Research and Innovation Agencies	financial support technical support applied research	
Chambers of Commerce Business Associations	financial support contacts with the industry	

Universities play a key role in the production and the spreading of the knowledge necessary to innovate. Furthermore, thanks to the supporting structures and the phenomenon of spin-off companies, a model of university with stronger connections to the innovative needs of businesses is developing.

Universities support the technology transfer and the creation of business through dedicated structures: the Industrial Liaison Offices (ILOs) and the Business Incubators and Accelerators which allow the transformation of innovative ideas into productive companies thanks to a set of services provided, namely coaching, technical assistance, strategic advisory and infrastructural support.

There are two universities in Sardinia: the University of Cagliari and the University of Sassari. Both have collaboration agreements with the regional agencies for research.

The University of Sassari (UNISS) launched in 2014 its incubator CUBACT with the aim to provide assistance and support to the new entrepreneurs both in the first stages of the business idea concept development (pre-incubation) and in the actual incubation phase. The beneficiaries of the services provided by CUBACT are both researchers or professors of the University of Sassari and outsiders.

The agencies for research and innovation are public entities controlled by the regional government whose mission is focused on *innovation policy support* and on other, more applied activities as:

- implementation of research and technology development programmes
- integration between research and industry
- development of human capital through training
- creation of clusters and innovation districts
- competence based networking
- support to the creation of Innovative SMEs through dedicated financial tools
- promotion, management and development of Scientific and Technologic Parks (STP)

In Sardinia the most important agency for research is Sardegna Ricerche.

Established in 1985 by the Regional Council under the name of "Consorzio Ventuno" it adopted its actual denomination in January 2007. In the same period the agency embraced its new mission, focused on the promotion of research and of technology transfer as well as the development of the knowledge-based economy. Sardegna Ricerche is also responsible for the management of the Scientific and Technologic Park of Sardinia, founded in 2003.

The STP of Sardinia has two branches and hosts over 60 companies; it's one of the largest STPs of Italy. The STP is specialized in three main areas:

- ICT
- Biotechnologies, spanning from biomedicine to bioinformatics
- Renewable Energies.

The Park provides to its tenants multifunctional offices, laboratories, reception services, logistic services and technology development services. Moreover the Park is equipped with technological platforms such as a bioincubator, an ICT Farm, a Nanotechnologies Lab, a supercomputer with a computing capacity of 137 TFlop and 5 PetaByte of disk space, a PATLIB (PATentLIBrary) with an archive of all Italian, European and international patents and trademarks, a documentation centre and a centralized scientific library.

Chambers of Commerce and Business Associations take part to the innovation ecosystem by representing the needs and aspirations of the business world. Their aim is to participate in the decision making process and propose solutions and initiatives, while at the same time acting as connectors between the governance entities, the markets and the local entrepreneurs. Moreover they support and are represented in the activities carried out by other entities, sometimes participating with funding or other contributions aimed at the success of their initiatives. Finally they support the innovative ideas through specific funding programmes (e.g. the Innovation Vouchers).

The Universities (through their ILOs), Research Agencies (through STPs) and, sometimes, the Chambers of Commerce and the Business Associations are among the main promoters of Business Incubators, structures where the innovative spin-off and start-up companies can access services like real estate (offices and labs), training and coaching, specialized consultancy (on issues as finance, marketing, management consulting) and networking with other entrepreneurs, in order to develop their productive structure and their business.

The business incubation practice started later in Italy compared to other countries. The creation of the first incubators in the country kicked-off in the eighties from a governmental initiative, with the aim to promote entrepreneurship and economic development. The first incubators were founded in 1984, with the creation of the BICs, Business Innovation Centers. Today there are 34 BICs spread over the whole national territory; they are also part of the European Business Network (EBN).

At the same time, the great development experienced by ICT and .com start-up companies induced the experimentation of a profit-oriented, privately-owned model of incubator, mainly at the hands of venture capitalists and industrial investors.

The Bank of Italy conducted a survey on the Italian business incubators in 2012 during which 53 active incubators were pinpointed: the oldest one was created in 1984, while over half of the existing incubators were established between 2003 and 2009.

The first element that emerges from the survey is a certain geographical fragmentation of the incubators' territorial distribution. Ten incubators are located in the north west of Italy, 18 in the north east, 17 in central Italy, 13 in southern Italy and the Islands.

Table 2. Italian Incubators population and ownership, Source: Bank of Italy

Region	Incubators	Private Property (%)	Public Property (%)
Piedmont	3	0	100
Lombardy	7	71	29
Trentino-Südtirol	2	0	100
Veneto	4	50	50
Friuli Venezia Giulia	3	33	67
Emilia Romagna	9	50	50
Tuscany	10	30	70
Umbria	1	0	100
Marche	2	50	50
Latium	4	75	25
Abruzzo	3	0	100
Molise	1	0	100
Campania	3	50	50
Apulia	2	0	100
Sicily	2	0	100
Sardinia	2	0	100
Italy	58	36	64

The National Innovation Prize and the Regional Start Cup

The Premio Nazionale per l'Innovazione (PNI) was born in 2003 with the aim to reward the best innovative business ideas of Italy.

The objective of PNI is to support the growth of highly innovative businesses and to promote the economic development of the territories where the local competitions are held. Moreover the PNI aims to disseminate the entrepreneurial culture and to foster the dialogue among researchers, companies, investors and financial institutions.

The PNI is organized every year by the Italian Association of Incubators and Business plan competitions (PNICube). It's divided in two steps, the regional phase, during which universities, incubators and other partner institutions organize local Business Plan Competitions (BPC), known as Start Cups; the second phase is the national competition where the winners of each regional Start Cup compete for the final prizes.

In Sardinia the regional Start Cup is managed by the ILOs of the two Sardinian Universities, in Sassari and in Cagliari.

Apart from the actual competition other communication activities, training and orienteering opportunities are set up, as thematic seminars on various related subjects

(business management, business strategy, marketing, intellectual property management, finance).

The Regional phase of the Start Cup is also divided in two steps: a local contest and a regional contest.

During the local contest, that is usually launched in springtime, the business ideas are submitted in a concise form, through an online application system together with an elevator pitch video. The local committees, whose members are appointed among experts of innovation and business management, analyze and evaluate the business ideas and select the 10 winners, 5 per each local contest.

Those 10 contestants (single applicants or groups) receive a money prize (worth approximately 2.000 euros) and continue to develop their ideas. The winners are also assigned a specialist to help them to draft the final version of their business plan. This elaborated business plan, together with a new version of the elevator pitch video, takes part to the regional finals. The technical and scientific committee, whose members are appointed jointly by the two universities, scrutinize the 10 proposals and award the prize to the best business plans. Three winners were selected from 2008 to 2013, while the 2014 edition awarded four prizes. The variability depends on the available budget.

Each applicant group receives a money prize (8.000, 4.000 e 2.000 € for the best three) and, if the idea comes from academic research, they access the national finals, which are normally held in December.

The money prizes of the local contest can be paid to natural persons while the regional and national prizes can be paid only to registered companies. Winners have one year's time after the award ceremony to officially create their company, otherwise the prize is withdrawn.

The 2015 edition will award 4 sector-based prizes, and two cross-cutting special mentions:

- *Life Sciences* (innovative services or products to improve people's health);
- *ICT* (innovative services or products in the field of ICT, new media, e-commerce, social media, mobile, gaming, etc.);
- *AgriFood–Cleantech* (innovative services or products for the improvement of environmental sustainability, agriculture and farming, energy waste reduction, etc.);
- *Industrial* (innovative services or products for industrial productions that do not fall in the previous categories and are innovative from the technology used or because they create new markets).

The amount of the prize is variable, depending on the organization's budget and sponsorships. In 2014 each prize was worth 25.000 euro. Special mentions are awarded to the best Social Innovation project and to the best Equal Opportunities project.

Methods

The data used for this study have been obtained thanks to the collaboration with the Industrial Liaison Office of Sassari University and with the PNICube Association.

Both entities, as organizers of their respective BPCs, possess the relevant data of every applicant business idea for each phase of the contests. The Sardinian Start Cup is organized each year since 2008; the available data, concerning 7 editions of the contest, allow us not only to analyze the historical series and the involved sectors, but also the survival capabilities of the business ideas that make it through the BPC different stages of the competition process. Thus we analyzed the participation to the Sardinian Start Cup in both stages, local and regional. Furthermore, and only for the Sardinian applicants, we measured the development and survival of the participating business ideas.

Based on the available data we are able to create two sector-based performance indicators. The first one, called the Transformation index (Ti) allows to measure the capability of the business ideas of a known sector, to actually evolve into the status of registered company.

$$Ti_x = \frac{\text{Registered Companies}_x}{\text{Phase 1 Applicants}_x} \times 100 \quad (1)$$

Where x is the chosen sector.

The second index, called the Development index (Di) is capable to measure the capability of the business ideas of a chosen sector (x) to develop into a structured business plan, which allows the participation to the regional finals of the Start Cup.

This second index, equivalent to:

$$Di_x = \frac{\text{Phase 2 Applicants}_x}{\text{Phase 1 Applicants}_x} \times 100 \quad (2)$$

also allows, when confronted with the Ti (1), to highlight the mortality rate of the business ideas, that is the rate at which the number of participants decreases from one phase to the other. The Mortality index for the sector x (Mi_x) equals the difference between:

$$Mi_x = Di_x - Ti_x \quad (3)$$

The PNI data refer to a 12 year time span, from 2003 to 2014. In order to compare the data and to simplify data processing, some preliminary elaborations were necessary.

The database of the 2003 and 2004 editions of the PNI not always stated the region of origin of the applicants. To solve this omission, that impairs proper geographical comparison among the applicants, the names and the Registration Number of the company were searched on a national database in order to identify the official registered address of each applicant. This search gave positive results for 569 out of a total of 571.

The editions 2009 to 2012 of PNI also counted on the participation of business ideas developed by specialized centers of the CNR (National Research Council) and ENEA

(National agency for new technologies, Energy and sustainable economic development. In order to keep data comparable on the geographic point of view, a further search on the web, based on the names of the promoters and on the sector, was necessary to identify the exact location of the specific research center or lab, where the actual project was developed. It has to be noted that the names chosen for the prize categories have sometimes changed from one edition to the other. It can be argued that this has been done to allow the winners of the regional Start Cups to easily ascribe their business plans in more general categories, sometimes paired (Cleantech & Agrofood), in consideration of the interdisciplinary, often cross-cutting, nature. The right of choice of the category in which a business plan will compete is of the applicants, not the organizers.

Nevertheless, in our study the categories have been standardized under a single unambiguous nomenclature, aimed, when possible, at separating paired categories and ascribe to the appropriate category each business plan, with the goal to keep the data as much comparable as possible.

The sectors used for the classification are the following:

1. Aerospace
2. Agro-food
3. Biomedical & Life Sciences
4. Cleantech
5. Culture and Heritage
6. Electronics
7. Energy & Environment
8. ICT
9. Industrial
10. Innovation Services
11. Nanotechnologies
12. Social innovation

In closing, not every Italian region organizes its own Start Cup; smaller and less populated regions prefer to join forces with neighbor regions and organize multi regional contests that are named e.g. “Start Cup Umbria & Marche” or “Piemonte & Val d’Aosta”. In order to allow geographical comparison among all applicants the business plans involved in the multi regional contests have been associated to the actual regions of residence, following the same methodology used to solve the other cases of missing data.

Our study follows three approaches: historical series, geographical location and sector analysis.

Results and Discussion

Analysis of the historical series of data:

In its 12 years of history the PNI collected 571 applicant business plans. Most of them at a later stage, have converted themselves into registered start-up companies.

Four regions (Lombardy, Veneto, Emilia Romagna and Piedmont) took to the PNI part since its first edition in 2003. The number of business plans that make it through from the regional selections to the national finals varies depending on the budget and the rules of each regional Start Cup.

Table 3. PNI Applicants 2003-2014, Source: Authors' elaboration of PNICube data

Region	Rounds	1st Year	Candidates	Sector	Region	Rounds	1st Year	Candidates	Sector
Lombardy	12	2003	57	8	Sardinia	7	2008	22	5
Veneto	12	2003	51	10	Calabria	6	2009	17	6
Emilia R.	12	2003	50	11	Molise	6	2007	11	6
Piedmont	12	2003	50	11	Latium	5	2007	22	4
Campania	11	2004	57	9	Marche	5	2006	9	4
Tuscany	11	2004	43	8	Trentino	5	2009	8	4
Umbria	11	2004	28	9	Liguria	4	2011	12	6
Sicily	10	2005	51	8	V. d'Aosta	2	2012	2	2
Friuli V. G	9	2004	45	7	Abruzzo	1	2012	3	1
Apulia	7	2008	30	7	Basilicata	1	2014	1	1

The first result of this analysis is the variety of sectors involved by the applicants proposals. A wider variability could be a marker of vitality of the local business and academic environment of a given territory. A more concentrated profile could be interpreted as a result of some kind of “specialty” or a consequence of the presence of “points of excellence” of a certain sector in the area (e.g. technologic clusters, specialized districts etc).

On the other side the number of sectors is a dependent variable of the absolute number of applicants and of the number of editions; consequently this figure has to be interpreted while giving the appropriate consideration to the frequency parameter. Emilia Romagna, Piedmont and Veneto, from this point of view, are the three regions with the highest level of sectorial variability and, at the same time, are part of the group of regions that took part to every edition of the PNI. To showcase the variability, or its opposite manifestation, the sectorial concentration of the business plans submitted in each region the Herfindahl-Hirschman index (HHI) was used; the HHI is normally used to measure the concentration within a single competitive market.

The HHI allows to overlook the “number of editions” variable and to concentrate on the analysis of the concentration level of each regional market. The HHI is directly proportional to concentration, meaning that the higher the HHI figure, the more concentrated the analyzed market is. To separate high concentration regions from low concentration ones we excluded from the count the three regions who took part to less editions and we identified the median value of the distribution for the remaining population, equivalent to 0.25.

Table 4. Sectorial Concentration by Region, Source: Authors' elaboration of PNICube data

High Concentration Regions	HHI	Low Concentration Regions	HHI
Basilicata	1.00	Liguria	0.25
Abruzzo	0.56	Calabria	0.25
Aosta Valley	0.50	Lombardy	0.24

Trentino Sudtirolo	0.44	Friuli Venezia Giulia	0.23
Sardinia	0.38	Sicily	0.22
Marche	0.38	Molise	0.22
Campania	0.34	Veneto	0.22
Apulia	0.32	Emilia Romagna	0.18
Tuscany	0.29	Piedmont	0.16
Latium	0.29	Umbria	0.16

Based on the processed data the regions with higher levels of concentration ($HHI \geq 0.25$) are Trentino Südtirol, Sardinia, Marche, Campania, Apulia, Tuscany and Latium. The regions with low concentration levels are on the opposite Liguria, Calabria, Lombardy, Friuli Venezia Giulia, Sicily, Molise, Veneto, Emilia Romagna, Piedmont and Umbria. It is interesting to remark that regions with fairly different economic structures fall into the same category. Umbria for instance, the 12th region by per-capita GDP, is on top of the low concentration regions together with very strong and industrialized regions such as Piedmont, Emilia Romagna, Veneto and Lombardy.

Sardinia, with one of the highest concentration levels, confirms the aforementioned theory; the presence of an institutional entity that supports only certain sectors (in particular ICT and Nanotechnologies) tends to influence positively and attract the business idea creation efforts towards the supported sectors.

The sector-based analysis of the submitted business plans, year after year, is summarized in the following table. The frequency of participation is indicated with the letter X.

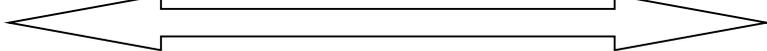
Table 5. Sectorial participation 2003-14, overall data, Source: Authors' elaboration of PNICube data

Sector	X _{min}	X _{max}	Avg	Std Dev
Industrial	1.72%	29.31%	8.36%	0.0900
Energy & Environment	3.33%	27.54%	17.08%	0.0805
Biomedical & Life Sciences	23.53%	46.88%	34.05%	0.0727
Innovation Services	2.78%	23.64%	9.42%	0.0716
Nanotechnologies	1.45%	15.79%	7.21%	0.0559
Electronics	1.69%	14.71%	6.61%	0.0497
ICT	16.07%	32.73%	23.27%	0.0447
Clean Technologies	7.14%	13.33%	10.27%	0.0253
Cultural Heritage	1.45%	3.39%	2.57%	0.0082
Agrofood	6.67%	7.14%	6.90%	0.0019
Aerospace	6.67%	6.67%	6.67%	0
Social Innovation	7.14%	7.14%	7.14%	0

The sectors where the participation is more constant (low Standard Deviation levels) are Social Innovation, Aerospace, Agrofood, Cultural Heritage, Cleantech and ICT. It should be considered however that not every sector can be recognized as representative in absolute terms; Social Innovation or Aerospace applicants, for instance, took part in only one edition ($X_{min} = X_{max}$). The most consistent sector among those that took part to every edition of the PNI is ICT.

To ascertain the existence of similar patterns we created a ranking of the 4 most frequently submitted sectors for each region

Table 6. Regional Patterns of Business Creation Oriented Research.

	Lombardy Sardinia Calabria	Sicily	Tuscany Liguria Latium	Umbria	FVG Molise
1°	ICT	ICT	Biomedical & Life sciences	Biomedical & Life sciences	Biomedical & Life sciences
2°	Biomedical & Life sciences	Biomedical & Life sciences	ICT	ICT	Energy & Environment
3°	Energy & Environment	Innovation Services	Energy & Environment	Innovation Services	ICT
4°	Innovation Services	Energy & Environment	Innovation Services	Energy & Environment	Innovation Services
More Similar					Less Similar

The regions listed in the table are part of the most homogeneous group. It is interesting to highlight the fact that regions that are culturally and economically very diverse, like Lombardy, Sardinia and Calabria, show the very same participation pattern. The other regions of the group differ only for the position of the sectors, that are the same. Other regions that present similar patterns are Emilia Romagna, Marche and Piedmont, Campania and Veneto, Apulia and Trentino Südtirol. In particular, the latter two regions show the most erratic behavior since they have only two sectors out of four in common and only one in the same position (3rd place, Innovation Services).

Looking at the participation data of Sardinia's Start Cup we can underline that the most popular sectors in this competition are ICT, Energy & Environment and Tourism. A generic category named "other" is present at the first stage of the competition and then disappears, a possible interpretation being that unclear or undefined ideas, as well as very peculiar "niche" ideas, tend to experience more difficulties in their development. The data regarding the regional analysis are summarized as follows.

Table 7. Sector performance (Sardinia StartCup) Source: Authors' elaboration of University of Sassari data

Sectors	Ti	Di	Mi
Energy and Environment	31.82%	36.36%	-4.55%
Tourism	4.55%	9.09%	-4.55%
Agrofood	12.50%	25.00%	-12.50%
Biotech&Life Sciences	40.00%	60.00%	-20.00%
Culture & Heritage	0%	20.00%	-20.00%
Other	4.76%	25.00%	-20.24%
ICT	17.24%	43.10%	-25.86%
Health	9.09%	36.36%	-27.27%
Nanotechnologies	11.11%	55.56%	-44.44%

Tourism, Energy & Environment and Agrofood are the most resilient sectors, while Nanotech and Health tend to have higher failure rates. Sardinia's tradition in Tourism and

Agrofood together with the more recent high interest towards investments in the renewable energy sector can help to understand these figures. Although the hypothesis doesn't completely justify the higher mortality rate of "weak" sectors, it's imaginable that such business ideas, which are born in a region lacking a traditionally developed environment, experience higher difficulties during their development given the impossibility to be part of a larger industry or to find a sufficient number of clients. It is true however that many of these companies develop their processes in a virtual and intangible way, overcoming in this way the lack of customers or the difficulties derived from insularity.

Conclusions

The study evidences that the primary focus of Italian researchers/entrepreneurs are ICT and Biomedical & Life sciences, although in some regions a certain level of sectorial variability has been recorded and interpreted as a signal of vitality of the Italian innovation ecosystem. In general terms there is a fair balance between concentration, as a consequence of the Smart Specialization policies implemented on a EU level, and sectorial variability.

We also highlight the scarce presence of two of the most iconic sectors of the Italian economy, Agrofood and Tourism. Regarding the former we can consider that the large firms tend to internalize research and development of innovative ideas, withdrawing them from the public-funded research. This is coherent with the latest findings that point out that in Italy the research investments come mostly from the private sector (2014 NETVAL Report data). Moreover, the results show a separation between the sectors that are considered traditional or vocational in certain regions and the actual direction taken by the new entrepreneurs. It's the case of Piedmont, a region where the manufacturing and automotive industry have always been strong, while our findings show very few proposals in the Industrial sector. The same can be said for Emilia Romagna and the Agrofood sector.

However, some interesting and unusual similarities have emerged from the pattern analysis. We have evidenced similar or coincident patterns in regions that are very diverse both from the cultural and economic point of view. We could suggest that appropriate support policies for joint research and business networks development could improve the competitiveness of innovative SMEs in such regions and contribute to a better cohesion among richer and less developed regions.

Further research

Although there could still be a margin of difference between our findings and the real market situation, due mostly to the freedom of choice of the category granted to the applicants, which might reduce the accuracy of the analysis, the use of BPC data as a marker of the innovation market trends is a promising methodology capable to highlight tendencies and similarities on a territorial base.

However, the methodology deserves further testing and development, an effort that will be the subject of further research, aimed at verifying the consistency of this method and integrating the model with the comparative findings derived from the analysis of the National Registry of Innovative Companies, with the aim to evaluate the accuracy level of the stand-alone BPC data analysis. This study will also allow to compare the indexes

devised in this paper and apply them to other regions in order to measure the performance of other regional networks (Universities, Incubators, Agencies, etc.) in terms of their capability to create and support innovative companies.

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Social Media Messages on Facebook: An Analysis of Five-Star Hotels-to-Consumer Communications

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Abstract

The focus of this research study was on a content analysis of Facebook posts initiated by 5-star hotels in Dubai. Specifically its purpose was to examine, analyze and identify what messages do 5-star hotels send to their prospective or existing consumers in Facebook and how these messages are endorsed by the Facebook users. The findings based on the qualitative method of content analysis of 300 posts by 10 hotels in Dubai are the following: The most common posts were the ‘status update that included a photo’ followed by ‘status update that contained only text’. However, Facebook fans seem to “Like” more the ‘status updates that included photos or videos’. The main subjects of the hotels’ post were among others: Dining, Photos, Communicational/Questions/Interaction with the fans, Combination of two or more themes, General information about the hotel, Special Occasions, Offers/Promotions, Events/Concerts, Links, Beverages/Drinks, Awards, Greetings, Accommodation, Competitions, Media using the hotel’s property, Videos, Information about celebrities, Posts in different language other than English. The various themes of Facebook posts as endorsed by Facebook fans were ‘awards’, ‘competitions’, ‘beverages/drinks’ and ‘videos’. The most used words as these appeared on the hotels’ Facebook posts were ‘book’ and ‘offer’. In addition, among the least used words were ‘traditional’, ‘oriental’ and ‘Arabic’.

Keywords: social media, Facebook, hotels, content analysis

Introduction

According to Rapp and Panagopoulos (2012), social media transform companies’ approach on how to engage consumers. The combination of endless information and the social media usage have changed forever the relationship between organizations and customers. Since the ultimate goal of social media is the consumers’ endorsement, their presence is not temporary. As a result, a better understanding of social media is needed.

In addition, nowadays managers want to compare the outcomes of the social media engagement with the financial outcomes of their company (Rapp & Panagopoulos, 2012). As a consequence, they ask for more research on social media matters in order to concentrate their efforts and investments in the appropriate way.

Although a number of studies, concerning the particular subject, have appeared in the academic literature (Kwok & Yu, 2012; Zhang, 2010), the field is immense and keeps growing and therefore is still open for further research.

As a result, the purpose of this research study is to examine, identify and analyze what messages do 5-star hotels send to their prospective or existing consumers in Facebook and how these messages are endorsed by the Facebook users.

The objectives of this study are the following:

- To identify the most common type of Facebook message
- To identify which are the main subjects of the Facebook posts
- To examine how the different types of Facebook messages are being engaged from the Facebook users
- To identify which subjects are being endorsed most and least by the Facebook users
- To find which words appear more and least often on Facebook posts

Literature Review

Social Media

Generally, social media are included in the marketing and communication tools (Schlinke & Crain, 2013). In particular, they are appropriate for public relations purposes. They can help by extending a brand and they can manage its fame. A company can use social media for several reasons. Spread its reputation, provide news on specific matters, and improve the relationship between customers and the organization.

The main difference of social media platforms and other websites in general is the possibility of interaction (Schlinke & Crain, 2013). Social media are a two way of communication thus people can exchange ideas and opinions within broad communities. Their most important element is their content. Every thriving social media platform is based on good content, in other words quality.

Social messages

As far as the content itself is concerned, among the four types of social media messages (status, hyperlink, photo, and video) that one can find in a Facebook page, status and photo messages attract more people than the link and the video messages (Kwok & Yu, 2012).

According to Schlinke and Crain (2013), commercial online websites can win more trust and conversion of sales by adding photos of people to their sites. The absence of photos can generate doubts about the accuracy and the integrity of the mentioned topics. As a result, photos appropriate for every platform (i.e. casual in Facebook, more professional in LinkedIn) should be used accordingly.

Consumers and Facebook

The fundamental aim of joining Facebook in the first place is ‘social connection’, in other words, staying in touch with people who are away or that have not seen in a while (Giannakos, Chorianopoulos, Giotopoulos & Vlamos, 2012, 599).

According to Giannakos et al. (2012, 599), the two main reasons for using Facebook are “social connecting” and “wasting time”. More specifically, in the first group activities include communication with people that are away, communication with people that they have not been in touch for a long time or come in touch, update in the activities of friends from the past. In the second group activities include spending time, killing time, entertainment and habit.

Also, people tend to “Like” more messages that do not contain direct marketing messages because they want to have a steady ongoing relationship with companies instead of seeing only periodical staff in a Facebook page only for promotional reasons (Kwok & Yu, 2012).

Finally, specifically, in hospitality industry and in hotels’ Facebook pages most of guests’ comments are about their positive feelings and thoughts from their staying in the hotel (Hsu, 2011). In addition, users might express their intent to visit the hotel.

Companies and social media

Many authors recommend that companies should embrace social media (Andzulis, Panagopoulos & Rapp, 2012; Rodriguez, Peterson & Krishnan, 2012). They advise that in this way the companies will benefit since they will strengthen their brand. Social media should become one with the culture of the organization in order to be an effective marketing and sales tool (Andzulis, Panagopoulos & Rapp, 2012). In addition, social media have a positive effect on companies’ abilities to create and manage relationships with consumers (Rodriguez, Peterson & Krishnan, 2012). More specifically, business-to-business sales companies by using social media networks and new sales technologies can increase their sale performance.

Research Method

Population and Sample

This paper concerns the analysis of the Facebook messages applied by 5-star hotels in Dubai. The well-known website for recommending hotels, restaurants, nightlife etc., TimeOut Dubai (www.timeoutdubai.com), was used for obtaining the required research sample. The sample was chosen among the population of 5-star hotels.

The search engine in TimeOut revealed 84 ‘5-star hotels’ in Dubai. From this population, 10 hotels were selected based on convenience to represent the sample. Specifically the sample consisted of: Atlantis the Palm, Bab al Shams Desert Resort Spa, Burj Al Arab, Fairmont The Palm, Hilton Dubai Jumeirah Resort, Kempinski Hotel& Residences Palm Jumeirah, The Address Downtown Dubai, The Ritz-Carlton Dubai, The Westin Dubai Mina Seyahi Beach Resort Marina and Amwaj Rotana Jumeirah Beach.

Data analysis

After the sample was selected, the next step was to decide how much data should be gathered. The time frame of one month was decided to be of appropriate duration. As a consequence, the content analysis was based on data that hotels posted in their “Walls” between January 28th, 2013 and February 28th, 2013.

The required data for the content analysis was manually retrieved. The data was copied from hotels’ Facebook pages and recorded in an Excel spread sheet. More specifically, every hotel’s post was copied along with its date and the “Likes” it gathered. In particular four kinds of data were identified and selected: message body, message media type (i.e. “status”, “link”, “video” and “photo”) and the number of people who “Liked” a particular message.

First of all, it must be noted that no posts from Facebook fans on hotels' "Walls" was taken into consideration. This decision was taken based on the fact that Facebook fans had posted only few messages on hotels' "Walls" so no safe and general result could be extracted and most importantly, the study focus on the hotels' communication towards consumers.

As a consequence, the process of analyzing the gathered data in the study was as follows:

Firstly, each message was categorized in one of four typical Facebook types of messages: 'status update only with text', 'status update that includes photo', 'status update that includes link' and 'status update that includes video'.

Secondly, according to the "Likes" that each of these messages gathered, the most endorsed type of Facebook message was determined. More specifically, the 5 most popular messages from every hotel's Facebook page were identified. Then these messages were categorized according to the following types: 'status update only with text', 'status update that includes photo', 'status update that includes link' and 'status update that includes video'.

Thirdly, every message was categorized according to its main subject and its content critically examined. In this way, specific 'themes' were revealed and their frequencies were counted in order to explore which are the 'most and the least common themes'.

Fourthly, in order to examine which subjects of the Facebook messages were the most and least engaging by Facebook fans, the 5 messages with the most and the least "Likes" were selected from every hotel's total messages during the observed month. As a result 10 messages were chosen for every hotel, 5 messages that gathered the most "Likes" and 5 messages that gathered the least "Likes".

Finally, the last research objective was to identify the most and least used words that one can find in the hotels' Facebook messages. The process of text mining was used in this step in order to identify each used word and count it down.

Research Findings

Hotels' Facebook messages

The first research question was to identify what kind of messages 5-star hotels share with their fans and more specifically which type of message is the most common. The research found out that among the 300 collected messages, 79.66% included photo and some text, 15.33% contained only text, 3.66% shared a link and 1.33% included a video.

The second research question was to examine how these posts are being endorsed by Facebook fans. For this reason, the five most popular posts from every hotel's Facebook page were collected based on the "Likes" they gathered. From these 50 total posts, 47 were status updates which included photo and the remaining 3 were status updates that shared a video. As a consequence, the most endorsed types of messages are photos and videos.

Furthermore, in order to identify the least endorsed posts by Facebook fans, the 50 least “Liked” posts were collected. Some of these posts included only text; there were also many which included a photo. Also it is noteworthy that among a total of 300 posts that were gathered in the beginning of this research, only 11 were identified as links and 6 among them included in the least popular gathered posts. As a result, the least endorsed types of messages are ‘status update that includes only text’ and ‘status update that includes only link’.

The main themes of hotels’ Facebook posts

The third research question was to identify which are the main themes that 5-star hotels share with their fans. Table 1 below presents the various identified themes and their frequencies.

Table 1: Identified Themes Based on the Particular Subject of Every Post

Themes	Frequency
Dining	42
Photos	41
Communicational/Questions/Interaction with the fans	32
Combination of two or more themes	31
General information about the hotel	31
Special Occasions	18
Offers/Promotions	15
Events/Concerts	13
Links	11
Beverages/Drinks	11
Awards	9
Greetings	8
Accommodation	7
Competitions	4
Media using the hotel’s property	4
Videos	4
Information about celebrities	3
Posts in different language other than English	2

Then the themes were divided in categories according to their frequencies as follows: “The most common themes” and “The least common themes”.

The most common themes

The 10 most common and frequent themes that appeared in hotels’ “Walls” were: ‘Dining’, ‘photos’, ‘communicational/questions/interaction with the fans’, ‘combination of two or more themes’, ‘general information regarding the hotel’ (i.e. information about services or activities), ‘special occasions’ (i.e. Valentine’s Day, Chinese New Year Celebration etc.), ‘offers or promotions’, ‘information about events or concerts that took or will take place in the hotel’, ‘links’, and ‘beverages/drinks’.

The least common themes

The 8 least common and frequent themes that appeared in hotels’ Facebook pages were: ‘Information about awards and distinctions that the hotels won’, ‘greetings’, ‘information about the accommodation and the room prices’, ‘competitions that the hotels created online

in order to give prizes to fans who participated'. In addition themes that did not appear often included: 'Information about media companies that used hotel's facilities in order to publicize an interview or a photo-shoot', 'videos', 'information about celebrities who visited the hotel', and finally, 'posts with text in a different language other than English'.

The engaging themes of hotels' Facebook posts

The fourth research question was to examine how the several themes were endorsed by Facebook fans. For this reason, the 5 most and the 5 least popular posts from every hotel's Facebook page were collected based on the "Likes" they gathered. The following Table 2 presents the "Most and least engaging themes".

Table 2: The Most and the Least Engaging Themes

Most Engaging Themes	Least Engaging Themes
Awards	Events
Competitions	Greetings
Beverages/Drinks	Links
Videos	Posts in different language other than English
	The hotel shared another company's photos/links

The most and the least used words

The fifth research question is to identify the most and the least common used words on hotels' Facebook messages. These were identified and shown in the following Table 3 with their frequencies.

Table 3: The Words and their Frequencies

Word	Freq.	Word	Freq.	Word	Freq.	Word	Freq.
book/ing	43	Wednesday	6	massage	2	grape varieties	1
Offer	42	competition	6	oriental	2	cheese	1
information	25	break	6	week	2	gift	1
Eat	25	buffet	6	wine	2	week	1
Call	23	cuisine	5	guest	2	visit	1
Valentine	23	chef	5	per couple	2	lobster	1
Dinner	23	lunch	5	details	2	ambience	1
Love	19	view	5	professional	2	conference	1
restaurant	17	celebrate	5	safe	2	fun	1
Win	17	dining	4	sale	2	recycling	1
Tonight	16	terrace	4	interview	2	community	1
Fans	15	learn more click here	4	waterpark	2	party	1
Brunch	13	traditional	4	show	2	promotion	1
romantic	13	chinese new year	4	dessert	2	cigars	1
Award	12	spa	4	afternoon	2	alcoholic	1
Day	12	family	4	dance	2	sleep	1
Friday	12	dolphin	4	UAE	2	bed	1
Photo	11	access	3	sun/set	2	high standards	1
Food	11	weather	3	% off	2	March	1
reservation(s)	11	friends	3	body	1	treat	1
Menu	11	breakfast	3	mind	1	recharge	1
Beach	10	free	3	rejuvenating	1	pricy	1
Email	9	Tuesday	3	fitness	1	Arabic	1

rate(s)	9	picture	3	order	1	deluxe	1
Join	8	relax/ing	3	properties	1	chic	1
Pool	8	ladies	3	world	1	elegant	1
weekend	8	happy	3	pleasure	1	seat	1
drink(s)	8	dish(es)	3	bbq	1	walk	1
experience	8	kitchen	3	health	1	dip	1
package	7	welcome	2	amenities	1	entertainment	1
Special	7	Saturday	2	guestrooms	1	children	1
Bar	7	hospitality	2	cocktails	1	spirits	1
Event	7	time	2	announce	1	getaway	1
discount	7	excited	2	music	1	palms	1
Room	7	guess	2	nightlife	1	creative	1
Enjoy	7	delight	2	glass	1	beautiful	1
Suite	6	refresh/ing	2	bottle	1	gourmet	1
Thursday	6	voucher	2	month	1	try	1
Sunday	6	video	2	taste(s)	1	prize	1
Monday	6	meeting	2	Twitter	1	shisha	1
beverage(s)	6	donation	2	jazz tunes	1		

The two most dominant words identified in the posts were: ‘Book’ and ‘offer’. In addition words that appeared quite often were: ‘Eat’, ‘dinner’, ‘restaurant’, ‘brunch’, ‘food’ and ‘menu’. The day of the week that appeared frequently was ‘Friday’. On the other hand the day that did not appear often was ‘Saturday’.

Discussion

This research showed that 5-star hotels post all kinds of messages in their official Facebook pages. One can find among others ‘status update that includes only text’, ‘status update that includes photo’, ‘status update that includes link’ and ‘status update that includes video’. These findings are common also with the findings in both Hsu (2012) and Kwok and Yu (2012) studies.

However, the study revealed that the most common type of Facebook message that appeared in the Facebook pages of the chosen hotels was a ‘status update that includes photo’, followed by a ‘status update with text only’. According to Schlinke and Crain (2013), commercial online websites can win more trust and conversion of sales by adding photos of people to their sites.

As far as, the content of the Facebook messages is concerned, the identified ‘themes’ are consistent with the ones in Hsu study (2012). In the Hsu study (2012, 977) the following themes have been identified: ‘people’, ‘events’, ‘music’, and ‘information related to the hotel’. These findings are supported by this study but in addition the following themes are identified: ‘dining’, ‘communicational/ questions/ interaction with the fans’, ‘combination of themes’, ‘photos’, ‘offers/promotions’, ‘links’, ‘beverages/drinks’, ‘awards’, ‘greetings’, ‘accommodation’, ‘competitions’, ‘media using the hotel’, ‘videos’, and ‘posts in different language other than English’.

In addition, the identified ‘themes’ revealed that the hotels post both sales and marketing messages. According to Andzulis et al. (2012) social media should be integrated both in

sales and marketing strategies. Accordingly, the ‘offers/promotions’ theme is certainly related to sales strategy and the 2 most common identified words are ‘book/ing’ and ‘offer’. These findings were also consistent in Kwok and Yu study (2012) where the majority of the Facebook posts were categorized as ‘sales and marketing messages’. On the other hand, among the other themes found ‘photos’, ‘videos’, and ‘awards’ fall in the category of marketing messages since the hotels post these in order to advertise the properties to their Facebook fans.

Furthermore, the current study revealed that the hotels communicate many different thoughts in their Facebook pages (i.e. ‘greetings’, ‘information about celebrities’, ‘special occasions’ etc.). Indeed, Leung et al. (2013) suggested that hotels’ social media pages should not be used only for advertisements of offers and promotions.

As far as, Facebook fans are concerned, this study showed that they endorse more 2 types of Facebook messages: ‘status update that includes photo’, and ‘status update that includes video’. Here these findings were partially supported by the study of Kwok and Yu (2012) in which the ‘status update that included photo’ was one of the most popular messages. However, in their study, the ‘status update that included video’ was not ranked as second most popular type of Facebook messages. A possible explanation for these different results is that the videos that a hotel can share in its page are much wider in scope than the videos that a restaurant usually shares with its fans. As a result, the hotels’ video postings have more possibilities to be engaged by the fans and receive “Likes” or “Comments”.

Additionally, the research identified that Facebook fans engage less 2 types of Facebook messages: ‘status update that contains only text’ and ‘status update that includes link’. Since many hotels share messages that include photos, it seems that Facebook fans find the ‘status updates that include text only’ boring and this is why they seem not to “Like” them. It is worth noting here that the study of Kwok and Yu (2012) does not support the fact that the ‘status update that contains only text’ is among the least engaging messages. On the contrary, their study included it among the most popular messages. Concerning now the ‘status update that includes link’ their study supports the fact that it is among the least endorsed types of Facebook messages.

One can also connect the ‘most engaging themes’ with the findings of Giannakos et al. (2012). More specifically, according to them the two main reasons for using Facebook is ‘social connection’ and ‘wasting time’. ‘Competitions’ and ‘videos’ support their argument about wasting time since these two themes require time in order, on the one hand, to search for the answer to answer the question and on the other hand, to watch the video. Social connection can be also supported by the findings of this study since when a consumer ‘Likes’ a hotel’s Facebook page, he wants to communicate, interact and see what the hotel is posting.

The fact that among the ‘least engaging themes’ were ‘posts in different language other than English’ and ‘the hotel shared another company’s photos/links/videos’ again shows that English is the most appropriate language for a hotel’s Facebook page and that a consumer “Likes” a hotel’s page because he most probably wants to see information

relevant to the particular hotel and not to any other organization. Moreover, “Links” were identified among the ‘least engaging themes’. However, as it was suggested by Kwok and Yu (2012) there is also a possibility that Facebook fans watch the proposed links but they do not “Like” the post.

Conclusion

The current study added to previous approaches like those of Hsu (2011) and Kwok and Yu (2012) but most importantly, this study provided a basis for the development of a systematic thematic content analysis of the social media and especially Facebook. As a result, this study developed a theme categorization which provides a new roadmap for further research. In addition, the present study added to the existing literature review on Facebook. In particular, it complemented previous research (Zhang, 2010) that is relevant to Facebook messages and Facebook users and therefore again provided a foundation for further research.

Implications

A major implication of this study, from a theoretical point of view, is that it enhances the very limited existing research on Facebook messages and the hospitality industry. This study is one of the first attempts to utilize content analysis in order to identify the communication content between hotels and Facebook fans. Therefore, the academia can benefit from the study by means of a better understanding of the potential of hotels’ Facebook marketing.

In addition, this study indicates certain ways for adopting a successful Facebook marketing strategy of 5-star hotels and therefore sets an example in order to attract more customers. Additionally, the 5-star hotels can benefit from this study because they can immediately identify which types of messages customers prefer and thus they can proceed by making the necessary changes in their Facebook communication and engage more consumers. In accordance, since the study pinpointed the most and the least engaged subjects by Facebook fans, the marketers have valuable information on which subjects to promote and which ones to avoid when engaging their customers.

Recommendations for future research

Further research should include hotels from around the globe and from different categories of star-ratings (i.e. one star, two stars etc.) in order to get results that will be representative of the hospitality industry as a whole. Also, future studies should include other major social media platforms such as YouTube, Twitter, Pinterest, Tumblr, Weibo etc. in order to reveal how consumers engage other types of social messages.

Furthermore, the reasons why consumers post on hotels’ Facebook pages, why they “Like” some hotels’ posts more than others and what they prefer to see on hotels’ “Walls” should be further investigated.

In the future additional ways of approaching and examining social media messages and customers’ communications should be examined. Qualitative approaches as well as

quantitative ones should be included. For example, future research could ask Facebook users what they want to see in a hotel's page and what they do not.

Finally, an area to explore further is the return on investment. According to Rodriguez et al. (2012) online social networks have a positive effect on a company's sales performance. Future research should specifically investigate if messages on Facebook and in general other social media platforms are able to boost sales and generate more business in the hospitality industry.

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A Study of Faculty Burnout among Tourism and Hospitality Faculty at U.S. Universities

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Abstract

Concern about employee burnout has been articulated in many publications over the last 40 years. As stated by Golembiewski, Boudreau, Sun & Luo (1998), employee burnout is exhibited in all organizations at different degrees. Burnout negatively is correlated with job satisfaction and turnover where employees unhappy and dissatisfied with their jobs. As a result, employee burnout leads high turnover, absenteeism, low morale and mediocre productivity (Smith, 1999). Faculty employed by universities and colleges are also subject to burnout. A large number of faculty in US colleges and universities across the country are going about the motions of teaching and conducting research without energy, enthusiasm, or sense of purpose (Crosby, 1982). College faculty members face many challenges such as heavy teaching loads, student advisement, few opportunities for scholarly exchanges, and pedagogical difficulties (Cohen & Beraver, 2003, Levin, Kater, Wagoner, 2006; Stake, 1995; Twombly & Amey, 1994). Tenure-track faculty are more at risk of suffering burnout from their teaching duties than their tenured and non-tenure track counterparts, according to a study presented at the American Association of University Professors annual conference in Washington. Neidle (1984) concluded that burnout often occurs at various intervals throughout one's academic career, and Sorcinelli and Gregory (1987) suggest that junior faculty could be subject to higher levels of stress, with pressures and expectations related to tenure decisions. Crosmer found that, overall, faculty members are not more burned out than the average working population.

Keywords: burnout, academic, faculty, workload, performance, academic stress

Celebrations in Emergence Consumer Culture in Saudi Arabia

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Abstract

This article discusses the significance of social and religious festivities and celebrations in the Kingdom of Saudi Arabia and how and to what extent the increasing influence of Western consumer culture has contributed to changes in those. Through a qualitative approach using in-depth interviews and ethnographic observations, the study found that there is a significant change in the meaning of such celebrations for the families of Saudi Arabia, both in their nature and in the importance given to them. This pertains to traditional religious festivities such as the *Eid al Fitr* and traditional social celebrations such as weddings as well as to the contested emergence of new, Western celebrations, such as birthday parties and Valentine's Day. The research showed up great concerns arising from these changes and innovations as threats to traditional values and religion, and to the integrity of the family and as a consequence the whole social fabric. There has been a shift from values of participation and cooperation to competition. This is not, however, an unambiguous case of Westernisation. The conspicuous waste displayed in such events has as much to do with traditional Arabian values of hospitality and generosity as with consumerism. Indeed, it could be claimed that consumerist and traditional values coincide to contravene Islamic ideals of modesty and sobriety.

Keywords: consumerism, consumer culture, celebrations, Saudi Arabia

Celebrations in Saudi Arabia in emergence consumer culture

Saudi Arabia is located in the heart of the Arabian Peninsula in the heart of the Middle East. Saudi Arabia is characterized geographically and historically as the source of Islam and spreads Islam to all parts of the world.

Saudi Arabia became an internationally recognised independent state in 1932 after the unification of the Kingdom as an Islamic state committed to the full application of the laws and principles of Islam in all spheres of social life.

The Saudi government is a monarchy, in which all powers rest with the king, but he is bound by Islamic law. Saudi is dependent on oil for most of their income, the sale of which exceeds 90% of the national income.

I will talk about three types of celebrations which can be broadly categorised as traditional/social celebrations, religious festivities, and Western-inspired innovations.

My observations derive from a broader study of the emergence and impact of consumerism in Saudi Arabia. In an explorative qualitative approach using semi-structured in-depth interviews with respondents from the three main cities of Riyadh, Jeddah, and Dammam

and ethnographic observations of sites of consumption such as shopping malls and venues for social functions. The field work was conducted from August to December 2013.

Wedding parties

The clearest example of symbolic expenditure and consumer behaviour in Saudi society is wedding party. Often a marriage is not just based on the desire of the husband and wife but also the wishes and interests of their two families, who must agree to this relationship and the resulting marriage.

Many of interviewees believe that weddings are the most important causes of waste of resources and household debt. Money is spent not only on the wedding itself, but also for months if not years before in preparation.

What we witness here is a combination of traditional social commitments and a dynamics of Veblenian conspicuous consumption and emulation after the advent of consumerism. We also find a particular fit of conspicuous consumption and the structure of Saudi society.

For example, excessive expenditure serves to affiliate oneself with higher ranking families or upper class people, which means that the people who emulate the upper class may establish or strengthen social relationships with powerful decision-makers in the state that suggest their social clout and influence can be used to help or harm others.

This is in contrast with what is currently happening in the West, where the affluent upper class less openly refer to sheer wealth and power, but try to justify their position by talking about hard work, according to Rojek (2000).

According to Rashad *et al.* (2005), Arab weddings and marriages today have been affected by the increased modernization and consumerism in the region. As such, these events are extremely expensive. In fact, young Arab men often indicate that they start saving in their 20s to get married in the future. In addition to the prevalence of pride among women who wear new dresses for every wedding party, the majority of interviewees spoke of the difficulty they faced in trying to persuade their wives to wear one dress for more than one occasion, especially if the guests are the same. In other words, women do not want to be seen in the same dress, as others' reactions are important. Indeed, whether discussing women looking at each other's dresses or their refusal to wear the same dress, if the head of household cannot provide a new dress, it reflects badly on the financial ability of the family.

In this discussion, we find differences between men and women at such events. Men usually wear traditional outfits without much adornment in the marriage meeting hall; their clothes should simply be clean and adequate. They wait to greet the groom, eat dinner with the rest of the guests, then leave. The competitive, invidious comparison of clothing is done behind closed doors among women.

So, there is great competition among them. For example, they pay attention to the owners of the hall where the celebration is held as well as the quality of the wedding, table

placemats, the open buffet, and even the music at the ceremony. Men may not care about such things, but for women they are key. In a way it could be said that the consumerisation of social celebrations such as weddings has strengthened the role of women in what traditionally is a very male dominated social system.

Ramadan

Ramadan is a month on the Arabic and Islamic calendar when believers fast, from *Fajr* (sunrise) to *Maghreb* (sunset). Although it is a month of worship which is a religious event, the consumption and spending are key factors affecting the behaviour of the Saudi family. Many families rearrange social commitments so they can sleep during the day instead of at night. Sleep schedules start after morning prayers (i.e., after sunrise). In addition, work schedules in the public sector change; for example, instead of working from eight in the morning, people work from ten o'clock to half past three. During Ramadan, Arabian families fast during the day by postponing business and dinner visits until after the non-obligatory *Taraweeh* prayer.

At such family gatherings, the breakfast table is large and contains a lot of food—twice as much as guests can eat. As such, there is a conflict between the social norm of generosity and the religious norm of modesty as expressed through fasting. Ramadan brings those norms into close contact. This concern, as I could observe, leads to some confusion related to the month of Ramadan, and is further pronounced by the development of consumerism.

It quickly became clear that some Saudi behaviour related to Ramadan have recently changed in terms of eating breakfast¹⁹ (*Iftar*) in restaurants and hotels instead of at home. This shift stemmed from others' desires during Ramadan, as the feast is no longer served to guests in an individual's house. Thus, eating in a restaurant or hotel allows the host to avoid many of the hardships that he would otherwise have borne. In addition, newer homes are no longer built to receive large numbers of guests. With this we find that there really is a shift in consumer culture and in ways of eating regarding the invitations of guests, where many avoid inviting guests to the home, but prefer to eat out in restaurants, whether in Ramadan or otherwise. This change in consumer culture is different from what exists in the West, according to Warde and Martens – again we find a stronger element of conspicuous consumption.

Eid al-Fitr and Eid al-Adha

Festivals (*Eid al-Fitr* and *Eid al-Adha*) are religious occasions for all Muslims. All Muslims celebrate these holidays, but each community uniquely expresses them. In Saudi society, *Eid al-Fitr* and *Eid al-Adha* do not appear to be as religiously significant as Ramadan. *Eid* is a prayer in the mosque after sunrise. On this holiday, families in all sectors of the state enjoy approximately five days of private or public holiday.

During festivities in Saudi Arabia, the majority of families do two basic things: wear new clothes and visit relatives. There is an intrinsic link to consumption (the first obviously:

¹⁹ *Iftar* in Ramadan does not mean eating in the morning, but is eating after fasting, as a Muslim first starts eating after sunset.

buy new clothes, the second: don't go empty-handed). During *Eid al-Adha*, many families slaughter an animal and commemorate to the model of Ibrahim.

On the other hand many interviewees complained about increased higher expenditures on these occasions, especially *Eid al-Fitr*. In fact, the state disperses salaries for the month of Ramadan five days in advance so that families can prepare for *Eid al-Fitr*, which indicates the inability of families to meet their needs on both occasions. As such, public holidays are a strong motivation to travel abroad.

During these gatherings, big families and relatives come together. Young people and women focus on their new clothes to demonstrate the ability of each person or small family to keep up with fashion—whether in clothing or electronic equipment (Rao, 2001). This competition speaks a lot of hidden suffering among heads of household as they try to meet the needs of family members so that others do not pity their situation.

New celebrations

During globalisation, we have witnessed new celebrations increasingly appearing in Saudi Arabia. These celebrations are not religious or traditional festivals and as such are not accepted by elders and the elite.

For example, in 2005, following the Western model of having a national holiday, a royal decree defined 23 September as national holiday for all sectors of the state and students. This holiday is not for Muslims; there is a more liberal consideration of National Day among those who celebrate it. This is an entirely secular holiday celebrating Saudi nationhood - although many mainly use it for travelling to visit relatives or finishing some personal business.

While there is, due to the royal decree, wider acceptance of the secular national holiday, there is a national debate between conservatives and liberals around other, more private and consumerist celebrations such as birthday parties and mother's day, which are increasingly adopted but not yet widespread or common. Birthday celebrations are a strong expression of Western individualism (celebrating the individual – the existence (due to birth) of the individual – is quite extraordinary). However, real opposition from the community no longer exists. Celebration of the birth of someone is not part of the Arab Islamic heritage, so there is a lot of tension about the interest in the birth or death of people. Thus, the dates on which such events occur are not marked. In the West, however, such celebrations are common; note the celebration of one particular birth on Christmas.

In my research I noticed that such celebrations have spread among young men and women more than other age groups. This is owing to the strains of expenditure that come with these events or to the fact that what is celebrated at a birthday party is individualism. Also, on Mother's Day the nuclear family is celebrated and on Valentine's Day, Western style romantic love. Newspapers and magazines publish various articles on such new celebrations that require less expenditure traditional ones. However, despite the limited criticism, such celebrations are still unacceptable—especially among the elderly and conservatives. Furthermore, interviewees indicated that birthday parties are more suitable

for children and do not take a religious or social form. We may find that the concepts of fashion and modern fads go away later, so they are not related to religious or social aspects, but still have cultural connotations. This is explained by Berking as a individualization that increases subjective freedom and suggests complete dependence on the market at every level of social intercourse; it means learning how to cope with paradoxical demands on behaviour to control one's affects and yet to be natural to use the opportunities of informalization (Berking, 1999: p. 147).

The researcher noted that primarily city dwellers, whether of an urban, rural, or Bedouin background, participate in these celebrations. This may indicate the impact of the society and the media on the attitudes of families and acceptance of some non-inherited habits. It also suggests that birthday parties are only for kids and as such do not lead to the affectation or extravagance evident during public holidays. Ultimately, adults do not like birthday celebrations and are hesitant to celebrate them.

Celebrations like Valentine's Day are totally different. Valentine's Day is for lovers, who usually share flowers, teddy bears, or jewellery. Still, such holidays are primarily celebrated among younger generations (who are usually not married). Against the background of the strict application of gender separation this is seen as a challenge to morality. The religious establishment are trying to close flower stores to prevent such contact between the sexes.

This indicates that anxiety exists in relation to new holidays. Although Christmas is not celebrated (as it is a Christian holiday), the conflict remains regarding whether to maintain festivals only from the Kingdom of Saudi Arabia (*Eid al-Fitr* and *Eid al-Adha*) and oppose other celebrations or to keep pace with changes in the new Kingdom of Saudi Arabia.

Conclusion

While we find that social celebrations have a prominent role in highlighting the social class of and distinctions between families, is still the role of religious and rational behaviour to call for easing the tension between the social classes. Moreover, the modern Western celebrations began to have an impact on the consumer behaviour of the Saudi family and these celebrations did not arise from the Saudi society as they did in Western societies.

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