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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 third International Interdisciplinary Business-Economics Advancement Conference. In these proceedings, please find 72 papers or abstracts from 18 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 would also like to thank Lufthansa for their generous sponsorship. 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
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March 2015
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Destination Image Surveys: The Case for the Inclusion of a ‘Don’t Know’ Option

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Abstract

Destination image measurement has been one of the most popular topics in the tourism literature since the first studies were published in the early 1970s. The majority of published studies have used structured questionnaires, which require respondents to rate the performance of a destination across an index of attributes, using Likert-type scale items. A review of 187 such studies revealed only four that employed a ‘don’t know’ option, without which, a respondent is forced to provide an opinion on items that might sometimes be unfamiliar. This then begs the question: “What response is required if the respondent doesn’t have an opinion about a particular scale item”? The inclusion of a ‘don’t know’ option reduces the risk of uninformed responses. The issue of uninformed responses was first raised as a potential source of error in survey research during the 1940s, and so it is perhaps surprising that so few destination image questionnaires have included a ‘don’t know’ option. This presentation provides a case for such using such a response category, based on the findings of studies undertaken by the author measuring perceptions held of destinations in Australia, New Zealand and South America. The relatively high uptake of the ‘don’t know’ option by respondents in these studies lends support to the assertion there are two key potential advantages in using this approach. Firstly, potential bias is minimised when participants are offered an alternative to providing an uninformed response such as skipping the question, using the scale midpoint to indicate neutrality, or making up an answer. Secondly, high levels of ‘don’t know’ usage by respondents for any given attribute provide the destination marketer with a practical metric that would otherwise have been missed.

Keywords: destination image, uniformed responses
Cognitive Hierarchy in Capacity Allocation Games

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Abstract

We consider a supply chain with a single supplier and multiple retailers, in which the retailers make orders to the supplier. If the retailers’ orders exceed the supplier’s capacity, a proportional rationing rule will apply in allocating capacity among retailers. We experimentally study the game, and the orders made by the subjects who are motivated by financial incentives are significantly different from the Nash equilibrium. In addition, the data also suggests heterogeneities among the subjects. We propose a behavioral model based on the Cognitive Hierarchy (CH) theory, in which decision makers are cognitively heterogeneous. The theoretical model reveals three interesting results. First, the retailer’s order quantity is significantly below the Nash equilibrium. Secondly, the average order quantity increases as the number of retailers goes down or as the supplier’s production capacity becomes smaller. Lastly, and most interestingly, a retailer’s profit first increases in his level of thinking until this level reaches a certain point, and then decreases afterwards. This inverted U relationship suggests that a retailer could improve his profit by taking some iterations of thinking, and yet over analyzing the situation can be self-defeating. We structurally estimate the model parameters using the maximum-likelihood method, and the results confirm the predictions of the behavioral model.

Keywords: capacity allocation, cognitive hierarchy, behavioral operations management, behavioral economics
Destination Promotion via Destination Marketing Organization: A Proposal Collaborative Model Specific to Turkey

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Abstract

Destination marketing organizations (DMOs) are responsible to promote the long-term development and marketing of a destination with its key components like attractions, transportation, restaurants, accommodations, events, guided tours and other retailers serving travelers in an exact model. DMOs are concentrating on convention sales, tourism marketing, and services. DMOs are also creating public awareness about their destination; arrange booking for the meetings and event business that feeds the economic engine of the region. Much of literature on destination marketing has focused on attempting to understand the competitive market environment for destinations. In spite of the collaboration need in promotion, less attention has been paid to enhance destination competitiveness all together. To contribute to broader destination development goals, all key components of a distinct destination have to come together. In the literature, the collaboration issue takes place as within and between destinations. In the cause of collaboration for promotion within destination is fundamental for this paper, opportunity of collaboration within key components of destination (attractions, transportation, restaurants, accommodations, events, guided tours and other retailers serving travelers) is investigated in this paper. In the end, a specific collaborative DMO model modified from other forms exist in the world is proposed for Turkey. The proposed DMO model for promoting destination incorporates all the key components of a distinct destination or city. The proposed destination promotion body (DMO) considered to comprise of members from chamber of commerce, chamber of industry, foundation of tourism and education, travel agents association, hotels, travel agents, airline companies, meeting centers, destination management companies (DMCs), trade fair and meeting planners etc.

Keywords: destination, marketing, organization, destination promotion, stakeholders, DMOs
Establishing a Niche for Kenya’s Coastal Gastronomy: Perspectives of Tourists’ Intrinsic Inclination

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Abstract

Gastronomic tourism has increasingly become a valuable source of unique attractions that enables guests differentiate a tourism destination from competitors. However not all destinations that have embraced the idea have succeeded in their endeavour, a key constraint being the quality of the food served in the destination. This paper sought to establish whether the quality of Kenya’s coastal signature foods met the guests’ quality threshold based on their physiological inclination. It was hoped that the guests’ intrinsic inclination would reliably be predicted based on their perception of quality when they taste the Kenyan coastal signature foods based on the foods’ sensory appeal, as this information would be of great help to the prospective gastronomic marketers and chefs to focus on the niche’s demands better.

Keywords: intrinsic inclination, gastronomy, niche

Introduction

Gastronomy has been described as possession or acquisition of skills and knowledge relating to food and drink of a specific region regarding what is eaten, where, when, in what manner and in which combination. Academic literature suggests that there is a synergy created between food of a given region and tourism (Tikkanem, 2007). This is because food acts either as the primary or secondary trip motivator that adds value to the image of a destination (Boniface, 2003; Hall, & Sharples, 2003; Long, 2004). As such, the local cuisine of a destination is likely to have an impact on tourism (Richards, 2005, MacLaurin et al., 2007). Regrettably, not all destinations, including Kenya, have capitalised on the opportunity gastronomy provides (Opole, 2001), and not all that have tried to use gastronomy in their marketing have been successful (Richards, 2005). A possible reason may be that a niche of their gastronomy was never identified. To effectively understand the behaviour of guests in regards to their appreciation of a region’s gastronomy and identify its niche, one has to understand incentives as well as the significance of these incentives to their appreciation of a region’s gastronomy. One way of facilitating this is by understanding the guests’ intrinsic traits.

Theory

According to the classic work of White (1959), intrinsic motivation constitutes one participating in an activity because of the inherent interest or enjoyment derived from it. This may be done for the positive experience associated with the activity with the view of one extending his capacities. This motivation however is heterogeneous: While some people may be intrinsically motivated to appreciate certain products, others may not. This, according to Hull’s (1943) ‘learning theory’, may be catalysed (rather than caused) by
one’s physiological drive (or their derivatives), when one is exposed to conditions that present gastronomic food in a cultural set-up (Ryan & Deci, 2000). The guests’ gastronomic experience can be conceptualised in three interrelated dimensions; their conative dimension (behaviours), affective dimension (attitudes) and cognition (perception) (Getz, 2008). Specifically, the guests’ internal inclinations may affect their external expressions of emotions. This in turn may influence their perception of that item. Further, Hobden & Pliner’s (1995) Food Physiological theory explains the two extremes of the guests’ intrinsic inclinations; food neophobia (reluctance to eat novel foods) and food neophilia (seek sensation and pleasure by taking novel foods). Cohen et al. (2004) posits that the two inclinations have a likelihood of predicting future food intake and may have a significant relationship with satisfaction and loyalty of the guest. It was thus deemed interesting to establish how the two traits would influence the consumption of the signature foods of the Kenyan coastal strip.

In as much, man accepts food on the basis of certain hedonic characteristics that he defines and perceives with his senses. These sensory attributes (perception of taste, appearance, texture and smell) are affected by personal preference which results from one’s physiological reactions (Schmidt & Andrew, 2009). This then inspire a deeper relationship between the guest and the food products (Topping, 2007). Consumers first interact with the food visually (EFC, 2010). This then heavily influences how they perceive their enjoyment of the particular food (Kilcast, 2005). Liking or disliking of food may be conditioned by its colour: Attractive foods are sought out as pleasure-giving, while unattractive foods are avoided. Taste helps instil flavours of specific foods in one’s mind then attach the resultant experience to a destination (Fields, 2011; Sparks et al., 2003) by enabling the guest accrue cultural capital through taking food as a source of pleasure (Sparks et al., 2003). Equally, Datamonitor (2008) opines that the association between scent and memory is stronger than with other senses. This is because consumers form lasting bonds with products based on smell. A pleasing aroma of food is likely to influence one’s attitude positively, whereas unpleasant smell negatively influences one’s attitude (Asperin et al., 2011). Texture on the other hand is a deciding factor in determining the pleasure derived from food and has a strong effect on the way consumers perceive flavour (IMB, 2011).

While it is widely recognised that tourists provide a significant proportion of the market for restaurants around the world (Euromonitor, 2001) as cited by Hall et al. (2003), there appears to be little empirical research on food experiences of consumers based on their intrinsic inclinations. A study directly linked to gastronomy suggested that new studies need to identify a niche market for the gastronomy guest (Shenoly, 2005). Therefore, for an in-depth understanding of guest consumption patterns of local food in a destination, all spheres of food sensations as well as the guests’ intrinsic inclinations were established to facilitate better segmentation of gastronomic products and targeting the right guests.

Methods
This study was carried out along Kenya’s Northern coastal strip and Mombasa Island. This region is inhabited by a multiplicity of ethnic communities (Mijikenda, Bajuni, Orma, Sagala, and Swahili) and Immigrant (Britons, Indians, Pakistanis, Italians and Arabs)
groups who have greatly influenced the region’s gastronomy (Muhoho, 2010). The area is endowed with numerous guest attraction sites and warm sandy beaches (Muhoho, 2010). This has made international tourists and Kenyan population make it their vocational destination of choice (Okech, 2009). Tourism growth in this region historically relied on flows of foreign capital although currently the growth rate is decreasing as wealth builds up in the region’s private sector (KNBS, 2012). Majority of the in-bound guests seek accommodation from the 75 star rated hotels in the region, while majority of those within the country either reside in the 387 hotels found in the region or dine in any of the 411 restaurants found in the region or the food outlets located at attraction sites. Among the popular signature foods of the region include; Nyama ya mchuzi (oriental beef stew), Biryani ya kuku (Chicken Biryani), Samaki wa kupaka (poached stuffed fish), Pilau ya ngombe (Swahili beef pilaf), Kamba wa nazi (prawns cooked in coconut milk, Mbaazi ya nazi (pigeon peas in coconut milk), Mushakiki (marinated and roasted lamb/goat meat skewers) and Matobosha (small baked sweets).

This study confined itself to both international and local tourists participating in food related activities in leisure attraction centres of the coastal region during the months of December to March. This period was deemed appropriate as there is a better representation of both the local and international guests at the destination (Kenya Tourism Board (K.T.B.), 2011). A survey design using a quantitative approach was adopted to collect data from the sampled respondents. The accessible population constituted guests who visited these eateries with an aim of partaking of and/or had intent of serving themselves the signature foods of the region. Since the two regions selected for the purpose of this study were dissimilar in terms of number of food outlets (Mombasa Island and the North coast) a proportionate stratified sampling method was used. Three (3) non-overlapping strata were formed for each region based on outlets that prepare and serve the local cuisine. These strata included; guest attraction sites, restaurants serving local cuisine and hotels with local cuisine theme day. This made a total of six (6) strata. To ensure that all eateries serving signature foods found in the region were represented, a thirty percent (30%) representation was used to establish the sub-sample of outlets, bringing the sub-samples to eighteen (18). To settle on a representative number of guests to be included in the study, first, the number of guest beds in each hotel was established based on the hotel classification list, while for the other eateries the total number of seats was used. The average check for each outlet was then adduced based on the bed nights (for the hotels) and seat turn over (for the other eateries). Thus 322 guests who were to be subjected to the questionnaires were sampled.

An under-cleaved pre-test was carried out on a small group of subjects within attractions in the region to test the instruments using three expert judges. The subjects were sampled from; a hotel, an eatery in an attraction site and a restaurant serving local cuisine. Content validity was used to verify whether the elements chosen for the research sample were addressed in depth and breadth and were represented in the instruments. Construct validity was used to address the extent to which the particular measures for data collection conformed to the theoretical context. To ascertain the right choice of analysis for use, the flow order, skip pattern of the instruments, the timeliness and standardisation of data collection as propounded by Mugenda (2008) were made.
The sample size of this study was 322. The study established that the three eateries sampled in the North coast had a total of 74 seats and an average check of 2.5, per day. They only served lunch and snacks. The 5 restaurants had a total of 206 seats and an average check of 1.2 during the lunch hour, while the 4 hotels had a total bed capacity of 561 and an average check of 45%. For outlets found on Mombasa Island, the two sampled eateries had a total of 100 seats and an average check of 2.4. Just like in the case of those found in the North coast, only lunch and snacks were served. The 3 restaurants had a total of 118 seats and an average check of 1.6, while the one hotel sampled had a total bed capacity of 85 and an average check of 65%. For each of these outlets 30% of the population was included in the sample.

Findings and discussions
The highest representation of respondents (n=71, 22.0%) were Kenyans from outside the coastal region. While most of the respondents (39.1%) were in the region for holiday purposes, the greatest percentage (n=45, 47%) of the other respondents who were in the region for business purposes were Kenyans. Interestingly, a good proportion of guests (n=37, 11.5) were in the region for purposes of experiencing the food culture. The results further revealed that at least (n=214, 66.5%) of the respondents had a form of occupation (Table 1). Of this, a greater proportion (n=123, 38.2%) were employed full time. This implies that majority of the population partaking to signature foods found in this region had a source of livelihood.

Table 1: Demographic profile of the respondents

<table>
<thead>
<tr>
<th>Variables</th>
<th>Categories</th>
<th>(n)</th>
<th>Valid %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Region of origin</td>
<td>Kenyan from coast</td>
<td>31</td>
<td>9.6</td>
</tr>
<tr>
<td></td>
<td>Kenyan outside coast region</td>
<td>71</td>
<td>22.0</td>
</tr>
<tr>
<td></td>
<td>Rest of Africa</td>
<td>27</td>
<td>8.4</td>
</tr>
<tr>
<td></td>
<td>Britain</td>
<td>44</td>
<td>13.7</td>
</tr>
<tr>
<td></td>
<td>Germany</td>
<td>23</td>
<td>7.1</td>
</tr>
<tr>
<td></td>
<td>Italy</td>
<td>29</td>
<td>9.0</td>
</tr>
<tr>
<td></td>
<td>Rest of Europe</td>
<td>24</td>
<td>7.5</td>
</tr>
<tr>
<td></td>
<td>Asia and far East</td>
<td>23</td>
<td>7.1</td>
</tr>
<tr>
<td></td>
<td>N. &amp; S America</td>
<td>50</td>
<td>15.5</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>322</td>
<td>100</td>
</tr>
<tr>
<td>Purpose of visiting the region</td>
<td>Holiday</td>
<td>126</td>
<td>39.1</td>
</tr>
<tr>
<td></td>
<td>Business</td>
<td>63</td>
<td>19.6</td>
</tr>
<tr>
<td></td>
<td>Experience food culture</td>
<td>37</td>
<td>11.5</td>
</tr>
<tr>
<td></td>
<td>Cultural attractions</td>
<td>46</td>
<td>14.3</td>
</tr>
<tr>
<td></td>
<td>Visiting friends</td>
<td>24</td>
<td>7.5</td>
</tr>
<tr>
<td></td>
<td>Exploration</td>
<td>26</td>
<td>8.1</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>322</td>
<td>100</td>
</tr>
<tr>
<td>Current employment status</td>
<td>Employed full time</td>
<td>123</td>
<td>38.2</td>
</tr>
<tr>
<td></td>
<td>Employed part time</td>
<td>53</td>
<td>16.5</td>
</tr>
<tr>
<td></td>
<td>Student</td>
<td>40</td>
<td>12.4</td>
</tr>
<tr>
<td></td>
<td>Unemployed</td>
<td>24</td>
<td>7.5</td>
</tr>
<tr>
<td></td>
<td>Retired</td>
<td>38</td>
<td>11.8</td>
</tr>
<tr>
<td></td>
<td>Self employed</td>
<td>38</td>
<td>11.8</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>322</td>
<td>100</td>
</tr>
</tbody>
</table>
The most popular foods in the various outlets that guests partook of in order of preference included; *Biryani ya kuku* (Chicken Biryani) (62.2%), *Samaki wa kupaka* (poached stuffed fish) (48.1%), *Pilau ya ngombe* (Swahili beef pilaf) (38.4%), *Kamba wa nazi* (prawns cooked in coconut milk) (27.5%), *Mbaazi ya nazi* (pigeon peas in coconut milk) (25.1%), and *Matobosha* (small baked sweets) (23.4%).

Further, this study sought to establish the relationship between the guests’ level of satisfaction with the quality of signature food of the Kenyan Coastal Strip, in relation to their intrinsic traits with a view of using the information as a means of understanding the image and perception guests have on Kenyan Coastal gastronomy. To establish dynamics that might help explain the results, a null hypothesis was set:

H⁰2.1: There is no statistically significant difference between respondents’ physiological inclination and their level of satisfaction of quality of signature foods.

A cross tabulation statistic revealed that both neophiliacs (n= 153, 67.4%) and neophobics (n= 63, 66.3%) rated highly ‘I like extremely’ the signature food of the Kenyan coastal region as shown in Table 2. This implies that generally majority of the respondents, irrespective of their physiological inclination liked the region’s signature foods.

<table>
<thead>
<tr>
<th>Physiological inclination</th>
<th>Overall appreciation of Kenyan coastal signature food</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>I like it extremely</td>
<td>It can be much better</td>
</tr>
<tr>
<td></td>
<td>n</td>
<td>%</td>
</tr>
<tr>
<td>Neophiliacs</td>
<td>127</td>
<td>55.9</td>
</tr>
<tr>
<td>Neophobics</td>
<td>45</td>
<td>47.4</td>
</tr>
<tr>
<td>Total</td>
<td>172</td>
<td>53.4</td>
</tr>
</tbody>
</table>

\[ U = 9409.000, \quad \rho = 0.044, \quad r = 0.114; \quad \alpha = 0.05 \]

The mean range is between 1 and 3. Factors that lie closer to (1) have the strongest rating.

However, a Mann-Whitney Wallis (MWW) statistic revealed a statistically significant difference (U= 9409.000, \( p = 0.044 \)) between the respondents’ physiological traits and their overall acceptability of the KCSF. The null hypothesis was therefore rejected and the alternative accepted. A greater proportion of the neophiliacs (M = 1.46) extremely appreciated the region’s signature foods as compared to neophobics (M = 1.64). Interesting to note is that, though a greater proportion of neophobics were expected to dislike the region’s signature foods, the converse was true. This overall appreciation of signature foods fortifies the heterogeneity of foods’ hedonic qualities and the influence it may have to guests irrespective of their physiological inclination. The effect size (\( r = 0.114 \)) was moderate, indicating that overall acceptability accounted for 11 percent of the observed variation. These results were therefore to be treated with caution as the same findings may not be applicable to other regions.

To gain a further insight of the guests intrinsic inclinations in relation to the region’s food quality, an ordinal logistic regression (OLR) was conducted with two predictor variables.
to assess prediction of membership of physiological inclination in 5 categories of sensory outcome (appearance, taste, texture, aroma and overall acceptability). The model fitting information showed that the model was significant ($\chi^2_{15.555, df 5, p = 0.008}$) as shown in Table 3. Though the results showed that guests who were neophilic could be distinguished from those who were neophobic, the measure of fit for the model concluded that at least one of the variables would significantly predict group membership. The goodness of fit statistics compares the observed frequencies with the expected frequencies for each cluster. Here, a non-significant difference is desired, as it indicates that the full model adequately duplicates the observed frequencies at various levels of outcome.

### Table 3: Model Fitting Information of the respondents’ physiological inclination and quality of coastal strip signature foods

<table>
<thead>
<tr>
<th>Model</th>
<th>$-2 \text{ Log Likelihood}$</th>
<th>Chi-Square</th>
<th>df</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept Only</td>
<td>141.333</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Final</td>
<td>125.778</td>
<td>15.555</td>
<td>5</td>
<td>.008</td>
</tr>
</tbody>
</table>

#### Goodness-of-Fit

<table>
<thead>
<tr>
<th></th>
<th>Chi-Square</th>
<th>df</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson</td>
<td>73.437</td>
<td>41</td>
<td>.001</td>
</tr>
<tr>
<td>Deviance</td>
<td>81.455</td>
<td>41</td>
<td>.000</td>
</tr>
</tbody>
</table>

#### Pseudo R-Square

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Cox and Snell</td>
<td>.047</td>
</tr>
<tr>
<td>Nagelkerke</td>
<td>.067</td>
</tr>
<tr>
<td>McFadden</td>
<td>.040</td>
</tr>
</tbody>
</table>

In relation to the guests’ physiological inclination by their judgment of quality of the Kenyan coastal signature foods, the goodness of fit statistic showed a good fit $\chi^2_{73.437} = 81.455$, deviance criterion $p = 0.001$ and Nagelkerke’s $R^2 = 0.067$. This implies that the overall prediction success was 6.7%, signifying that there was only one parameter estimate variable that reliably separated neophiliacs from neophobics at $\alpha =0.05$

To establish the predictor that changed the odds of the outcome the most, a Wald statistic was evaluated (Table 4). The variables that were furthest from the odds ratio were targeted as they are the ones that were more influential in predicting membership in different clusters. The parameter estimate results indicated that taste displayed a Wald statistic = 6.256, $p = 0.012$. This implies that in relation to the guests’ physiological inclination, taste greatly influenced the odds of the outcome.

### Table 4: Parameter Estimates

<table>
<thead>
<tr>
<th></th>
<th>Estimate</th>
<th>Std. Error</th>
<th>Wald</th>
<th>df</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Threshold</strong></td>
<td>Neophiliacs</td>
<td>2.100</td>
<td>.417</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Appearance</td>
<td>.273</td>
<td>.285</td>
<td>.920</td>
<td>.337</td>
</tr>
<tr>
<td><strong>Taste</strong></td>
<td>Texture</td>
<td>.096</td>
<td>.286</td>
<td>.114</td>
<td>.736</td>
</tr>
<tr>
<td></td>
<td>Aroma</td>
<td>-.355</td>
<td>.297</td>
<td>1.432</td>
<td>.231</td>
</tr>
<tr>
<td></td>
<td>Overall acceptability</td>
<td>-.086</td>
<td>.332</td>
<td>.067</td>
<td>.795</td>
</tr>
</tbody>
</table>

*The reference category is: Neophobic affinity.*

In as much, all the guests irrespective of their physiological inclination rated the KCSF positively. The only parameter that brought the distinction was taste. Unlike the findings...
of Milele & Mordoch (2002), who averred that all senses may be involved in guests appreciating food quality, this study moves a step further; even a single sense may catalyse ones liking or dislike of a dish. In this case, to appreciate the signature of the Kenyan coastal strip, one had to taste it. This is what drew the distinction between the neophiliacs and nerophobics. Since most foods could not be tasted before procurement, this then implied that positioning through well worded descriptive terminologies may help the guests perceive the taste of the Kenyan coastal signature food. Since in this study, a higher proportion of both neophobics and neophiliacs liked the region’s signature foods, chances are high that if the food is taken over a longer duration of time a greater number of guests would appreciate it. This is in congruence with Wright, Nancarrow and Kwok’s (2001) views that taste in food may be an indication that one could appreciate the taste of a novel product if it is taken over some time.

**Discussion and Conclusion**

It is clear that gastronomic tourism though limited and not well developed in some parts of the world, is becoming an important activity to be ignored. This study has clearly demonstrated the existence of a correlation between the guests’ perceived quality of the region’s signature foods in relation to their physiological inclinations. Their neophobic and neophilic affinity have a place in their appreciation of a destination’s gastronomic products. However these hedonic benefits are not homogenous within guests. As such, individual sensory tenets (taste, appearance, texture and smell) need to be considered. This is so because, as demonstrated in the current study, while some respondents preferred certain sensory attributes the disliked others. This is in agreement with Hull’s classical learning theory. Furthermore, even a single sense may catalyse ones liking or dislike of a dish. It is therefore plausible for investors seeking to open gastronomic outlets along the Kenyan coastal strip to note that though a ready market exists, much emphasis should be directed to sensory needs of guests as this may help inspire a deeper relationship between guests and the products. More precisely, the taste of the region’s signature food is integral.

It is therefore recommended that, since taste can only be appreciated by tasting the various signature foods in the region, the marketing effort be made by carefully wording menus and marketing advertisements in a descriptive way that would entice guests to appreciate the regions gastronomic foods. To popularise gastronomic outlets, the Ministry of East Africa Affairs (MoEAA), Catering Levy Trustee (C&TL) should come up with a policy of classifying restaurants based on gastronomic prowess. This classification is then to be well displayed in all tourism magazines and hotel letter heads. Other than upgrading the staff’s gastronomic prowess all staffs should be equipped with service management skills and food knowledge so as to enhance personalised and suggestive selling. This will enable them give sound advice of constituents of dishes thus improving the guests’ meal drink experience. At the same time the outlets should engage gastronomic critics to recommend quality signals.

Though this study delved on intrinsic inclinations of guests visiting the various eateries (hotels, restaurants and attraction sites), no effort was made to compare guest’s responses from the three clusters, which could have otherwise brought in interesting results. Thus there is a need for future studies addressing this. Additionally, it will be necessary to
capture the exact region of origin of the captive market so that the correct niche is targeted in ensuring sustainability of gastronomic tourism in the Kenyan coastal region.

References


Econometric Analysis of Social Security Benefits

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Abstract

The present formula for calculating social security benefits, based on a person’s lifetime earnings, is adjusted or “indexed” earnings to account for changes in average wages since the earnings were recovered. The indexed earnings, which are more than actual earnings are used to calculate the social security benefits in real terms. This index factor varies from 14.12 (for year 1953) to 1.0 (for year 2013) ranging for a period of 60 years. It is interesting to note that the federal government reduced the index factor to 1.0 from 2012 onwards. This means the indexed earnings will be same as actual earnings for future social security calculations – resulting in possible reductions in social security benefits. In this research study, an attempt is made to study the details about the present formula for calculating the social security benefits. Suggestions and appropriate changes are made to help arrive at a better and more realistic formula. For this to commence, a functional relationship in the form of a specific equation (linear or non-linear depending on the data) will be first fitted between the index factor and the cumulative number of years. Finally, a new formula will be derived.

Keywords: econometric analysis, indexed earnings social security, social security benefits calculation
Segmenting Travelers Based on the Use of Travel Social Media

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Abstract

The popularity of social media among travelers has been highly recognized by research addressing this issue. Research has mainly focused on the role and impact of social media on travelers’ travel planning process and there is consensus that travel decisions are highly influenced by social media websites. Yet, little attention has been paid to the differences among travelers regarding their use of social media for travel purposes. Based on the use of travel social media websites, cluster analysis was employed to identify different segments among travelers. Furthermore, the study profiles the clusters based on demographic and other travel related characteristics. The findings of this study are important to online marketers to better understand traveler’s use of social media and their characteristics, in order to adapt online marketing strategies according to the profile of each segment. Given the popularity of social media among travelers, it is imperative that researchers and practitioners continue to deepen the understanding of social media users. The study provides practical and theoretical contributions. Future research is also suggested in order to further develop the contributions and take into account the limitations of this study.

Keywords: market segmentation, online content creators, online content users, social media

Introduction

In the past 15 years, the Internet has revolutionized the way travellers search for information (Arsal, Backman, & Baldwin, 2008). Because of the Internet’s virtual capabilities, it can include many different physical sources of information, such as mass media, word-of-mouth communication and expert reports and opinions (Kim, Lehto, & Morrison, 2007) and it can provide timely and accurate information relevant to travellers. This information can be provided not only by pictures but also by videos and sounds, with the advantage of being more inexpensive than traditional means (Buhalis, 1998). The Internet provides nearly limitless amounts of information with relatively minimal expenditures of effort or money (Kim et al., 2007). These advantages paved the way for Social Media to become the most powerful force driving travel planning and decision making, playing a crucial role in travellers’ overall travel experience. Travellers now have access to almost unlimited travel information created by other travellers. In fact, travel content created online is considered to be more credible and trustworthy than reviews from
professionals or marketer information (Fotis, Buhalis, & Rossides, 2012; Gretzel & Yoo, 2008). Travellers also have the opportunity to share their travel experiences with others.

Different sources evidence social media’s importance in the travel context. For instance, in the United Kingdom, social media websites are the main resource when planning their holiday (World Travel Market, 2013) and in the Asia-Pacific region, 44% of leisure travelers use social media platforms for advice and inspiration regarding travel destinations (eMarketer, 2013). According to Tripadvisor’s TripBarometer (2014b), 89% of global travellers are influenced by online travel reviews when choosing their accommodation. In fact, more than 50% of travellers actually change their original travel plans after using social media websites (Mediabistro, 2012).

On the supplier side, according to Tripadvisor (2014b), 96% of hoteliers say reviews are influential in generating bookings. Fifty per cent of travel companies claim that direct bookings have been generated from social media (Mediabistro, 2012). In terms of money, Compete Incorporated (2007) estimates that consumer generated content influences 10 billion dollars in online travel bookings.

Given Social Media’s importance in the travel industry, it has been an emerging research topic. A recent literature review found 270 publications addressing the use of social media in the travel context, with the first four publications in 2007 (Zeng & Gerritsen, 2014). Research has focused on social media’s impact on travel decisions (e.g. Sparks & Browning, 2011; Ye, Law, & Gu, 2009; Ye, Law, Gu, & Chen, 2011), factors that influence travellers to write online reviews (e.g. Ribeiro, Amaro, Seabra, & Abrantes, 2014; Yoo & Gretzel, 2008), motivations to use social media (e.g. Chung & Buhalis, 2008b; Parra-López, Gutiérrez-Taño, Díaz-Armas, & Bulchand-Gidumal, 2012) and social media’s adoption and use by tourism and hospitality firms (e.g. Hotels) and destination marketing organizations (e.g. Hays, Page, & Buhalís, 2013; Hee, Lee, & Law, 2012). However, studies focusing on social media users’ demographic characteristics and behaviours are scarce. Travellers have different behaviours regarding the use of social media for travel planning (Zeng & Gerritsen, 2014). Therefore, the main purpose of this paper is to identify different segments of social media users for travel purposes and identify the significant differences between the segments. Such knowledge is useful to hospitality and tourism managers, as well as travel social media marketers, in order to better understand the needs and characteristics of each segment and decide marketing strategies accordingly.

Literature Review

Motivations to Use Social Media

As many other products and services, travellers need to search for information to make decisions, such as which destination, airline company or hotel to choose. Furthermore, compared to other services or products, travel normally requires more information processing before making a decision, because the purchase of travel products is considered to be highly risky (Huang, Chou, & Lin, 2010). Indeed, to consume tourism products, individuals must leave their daily environment and move to a geographical different place (Werthner & Ricci, 2004) and when making travel decisions, only descriptions are
available (Werthner & Klein, 1999). On the other hand, consumers cannot try travel products/services before purchasing, making it difficult to evaluate the value for money before the actual experience (Kim, Qu, & Kim, 2009). In this context, information search decreases uncertainty associated with travel, enhancing the quality of tourists’ trips (Fodness & Murray, 1997).

Travellers find motivation to use social media for travel purposes in the perceived functional (informational) benefits that social media provide (e.g. “social media tools enable me to keep up to date with the tourist sites” and “social media tools give me the possibility to exchange information about tourist sites”) (Parra-López et al., 2012). In fact, Chung and Buhalis (2008a) report that information acquisition was the most important factor influencing travellers to participate in online travel communities.

Besides the informational benefits of social media, a significant number of studies have shown that reading travel reviews added fun to the trip planning process, made travel planning more enjoyable and made travellers feel more excited about travelling (Gretzel & Yoo, 2008; Gretzel, Yoo, & Purifoy, 2007; Parra-López et al., 2012). Chung and Buhalis (2008b) found that users of online travel communities (e.g. Tripadvisor.com, VirtualTourist.com) participated in the online community activities not only for the informational benefits, but also for the hedonic benefits (i.e. “Having fun with contents”, “Entertainment” and “To be amused by members”). In a different study, hedonic needs were pointed as an important predictor for the level of participation in an online travel community (Wang & Fesenmaier, 2004). More recently, the positive relationship between the perceived hedonic benefits and intention to use social media for travel planning was confirmed by Ayeh, Au, and Law (2013). Perceived enjoyment not only seems to affect the use of social media for travel planning, but is also considered a determinant of creating travel content online. Indeed, Yoo and Gretzel (2011) found that enjoyment is a driver of travel content generated media creation. This conclusion was echoed in a more recent study that found that perceived enjoyment not only had a positive relationship with the use of social media for travel planning, but also affected the actual creation of travel content online (Kang & Schuett, 2013). The empirical evidence from all of these studies shows that individuals use travel related social media not only for information purposes but also because they consider its use enjoyable. Web 2.0 has made information search more personalized, active and interactive, which contributes to its hedonic value (Gretzel, 2012).

Another factor that seems to affect social media use is travellers’ level of involvement. According to Rothschild (1984), involvement is “a state of interest, motivation or arousal” and “its consequents are types of searching, processing and decision making” (p. 217). In the context of travel, Leung and Bai (2013) found that travellers’ involvement with a hotel social media page had a significant impact on their intention to revisit hotels social media pages in the future. Ribeiro et al. (2014) study provides evidence of the positive association between travel involvement and travel content creation. These findings suggest that travellers more involved with social media are more likely to share their travel experiences online and have higher levels of consumption of social media.
Travellers Use of Social Media

Typically, travellers’ use of social media is divided in three phases: before, during and after the trip. It is not surprising that Cox, Burgess, Sellitto, and Buultjens (2009) found that social media are predominantly used before travelling. During this phase, travellers search for ideas on where to go, information on accommodation options, excursions and other leisure activities (Cox et al., 2009; Fotis et al., 2012). Social Media play an important role before travelling, by providing ideas, reducing risk and making it easier to imagine what places will be like (Gretzel & Yoo, 2008). Interestingly, a higher percentage of travellers turn to user generated content (UGC) when visiting a destination for the first time, as well as visiting an international destination (Simms, 2012), supporting the important role social media plays in reducing risk. Before the trip, travellers are essentially consuming social media, i.e., they are reading and viewing UGC but are not actively participating by creating content.

During the trip, travellers’ use of social media for travel purposes has been found to be much lower than before the trip (Cox et al., 2009; Fotis et al., 2012). In Fotis et al. (2012) study, 30% of the respondents searched for travel related information on their holiday, while in Cox et al. (2009) the percentage dropped to 6%. It should be noted that during this phase, travellers not only consume social media to find holiday related information, but also begin to share their travel experiences, by producing comments and reviews. A popular activity during this phase is sharing videos and photos (Text100, 2013). However, producing social media content is much lower than consuming (Fotis et al., 2012). Social Media geo-location sites, such as Foursquare, can help tourism and hospitality businesses by encouraging travellers to use social media during this phase in exchange for discounts or coupons (Hudson & Thal, 2013).

After the trip, travellers use social media to post information regarding their trip through comments, reviews, photos or pictures (Fotis et al., 2012; Parra-López et al., 2012). It is during this phase that social media producing takes place. Producing encompasses creation and publication of one’s personal contents, such as text, images, audio, and video (Shao, 2009). Curiously, contrary to Cox et al. (2009) findings, Fotis et al. (2012) claim that social media are predominantly used after the trip. However, one should interpret these results cautiously. First of all, the statements used to evaluate social media use after the trips are considerably different. On the other hand, the differences may be due to cultural differences. Fotis et al. (2012) study was conducted with travellers residing in Former Soviet Union Republics, while Cox et al. (2009) respondents were from Australia.

Even though Tripadvisor receives more than 115 contributions every minute (Tripadvisor, 2014a), different sources indicate that there are far more travelers consuming social media than producing. For instance, Yoo and Gretzel (2011) found that half of the respondents used travel related social media, but only 17 percent have ever posted travel materials online. According to Forrester Research, 75 percent of Internet users use social media, but less than half actively participate (Osborn, 2009).

Furthermore, there are differences between those who consume and produce social media regarding certain behaviours. For example, Gretzel et al. (2007) found that, in comparison
to non-writers, travel review writers are more involved in trip planning and are more influenced by reviews. More, travellers that read travel reviews more often have higher incomes and travel frequently for pleasure, representing an attractive market for travel marketers.

These results clearly reveal that travellers use social media for travel purposes differently. Thus, a cluster analysis to identify different clusters seems appropriate to enhance our understanding of travellers’ use of social media, by exploring each segment’s demographic profile and other relevant characteristics derived from the literature review, such as enjoyment or involvement with social media. Several studies have pointed out for the lack of studies focusing on demographic profile of travellers who use social media for travel purposes and for the need to better understand travellers engagement with social media (e.g. Ip, Lee, & Law, 2012; Yoo & Gretzel, 2012). This analysis will contribute to fill this gap.

**Methodology**

**Questionnaire and Measurements**
Based on the literature review, a questionnaire was designed in order to obtain relevant information for the cluster analysis and description of the clusters. An opening paragraph was included in the questionnaire to provide participants with an overview of the study’s purpose and to ensure the confidentiality of the answers. Respondents were also given an estimation of the time required to complete the questionnaire and e-mail contact in case they had any questions or doubts. These procedures are recommended to enhance the credibility of the survey (Malhotra, 2008). The questionnaire was divided into 3 main sections. The first section included questions regarding respondents’ travel-related behaviours and online purchasing experience to obtain relevant background information. Respondents were asked to recall their trips taken within the last 12 months to answer these questions. The second section addressed social media use and travellers’ perceptions regarding social media use, specifically perceived enjoyment and involvement. Table 1 shows the questions presented in this section and the sources. Social Media Consumption (SMC) and Social Media Creation (SMCR) were measured using a 5-point Likert scale, where 1 = Never and 5 – Always. Perceived Enjoyment (PE) was also measured using a 5-point Likert scale, where 1= Strongly Disagree and 5 = Strongly Agree. Social media involvement was measured using a 5 point differential semantic scale. The last section of the questionnaire contained questions regarding respondents’ demographic characteristics, namely age, gender and education level.

<table>
<thead>
<tr>
<th>Measures</th>
<th>References</th>
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<tbody>
<tr>
<td>Before travelling…</td>
<td>New measures</td>
</tr>
<tr>
<td>SMC1 - I read hotel reviews from other travellers.</td>
<td>Cobanoglu and Ongan: Proceedings of the International Interdisciplinary Business and Economics Conference: Volume 3 Published by Scholar Commons, March 28, 2015</td>
</tr>
<tr>
<td>SMC2 - I searched for travel information on social media websites.</td>
<td></td>
</tr>
<tr>
<td>SMC3 - I looked at activity/attractions reviews of other travellers.</td>
<td></td>
</tr>
<tr>
<td>SMC4 - I read other travellers’ experiences and tips.</td>
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</table>
While travelling…
SMC 5 – I check in to the location I am at/update my location on social media (for example, on Facebook, Foursquare)
SMCR 5 – I search for travel information on social media websites (for example, things to do or where to eat)

After travelling...
SMCR 1 - I write hotel reviews on social media websites.
SMCR2- I post photos on social media websites.
SMCR3 - I write reviews of activities/attractions on social media websites.
SMCR 4 - I write reviews of the place and/or monuments I visited on social media websites.

New measures
PE1- Using social media for travel purposes is enjoyable. Adapted from Lee, Cheung, and Chen (2005)
PE2- Using social media websites for travel purposes is fun. Adapted from Moon and Kim (2001)
PE- Using social media websites for travel purposes stimulates my curiosity. Adapted from Verhoef and Langerak (2001)

New measures
PE4- I consider the use of social media for travel purposes a big hassle. (R)

Social Media is….
SMI1 – Unimportant…Important
SMI2 – Irrelevant…Relevant
SMI3 – Means nothing to me…means a lot to me
SMI4 – Unexciting…Exciting
SMI5 - Doesn’t matter to me…Matters to me
SMI6 - Boring…Interesting
SMI7 - Useless…Useful
SMI8 - Superfluous…Vital
SMI9 - Of no concern to me…of concern to me

SMC – Social Media Consumption; SMCR – Social Media Creation; PE – Perceived Enjoyment; SMI - Social Media Involvement

Data Collection
The questionnaire was distributed online, using Surveygizmo (www.surveygizmo), an online survey platform, from July 28th to August 25th of 2012. A pretest was conducted with colleagues, which were asked to provide comments on the relevance and clarity of the questionnaire items and time taken to complete it. After some adjustments based on the pretest, email invitations with a link to the final questionnaire were sent to colleagues, students and other contacts. Moreover, links to the survey were placed on Facebook and LinkedIn. In both channels used to distribute the questionnaire, respondents were kindly asked to distribute the questionnaire among their contacts. The questionnaire was originally developed in English, but was also available in Portuguese (since the researchers are from Portugal). During this period, 1,759 responses were obtained, with a total of 1,732 valid for further analysis.

Data Analysis
Clusters analysis was applied to identify market segments in terms of Social Media Consumption (SMC1 to SMC5) and Social Media Creation (SMCR1 to SMCR5). The
clustering was undertaken without any preprocessing data procedure. In fact, the preprocessing of data, for instance by standardization or applying factor analysis, is actually not free from serious objections (Dolnicar, 2002; Hair, Black, Babin, & Anderson, 2010). The Squared Euclidean distance was considered to measure dissimilarities. Cluster analysis encompassed two phases. First, three hierarchical algorithms were applied, namely, complete linkage, average linkage and Ward’s method. Complete linkage and Ward’s method are frequently applied in market segmentation (Dolnicar, 2002). Average Linkage was also considered, since, along with Ward’s method, it has been found to perform relatively well (Everitt, 1993). The examination of the fusion values (or agglomeration coefficients), resulting from the three hierarchical procedures, suggested a four or five cluster solution (Hair et al., 2010). K-means was then applied with initial cluster seeds given by each of the four and five cluster solutions of the three hierarchical algorithms. This combination approach, applying a non-hierarchical algorithm after a hierarchical one, is often recommended as it gives more accurate solutions (Hair et al., 2010). Both stability and interpretation of the final clusters led to the choice of the five-cluster solution. Comparing the final five-cluster solutions, each one obtained by k-means with initial seeds given by one of the three hierarchical algorithms, less than 3% of the cases were assigned to different clusters across the three cluster solutions. This percentage is well below the 10% threshold for the percentage change in cluster memberships that would result from a very stable solution (Hair et al., 2010). To further analyze stability, the sample was randomly split into two halves and, in each half, k-means was applied with initial cluster seeds given by Ward’s algorithm. Once more, less than 10% of changes in cluster memberships (5.4%) was observed, which supports the stability of the five-cluster solution. External variables (not used in the segmentation) were considered to characterize and validate the cluster structure, identifying dimensions on which the clusters differ significantly. The Chi-square test, Kruskal-Wallis test and post-hoc tests were used to compare groups based on external variables. For all the analysis, SPSS statistical software (version 22) was used and, in group comparisons, a p<0.05 was considered statistically significant.

Results

Demographic Profile
The 1,732 respondents were from 54 countries with a prominence of responses from European residents, specifically Portuguese residents. This was expected, given that the researchers reside in Portugal and have more available contacts from people residing in this country. The age group with more number of responses was the age group 18-29, with 34.6% of the total of responses, while only approximately 13% are aged over 50. In terms of gender, there is a slight skew towards a higher proportion of female participants (61.5%). The sample seems to be composed by highly educated individuals, with approximately 88% of the respondents holding at least a college degree, against only 11.6% who have only completed the 12th grade or less.

Cluster Solution
Through the cluster analysis, five segments were identified (represented in Figure 1):
Segment 1: Inactive - representing 22% of travellers. This segment barely uses social media for travel purposes, either for consuming or creating.

Segment 2: Occasional Consumers and Apathetic Creators - representing 22% of travellers. This segment occasionally uses social media before travelling but rarely creates travel related content. Segment 3: Occasional Consumers and Creators – representing 20% of travellers. This segment occasional uses social media for travel purposes, both for consumption and creation. Yet, in general, consuming scores higher than creation.

Segment 4: Consuming Enthusiastics and Apathetic Creators – representing 21% of the travellers. This segment uses social media very often or always before and while travelling. However, they rarely share their travel experiences with others.

Segment 5 –Fully engaged – representing 15% of travellers. This segment is composed of travellers that are active consumers and creators of social media travel content, before, while and after travelling.

**Figure 1 – Profile of the 5 Clusters**

**Profiling the Clusters with External Variables**

In order to characterize the five clusters, they were compared using external variables (that were not used in the cluster analysis). Profiling the clusters with external variables also enables the evaluation of content validity, which, despite its importance, is often over looked at in tourism segmentation studies (Dolnicar, 2002; Hair et al., 2010). Results from this analysis are resumed in Table 2.

Segments do not differ regarding gender, which seems to contradict Gretzel et al. (2007) study that found that males are more likely to create travel content. However, significant differences were found regarding other variables. For instance, regarding education the Chi-square test identified significant differences between clusters (p<0.0005). In fact, as shown in Table 2, there is a significant lower percentage of travelers with doctoral degree in the two segments characterized by having some creation activity (fully engaged and occasional consumers and creators) when compared with the less active (Inactive and Occasional Consumers and Apathetic Creators). On the other hand, comparing levels of education, the doctoral degree has the lowest percentage of fully engaged (10.3%, while the other three lower educational levels have 14.4%, 15.9% and 17.9%) and of occasional
consumers and creators (13.8%, compared with 30.8%, 23% and 17% of the three lowest educational levels). These results suggest that the higher education level, doctoral degree, is associated with less creation of travel content. To support this, educational levels were compared regarding the creation of social media contents (measured with the mean of all social media creation items – SMCR1 to SMCR5). Using Kruskal-Wallis test and post-hoc comparisons, lower levels of social media creation in the Doctoral degree level of education were found (p<0.005). This is not new as Ip et al. (2012) found that travel content creation online increased with education level until university level and then decreased. However, it does contradict Yoo and Greztel’s (2012) study that found no significant differences between travel social media creators and non-creators.

The chi-square test also revealed significant differences between clusters regarding age (p<0.0005), which was categorized in 5 classes (see Table 2). The fully engaged cluster is characterized by having a higher percentage of younger individuals (47% are less than 29 years old, and 81% are under 40). The same occurs with the other cluster that includes social media creators (occasional consumers and creators) for which 46% are less than 29 years old and 74% are below 40 years old. Furthermore, the oldest age group is less likely to use social media for travel purposes (43 percent are included in the inactive cluster and only 2 per cent are fully engaged). On the other side, the two younger classes have a higher percentage of fully engaged (20.5% and 18%, respectively, in contrast with 3% and 2% of the last two age classes) and occasional consumers and creators (26.5% and 19.6%, compared with 15.6% and 13% of the last two age classes). Summarizing, profiling the clusters according to age indicates that creation of social media contents may be associated with younger travelers while inactive social media travelers are more prevalent in older age classes. These differences are supported by comparing the mean of social media consumption and creation items between age classes. In fact, both social media creation and consumption have significantly higher values in the two youngest age classes compared with the two oldest age classes (Kruskal-Wallis and had hoc tests; p<0.03 in all tests). These results are not surprising, since a higher number of younger users use social networking websites (Pew Research Center, 2013). In the travel context, Gretzel et al. (2007) also found that frequent review readers and review writers were more likely to be younger than 35 years old. Similarly, Simms (2012) reported that younger travellers were more likely to use social media. Others studies have also supported that young travelers are more likely to share their travel experiences online and share travel photos (Ip et al., 2012; Lo, McKercher, Lo, Cheung, & Law, 2011).

<table>
<thead>
<tr>
<th>Table 2. Demographic profile of the clusters</th>
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<tr>
<td></td>
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<tr>
<td>Gender</td>
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<tr>
<td></td>
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<td>Education Level</td>
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The current study found significant differences between all clusters regarding their sense of perceived enjoyment with the use of social media for travel purposes (Kruskal-Wallis and post-hoc tests; \( p<0.025 \) for all tests). Indeed, the perceived enjoyment with the use of social media websites for travel purposes (measured by the mean of PE1 to PE4) is lower in the inactive cluster, followed by the group of occasional consumers and apathetic creators, the enthusiastic consumers, the occasional consumers and creators and, finally, with highest values, the fully engaged (see Table 3). These findings suggest that there is a positive relationship between perceived enjoyment and the use of social media for travel purposes. This is confirmed by the Pearson correlation coefficient between perceived enjoyment (mean of PE1 to PE4) and consumption of social media (mean of SMC items) which is 0.78 (\( p<0.0005 \)). The Pearson correlation coefficient between perceived enjoyment and social media creation (mean of SMCR items) is 0.61 (\( p<0.0005 \)), also a relatively strong positive correlation. These results are in accordance with other studies that have claimed that travellers use social media before travelling to add enjoyment to travel planning (Gretzel & Yoo, 2008; Gretzel et al., 2007; Parra-López et al., 2012) and that travel content creators are mostly driven by intrinsic motives, such as enjoyment (Kang & Schuett, 2013; Yoo & Gretzel, 2008, 2011).

### Table 3. Mean values for perceived enjoyment and level of involvement

<table>
<thead>
<tr>
<th>Segment</th>
<th>Perceived enjoyment</th>
<th>Level of involvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inactive</td>
<td>1.35</td>
<td>2.82</td>
</tr>
<tr>
<td>Occasional Consumers</td>
<td>3.05</td>
<td>3.06</td>
</tr>
<tr>
<td>and Apathetic Creators</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Occasional Consumers and</td>
<td>3.61</td>
<td>3.63</td>
</tr>
<tr>
<td>Creators</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consuming Enthusiasts</td>
<td>3.43</td>
<td>3.47</td>
</tr>
<tr>
<td>and Apathetic Creators</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fully engaged</td>
<td>3.92</td>
<td>3.97</td>
</tr>
<tr>
<td>Kruskal-Wallis test</td>
<td>&lt;0.0005</td>
<td>&lt;0.0005</td>
</tr>
</tbody>
</table>

As shown in Table 3, the level of involvement with social media websites (measured by the mean of items SM1 to SM9) differs among the different segments in a similar way to perceived enjoyment. That is, involvement with social media is significantly lower in the groups that use less social media for travel purposes (segments 1 and 2) than in the clusters that use social media more frequently (segments 3, 4 and 5). This result was confirmed with the Person (\( r \)) and Spearman (\( \rho \)) correlation coefficients which indicate a significant and positive relationship between involvement and both social media consumption (\( r=0.4; \rho=0.41; p<0.0005 \)) and social media creation (\( r=0.43; \rho=0.45; p<0.0005 \)). This result was expected, as discussed in the literature review.

The number of travel purchases online was also considered to profile the segments. No significant differences were found between segments 2, 3, 4 and 5; only the Inactives had significant lower values in this variable than the other groups (Kruskal-Wallis and post-hoc tests; \( p<0.031 \)). These results suggest that social media users do not differ much in the number of online travel purchases, regardless of how much they use social media.
However, travelers that do not generally use social media also tend not to purchase travel online.

Examining the percentage of travelers who usually purchase travel online, significant differences were found between segments (chi-square test, p<0.0005). The percentage of travelers who use online websites to purchase travel services is smaller in the inactive segment (51%), followed by segment 2 and 3 (60% and 62%, respectively), and lastly segments 4 and 5 with 70% and 69%, respectively.

Furthermore, no significant differences were identified between clusters regarding the number of national trips in the past year. However, regarding the number of international trips, the Inactive segment differs significantly from segments 2, 4 and 5, the inactive cluster having a significantly lower number of international trips (Kruskal-Wallis and post-hoc tests; p<0.03). The fact that this segment takes fewer international trips may, in part, explain why they do not use social media. Indeed, research has shown that a higher percentage of travelers turn to social media when visiting an international destination (Simms, 2012). It is worth noting that recent research has found no linear relationship between frequency of travel and frequency of social media consumption. Indeed, Gretzel et al. (2007) claimed that there is a u-shaped relationship between those two variables, that is, respondents who consume social media more are more likely to travel very little or very much.

Conclusions
Since social media is so influential on traveler’s decision making, several authors have pointed out the need and importance of better understanding who uses social media and who the content creators are (e.g. Wilson, Murphy, & Fierro, 2012; Yoo & Gretzel, 2012). However, research addressing this issue is scarce. This conclusion is echoed in Ip et al. (2012) study which posits that there are a limited number of studies focusing on the demographic profile of travelers who use travel websites for planning their trips. The current study helps close this gap by segmenting travelers according to their social media use for travel purposes and providing a profile of the different segments. Segmentation has always been considered of paramount importance, as marketers will be more effective if they better understand their audience.

The current study has found five segments, which distinguish social media users according to the degree of involvement in consumption and creation of travel contents. The segments do not differ regarding gender or national travel experience, and interestingly, the number of international trips is only significantly lower in the inactive cluster. However, significant differences were found regarding other aspects, namely education, age, perceived enjoyment and social media involvement. These results provide useful insights to travel online marketers and social media websites providers that need to be aware of the different segments as they can customize websites accordingly.

The main conclusions are that fully engaged social media users, as well as occasional consumer and creators, the two segments with higher level of social media creation, are younger, few have doctoral degree, perceive higher levels of enjoyment with the use of
Social media for travel purposes and are also more involved with social media websites. These segments are important to online travel providers because of their participation in creating travel related content. Indeed, they have the potential to influence others and, as a result, will affect travel decisions, such as where to go, where to stay or where to eat.

The enthusiastic consumers and apathetic creators cluster represent another segment that travel marketers need to pay attention to. Indeed, since they read other travellers’ reviews frequently, they are more likely to consider other travelers’ reviews as providing more reliable and relevant information and are also more likely to be highly influenced by those reviews (Gretzel et al., 2007). This study revealed that that this segment is equally represented in all educational levels and all age classes (in each educational level and each age class about 20% belong to this segment), and have high levels of enjoyment and involvement with the use social media online resources.

Several studies have shown that there are far more people consuming travel information than generating it (Pan & Crotts, 2012; Yoo & Gretzel, 2011). Since this study has shown a significant positive relationship between the creation of travel related content and social media involvement and with perceived enjoyment, the creation of travel related contents could be encouraged by creating websites with features that are more interactive and appealing. Other incentives, such as points, could be offered to encourage consumers to create travel content.

One of the limitations of this study is the over represented responses of Portuguese travelers, which should be noted when considering the overall generalizability of this study. Future research would benefit with a more balanced sample. Researchers could investigate other variables to characterize the segments, such as income level, nationality, attitude towards risk and trust in online reviews.

References


Using Personality Types to Influence Buyer Decisions

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Abstract

In a world where technology has provided buyers with nearly as much access to information about a product or service as the salesperson has, salespeople must look for new ways of selling. One avenue would be to better understand their buyer and their buyer’s motives for purchasing. One tool being suggested is a facet of the Enneagram. Enneagram theory is based on varying personality types. One area of classification within the theory is referred to as the instinctual variants or drives that underlie one’s motives and behaviors. Three unique variants are said to exist, which could provide insight into the intentions behind a prospect’s reason for purchasing. Using this information, a salesperson may be more equipped to tailor their pitch to meet the needs of their buyer. This presentation will be designed to introduce participants to the three instinctual variants within Enneagram theory. Discussions will include how to recognize each type, general motivations of each type that may impact purchasing decisions, and methods for discovering such internal desires. This information could potentially benefit a salesperson when pitching a product or service.

Keywords: buyer, personality, influence
How well do markets respond to newly released information on social media?

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Abstract

Closed-door decisions can be defined as decisions in which the outcome is determined by a limited number of decision-makers and is shrouded in at least some secrecy, and can be contrasted with open-door decisions, populated by a large number of decision-makers. In this paper, we use two well-documented cases to examine, using a large real-time data set, how well market prices respond to newly released information via social media relating to both types of decision. Our results suggest that the market was generally sluggish in responding to new information in both contexts, and notably so in the former case. We venture some possible explanations for our findings, including the observation that market prices do not fully react to the release of new information via social media until that information is picked up and disseminated by traditional media. We explain this by the demand by market actors for corroborating evidence in established and well-regarded news outlets, particularly in respect of events shrouded in more secrecy. We explore whether this sequential reaction of markets is an efficient response to the release and dissemination of the new information, and conclude that there is at least some evidence of informational inefficiency.

Keywords: markets, efficiency, information
From Scratch -Creating a New Department, New Core Courses, and Two New Socially Responsible Majors

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Abstract

Until one year ago, Rollins College offered one business major: International Business. In Fall 2012, Rollins’ Board of Trustees encouraged the Department of International Business (INB) to consider offering a different kind of business major, one that did not involve a significant foreign language requirement. To accomplish this goal, a new department was created in last Spring 2013 and six INB faculty transferred into that department: Business and Social Entrepreneurship (BSE). Over Summer 2013, the faculty began to develop a curriculum proposal that involved an entirely new set of business core courses, along with two new majors: Management (described as “responsible business management”), and Social Entrepreneurship and Business. In Fall 2013, 26 new courses were proposed to the college’s curriculum committee and approved. In Spring 2014, the BSE did a “soft rollout” of a limited number of courses and began to accept majors. The “hard rollout” occurred in Fall 2014. After the freshmen showed up on campus, the program has over 400 majors and minors, and is the largest academic program on campus!

Note that the effort began with NO core business courses – the INB business core consisted exclusively of courses with a heavy “global lens,” such as International Marketing and International Finance. The BSE faculty consequently developed an entirely new set of core courses with a dramatically different set of lenses and design considerations. The dominant lenses were for medium and smaller businesses. The key design considerations included: triple bottom line (People, Planet, Profit), responsible leadership and citizenship, impact and engagement, entrepreneurial thinking and innovation, critical thinking and ethical reasoning, and do business for doing good. These elements are infused throughout the core courses (and the major courses). The Management major is described as “responsible business management.” The obvious focus is on learning responsible approaches to business management. The Social Entrepreneurship & Business (SEB) major focuses on helping students build a career out of making the world a better place (do well by doing good!); creating innovative solutions to critical social, cultural and environmental challenges; organizing, creating, and managing a venture, and becoming an agent of change at any position. Note that the SEB majors is the first one ever offered in an AACSB accredited institution.

So, why build these two majors? A student survey at Rollins College obtained the following critical results: 84% will seek socially responsible employment, 90% of these thought that business can create a positive impact and want to be so involved, and 77% thought that more emphasis was needed on preparing socially and
environmentally responsible individuals. Similarly, employers were saying that they value sustainable growth, entrepreneurial thinking and innovation, and the triple bottom line. The majors were built in light of these findings. As would be expected, many obstacles had to be overcome to achieve the vision. And, that is the first piece of advice: develop a clear and unique vision for the new department and the majors. Other sound plans are needed for (1) dealing with internal process, (2) defining the target market, (3) marketing, (4) communication (internal & external), (5) financial issues (e.g., staffing), (6) developing a high performing team, (7) building and maintaining political capital, (8) dealing with incoming criticism, (9) dealing with success, and (10) dealing with failure.

**Keywords:** responsible business management, social entrepreneurship, entrepreneurial and innovative thinking, triple bottom line
Consumer Perceptions of Cruise Line Sustainability

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Introduction
The cruise industry is a multibillion-dollar industry that has evolved since its creation (Mak, Sheehy, & Toriki, 2010). The origins of the cruise industry began in the 1800s with Arthur Anderson and Samuel Cunard. It is believed that Anderson established the idea of cruising in the Shetland Journal with a fake cruise advertisement (P&O, n.d.). Anderson then went on to found Peninsular Steam Navigation Company in 1837 with Brodie McGhie Wilcox (P&O, n.d.). By 1840, Peninsular Steam Navigation Company became Peninsular and Oriental Steam Navigation Company, more commonly known as P&O (P&O, n.d.). P&O expanded with shipping into the East and obtained additional contracts from the Royal Mail, which further grew the shipping company (P&O, n.d.). P&O later implemented Anderson’s idea of cruising for leisure in the Mediterranean with the sale of round trip tickets (P&O, n.d.). P&O’s leisure cruises had a large influence on the beginning of the cruise industry. The first cruise has often been touted to have taken place in 1840 on the RMS Britannia. In 1840, Cunard took 63 passengers on the RMS Britannia across the Atlantic (Gulliksen, 2008). The RMS Britannia was the first ship to have established voyages for passengers across the Atlantic (Branchik, 2011; Butler, 2004). Anderson and Cunard had a large influence on the beginning of the leisure cruise industry and transportation of passengers.

Since the beginning of the passenger cruise industry, cruising has changed in the leisure market and no longer just focuses on the transportation of passengers. Cruise travel can be defined as a “passenger ship used for pleasure voyages. The voyage itself and the ship’s amenities [consisting] of transportation, accommodation, dining, ship-board entertainment, recreational activities, domestic and foreign ports of calls, and shore excursions, are considered the essential part of the experience” (Sun, Jiao, & Tian, 2011, p. 747). The cruise industry caters towards a wide range of consumers with resort style cruising, expeditions, sailing yachts, tall sailing ships, and river cruising (Dowling, 2006; Showker, 2010). Cruise travel is a worldwide industry that covers every continent and allows passengers to sail anywhere that can be reached by sea or river (Showker, 2010). Passenger ships vary in size from small yachts to large vessels that can carry up to 5,000 passengers (Gulliksen, 2008). Many of these passenger vessels are considered to be floating resorts due to the range of entertainment options available. Passengers can rock climb, watch Broadway style shows, ice skate, zip line, etc. (Royal Caribbean International, n.d.). Cruise ships have varying amenities from each line, but many vessels are considered floating resorts that offer passengers a resort experience at sea. This has created competition between cruise lines to create larger and unique passenger vessels.

The cruise industry is the fastest growing sector in the travel industry and has experienced an increase in the growth of passengers since the 1970s (Clancy, 2008). As stated by Cruise
Lines International Association (CLIA), approximately 500,000 passengers sailed on a cruise in 1970 and the number has increased by over 2,100 percent (“Profile of the U.S. Cruise,” n.d.). In 2014, CLIA forecasted the estimated number of passengers sailing on cruises at 21.7 million worldwide (Cruise Lines International Association, 2014). Furthermore, there will be 24 new ships introduced by CLIA cruise line members in 2014 and 2015, which will add an additional passenger capacity of 37,546 to the market (Cruise Lines International Association, 2014). With the addition of new ships and more passengers, the cruise industry is expanding into new destinations. Major cruise lines add new itineraries in order to expand into regions that are less explored, and to market to new cruisers and repeat passengers (Cruise Lines International Association, 2013).

Cruise line sustainability has been a concern for environmental groups and governmental agencies due to pollution, sewage, and harm to the oceans. Environmental advocacy groups and news agencies have reported on the failure of cruise lines to uphold safe environmental practices. A large issue that is examined by advocacy groups and governmental agencies is the dumping of garbage, graywater, black water, and bilge water. An article by the Associated Press noted the government in the Cayman Islands had been able to trace garbage on the local shore from passing cruise ships (Melia, 2009). The dumping of water is a concern due to the factors that may be present in graywater, black water, and bilge water. Graywater, also referred to as sullage, is different from black and bilge water because it can be recycled. The United States Environmental Protection Agency views graywater as “reusable wastewater from residential, commercial and industrial bathroom sinks, bath tub shower drains, and clothes washing equipment” (Environmental Protection Agency, n.d., c). Graywater is recyclable but needs to be treated in order to reuse the water (Environmental Protection Agency, n.d., c). Black water, also referred to as wastewater, is different from graywater because it is considered hazardous sewage waste. Black water is viewed as wastewater by the EPA, which comes from toilets, bidets, and kitchens (Environmental Protection Agency, 2012). Bilge water is found on the lowest part of a vessel and comes from a variety of different sources onboard the vessel that have either leaked or spilled, which then collect in the bilge. The EPA defines bilge waters as a “mixture of water, oily fluids, lubricants, cleaning fluids, and other similar wastes” (Environmental Protection Agency, 2008, p. 1). The dumping of graywater, black water, and bilge water is a concern in the maritime industry due to possible chemicals and contaminates that may be present in the water. In 2011, news agencies reported the United States EPA fined Princess Cruises $20,000 when the Golden Princess dumped pool water into Glacier Bay National Park in Alaska (Sloan, 2013). Dumping has long been a concern for environmentalist groups due to possible chemicals and toxins that may be present in the materials.

Cruise line failure to follow international laws on environmental practices has led environmental groups to closely watch the industry. Friends of the Earth, an environmental advocacy group, has published yearly report cards on the environmental footprint of major cruise lines. The report cards examine sewage treatment, air pollution reduction, water quality compliance, and changes from the previous year. In 2014, CLIA North America had 26 cruise line members (Cruise Lines International Association, n.d., a) and worldwide CLIA had nearly 60 cruise line members (Cruise Lines International Association, n.d., b).
The report by Friends of the Earth only examined 16 major cruise lines with a total of 162 cruise ships. The cruise lines examined are based in the United States, the United Kingdom, Italy and Japan. For 2013, only Disney Cruise Line received an overall grade of A and seven cruise lines received a D or lower grade (Friends of the Earth, 2013). Disney Cruise Line was the only line to receive an overall grade of A out of the 16 lines examined. Seven cruise lines received a grade of D or lower and these lines were Regent Seven Seas Cruises, Silversea Cruises, Oceania Cruises, MSC Cruises, P&O Cruises, Costa Cruises, and Crystal Cruises (Friends of the Earth, 2013). Between the seven cruise lines, most sail to exotic destinations. Silversea Cruises has three expedition ships that sail to destinations in Antarctica, the Galapagos, and Asia (Silversea, n.d.).

Sustainable studies on the cruise industry examine one or more of the three pillars of sustainability. The three pillars of sustainability examine the environment, economy, and social equality (General Assembly of the United Nations, n.d.). The environmental pillar of sustainability focuses on the protection of the environment from damaging effects of waste and pollution (Environmental Protection Agency, n.d., b). Areas of air and water quality are important to the environmental pillar and protecting fragile eco-systems throughout the globe (Environmental Protection Agency, n.d., b). The economic pillar of sustainability examines the idea of economic stability for communities from jobs, small businesses, supply and demand, and natural resource accounting (Environmental Protection Agency, n.d., b). Economic sustainability focuses the importance of using local resources to their best advantage for the local community, while using these resources responsibly to protect the environment. The social pillar of sustainability emphasizes social equality of human health, environmental and social justice, education, and security of resources (Environmental Protection Agency, n.d., b). The three pillars of the environment, economy, and social equality create the idea of sustainability. All three pillars of sustainability are seen throughout the cruise industry and are also interlinked. As the cruise industry expands, the three pillars of sustainability have become more visible.

Sustainability of the cruise industry is a concern that has emerged in the travel industry due to expansion of cruise lines and increased number of passengers. Consumers may view the idea of sustainability differently throughout the world due to demographic differences. Characteristics of demographics include age, gender, income, education level, status of employment, family size, marital status, and other categories that can be used to describe the structure of a population (Laroche, Bergeron, & Barbaro-Forleo, 2001). Various demographic backgrounds can influence how a consumer may view tourism and the environment. There is a correlation between specific demographic characteristics that are more likely to favor environmentalism (Laroche et al., 2001).

Gender, age, education, and income are considered important factors for examining an individual’s attitudes and behavior towards the environment since these factors can influence a consumers purchasing behaviors (Im, Bayus, & Mason, 2003; Laroche et al., 2001; Torgler, Garcia-Valinas, & Macintyre, 2008). McIntyre, Meloche, and Lewis (1993) noted women are more likely to favor environmentally friendly products compared to men. Furthermore, women are more likely to be concerned about the well-being of others and are more socially conscious (Eagly, 1987). Some studies have found age to have an
influence on environmental perceptions. Age differences have been shown to influence consumers’ decisions and buying patterns (Im et al., 2003). Earlier studies on environmentally friendly consumers found age influenced social conscious intentions (Anderson & Cunningham, 1972; Berkowitz & Lutterman, 1968). The study found younger customers are more likely to purchase environmentally friendly products (Evanschitzky & Wunderlich, 2006). The impact of demographics plays an important role in the viewpoint of consumers. With concerns that emerge about sustainability, this leads to the question of how do consumers view the cruise industry and sustainability.

Travel industry research has encompassed consumer perceptions regarding sustainability and environmental awareness, but only in the hotel industry. Most of the research has examined green hotels and how consumers perceive sustainability and eco-friendliness in hotels throughout the globe (Han, Hsu, & Lee, 2009; Han, Hsu, Lee, & Sheu, 2011; Millar & Baloglu, 2011). Consumer research of green hotels also focused on understanding consumer decisions and behavior (Kim & Han, 2010; Han, Hsu, & Sheu, 2010; Kim, Palakurthi, & Hancer, 2012). In the research presented on consumer perceptions, demographics have influenced the consumer choices and opinions on sustainability. Environmental consumer studies on age and gender have shown an influence on an individual’s environmental choices (Anderson & Cunningham, 1972; Berkowitz & Lutterman, 1968; Im et al., 2003; Laroche et al., 2001; McIntyre et al., 1993; Torgler et al., 2008). Research on consumer perceptions of sustainability in the tourism industry does not focus on ocean travel.

The research on sustainability in the cruise industry does not examine the perspective of the consumer. The research is from the perspective of environmentalists and activists. Most research on sustainability in the cruise industry has focused mainly on the environmental pillar of sustainability (Environmental Protection Agency, 2008; Johnson, 2002; Luck, Maher, & Stewart, 2010). Research on the three pillars of sustainability does not examine how consumers perceive the industry. There has been a lack of research on consumer perceptions and the three pillars of sustainability. Therefore, this research provides information to the cruise and travel industry about consumer perceptions of cruise line sustainability. Cruise lines have a large impact on the social pillar of sustainability. Flags of convenience have created shipboard environments where crews receive low wages, lack of power to strike, and poor working conditions (Wood, 2004). Flags of convenience have allowed ships to avoid disclosing ownership. In an investigation by The New York Times, some countries were found to not require the owner of a vessel to disclose who they are or require more than a signature to register (George, 2011; Sharife, 2010). The most important item for ship owners is operation costs. Many owners have looked to save costs instead of focusing on labor and safety conditions (Gregory, 2012; Wood, 2004).

**Methods**

Using Qualtrics, a survey link was posted on three different cruise message boards, as well as Facebook. The survey asked about consumer background such as demographics and cruising history, reasons for booking a cruise, and perceptions of importance of sociocultural, economic and environmental sustainability in the cruise industry. The survey
was pilot tested and a total of 267 respondents completed the survey. Data was coded and analyzed using a statistical software package.

**Results**

Of the 267 respondents, 11 percent had not cruised before. A total of five percent had only cruised one time. Respondents who had cruised two to nine times contributed to 30 percent of the survey participants. A total of 33 percent selected 10 to 24 times, which means that 63% cruised between 2-24 times before. Respondents who had cruised 25 times or more were 21 percent of survey respondents. Half of the respondents were male and 50% female. Thirty-one percent were between 18 and 45 years old, while 67% were 46 or older. Thirty-five percent of respondents had completed a bachelor’s degree and 30 % of respondents selected some postgraduate work, a graduate degree, or professional degree. Furthermore, 87% stated they lived in suburban or urban areas. The factors that were most important to respondents when selecting a cruise were cost of the cruise followed by the itinerary and thirdly cuisine on board, while shopping and accessible accommodation were the least important items. Twenty seven percent of the respondents stated they would be willing to pay slightly more for a tourism operator that engages in sustainable practices. The two highest preferred sustainable travel behaviors could be considered both economic and social. The sustainable travel behavior respondents identified the most with was, “when I travel I try to eat at locally owned restaurants.” The mean for responses was 3.95 with 73% of respondents either agreeing or agreeing strongly to the statement. The second sustainable travel behavior consumers agreed with was, “when I travel I try to purchase local products.” The mean for responses was 3.88 with 56.2 percent agreement and 18.7 percent strong agreement.

The lowest sustainable travel behavior related to the highest selected travel behavior. Consumers responded to the statement, “when I travel I try to eat at restaurants that are familiar (chain restaurants).” The mean for responses was 2.67 with 39.3 percent of respondents who disagreed and 34.1 percent who selected neither agree or disagree. The second and third lowest sustainable travel behaviors related to the environment. For the statement “when I travel I am willing to reuse my towel or bed linens” the mean was 2.74, which was the second lowest sustainable travel behavior selected by respondents. For the agreement level of strongly disagrees, 15.6 percent of respondents selected this option and for the point of disagrees 37.5 percent of respondents selected this agreement level. The third lowest sustainable travel behavior was “when I travel I try to stay at a hotel that is considered ‘green.’” The mean for this behavior point was 3.07 with 22.5 percent of respondents selecting disagree and 53.2 percent selecting neither agree nor disagree. Respondents further answered a series of questions about the importance of sustainable factors when choosing a cruise line. Survey participants favored more social sustainable factors than environmental sustainable factors. The three highest sustainable factors selected by consumers were social. The most important sustainable for choosing a cruise line was, “all applicable health and safety measures are taken to protect passengers, crew, and local communities.” The mean for this factor was 4.49 with 58.1 percent of respondents selecting very important and 34.8 percent selecting important. The second and third highest factors received the same means for respondent selections. The second factor respondents selected was “international legal protection is provided to crew.” This factor received a
mean score of 4.03 with 31.5 percent of respondents selecting very important, 44.9 percent important, and 20.6 percent moderately important. The third factor, which received a mean of 4.03, was “information provided to passengers about local cultures and customs of destinations,” for which 27% selected very important, 53.6% selected important, and 15.4 selected moderately important. The fourth highest factor was placed in the general category since it related to all sustainable factors. The factor was “cruise lines observe all applicable regulations in port and in international waters.” The mean for this factor was 4.01 with 34.8 percent of respondents who selected very important, 35.6 percent selected important, and 26.2 percent selected moderately important. The fifth highest point for consumers was “activities of cruise ships should not compromise the basic services in port.” The mean for this factor was 4.00 with 22.1 percent of respondents who selected very important, 59.6 percent selected important, and 15.7 percent selected moderately important. Certification in sustainability was not an important sustainable factor for these consumers. In the survey consumers answered a series of question about the importance of sustainable factors when choosing a cruise line. Survey respondents favored more social sustainable factors than environmental sustainable factors. Four of the five top factors chosen were sustainable. The three highest sustainable factors selected by consumers were social. The highest factor respondents selected was important for choosing a cruise line was, “all applicable health and safety measures are taken to protect passengers, crew, and local communities.” The mean for this factor was 4.49 with 58.1 percent of respondents selecting very important and 34.8 percent selecting important. The second and third highest factors received the same means for respondent selections. The second factor respondents selected was “international legal protection is provided to crew.” This factor received a mean score of 4.03 with 31.5 percent of respondents selecting very important, 44.9 percent important, and 20.6 percent moderately important. The third factor, which received a mean of 4.03, was “information provided to passengers about local cultures and customs of destinations. For respondents 27.3 percent selected very important, 53.6 selected important, and 15.4 selected moderately important. The fourth highest factor was placed in the general category since it related to all sustainable factors. The factor was “cruise lines observe all applicable regulations in port and in international waters.” The mean for this factor was 4.01 with 34.8 percent of respondents who selected very important, 35.6 percent selected important, and 26.2 percent selected moderately important. The fifth highest point for consumers was “activities of cruise ships should not compromise the basic services in port.” The mean for this factor was 4.00 with 22.1 percent of respondents who selected very important, 59.6 percent selected important, and 15.7 percent selected moderately important.

Research question three sought to answer how consumers perceive sustainability in the cruise industry. The researcher first noted there were differences in how survey participants viewed sustainability. Questions asked consumers what sustainability meant to them. A majority of consumers, 81.6 percent, felt sustainability meant conserving resources around them. Purchasing and using local products received 74.9 percent response from consumers stating they felt this was a sustainable point. Only 62.2 percent of survey respondents felt using environmentally friendly products related to what sustainability meant to them. On the factor of respecting native populations, only 58.4 percent of participants felt this was a sustainable principle. Only 32 percent of respondents thought earning a living wage was
related to sustainability. Overall 68.2 percent of consumers did not feel earning a living wage meant sustainability.

The researcher next examined how consumers felt the cruise industry was doing overall on sustainability. Questions asked consumers if they felt the cruise industry was sustainable. Overall, 65.9 percent of consumers felt the cruise industry was sustainable. This was significant since 15.0 percent of consumers did not feel the industry was sustainable. A total of 19.1 percent of respondents had no opinion on cruise industry sustainability. The researchers further analyzed this question by looking at cruise history. The factor of cruise history had a significant affect on some of the sustainable factors. An analysis of variance showed the effect was significant, \( p < .001 \). Post hoc analyses using the Scheffe post hoc criterion showed respondents who had cruised more, were more likely to find the cruise industry sustainable. Out of the respondents who had cruised 25 times or more, 74.5 percent thought the cruise industry was sustainable. While 20 percent of participants who cruised 25 times or more did not think the cruise industry was sustainable. For respondents who had cruised 10 to 24 times, 79.5 percent felt the cruise industry was sustainable while 13.6 percent did not. The percentage slightly decreased for participants who had cruised two to nine times with 62.2 percent selecting the cruise industry was sustainable, 13.8 percent selected the industry was not sustainable, and 25.0 percent had no opinion. For respondents who had only cruised once or had not cruised, the percentage of respondents who felt the cruise industry was sustainable decreased compared to respondents who had cruised more. Respondents who had not cruised, 36.7 percent thought the cruise industry was sustainable, while 50.0 percent had no opinion and only 13.3 percent thought the industry was not sustainable. For the participants who had only cruised once, 35.7 percent thought the industry was sustainable, while 14.3 percent thought the industry was not sustainable, and 50.0 percent had no opinion.

When it came to survey participants scoring individual cruise lines in question B2 for how they felt each line did on sustainability, many participants had no opinion. Overall most cruise lines had 100 survey respondents state no opinion. Princess Cruises was the only line to receive 90 responses with no opinion. The highest no opinion received was for MSC Cruises with 82.8 percent of respondents who selected no opinion. MSC Cruises received no scores from survey participants of a nine or ten on sustainability. Respondents mostly favored Celebrity Cruises and Princess Cruises for sustainability. Celebrity Cruises received a mean of 6.26 and 40.8 percent of respondents who selected a score of six or higher on sustainability. Princess Cruises received the highest number of responses with 53.6 percent of respondents who selected a score of six or higher on sustainability and the mean was 6.97. Three cruise lines received a mean between 5.00 and 6.00: Disney Cruise Line received a mean of 5.78; Royal Caribbean International received a mean of 5.50; and Holland America Line received a mean of 5.35. Norwegian Cruise line received a mean of 4.80. Carnival Cruises received the highest number of low scores on sustainability with 34.4 percent of respondents who selected a score of five or lower with a mean of 4.25. Overall MSC Cruises received the lowest mean of 3.91.

Each respondent was asked 23 points on sustainable factors when choosing a cruise line. The factors examined specific areas of environmental, economic, and social sustainability.
Respondents were also asked three general sustainable factors. The factor of “cruise lines observe all applicable regulations in port and international waters” was the most important of the three general factors with a mean of 4.01. No respondents selected the point of unimportant for this factor. The point of importance was selected by 35.6 percent of respondents and very important was selected by 34.8 percent. The factor regarding “a long-term management plan for sustainability has been developed and implemented” received a mean of 3.53 with 41.6 percent of respondents selecting moderately important. When respondents were asked if they would choose one cruise line over another because it is considered more sustainable, only 11.2 percent said this was very important. The factor received a mean of 3.29 with 43.1 percent of respondents selecting moderately important.

Respondents were asked eight points on environmental sustainability. The lowest mean for environmental sustainability was 2.85 for the factor of “room card reader for passengers to insert their cruise cards when entering a cabin to turn on electricity.” While 11.2 percent of respondents selected unimportant, 24.0 percent selected of little importance, and 40.1 percent selected moderately important. The second lowest mean for environmental sustainability was 3.00 for the factor of “green and sustainable certifications.” With 50.9 percent of respondents who selected the point of moderately important and 21.3 percent selected the point of little importance. The second highest mean for environmental sustainability was 3.36 for the factor of “use of renewable energy sources.” With 49.8 percent of respondents who selected moderately important, 13.9 percent who selected important, and 20.2 percent that selected very important. The highest mean was 3.58 for the factor of “preferences for products that are environmentally responsible.” The point of moderately important was selected by 34.1 percent of respondents; important was selected by 41.6 percent of respondents; and very important was selected by 14.2 percent of respondents.

The second section respondents answered was regarding economic sustainability. There were five factors for respondents to answer. The lowest mean for economic sustainability was 3.52 for the factor of “cruise lines hire local minorities and women.” The point of moderately important received 42.3 percent of responses, while the point of important received 25.8 percent, and very important received 21.3 percent. The second lowest mean for economic sustainability was 3.57 for the factor of “cruise lines give local residents the opportunity to gain employment.” The point of moderately important received 43.1 percent of responses, while the point of important received 30.7 percent, and very important received 18.4 percent. The second highest mean for economic sustainability was 3.71 for the factor of “cruise lines support local businesses selling sustainable products that represent a destination’s culture, history, and nature.” The point of moderately important received 30.3 percent of responses, important received 43.1 percent, and very important received 19.1 percent. The highest mean for economic sustainability was 3.73 for the factor of “purchasing policies favor local goods from embarkation ports and ports traveled to throughout a cruise.” The point of important received 40.1 percent of responses and very important received 21.0 percent.

The third section respondents answered was regarding social sustainability. There were seven factors for respondents to answer. The lowest mean for social sustainability was 3.77
for the factor of “cruise lines contribute to the preservation of historical and archaeological sites.” The point of moderately important was selected by 28.1 percent of respondents and important was selected by 41.9 percent. The second lowest mean for social sustainability was 3.81 for the factor of “cruise lines support communities traveled to with projects supporting development of communities and infrastructure.” The point of moderately important was selected by 21.3 percent of respondents and important was selected by 55.4 percent. The second highest mean for social sustainability was 4.03 for two factors: “international legal protection is provided to crew” and “information provided to passengers about local cultures and customs of destinations.” For the point of international legal protection, 44.9 percent of respondents selected this was important and 31.5 percent selected very important. For the point of information provided to passengers, 53.6 percent of respondents selected this was important and 27.3 selected very important. The highest mean for social sustainability was 4.49 for the factor of “all applicable health and safety measures are taken to protect passengers, crew, and local communities.” No respondents selected the point of unimportant. The point of very important was selected by 58.1 percent of respondents and important was selected by 34.8 percent.

The researcher then examined how the demographic of income affected this section of the survey. The factor of income had a significant affect on some of the sustainable factors. An analysis of variance showed the effect of “access to alternative modes of transportation in ports” was significant, \( p = .003 \). Post hoc analyses using the Tukey post hoc criterion for significance indicated that the income levels from $40,000 to $149,999 placed a higher importance for “access to alternative modes of transportation in ports” compared to the income level of $150,000 or more. An analysis of variance showed the effect of “composting of food waste” was significant, \( p = .001 \). Post hoc analyses using the Scheffe post hoc criterion for significance indicated that the income level of $100,000 or more placed a higher importance on “composting of food waste” compared to the income level of $40,000 to $59,999. All three factors of general sustainability showed in an analysis of variance a significant effect of \( p < .006 \). The factor of “a long-term management plan for sustainability” in the post hoc analyses using the Tukey post hoc criterion for significance indicated the income level of $80,000 or more placed a higher importance on this factor compared to the income level of $40,000 to $59,999. The factor of “cruise lines observe all applicable regulations” in the post hoc analyses using the Tukey post hoc criterion for significance indicated the income level of $100,000 or more placed a higher importance on this factor compared to the income level of $40,000 to $59,999. When it came to the option of choosing one line over another due to sustainability, the post hoc analyses using the Tukey post hoc criterion for significance indicated the income level of $60,000 or more placed a higher importance on this point compared to the income level of $40,000 to $59,999.

The researcher predicted sustainable practices are more important to younger cruisers when choosing a cruise than older cruisers. In the survey there was no significant difference in 17 sustainable factors for choosing a cruise between young and older cruisers. Six of these points were environmental sustainability factors; three of these factors were economic sustainability factors; and five of these factors were social sustainability factors. When it came to the option of choosing one line over another due to sustainability, there was no
significant difference between young and older cruisers. Additionally there was no significant difference between young and older cruisers on the questions about “a long-term management plan for sustainability has been developed and implemented” and “cruise lines observe all applicable regulations in port and in international waters.”

There was a significant value of .05 and less for 6 sustainable factors. Two of these points were environmental sustainability factors; two of these factors were economic sustainability factors; and two of these factors were social sustainability factors. The two environmental sustainability factors varied on the impact of age. An analysis of variance showed the effect of “green and sustainable certifications” to be significant, \( p = .004 \). Post hoc analyses using the Tukey post hoc criterion for significance indicated that the age level of 56 to 65 to be significantly higher than the age group 46 to 55. The mean for the age group of 56 to 65 was 3.32, while the mean for the age group of 46 to 55 was 2.76. An analysis of variance showed the effect of “access to alternative modes of transportation in ports” to be significant, \( p = .000 \). Post hoc analyses using the Tukey post hoc criterion for significance indicated that the age levels of 26 to 45 to be significantly higher then the age groups 46 to 55 and 66-plus.

The two economic sustainability factors found significant differences between the age groups above 36. An analysis of variance showed the effect of “cruise lines hire local minorities and women” to be significant, \( p = .000 \). Post hoc analyses using the Scheffe post hoc criterion for significance indicated that the age level of 36 to 45 to be significantly higher than the age groups of 56 and above. The mean for the age group of 36 to 45 was 4.00, while the mean for the age group of 56 to 65 was 3.82 and the mean for 66-plus was 3.21. An analysis of variance showed the effect of “purchasing policies favor local goods from embarkation ports and ports traveled to throughout a cruise” to be significant, \( p = .004 \). Post hoc tests indicated the age group of 56 to 65 to be significantly higher than the age group of 66-plus. The mean for the age group of 56 to 65 was 4.03, while the mean for the age group of 66-plus was 3.49.

The two social sustainability factors varied on the impact of age. An analysis of variance showed the effect of “cruises lines contributed to the preservation of historical and archaeological sites” to be significant, \( p = .003 \). Post hoc analyses using the Scheffe post hoc criterion for significance indicated that the age level of 56 to 65 to be significantly higher then the age groups 36 to 45 and 66-plus. The mean for the age group of 56 to 65 was 4.15, while the mean for the age group of 36 to 45 was 3.59 and the mean for the age group of 66-plus was 3.64. An analysis of variance showed the effect of “cruise lines avoid the exploitation of local cultures” to be significant, \( p = .011 \). Post hoc analyses using the Scheffe post hoc criterion for significance indicated that the age level of 56 to 65 to be significantly higher than the age group of 26 to 35. The mean for the age group of 56 to 65 was 4.22, while the mean for the age group of 26 to 35 was 3.50.

The researchers hypothesized that sustainable practices are more important to women when choosing a cruise than men. A t-test was conducted to compare gender and sustainable factors for choosing a cruise line. The three general sustainability questions noted differences between males and females on importance of sustainability factors.
came to the idea of choosing one cruise line over another, there was a significant difference in the scores between males and females, $p < .001$. The mean for male respondents was 3.24 and the mean for female respondents was 3.36. For the general sustainability question, “a long-term management plan for sustainability has been developed and implemented,” there was a significant difference in the scores between males and females, $p < .001$. The mean for male respondents was 3.23 and the mean for female respondents was 3.83. For the general sustainability question, “cruise lines observe all applicable regulations in port and in international waters,” there was a significant difference in the scores between males and females, $p < .001$. The mean for male respondents was 3.58 and the mean for female respondents was 4.44. For the general sustainability questions females placed higher importance on cruise line sustainability.

Male and female cruisers were compared in how important they rated environmental sustainability factors of cruise lines. All eight environmental sustainability items showed significant difference in the scores between males and females, $p < .001$. Female respondents placed a higher importance than male respondents on six of the eight environmental sustainability factors. The highest factor for female respondents was 3.86 for the factor of “composting of food waste.” The mean for male respondents for this factor was 2.65. The factor of “use of renewable energy sources” received a mean from female respondents of 3.82 and from male respondents the mean was 2.90. The environmental sustainability factor with the smallest difference between males and females was “room card reader for passengers to insert their cruise cards when entering a cabin to turn on electricity.” The mean for female respondents was 2.87 and the mean for male respondents was 2.84. Male respondents placed a higher importance than female respondents on two of the eight environmental sustainability factors. The first factor was “access to alternative modes of transportation in ports.” The mean for male respondents was 3.39 and the mean for female respondents was 3.10. The second factor males placed a higher importance on was “refillable toiletry dispensers in the cabin bathroom.” The mean for male respondents was 3.41 and the mean for female respondents was 3.30.

Furthermore, differences in the importance of sustainability between male and female cruisers were analyzed. There were five economic sustainability factors for male and female respondents to answer. In all five questions there was a significant difference in the scores between males and females, $p < .001$. Female respondents placed a higher importance than male respondents on all five economic sustainability factors. The factor females placed the highest importance on was “crews are paid a living wage.” The mean for female respondents was 4.11 and the mean for male respondents was 3.21. For the factors on employment, male respondents placed the lowest importance on both factors. The factor on “cruise lines give local residents the opportunity to gain employment,” received a mean of 3.17 from males and a mean of 3.97 from females. The factor on “cruise lines hire local minorities and women,” received a mean of 3.12 from males and a mean of 3.93 from females. The factor females placed the lowest importance on was “cruise lines support local businesses selling sustainable products that represent a destination’s culture, history, and nature.” The mean for female respondents was 3.85 and the mean for male respondents was 3.57.
There was a significant difference in the scores for all seven social sustainability items between males and females, \( p < .001 \). Female respondents placed a higher importance than male respondents on all seven social sustainability factors. The highest mean for both females and males was for the factor “all applicable health and safety measures are taken to protect passengers, crew, and local communities.” The mean for female respondents was 4.55 and the mean for male respondents was 4.43. The second highest mean in the social sustainability category was for the factor “international legal protection is provided to crew.” The mean for female respondents was 4.31 and the mean for male respondents was 3.77. The lowest social mean for females was for the factor “cruise lines support communities traveled to with projects supporting development of communities and infrastructure.” The mean for female respondents was 3.91 and the mean for male respondents was 3.71. The lowest mean for males was for the factor “cruise lines contribute to the preservation of historical archeological sites.” The mean for male respondents was 3.56 and the mean for female respondents was 4.00.

**Summary**

This study sought to identify how consumers view sustainability in the cruise industry. After the survey period was completed, the information was coded and then analyzed. While the information was analyzed from the surveys, patterns began to emerge. Overall, female respondents placed a higher importance on most sustainable cruise factors compared to male respondents. Additionally, differences regarding perceptions of cruise line sustainability between past cruisers and respondents who had not cruised were noted. It was also interesting to note that age was not directly correlated to increased importance of sustainability for all items.

**References**


On Pricing of American-style Put Options with Early Notification in the Black-Scholes Market  

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Abstract  

In this paper we research the problem of pricing American-style Put Options with Early Notification (APOEN) in the Black-Scholes market. Firstly, we describe the characteristics of APOEN and consider the relationship of its pricing and the stochastic optimal stopping time, then state that APOEN degrades into traditional American put options when the early notification is zero and European Put Options when it is equal to the option maturity. Secondly, on the basis of Black-Scholes pricing equation, we provide the APOEN pricing equation, which is a free boundary integral partial differential equation (IPDE), define the boundary of the early notification and prove its existence and uniqueness. Thirdly, the numerical solution to the APOEN pricing equation is addressed according to the theory of finite difference and Simpson numerical integration. Finally, we further verify the relationship among APOEN, traditional American options and European options by the numerical example. The results show that APOEN degrades into traditional American put options when the early notification is zero as well as European Put Options when it is equal to the option maturity, also the price of APOEN falls as the early notification increases until it is equal to the price of European options, while the difference between the American option price and the APOEC price is the implied information value of the early notification.  

Keywords: early notification, American options, free boundary, integral partial differential equations, information value  

Introduction  

American options have been the most traded options variety for which could be executed in advance and pose strong flexibility. Pricing American options is not only a highly challenging question but also having motivated many scholars to research. For instance, Alili & Kyprianou (2005) gave the related properties of the first passage of Levy processes and apply it to the American put option pricing. Zhu (2006) proposed an accurate and implicit solution for the American option price. Chen & Chadam (2007) studied the mathematical properties of the optimal exercise boundary for American put options while Zhu & He (2007) presented an approximate formula for the optimal exercise boundary of the American put option. Khaliq, Liu (2009), Huang, Forsyth (2011), Anthony, Hongtao et al (2012), Alexey, Olivier (2012), Khaliq, Kleefeld et al (2013) researched the question of pricing American option with the underlying asset price following the regime-switching stochastic process. Santtu and Jari (2012) compared the pros and cons of the different finite
difference methods for pricing American options under finite activity jump-diffusion models. Kin and Felix (2010) discussed the error reduction techniques for Pricing American Options based on Least-squares Monte Carlo. The high-order difference method has been applied to calculate the American option price under jump-diffusion models by Jari (2010) while the problem of Pricing American options under stochastic volatility and stochastic interest rates has been resolved by Alexey & Olivier (2010). Santtu & Jari (2011) raised an iterative method to price American options that could achieve better computational accuracy. Zhu & Zhang (2011) showed a new American option pricing method on predictor–corrector scheme. Hamatani & Fukushima (2011) utilized the stochastic linear complementarily model to value American options under the uncertain volatility. Reisinger & Witte (2012) studied the application of the policy iteration for pricing American options and found that the policy iteration has the characteristics of simple algorithm, less resources demand and high calculation accuracy. Mark & Mike (2012) compared the price of American put options by binomial tree and other analytical/numerical methods and found the binomial tree price is unbiased. András&Tamás (2012) also stated that pricing Bermudan or American options on binomial tree method invariably overestimate the price when there is no defined certain conditions. Chang, Chung and Stapleton (2007), Chang, Lin and Tsai (2012) apply the different Richardson extrapolation to price American option and indicate the Richardson extrapolation invariably get better calculational accuracy. Golbabai, Ahmadian, Milev (2011), Saiba, Tangman, and Huruth (2012) used the radial basis functions method for pricing American options. An inverse finite element (inverse finite element) method is applied to price American options by Zhu & Chen (2013).

The current studies on American options mainly focus on finding more closer to the actual stochastic process in order to describe the movements of underlying asset price and obtain better computational methods. However, in the social and economic life, there is frequently a category of the contract that cannot be terminated ahead of mature time unless it is notified before the early execution date. Like, Todd & Shmuel (1993) discussed the pricing of interruptible electric service with an early notification option. Kamat & Shmuel (2002) explained the interruptible electricity supply contracts with early notification from the perspective of Exotic options. Ross, Sergey and Stathis (2006) studied the valuation of the interruptible electricity service contracts and the optimal interruption strategies from an electricity retailer’s point of view. This paper researches the problem of pricing American options in the Black-Scholes market which cannot be exercised ahead of mature time only if it is noticed early, such options are hereinafter referred to as American-style Put Options with Early Notification (APOEN).

The rest of this paper is organized as follows. In section 2, we introduce the characteristics and pricing principles of American options with early notification. In section 3 and 4, we present the algorithm of pricing American options with early notification on multiple-period binomial tree and prove the final price as a no-arbitrage price. The numerical cases of American call and put options with early notification for different early notifications and diverse exercise prices are given in section 5. At last, We conclude in section 6.
Brief introduction of American options with early notification

Traditional American option pricing is a problem of optimal stochastic stopping time, that is, American option price can be expressed as:

$$V_0 = \sup_{\tilde{t} \in \mathbb{T}_{0,T}} E^{Q_{\tilde{t}}} \mathcal{G}(S_{\tilde{t}})$$

(1)

where $E^{Q_{\tilde{t}}} \mathcal{G}$ is the mathematical expectation under the equivalent risk neutral measure, $\mathcal{G}$ is the Stochastic stopping time in $[0,T]$. Let $c(S_t)$ the value of continuing to hold American option when $t \tilde{=} (0,T)$, then we routinely get

$$V_t = \max \{ f(S_t), c(S_t) \}$$

(2)

where $V_t$ is the American option price at time $t$, namely the optimal stopping time strategy of American option pricing(early execution strategy) is as follows:

$$t = \inf \{ t | f(S_t) > c(S_t) \}$$

(3)

In American options with early notification, the holder must both make an executive decision when $t \tilde{=} (0,T-D)$ and notify the American Option Writer so as to exercise American options at time $t+D$, where $D \tilde{=} (0,T)$ is the early notification time. Obviously, when $D = 0$, American options with early notification degenerates into traditional American options and European options at $T$.

For pricing American option with early notification, the function changes as follows:

$$V_0 = \sup_{\tilde{t} \in \mathbb{T}_{0,T}} E^{Q_{\tilde{t}}} \mathcal{G}(S_{t+D})$$

(4)

Let $F_t$ is the filter at time $t$, then the optimal stopping time strategy (early execution strategy) is

$$E^{Q_{\tilde{t}}} \mathcal{G}(S_{t+D}) | F_t \mathcal{G} = E^{Q_{\tilde{t}}} \mathcal{G}(S_{t+D}) | F_t \mathcal{G}$$

(5)

where $E^{Q_{\tilde{t}}} \mathcal{G}(S_{t+D}) | F_t \mathcal{G}$ adopts to $F_t$, therefore, when it is stochastic stopping time, the optimal stochastic stopping time strategy of American options with early notification corresponding to Eq.(3) is as follows:

$$t = \inf \{ t | E^{Q_{\tilde{t}}} \mathcal{G}(S_{t+D}) | F_t \mathcal{G} > E^{Q_{\tilde{t}}} \mathcal{G}(S_{t+D}) | F_t \mathcal{G} \}$$

(6)

And the value of American options with early notification at time $t$ satisfies the following function:

$$V_t = f(S_t) \cdot 1_{\{ E^{Q_{\tilde{t}}} \mathcal{G}(S_{t+D}) | F_t \mathcal{G} > E^{Q_{\tilde{t}}} \mathcal{G}(S_{t+D}) | F_t \mathcal{G} \}} + c(S_t) \cdot 1_{\{ E^{Q_{\tilde{t}}} \mathcal{G}(S_{t+D}) | F_t \mathcal{G} > E^{Q_{\tilde{t}}} \mathcal{G}(S_{t+D}) | F_t \mathcal{G} \}}$$

(7)

where $1_{\{ \}}$ is the indicator function, apparently, it degenerates into the American-style put options when $D = 0$.

Pricing equation
Suppose the price movement of the risk assets under the risk neutral measure satisfies the following stochastic differential equation (SDE):

\[ dS = S(rdt + \sigma dW) \]  

(8)

where risk-free interest rate \( r \) is constant \((r > 0)\), volatility \( \sigma \) is constant \( \sigma > 0 \), \( S_0 \) is the risk assets price at \( t = 0 \), and \( W \) obeys the standard Wiener process. According to the Black-Scholes option pricing formula, when the exercise price is \( K \), the European put option price at maturity \( T \) is equal to

\[ p(S_0, T) = S_0(N(d_1(S_0, T)) - 1) - Ke^{-rT}(N(d_2(S_0, T)) - 1) \]  

(9)

where \( d_1(S_0, T) = \frac{\ln(S_0/K) + (r + \sigma^2/2)T}{\sigma \sqrt{T}} \), and \( N(.) \) is standard cumulative probability distribution function (CDF).

From Eq.(9), APOEN cannot be executed ahead of time in the time between \([0, \Delta]\), thus based on the option pricing theory, the value of APOEN satisfies the following partial differential equation (PDE):

\[ \frac{\partial P}{\partial t} + Pr + S \sigma^2 \frac{\partial^2 P}{\partial S^2} - rP = 0 \]  

(10)

here, when \( t \in [\Delta, T] \), the value of APOEN is determined by both \( S_\Delta := S_{t-\Delta} \) and \( S := S_t \) as well as \( S_\Delta \) can determine whether APOEN executes at time \( t \), if

\[ p(S_\Delta, \Delta) = e^{-\Delta}E^q[\max(K-S,0) | F_{t-\Delta}] > e^{-\Delta}E^q[p(S_\Delta, S, t) | F_{t-\Delta}] \]  

(11)

from Eq.(11), we have

\[ S_\Delta < \frac{e^{-\Delta}K(1-N(d_1(S_\Delta, \Delta)))-\int_{0}^{\infty}P(S_\Delta, S, t)\phi(S | \mu(S_\Delta), \sigma) dS}{1-N(d_1(S_\Delta, \Delta))} \]  

(12)

where \( \phi(.) | \mu(S_\Delta), \sigma \) is a log-normal distribution probability density function (PDF) with the Parameter as \( \mu(S_\Delta) = \ln(S_\Delta) + \left(r - \frac{\sigma^2}{2}\right) \Delta, \sigma = \sigma \sqrt{\Delta} \).

**Definition 1.** Let

\[ S_f = \frac{e^{-\Delta}K(1-N(d_2(S_f, \Delta)))-\int_{0}^{\infty}P(S_f, S, t)\phi(S | \mu(S_f), \sigma) dS}{1-N(d_1(S_f, \Delta))} \]  

(13)

where \( S_f \) is called the notification boundary at time \( t - \Delta \).

**Theorem 1.** The boundary of limited notification defined in Eq.(13) exists and is unique.

**Proof.** Obviously, the existence and uniqueness of the notice boundary is equivalent to the unique solution of Eq.(11), that is

\[ p(s_\Delta, \Delta) = e^{-\Delta}E^q[p(S_\Delta, S, t) | F_{t-\Delta}] \].
Since \( S_\Delta \) just decide APOEN carried out or not, there is nothing to the price of continuing to hold APOEN, then we have
\[
e^{-r_\Delta} E^Q\left[P\left(S_\Delta, S, t| F_{t-\Delta}\right)\right] = e^{-r_\Delta} E^Q\left[E^Q\left[e^{-r(t-\Delta)} E^Q\left[\max\left(K - S_\Delta, 0\right)| F_t\right]\right]| F_{t-\Delta}\right]
\]
\[
= E^Q\left[e^{-r(t-\Delta)} E^Q\left[\max\left(K - S_\Delta, 0\right)| F_{t-\Delta}\right]\right],
\]
\[
= E^Q\left[p\left(S_\Delta, \tau-t+\Delta\right)\right]
\]
where \( \tau \in [t, T] \) is the APOEN execution time. Let \( \theta(\tau) \) as its density function, we have
\[
p\left(s, \Delta\right) = \int_{t}^{T} p\left(s, \tau-t+\Delta\right) \theta(\tau)d\tau.
\]
In accordance with the first integral mean value theorem, there exists a point \( \tau_0 \in (t, T) \) such that
\[
p\left(s, \Delta\right) - p\left(s, \tau_0-t+\Delta\right) = 0.
\]
Let
\[
h(s) = p\left(s, \Delta\right) - p\left(s, \tau_0-t+\Delta\right),
\]
apparently, when \( s = 0 \), we have
\[
h(0) = e^{-r_\Delta} K - e^{-r(\tau_0-t+\Delta)} K > 0,
\]
when \( s = +\infty \), we have
\[
h(+\infty) = 0.
\]
To calculate the first derivative of \( h(s) \), we obtain
\[
h'(s) = \frac{\partial p\left(s, \Delta\right)}{\partial s} - \frac{\partial p\left(s, \tau_0-t+\Delta\right)}{\partial s}
\]
\[
= -N\left(-d_1\left(s, \Delta\right)\right) + N\left(-d_1\left(s, \tau_0-t+\Delta\right)\right)
\]
due to the monotonicity of \( N(\cdot) \), it is well known
\[
d_1\left(s, \Delta\right) = d_1\left(s, \tau_0-t+\Delta\right),
\]
that is, when
\[
\tilde{s} = Ke^{\left(-r_\Delta + \frac{\sigma^2}{2}\right)\sqrt{\Delta(t_\Delta-t+\Delta)}},
\]
we get
\[
h(\tilde{s}) = 0.
\]
In addition, when \( s < \tilde{s} \), there \( h'(s) < 0 \); instead, when \( s > \tilde{s} \), \( h'(s) > 0 \).
So \( h(s) \) has a unique minimum point \( \tilde{s} \) between \( (0, +\infty) \), here, we have
\[
h(\tilde{s}) < h(+\infty) = 0,
\]
thus there exists the only solution \( s_f \) between \( (0, \tilde{s}) \) for
\[
h(s_f) = 0,
\]
and there is not any \( h(s) \) for \( h(s) = 0 \).

This means, at time \( t - \Delta \), when the risk asset price \( S_\Delta < S_f \), if continue to hold the option at the time \( t \), can only cut down the value of the option at time \( t - \Delta \). Hence that it is the optimal choice for the option holder to give the advance notice at time \( t - \Delta \) about executing at time \( t \), that is

\[
P(S_\Delta, S, t) = \max(K - S, 0), \text{if } S_\Delta < S_f
\]

On the contrary, we have

\[
\frac{\partial P(S_\Delta, S, t)}{\partial t} + S_r \frac{\partial P(S_\Delta, S, t)}{\partial S} + \frac{1}{2} S^2 \sigma^2 \frac{\partial^2 P(S_\Delta, S, t)}{\partial S^2} - r P(S_\Delta, S, t) = 0,
\]

if \( S_\Delta \geq S_f \)

Pricing APOEN need to add the following boundary condition

\[
P(S_\Delta, +\infty, t) = 0, P(S_\Delta, 0, t) = K
\]

and the initial condition

\[
P(S_\Delta, S, T) = \max(K - S, 0)
\]

when \( \Delta = 0 \), Eq. (11) translates into

\[
\max(K - S, 0) > P.
\]

And when \( S_\Delta = S \), the APOEN pricing equation degenerates into American put option pricing equation, which is consistent with the previous results. We do not know the form of \( P(S_\Delta, S, t) \) at time \( t \) in the calculation of the notice boundary \( S_f \) at time \( t - \Delta \), so APOEN pricing is also such a free boundary problem as traditional American bearish period pricing, and the free boundary can be described by an integral equation. That is to say, APOEN pricing belongs to the problems of a free boundary integral partial differential equations (IPDE).

In the APOEN pricing equation, \( S_\Delta \) does not appear explicitly in the pricing PDE, just only to determine that APOEN executes immediately or continues to hold. Obviously, in common with the traditional American put option pricing equation, the APOEN pricing equation has no analytic solution and we must resort to the help of numerical methods.

**Numerical algorithms**

For the numerical calculation, setting \( \tau = T - t \in [0, T] \), then \( \frac{\partial P}{\partial t} = -\frac{\partial P}{\partial \tau} \) and the pricing PDE transforms into

\[
-\frac{\partial P}{\partial \tau} + S_r \frac{\partial P}{\partial S} + \frac{1}{2} S^2 \sigma^2 \frac{\partial^2 P}{\partial S^2} - r P = 0.
\]
Here, define $S_{\Delta} \times S$ in $\Omega = [0, S_{\Delta, \text{max}}] \times [0, S_{\text{max}}]$, for $S_{\Delta}$ does not appear explicitly in the pricing PDE, just need to add the following boundary condition of PDF on the boundary $\Omega$

$$
P(S_{\Delta}, 0, t) = K$$

$$
P(S_{\Delta}, S_{\text{max}}, t) = 0$$

(20)

Let $T = N \delta t, S_{\text{max}} = J \delta s, S_{\Delta, \text{max}} = I \delta s_{\Delta}$, integer number $N, J, I$, using forward difference to estimate the partial derivative of $P$ with respect to the $\tau$ and the central difference to estimate the partial derivative of $P$ with respect to $S$, then we can get the following finite difference equations with the explicit format

$$
-\frac{P_{n+1}^{(i,j)} - P_{n}^{(i,j)}}{\delta t} + \frac{1}{2} (j \delta s)^2 \sigma^2 \frac{P_{n}^{(i+1,j)} - 2P_{n}^{(i,j)} + P_{n}^{(i-1,j)}}{(\delta s)^2} + \left( j \delta s \right) r \frac{P_{n}^{(i,j+1)} - P_{n}^{(i,j-1)}}{2 \delta s} = 0
$$

(21)

$n = 0, 1, ..., N - 1, j = 1, 2, ..., J - 1, i = 0, 1, 2, ..., I$

It leads to the following equation

$$
P_{n+1}^{(i,j)} = a_{j} P_{n}^{(i,j+1)} + b_{j} P_{n}^{(i,j)} + c_{j} P_{n}^{(i,j-1)},
$$

(21)

where

$$
a_{j} = \frac{\delta t}{2} \left( j^2 \sigma^2 + jr \right)
$$

$$
b_{j} = 1 - \left( j^2 \sigma^2 + r \right) \delta t.
$$

(22)

By combine the finite difference equation (22) and the boundary condition equation (20), at time $\tau = (n + 1) \delta t$, we can obtain the value of the option to keep holding while $S = j \delta s$

With $\tau \leq T - \Delta$ and $S_{\Delta} = i \delta s_{\Delta}$, let $\varphi(j \mid i) = \varphi(j \delta s \mid \mu(i \delta s_{\Delta}), \sigma)$, estimating

$$
\int_{0}^{\infty} P(S_{\Delta}, S, t) \varphi(S \mid \mu(S_{\Delta}), \sigma) dS
$$

by compound Simpson method, then we have

$$
\int_{0}^{\infty} P(S_{\Delta}, S, t) \varphi(S \mid \mu(S_{\Delta}), \sigma) dS \approx P_{i}^{n,c} := \frac{\delta s}{3} \left( P_{i}^{n, (0,i)} \varphi(0 \mid i) + 4 \sum_{0 \leq j \leq i \land j \neq i} P_{i}^{n, (j,j)} \varphi(2j - 1 \mid i) + 2 \sum_{0 \leq j \leq i} P_{i}^{n, (j,j)} \varphi(J \mid i) + P_{i}^{n, (i,i)} \varphi(J \mid i) \right)
$$

(24)

if

$$
p(i \delta s_{\Delta}) > e^{-r \Delta} P_{i}^{n,c}
$$

(23)

APOEN is executed in advance at time $t = T - \tau = T - n \delta t$, here, we have

$$
P_{n}^{(i,j)} = \max(K - j \delta s_{0}), j = 0, 1, ..., J
$$

(24)

but when $n \delta t > T - \Delta$, APOEN cannot be exercised early.

Numerical examples
Let $r = 0.08, \sigma = 0.15, K = 10, T = 1, S_{\Delta,\max} = S_{\max} = 50, I = J = 200, N = 100$. when early notification $\Delta = 0.1$, the relationship between the price of APOEN and the underlying asset price at time $t = 0$, is shown as fig. 1.

![Fig. 1. The relationship between Price of APOEN and Underlying Asset Price](https://scholarcommons.usf.edu/anaheipublishing/vol12/iss2015/1)

As you can see from Fig. 1, the APOEN price is on a monotonous reduction as the initial underlying asset price increases. Selecting the initial underlying asset price $S = 2.5, 5, 7.5$ respectively, the APOEN price fluctuates as fig. 2 while the early notification $\Delta$ changes between 0 to 1.

![Fig. 2. The relationship between Price of APOEN price and Time of Early Notification](https://scholarcommons.usf.edu/anaheipublishing/vol12/iss2015/1)

From fig. 2, in comparison with the traditional American option, a decision must be made at time $t - D$ according to the information of the time $t - D$ if American option with early notification will be executed in advance at time $t$, that implies the early execution strategy
contains greater uncertainty, hence the price of American options with early notification is routinely lower than the traditional American options price. However, compared to European options, on account of the early execution with a certain degree of flexibility and elasticity, the price of American options with early notification must be greater than the European option price. As a result, the price of American options with early notification decreases monotonically as the early notification increases, and it was equal to the traditional American option price at $D = 0$ and the European option price at $D = T$.

**Conclusion**

The problem of pricing American options with early notification in the Black-Scholes market is discussed in this paper, which is still shown as a stochastic optimal stopping time problem. Moreover American options with early notification degenerate into traditional American options when the early notice period is zero and European options when it is equal to the option maturity. We present the APOEN pricing equation, that is a free boundary integral partial differential equation (IPDE), and define the boundary of early notification as well as prove its existence and uniqueness. Based on the theory of finite difference and Simpson numerical integration, we state the numerical solution of APOEN pricing equation. By numerical examples, the relationship among American options with early notification, traditional American options and European options is further verified and we find that the price of American options with early notification drops with the increase of early notification until it is equal to the European options price. Information is valuable, the hidden information value of early notification is equal to the difference of the traditional American option price and the price of American option with early notification.

**References**


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Sources of Risk and Management Strategies among Small Scale Farmers in Kaduna State, Nigeria

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Abstract

The study focused on understanding the risk attitudes and strategies used by small scale farmers in managing negative farm related risks in Kaduna state as a case study. Structured questionnaires were used to collect relevant data from 150 small scale farmers in the study area and the respondents were randomly selected. Descriptive statistics, Attitudinal Scale Approach (ASA) and regression analysis were used for the data analysis. The results show that lack of technical know-how of improved farming technologies, livestock diseases outbreak and high cost of inputs are perceived most risky. The mean score and the standard deviation of all the statements are 3.0 and 1.066 respectively and 62.7% of the respondents were categorized among probable risk-averse individuals, while 34% of the respondents were categorized as risk preference individuals. Farm size, educational status and gross farm income affected the risk attitudes of the respondents. The management strategies used by the households include adoption of improved farming technologies, rain-fed and dry season farming, tractor for tillage operations, mixed cropping, planting profitable crops, participating in farmers’ group/association, access to ADP extension agents and, government projects. It is recommended that the policies regarding improvement of irrigation infrastructure in the current agricultural transformation agenda should be strengthened so as to resolve all weather-dependent threats to agricultural production by small scale farmers.

Keywords: risk averse farmers, agricultural transformation agenda, management strategies, production threats

Introduction

The economic performance of Nigerian agricultural sector is usually uncertain due to its biological nature in addition to relying mainly on natural conditions for agricultural and livestock production. This type of production is inherently risky because of variability of rainfall, animal mortality due to livestock diseases and fluctuations in output prices. The environment in most of low income countries is characterized by crop diseases, flooding, illness of household member and crime. All these create uncertainty (Capitanio, 2008). The agricultural sector inherently faces more risks than do most other industries (Geurin and Geurin, 1994). Variations in climatic conditions, intensity and amount of rainfall, the incidence of diseases and pests, crop failure, fire outbreak, price fluctuations, unstable government policies, farmers ill-health etc., cause farm income to fluctuate unpredictably. The variations in climatic conditions, intensity and amount of rainfall are source of risk.
and uncertainty to production activities of the small scale farmers. The crop production activities which are largely rain-fed and irrigated would be largely affected if the variation in the rainfall distributions is either too high or low. This constitutes risk, which not only affects crop income; it has an indirect effect on off-farm income as well as the households’ livelihood.

The recent changes in the structure and technology base of the world’s food system and in the policy environment affecting agricultural production have heightened the value of decision analysis under risk (Boehlje and Lins, 1998). And in response to this, the established concepts and tools of risk analysis have received renewed application in the current risk environment. What is important is that risk constitutes an essential feature of the production environment and cannot be escaped when addressing most agricultural economic problems (Moshini and Hennessy, 2001). Virtually all decisions that farm managers are involved in are subject to risk and their responses to risk that they perceive will continue to influence the efficiency, structure and performance of agriculture since agriculture is by nature a risky activity, and farmers’ risk attitudes are known to deeply influence their choices, especially when dealing with a new technology (Bocque’ho and Jacquet, 2010) as studies have shown that farmers are risk averse (Nyikal and Kosura, 2005). Also, there is a general perception that rural households are averse to modifications in their production, financial and marketing practices due to their risk aversion behaviour. They manage risk by preferring enterprises that provide satisfactory levels of security even at the expense of higher income. They diversify into a number of activities to spread risk. They also prefer to use established techniques of production, and to be self-sufficient in food requirement through increased food production. Empirical evidence is still lacking on how rural households respond to shocks resulting from risk in non-dynamic and subsistence agricultural environments in contrast to more dynamic rural settings. It will be important for policy makers to understand the risk attitudes and management strategies of rural households. Small scale farmers’ households’ off-farm diversification, crops choice, socio-economic characteristics etc. are important factors affecting their ability to smooth consumption during income shocks.

In Nigeria, where agricultural production has remained largely subsistence, about 90% of the total output is accounted for by households, who on the average cultivate about 1.2ha of land (NPFS, 2006). The agricultural development programmes such as National Programme for Food Security (NPFS), Community-Based Agriculture and Rural Development Programme (CBARDP), Fadama-III were targeted at rural households aiming to reduce farm-related risk of the small scale farmers in Nigeria and the enhance management strategies adopted to cushioning the effects of threats to their economic activities. High degree of production risk is caused by erratic rainfall, poorly functioning or missing markets, pests and diseases and poor health situation (Wolgin, 1975, Udry, 1994, Townsend, 1994, Dercon and Krishnan, 2003) and farmers use assets, savings, effective public safety nets and financial markets are some of sustainable mechanisms to manage and mitigate risk. Farmers ill-health and bad nutrition coupled with households poverty are factors which primarily affects downward income fluctuations affecting labour supply for farming and wage market. In such health situations, households face extreme unfavorable trade-offs. They must engage in short term responses which provide an
immediate gain in income and consumption smoothing. The issues at stake are the major threats to agricultural production and how small scale farmers perceive magnitude of these threats. In addition, how do the socio-economic characteristics of farmers influence their risk attitudes and, what are the existing management strategies used by small scale farmers in coping with farm related risks? The knowledge of how subsistence rural households make economic decisions under risk is important in determining strategies and formulating policies for agricultural development in the country. Therefore, the main objective of the study is to focus on understanding the risk attitudes and strategies used by small scale farmers in managing negative farm related risks using Kaduna state as a case study. The specific objectives are to describe the socio-economic characteristics of the small scale farmers in the study area, describe the major threats to agricultural production in the study area and determine perceived magnitude of these threats to agricultural production, determine the relationship between risk attitudes of the small scale farmers and their socio-economic characteristics and, describe risk management strategies available and used by small scale farmers in coping with risk.

Methodology
The study was conducted in Kaduna State which falls within the Guinea savanna region of Nigeria. It is located between latitudes 7°00’ and 10°87’ N and Longitudes 6°43’ and 10°52’ E (Zacheous, 2012). It is bordered in the north by Katsina and Kano states and in the south by Nasarawa state and FCT. It is also bordered in the east by Plateau state and in the west by Niger state. The state occupies an estimated land mass of 42,481 square kilometers of which 90% is arable land. The population of the state is 6,066,562 persons (NPC, 2006, KADP, 2007). The state has 23 Local Government Areas (LGAs) with total farming families put at 606,007 (Kaduna State Ministry of Agriculture, 2010). The area has a tropical climate, characterized by two main seasons, namely; the rainy and dry seasons. The rainy season last for about 150 – 180 days with annual rainfall varying from 900mm-1600mm in the northern and southern part respectively and spanned through the months of April to October. The single maximum rainfall is usually experienced in August/September. The dry season begins in November and ends by early April. The topography of the study area is largely flat with undulating hills and rocks to an average altitude of about 1,912ft. The soil types of the area are mainly deep, well drained, fine and medium textured (Zacheous, 2012). Agriculture is one of the main stay of the local economy and absorbs about 60%- 70% of the population. The remaining 30% - 40% engage in trading, civil service and education. Crops grown include, maize, guinea corn, millet, yam, cassava, sweet potato, ginger, groundnut, soyabean, cowpea, acha (hungry rice), vegetables, Sugarcane, cotton grown as cash crop etc.

Multistage sampling technique was employed to select respondents for the study. The four Agricultural zones namely: Birnin-Gwari, Lere, Maigana and Samaru-Kataf which reflect the geographical structure of the state were examined. In the first stage one Local Government Area (LGA) from each of the four zones was purposively selected, based on the predominance of farming activities i.e. Birnin-Gwari, Lere, Kubau and Zangon-Kataf LGAs with 31,186, 48,099, 35,642 and 64,603 farming households respectively (Kaduna State Ministry of Agriculture, 2010). In the second stage two villages from each of the selected LGAs were randomly selected to sample respondents. The villages selected are:
Birnin Gwari and Kuyelo in Birnin Gwari LGA; Ramin kura and Yarkasuwa in Lere LGA, Dutse-wai and Murga in Kubau LGA and Gora and Farman in Zangon-Kataf LGA. In the final stage, simple random technique was used to select a total of 150 farming households for the study, using proportion allocation technique (Paul, 2008). Using this technique, the number of sampled small scale farmers was obtained through:

\[ S_h = \frac{n \times N_h}{N_T} \]  

Where \( S_h \) = number of small scale farmers to be selected in a LGA, \( n \) = total number of small scale farmers for the survey, \( N_h \) = farming households in a LGA, \( N_T \) = Sum of farming households in the four LGAs. Therefore, a sample of 26, 40, 30 and 54 small scale farmers (respondents) were randomly selected from Birnin-Gwari, Lere, Kubau and Zangon-Kataf LGAs respectively.

An interview method with the aid of structured questionnaire was employed to collect primary data by the researcher with the assistance of trained KADP Extension agents from May to July, 2013. Information such as socio-economic characteristics of the small scale farmers, economics activities, risk attitudes and management strategies of the selected respondents in the study area were collected.

The analytical tools employed to analyze the data from the field survey are: Descriptive statistics, Attitudinal scale approach (ASA), and multiple regression analysis. Descriptive statistics such as frequency distribution, tables, percentages, mean, ratios were implored to describe the socio-economic characteristics of the small scale farmers, identify risks to agricultural production and describe the magnitude of the perceived risks.

The small scale farmers risk attitude was analyzed by applying a model formulated by other social scientists (DeVellis, 1991, Spector, 1992, McIver and Carmines, 1981) to develop a ranking procedure for peoples’ risk attitudes using an Attitudinal Scale Approach (ASA). The ASA model underlying principle is that risk attitudes are proxy by various responses to risk and establishing a score reflecting a quantitative measurement of the attitude. The model consists of defining a scale of statements that reflect the respondent’s attitude toward an underlying variable (here, risk attitudes proxy by various responses to risk) and establishing a score reflecting a quantitative measurement of the attitude. An aggregate score based on households’ responses to a total of “K” number statements (items), each representing a risk management strategy used by the households was estimated. The responses to each of the statements correspond to the socio-psychological attribute of the individual small scale farmer and his rating of the item conveys his attitude towards risk, based on his natural tendency to adopt the particular risk management strategy that the item reflects. The underlying assumption in this method of measuring the risk attitude is that if attitude towards risk is a determinant of risk management strategy adopted by the farming households, the household’s response to specific risk management strategy would be an indicator of their risk attitude. The respondent’s rating of the statement items was summed up to yield an aggregate score (Y) from Likert-type scale for the respondent, which was quantitative measure of attitude (Bhattacharya, 1993). Thus, a lower total for the respondent was then hypothesized to correspond to higher degree of risk aversion. While administering the schedule, both positive and negative statements were included to avoid response bias. Then Corrected Item Score Correlation (CISC) is measured as follows:
\[ r_i(y-\bar{y}) = \frac{r_y C - \bar{y}}{\sqrt{(\delta_i^2 + \delta^2_y + 2\delta_i r_y \delta_y)}} \]  

(2)

Where, \( r_i(y-1) \) = correction statement item \( i \) with sum of scores of all statement items, excluding statement \( i \) (Bard and Berry, 2000, Lagerkvist, 2005), \( r_y \)= correction of statement item \( i \) with total score, \( y, \delta_y \) = Standard deviation of the total score \( y, \delta_i \) = standard deviation of statement item \( i \).

Before drawing inferences on the basis of the total score obtained by an individual on the attitudinal scale, it is pertinent to test how well the statements reflect on the risk attitude of the farmers. The empirical analysis consists of reliability testing. The reliability testing of the attitudinal scale depends on the extent to which individual statements reflect the risk attitude of the respondents. Reliability is measured using Cronbach’s coefficient alpha (\( \alpha \)). The coefficient measures the proportion of total variation due to true differences in a person’s attitude toward the construct being measured.

\[ \alpha = \frac{k}{k-1} \left( 1 - \sum \delta_i^2 \right) \]  

(3)

where, \( \alpha \) = Cronbach’s coefficient (alpha), \( k= \) number of statement items in the ASA Model, \( \delta_i^2 = \) variance of \( i \)th statement item, \( \delta^2_y = \) total variance of the \( k \)-statement item scale.

The objective is to have \( \alpha \) as high as possible. The implication of a very high \( \alpha \) is that the statement (management strategies) included in the ASA model accounted for a total variation of the risk attitudes of the respondent.

The ASA model was then optimized in order to increase value of \( \alpha \) by deleting statement item (K) with negative or low Corrected Item Score Correlation (CISC). The more desirable the item as part of the scale is the more correlated the individual statement’s response to the remaining statements’ responses. Also, deleting the items increases the \( \alpha \) for the remaining statements, thereby increasing the statistical quality of the ASA Model. In order to determine the relationship between risk attitudes of the small scale farmers and their socio-economic characteristics, a regression analysis was estimated. The specification of general form of the multiple regression require that variable to be explained (dependent variable \( Y \)) be hypothesized as a function of independent variables \( X_1, X_2, X_3 \ldots X_N \). The implicit form of the multiple regression model is given below:

\[ Y = f(X_1, X_2, X_3, X_4, X_5, X_6, X_7) \]  

(4)

Where, \( Y = \) aggregate score of risk attitude scale, \( X_1 = \) Farmer age (yrs), \( X_2 = \) years of farm experience (yrs), \( X_3 = \) Household size (no), \( X_4 = \) Farm size (ha), \( X_5 = \) no of years in school (yrs), \( X_6 = \) off-farm income, \( X_7 = \) gross farm income (N).

Four functional forms, namely, linear, semi-log, double-log and exponential functions were tried and the best functional form was selected based on the goodness of fit for regression (\( R^2 \)) i.e. coefficient of multiple regression; \( t \) and \( f \)-values and signs & statistical significance of estimated regression parameter.
Results and Discussion

The socio-economic profiles of the respondents are presented on Table I while Table II is a presentation of the various threats to agricultural production and their nature of occurrence in the last five years prior to this study. The results on Table III shows the perceived magnitudes, the most likely time of the year these threats are likely to occur and their severity while Table IV is a presentation of the results of the reliability testing of the management strategies of the respondents and Table V presents the identified management strategies adopted by the respondents. Table VI shows the risk attitude of the respondents whiles the results on Table VII shows the estimates of the factors affecting risk attitudes of the respondents. The results on Table I are similar to those obtained from similar studies, including Pennings et al., (2008), Akubuiro, (1987), Essa and Nieouoldt, (2001), Sheng, (1989), Simoyan and Obiakor, (2012), Barrett et al., (2001), Musa et al., (2011), Caswell et al., (2001), Wencong et al., (2006), Fasasi, (2006), Barry and Frazer, (1984), Hazzel, (2009) and Antle, (1987) but contrasted the findings of Simpa, (2011) and Nwaru et al. (2011) on awareness of the various extension services available to them.

The results on Tables II and III are a mixed bag. While inadequate inputs (e.g. fertilizer, herbicides, and pesticides), plant pest and diseases, high cost of inputs, inadequate soil nutrients, inadequate credit facilities and inadequate supply of improved varieties where the important threats based on per cent occurrence, desert encroachment, high interest rate, inadequate farming land, too much rainfall/flood, fire outbreak, no vaccinations and, change in government and agricultural policy were the important threats based on the perceived percentage of the threats but they are perceived to be season-specific. In addition, lack of technical knowhow of improved farming technologies, livestock diseases outbreak, high cost of inputs, and inadequate credit facilities were perceived as more risky and they are most likely to occur all year round. It could be observed that only high cost of inputs and inadequate credit facilities seems to be occurring across classification but most of the perceived threats are environmentally inclined meaning that climate change is a reality among these farmers.

The results on Tables IV-VI shows that the mean score and the standard deviation of all the statements are 3.0 and 1.066 respectively and 62.7% of the respondents were categorized among probable risk-averse individuals, while 34% of the respondents were categorized as risk preference individuals showing similarity with Ayinde, (2008). Moreover, (Bocque’ho and Jacquet, 2010) observed that risk-averse farmers are generally understood as reluctant to invest in innovations about which they have little first-hand experience, while Kahneman and Tversky, (2000) reported that risk-seekers view risk as an opportunity to make profit and are prepared to accept losses in doing so and risk-neutral is described as an investor who purposely overlooks risk in investments decision, completely indifferent to risk in an investment and is concerned about expected return (Gustafsson, 2000). The reliability shows that Cronbach coefficient Alpha (α) for the entire 32 statement-items was 0.654 indicating that 65.4% of the total variation in the management strategies of the small scale farmers was explained by the included statements which were perfectly in line with DeVellis (1991). The percentage increased to 72.3% when those with low CISC were deleted leading to the identified management on Table VI. However, the management strategies are not directly related to the threats earlier
mentioned. It therefore means that the farmers need more enlightenment on correct solution to whatever might be there threats.

The results on Table VII show that only 19% variation in risk attitudes of the farm households are accounted by the socio-economics variables included in the model but the finding is similar to Bond, and Wonder, (1980); King, and Oamek, (1983) and Taver, (1986). The lack of empirical relationship between socio-economic factors and risk attitudes imply that the relationship were very complex and often difficult to quantify. However, there was a negative relationship with farm size suggesting that increasing farm size suppresses the risk attitudes of the respondents (i.e. risk aversion) which means the farmers are reluctant or avoid taking risk with large farming enterprises, fearing losses(Dwaipayan, 2006, Pennings, et al. 2008). Educational level was positive indicating that higher educational achievement exacerbates the risk attitude of the respondents similar to Caswell et al., (2001). Education generally creates a favorable mental attitude for acceptance of new practices especially of information for intensive management practices. Finally, gross income had positive relationship with the total risk score, implying that with the increase in income of farm enterprises of the respondents, enhances the risk attitude of the respondents in conformity with Pennings, et al. (2008) and Wencong et al. (2006) indicating that the risk attitude of the respondents are guided by expected financial benefits., the combination of production activities with the highest level of expected income are selected if the decision maker was a risk taker.

Table 1 Socio-economic characteristics of the respondents

<table>
<thead>
<tr>
<th>Variable</th>
<th>Frequency</th>
<th>Percentage</th>
<th>Variable</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age Range</td>
<td></td>
<td></td>
<td>0.1-1.0</td>
<td>37</td>
<td>24.7</td>
</tr>
<tr>
<td>21-30</td>
<td>24</td>
<td>16.0</td>
<td>1.1-2.0</td>
<td>61</td>
<td>40.7</td>
</tr>
<tr>
<td>31-40</td>
<td>50</td>
<td>33.3</td>
<td>2.1-3.0</td>
<td>36</td>
<td>24.0</td>
</tr>
<tr>
<td>41-50</td>
<td>40</td>
<td>26.7</td>
<td>3.1-4.0</td>
<td>11</td>
<td>7.3</td>
</tr>
<tr>
<td>51-60</td>
<td>25</td>
<td>16.7</td>
<td>Above 4.0</td>
<td>5</td>
<td>3.3</td>
</tr>
<tr>
<td>Above 60</td>
<td>11</td>
<td>7.3</td>
<td>Main Source of Labour</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td>Family</td>
<td>47</td>
<td>31.3</td>
</tr>
<tr>
<td>Male</td>
<td>133</td>
<td>88.7</td>
<td>Hired</td>
<td>81</td>
<td>54.0</td>
</tr>
<tr>
<td>Female</td>
<td>17</td>
<td>11.3</td>
<td>Communal</td>
<td>22</td>
<td>14.0</td>
</tr>
<tr>
<td>Total</td>
<td>150</td>
<td>100.0</td>
<td>Membership of Farmers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marital Status</td>
<td></td>
<td></td>
<td>Association</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single</td>
<td>15</td>
<td>10.0</td>
<td>Member</td>
<td>43</td>
<td>28.7</td>
</tr>
<tr>
<td>Married</td>
<td>123</td>
<td>82.0</td>
<td>Not a member</td>
<td>107</td>
<td>71.3</td>
</tr>
<tr>
<td>Divorced</td>
<td>4</td>
<td>2.0</td>
<td>Access to Extension</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Service</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Widow</td>
<td>6</td>
<td>4.0</td>
<td>Access</td>
<td>90</td>
<td>60.0</td>
</tr>
<tr>
<td>Separated</td>
<td>2</td>
<td>1.3</td>
<td>None</td>
<td>60</td>
<td>40.0</td>
</tr>
<tr>
<td>Household Size Range</td>
<td></td>
<td></td>
<td>Extension Contacts Range</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1-5</td>
<td>51</td>
<td>34.0</td>
<td>1-2</td>
<td>30</td>
<td>20.0</td>
</tr>
<tr>
<td>6-10</td>
<td>56</td>
<td>37.3</td>
<td>3-4</td>
<td>22</td>
<td>14.7</td>
</tr>
<tr>
<td>11-15</td>
<td>19</td>
<td>12.7</td>
<td>5-6</td>
<td>20</td>
<td>13.3</td>
</tr>
<tr>
<td>16-20</td>
<td>11</td>
<td>7.3</td>
<td>Above 6</td>
<td>11</td>
<td>7.3</td>
</tr>
<tr>
<td>Above 20</td>
<td>13</td>
<td>8.7</td>
<td>None</td>
<td>67</td>
<td>44.7</td>
</tr>
<tr>
<td>Educational level</td>
<td></td>
<td></td>
<td>Source of Capital</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primary</td>
<td>27</td>
<td>18.0</td>
<td>Personal Capital</td>
<td>93</td>
<td>62.0</td>
</tr>
</tbody>
</table>
Table 2 Occurrence of Risks that posed threats to agricultural production in the last five years

<table>
<thead>
<tr>
<th>Risk to agricultural production</th>
<th>Freq.</th>
<th>%</th>
<th>% of respondent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plant pest and diseases</td>
<td>1</td>
<td>1.2%</td>
<td>64.7</td>
</tr>
<tr>
<td>Drought</td>
<td>1</td>
<td>1.2%</td>
<td>22</td>
</tr>
<tr>
<td>Inadequate supply of improved varieties</td>
<td>5</td>
<td>6.2%</td>
<td>46.7</td>
</tr>
<tr>
<td>Desert encroachment</td>
<td>1</td>
<td>1.2%</td>
<td>4</td>
</tr>
<tr>
<td>Inadequate soil nutrients</td>
<td>3</td>
<td>3.7%</td>
<td>48.7</td>
</tr>
<tr>
<td>No vaccination</td>
<td>5</td>
<td>6.2%</td>
<td>12</td>
</tr>
<tr>
<td>Inadequate supply of inputs e.g. fertilizer, herbicides, pesticides</td>
<td>5</td>
<td>6.2%</td>
<td>82.7</td>
</tr>
<tr>
<td>Livestock diseases outbreak</td>
<td>2</td>
<td>2.5%</td>
<td>22.7</td>
</tr>
<tr>
<td>Dangerous weed</td>
<td>5</td>
<td>6.2%</td>
<td>23.3</td>
</tr>
<tr>
<td>Destruction of crops by animals</td>
<td>1</td>
<td>1.2%</td>
<td>17.3</td>
</tr>
<tr>
<td>High cost of inputs</td>
<td>5</td>
<td>6.2%</td>
<td>63.3</td>
</tr>
<tr>
<td>Low output (farm produce) price</td>
<td>2</td>
<td>2.5%</td>
<td>30</td>
</tr>
<tr>
<td>Erratic rainfall</td>
<td>1</td>
<td>1.2%</td>
<td>9.3</td>
</tr>
<tr>
<td>Inadequate market for farm produce</td>
<td>5</td>
<td>6.2%</td>
<td>21.3</td>
</tr>
<tr>
<td>Ill health of the farmers</td>
<td>5</td>
<td>6.2%</td>
<td>19.3</td>
</tr>
<tr>
<td>Inadequate credit facilities</td>
<td>3</td>
<td>3.7%</td>
<td>48.7</td>
</tr>
<tr>
<td>Inadequate family labour</td>
<td>5</td>
<td>6.2%</td>
<td>15.3</td>
</tr>
<tr>
<td>Inadequate farming land</td>
<td>5</td>
<td>6.2%</td>
<td>13.3</td>
</tr>
<tr>
<td>High interest rate</td>
<td>2</td>
<td>2.5%</td>
<td>8</td>
</tr>
<tr>
<td>Lack of functional credit banks e.g. MFBs</td>
<td>5</td>
<td>6.2%</td>
<td>28.7</td>
</tr>
<tr>
<td>Adulteration of farm inputs e.g. chemicals</td>
<td>2</td>
<td>2.5%</td>
<td>22</td>
</tr>
<tr>
<td>Lack of technical knowhow of improved farm technologies</td>
<td>5</td>
<td>6.2%</td>
<td>13.3</td>
</tr>
<tr>
<td>Too much rainfall/flood</td>
<td>1</td>
<td>1.2%</td>
<td>10.7</td>
</tr>
<tr>
<td>Conflicts within the community</td>
<td>1</td>
<td>1.2%</td>
<td>5.3</td>
</tr>
<tr>
<td>Conflicts within Fulani headers</td>
<td>2</td>
<td>2.5%</td>
<td>9.3</td>
</tr>
<tr>
<td>Fire outbreak</td>
<td>2</td>
<td>2.5%</td>
<td>6.7</td>
</tr>
<tr>
<td>Change in government and agricultural policy</td>
<td>2</td>
<td>2.5%</td>
<td>12</td>
</tr>
<tr>
<td>Theft</td>
<td>2</td>
<td>2.5%</td>
<td>16</td>
</tr>
</tbody>
</table>
Table 3 Farm households perceived magnitude of the identified threats

<table>
<thead>
<tr>
<th>Risks</th>
<th>1*</th>
<th>2</th>
<th>3**</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plant pest and diseases</td>
<td>L</td>
<td>40.70</td>
<td>RS</td>
<td>42.70</td>
</tr>
<tr>
<td>Drought</td>
<td>L</td>
<td>79.30</td>
<td>RS</td>
<td>20.70</td>
</tr>
<tr>
<td>Inadequate supply of improved varieties</td>
<td>N</td>
<td>63.30</td>
<td>RS</td>
<td>28.70</td>
</tr>
<tr>
<td>Desert encroachment</td>
<td>L</td>
<td>96.00</td>
<td>DS</td>
<td>24.00</td>
</tr>
<tr>
<td>Inadequate soil nutrients</td>
<td>R</td>
<td>56.70</td>
<td>AR</td>
<td>32.70</td>
</tr>
<tr>
<td>No vaccinations</td>
<td>L</td>
<td>88.00</td>
<td>AR</td>
<td>22.00</td>
</tr>
<tr>
<td>Inadequate supply of inputs e.g. Fertilizer, herbicides, pesticides</td>
<td>R</td>
<td>36.00</td>
<td>RS</td>
<td>48.00</td>
</tr>
<tr>
<td>Livestock diseases outbreak</td>
<td>M</td>
<td>83.30</td>
<td>AR</td>
<td>23.30</td>
</tr>
<tr>
<td>Dangerous weed</td>
<td>R</td>
<td>77.30</td>
<td>AR</td>
<td>28.00</td>
</tr>
<tr>
<td>Destruction of crops by animals</td>
<td>L</td>
<td>82.70</td>
<td>AR</td>
<td>23.30</td>
</tr>
<tr>
<td>High cost of input</td>
<td>M</td>
<td>59.30</td>
<td>AR</td>
<td>34.00</td>
</tr>
<tr>
<td>Low output (farm produce) price</td>
<td>N</td>
<td>76.70</td>
<td>AR</td>
<td>28.70</td>
</tr>
<tr>
<td>Erratic rainfall</td>
<td>N</td>
<td>74.00</td>
<td>RS</td>
<td>22.70</td>
</tr>
<tr>
<td>Inadequate market for farm produce</td>
<td>L</td>
<td>81.30</td>
<td>AR</td>
<td>26.70</td>
</tr>
<tr>
<td>Ill health of the farmer</td>
<td>L</td>
<td>80.70</td>
<td>RS</td>
<td>25.30</td>
</tr>
<tr>
<td>Inadequate credit facilities</td>
<td>M</td>
<td>58.00</td>
<td>AR</td>
<td>31.30</td>
</tr>
<tr>
<td>Inadequate family labour</td>
<td>N</td>
<td>86.70</td>
<td>AR</td>
<td>41.30</td>
</tr>
<tr>
<td>Inadequate farm land</td>
<td>L</td>
<td>89.30</td>
<td>RS</td>
<td>22.00</td>
</tr>
<tr>
<td>High interest rate</td>
<td>L</td>
<td>92.00</td>
<td>AR</td>
<td>28.00</td>
</tr>
<tr>
<td>Lack of functional of credit banks e.g. MFBs</td>
<td>N</td>
<td>74.70</td>
<td>AR</td>
<td>38.70</td>
</tr>
<tr>
<td>Adulteration of farm inputs e.g. chemicals</td>
<td>L</td>
<td>79.30</td>
<td>RS</td>
<td>24.70</td>
</tr>
<tr>
<td>Lack of technical knowhow of improved farm technologies</td>
<td>M</td>
<td>84.70</td>
<td>AR</td>
<td>34.70</td>
</tr>
<tr>
<td>Too much rainfall/flood</td>
<td>L</td>
<td>89.30</td>
<td>RS</td>
<td>20.00</td>
</tr>
<tr>
<td>Conflicts within the community</td>
<td>N</td>
<td>35.30</td>
<td>RS</td>
<td>26.00</td>
</tr>
<tr>
<td>Conflicts within Fulani cattle headers</td>
<td>L</td>
<td>46.70</td>
<td>AR</td>
<td>32.70</td>
</tr>
<tr>
<td>Fire outbreak</td>
<td>N</td>
<td>88.70</td>
<td>DS</td>
<td>24.70</td>
</tr>
<tr>
<td>Change in government and agricultural policy</td>
<td>R</td>
<td>88.00</td>
<td>AR</td>
<td>36.00</td>
</tr>
<tr>
<td>Theft</td>
<td>R</td>
<td>70.00</td>
<td>AR</td>
<td>28.70</td>
</tr>
</tbody>
</table>

a. 1=Extent of Perceived Threats, 2=% of Perceived Threats, 3=Period of the Year Most Risky, 4=% of Risk (severity). *M=More risky, R=Risky, L=Less risky, N=Not sure. **RS=rainy season, DS=dry season, AR=all year round

Table 4 Reliability testing of Attitudinal Scale of the management strategies

<table>
<thead>
<tr>
<th>Statement – Items</th>
<th>1</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>I never insure my farm</td>
<td>-0.100</td>
<td>0.404</td>
</tr>
<tr>
<td>I adopt new technology in my farming practice</td>
<td>0.228</td>
<td>0.598</td>
</tr>
<tr>
<td>I never have future market for my farm produce</td>
<td>-0.033</td>
<td>0.390</td>
</tr>
<tr>
<td>I do not have formal life insurance</td>
<td>-0.067</td>
<td>0.398</td>
</tr>
<tr>
<td>I do practice both rain-fed and dry season farming</td>
<td>0.176</td>
<td>0.613</td>
</tr>
<tr>
<td>Income generated from farming activities is not enough for the financial survival of my household</td>
<td>-0.075</td>
<td>0.396</td>
</tr>
<tr>
<td>In case of emergence, I do not have sufficient back-up labour to carry on farming activities</td>
<td>-0.029</td>
<td>0.562</td>
</tr>
<tr>
<td>I used tractor for my farming activities</td>
<td>0.185</td>
<td>0.603</td>
</tr>
<tr>
<td>I never rear animal to sell for complementing my income</td>
<td>-0.007</td>
<td>0.559</td>
</tr>
<tr>
<td>I practice mixed cropping in my farm</td>
<td>0.213</td>
<td>0.599</td>
</tr>
<tr>
<td>I never sell my farm produce at market</td>
<td>0.050</td>
<td>0.577</td>
</tr>
<tr>
<td>I plant my crop(s) because it is profitable</td>
<td>0.303</td>
<td>0.587</td>
</tr>
<tr>
<td>I do not have any other job apart from farming</td>
<td>-0.061</td>
<td>0.399</td>
</tr>
<tr>
<td>I belong to farmers’ groups / association</td>
<td>0.273</td>
<td>0.590</td>
</tr>
<tr>
<td>I do not benefit from credit from cooperative / banks</td>
<td>-0.033</td>
<td>0.393</td>
</tr>
</tbody>
</table>
Off-farm income is not an important source of income for me and my household 0.080 0.573
I do have access to ADP extension agents 0.287 0.588
I rely heavily on market information in making my marketing decisions 0.321 0.585
There is nobody else in the household who has an interest in farming as a business 0.098 0.629
I do use insecticide/pesticide in my farm -0.078 0.401
I never apply fertilizer in farm 0.079 0.635
I save greater share of my income in bank 0.123 0.365
I never have storage facility to store my farm produce 0.054 0.576
I do keep record of my farming work 0.129 0.365
I never use improved seeds in my farms -0.077 0.398
I do use traditional method of farming -0.023 0.391
I never use organic manure on my farms 0.113 0.608
I often fall sick 0.300 0.589
Weather is never favourable for my farming activities in the previous farming seasons. 0.121 0.610
I benefit in government project in my village/community e.g. Fadama, NPFS, RTEP etc 0.532 0.554
I have ready-made market for my farm produce 0.341 0.583
I do not have enough money for my farming activities/business 0.018 0.584

Coefficient alpha for the entire 32 statement 0.654

a. 1=Corrected Item-Scale Correlation (CISC), 2=Cronbach Coefficient (α) if item is deleted

Table 5 Identified management strategies of the respondents

<table>
<thead>
<tr>
<th>Identified management strategies</th>
<th>1</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>I adopt new technology in my farming practice (2)</td>
<td>0.23</td>
<td>0.72</td>
</tr>
<tr>
<td>I do practice both rain-fed and dry season farming (5)</td>
<td>0.183</td>
<td>0.721</td>
</tr>
<tr>
<td>I use tractor for my farming activities (8)</td>
<td>0.188</td>
<td>0.694</td>
</tr>
<tr>
<td>I practice mixed cropping in my farm (10)</td>
<td>0.32</td>
<td>0.709</td>
</tr>
<tr>
<td>I plant my crop(s) because it is profitable (12)</td>
<td>0.474</td>
<td>0.686</td>
</tr>
<tr>
<td>I belong to farmers group/association(14)</td>
<td>0.258</td>
<td>0.721</td>
</tr>
<tr>
<td>I do have access to ADP extension agent (17)</td>
<td>0.283</td>
<td>0.715</td>
</tr>
<tr>
<td>I rely heavily on market information in making my market decision (18)</td>
<td>0.37</td>
<td>0.701</td>
</tr>
<tr>
<td>I often fall sick (28)</td>
<td>0.256</td>
<td>0.716</td>
</tr>
<tr>
<td>I benefit in government project in my village/Community e.g. Fadama, NPFS, RTEP, etc. (30)</td>
<td>0.544</td>
<td>0.674</td>
</tr>
<tr>
<td>I have ready-made market for my farm produce (31)</td>
<td>0.268</td>
<td>0.715</td>
</tr>
<tr>
<td>Co-efficient Alpha for the entire 11 statement</td>
<td></td>
<td>0.723</td>
</tr>
</tbody>
</table>

a. 1=Corrected Item-Scale Correlation (CISC), 2=Cronbach Coefficient (α) if item is deleted

Table 6 Risk attitudes of the respondents

<table>
<thead>
<tr>
<th>Probable Risk Category</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Risk Aversion (32&lt;=Ya&lt;=95)</td>
<td>94</td>
<td>62.7</td>
</tr>
<tr>
<td>Risk Neutral (Yn=96)</td>
<td>5</td>
<td>3.3</td>
</tr>
<tr>
<td>Risk preference 97&lt;=Yp&lt;=160</td>
<td>51</td>
<td>34.0</td>
</tr>
<tr>
<td>Total</td>
<td>150</td>
<td>100.0</td>
</tr>
</tbody>
</table>
Table 7 Estimates of the factors affecting household risk attitudes of the respondents

<table>
<thead>
<tr>
<th>Variables</th>
<th>Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>1.655*** (0.117)</td>
</tr>
<tr>
<td>Age (X₁)</td>
<td>0.054 (0.058)</td>
</tr>
<tr>
<td>Years of farming experience (X₂)</td>
<td>-0.020 (0.027)</td>
</tr>
<tr>
<td>Household size (X₃)</td>
<td>-0.028 (0.022)</td>
</tr>
<tr>
<td>Farm size (X₄)</td>
<td>-0.055** (0.023)</td>
</tr>
<tr>
<td>Educational Status (X₅)</td>
<td>0.038** (0.016)</td>
</tr>
<tr>
<td>Off farm income (X₆)</td>
<td>-0.012 (0.012)</td>
</tr>
<tr>
<td>Gross farm income (X₇)</td>
<td>0.058*** (0.017)</td>
</tr>
<tr>
<td>R-square (R²)</td>
<td>0.190</td>
</tr>
<tr>
<td>Adjusted R²</td>
<td>0.142</td>
</tr>
<tr>
<td>F-value</td>
<td>3.948***</td>
</tr>
</tbody>
</table>

a. Values in parenthesis are standard errors. ***p < .01, **p < .05, *p < .10

Conclusion
The study focused on understanding the risk attitudes and strategies used by small scale farmers in managing negative farm related risks using Kaduna state as a case study. Structured questionnaires were used to collect relevant data from 150 small scale farmers in the study area and the respondents were randomly selected. The data collected were analyzed using descriptive statistics, attitudinal scale approach and regression. Lack of technical knowhow of improved farming technologies, livestock diseases outbreak, high cost of inputs, and inadequate credit facilities were perceived as more risky and they are most likely to occur all year round. It could be observed that only high cost of inputs and inadequate credit facilities seems to be occurring across classification but most of the perceived threats are environmentally inclined meaning that climate change is a reality among these farmers. In addition, 62.7% of the respondents were classified as risk averse and 34% as risk preference small scale farmers. The factors that affected the risk attitude of the respondents are farm size, educational level and gross income. The management strategies used by respondents are adoption of new technology in farming, practice of both rain-fed and dry season farming, use of tractor, mixed cropping, planting profitable crops, belonging to farmers group/association, access to extension agents, relying in market information for making decision, treatment of ill health, benefit in government project and market for selling of farm produce. The Cronbach coefficient Alpha (α) for the entire 32 statement-items was 0.654 indicating that 65.4% of the total variation in the management strategies of the small scale farmers was explained by the included statements and the percentage increased to 72.3% when those with low CISC were deleted. In view of this, there is need to strengthen the policies regarding improvement of irrigation infrastructure in the current agricultural transformation agenda so as to resolve all weather-dependent threats to agricultural production by small scale farmers. There is also a need to strengthen the agricultural extension transformation agenda so that small scale farmers can correctly diagnose farming constraints and apply the correct existing improved technologies to the constraints so diagnosed.

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Measuring Structural Change with Syrquin Decomposition Model

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Abstract

This study uses Syrquin Decomposition Model to determine the sources of economic growth between 1995-2011. Using 1995 and 2011 Turkey National Input-Output Tables, the economic growth of each sector was decomposed into initial demand factors such as domestic demand, export, intermediate demand and import substitution. Main findings of this study are; Turkish Economy has made progress on structural change over the last decades, all sectors have grown positively between 1995-2011 and three of four components (domestic demand, intermediate demand and export) have positive effects on economic growth of all sectors. Finding of study indicate a dependence on domestic demand as a source of economic growth. For certain sectors such as wood&corks, finance, energy and petrol, domestic demand is significant component of economic growth. Intermediate demand is also an important contributor to economic growth for all sectors. This situation indicates contribution of the inter-sectoral relations of production to the growth has risen in this period. The sectors which have the biggest intermediate demand impacts contribute to economic growth are energy, other minerals, wood&corks. While export growth is negligible for whole economy, particular sectors such as wood&corks, metal, and machinery industry are strongly driven by export. All sectors experienced negative import substitution during this period.

Keywords: Turkish economy, Syrquin Decomposition model, structural change

Introduction

Growth of the economy leads to a transformation in the structure of the economy. The elements of economic structure having different growth rates lead to significant changes over time and this is referred to as structural change.

Based on the approach of general economic equilibrium, the components of structural change is analysed with supply side and demand side changes. (Albal and Miguel, 1999: 301). Supply-side models concenterate on partial impacts of basic inputs such as capital and labour on economic growth within the framework of growth accounting model, while demand side models search partial impacts of demand components on economic growth using structural decomposition models. (; Chenery and Watanabe 1958, Carter, 1980; Syrquin Deutsch, 1989; Aydoğuş, 2010, Ayaş, 2012).

Syrquin Demand Decomposition Model decompose economic growth into four components such as domestic demand, intermediate demand, export, and import substitution. (Tregenna, 2014).
Effects of domestic demand refer to total effects of the growth in domestic demand in the whole economy on the sectoral output and includes households consumption expenditure, gross capital formation and government consumption expenditure.

Effects of Export indicate total effect of increasing exports on sectoral production.

Import substitution effects, shows the contribution of imported inputs to the economic growth and negative result for import substitution can be interpreted as import penetration. Intermediate demand effects reveal the change in sectoral output associated with changing technical input–output. This component is calculated from changes in the matrix of technical coefficients showing the flow of intermediate inputs and outputs in the economy. Intermediate demand effect also has been accepted as technological progress in the literature.

Structural decomposition analysis has many advantages for several reasons. First, it is able to examine changes in technical coefficients in sectoral level. (Bekhet, 2009) Second it takes interlinked nature of the economy into account opposed to approach ignoring input output relation.

Demand side decomposition model has been introduced first by Chenery(1960) and extended the others. (Syrquin, 1976; Chenery and Syrquin, 1979).

There are numerous empirical studies in the literature documenting the changes in the nature and structure of economic growth and there are few empirical studies that use demand side models on economic growth in Turkey such as Celasun (1983), Aydoğmuş (1991), Pamukçu and De Boer (1990), Tunç (2004), Voyvoda (2008) Çalışkan and Aydoğmuş (2011).

Celasun (1983), is known as the first study on the structural change in Turkey. In this study, it is stated out that the primary source of increase in production is the expansion of domestic demand.

Aydoğmuş (1991), examined the sources of sectoral growth in the planned term as a two time period; 1963-1979 and after 1980’s. According to the study findings, expansion of domestic demand has been found main source of sectoral growths in both periods. In the 1963-1979 import substitution was found as second source of economic growth while export growth is second source of economic growth after 1980’s.

Pamukçu and De Boer (1990), analysed Turkish economy in terms of structural change from 1968 to 1990. Focusing on technological change, study revealed that technological progress were related to intermediate goods and did not produce backward and forward linkage effects. The study highlighted that structural change did not occur during this period. Tunç (2004), examined structural change from 1985 to 1996 as two sub-periods and found that the impact of increase in domestic demand on production was high in both periods. Both impacts of domestic demand and export has been found effective while intermediate demand impact was limited on economic growth in 1985-1990. While maintaining the
importance of domestic demand on economic growth from 1990 to 1996 period, the contribution of export has been found to decrease compared to the previous period. Furthermore, the study suggested that the effect of technological development was low in this period and also signify the structural change resource vary widely for different sectors. A recent study (Voyvoda 2008) examined the sources of economic growth between 1985 and 2002 as two sub-periods. Empirical finding stated that, the source of economic growth differ according to applied policies as of periods. Contribution of domestic demand has been significant in both sub period, import substitution become prominent as the basis of growth on production between 1998 and 2002.

Çalışkan and Aydoğanuş (2011), is the latest study on the structural change of Turkey's economy as far as known. The sources of sectoral growth is investigated for the period of 1985-2002. This study emphasizes the importance of domestic demand on economic growth as in others. Finding in the study stated that; growth was based on the expansion of domestic demand, for the period 1985 – 1990. Despite there has been important export incentive in 1990 – 2002, the contribution of export was found to be low.

Although these studies have inconclusive and mixed results, (This may be due to the differences in research period, sectoral aggregation methods) the common finding is economic growth of Turkish economy is heavily depend on domestic demand and structural change is ignorable.

2002 Input - Output Tables known as the recent input-output tables published by Turkey Statistical Institute was used to analyse structural change in Turkish economy in previous studies. The aim of this paper is to determine sources of economic growth and to analyse structural change of the Turkish economy between 1995 and 2011 by using Syrquin Decomposition Model to identify the underlying factors of structural change between 1995 and 2011. The study differs from previous studies by using 1995 and 2011 input output tables published by OECD and it has been expected to contribute to literature in this way.

**Methodology**

In this study, Syrquin Decomposition Model was implemented and a summary of the model was given here, but more detailed treatments are available elsewhere (Miller and Blair, 1985; Aydoğanuş, 2010). The methodology presented here is based the structural decomposition analysis which is used to examine determinants of economic growth leading structural change. The core idea of structural decomposition method is to decompose the change in the dependent variable to several independent factors and measure the contribution of each factor. Such an analysis helps to identify which component effect/effects dominates the characteristics of the most rapidly growing sectors. It also provides the output changes that can be ascribed to the changes in its determinants such as intermediate demand, domestic demand, exports and import substition. (Voyvoda, 2008).

I/O Tables allow a consistent account of the main output flows of the economy, as well as the interrelations of the industries via their demands for intermediate inputs. Therefore, utilization of the I/O framework at various degrees of aggregation/disaggregation allows for differentiation of the output of different sectors in accordance with various sources of
demand. In its simplest form, a demand-driven input-output model of an economy with \( n \) industries can be described as (Boer, 1990):

\[
X = AX + Y
\]  

(1)

Where \( X \) refers the \( nx1 \) vector of sectoral gross outputs, \( A \) is the \( nxn \) matrix of technical coefficients with each element \( a_{ij} \) denoting the output of sector \( i \) needed to produce one unit output of sector \( j \) (\( i, j = 1...n \)) and \( Y \) is the \( nx1 \) vector of final demands. By using equation 1, it’s possible to produce classical Leontief inverse matrix.

\[
X = (I - AX)^{-1} * Y
\]  

(2)

\[
L = (I - AX)^{-1}
\]  

(3)

\((I - AX)^{-1}\) is called the Leontief inverse matrix of technical coefficients with each element \( l_{ij} \) indicating direct and indirect inputs needed to meet one unit final demand in the industry \( j \).

The starting point of decomposition model for open economy is Leontief’s equilibrium productions equations. In this approach it is assumed that supply is equal to demand both macro and sectoral level. In a demand-driven input-output model for an open economy, supply and demand equation can be written as follows

\[
X + M = AX + Y + E
\]  

(4)

Terms in the equation \( AX, Y, E \) and \( M \) respectively show intermediate input demand, domestic final demand, export and import. Equation 5 can be rewritten as follows.

\[
Y_i + AX_i = X_i + M_i - E_i
\]  

(5)

The right side of equation shows the total demand of sectors output while the left side shows the total supply. Making the necessary arrangements with equations 5, some equations obtained as below.

\[
X_i = d_i (V_{i+}Y_{i+}) + E_i
\]  

(6)  

\[
d_i = (X_1 - E_i)/(V_{i+}Y_{i+})
\]  

(7)  

\((i=1........n)\)

Coefficient \( d_i \) in the equation 6 and 7 called import coefficient and indicate impact of import substitution. Under these definitions, main output equation can be formulated as follows.

\[
X = (I - D * A)^{-1} (D * Y + E)
\]  

(8)

\( D \), in the equation 8 is a diagonal matrix consisting of \( di \) coefficient elements on the main diagonal. Putting \( R \) instead of the first term \((I - D * A)^{-1}\) The equation represents the decomposition of gross output growth into direct and indirect parts of the total demand for the gross output of the economy has been written as follows.

\[
\Delta X = R(t) * D(t) * \Delta Y + R(t) * \Delta E + R(t) \Delta D * [(Y_{t+1}) + V(t_{+1})] + R(t) * \Delta D * \Delta AX
\]  

(9)

The term on the left hand side shows change in output. The terms on the right hand side has the following standard meanings:

\( R(t) * D(t) * \Delta Y; \) represents the contribution of the domestic final demand,  
\( R(t) * \Delta E; \) represents the contribution of the export,
R(t)ΔD ∗ [(Y_{t+1}) + V_{t+1}] \); represents the contribution of the import substitution and the last

R(t) * ΔD * ΔAX; represents the contribution of the intermediate demand which referring change in technical coefficient.

In this research, 1995 and 2011 Turkey national input-output tables published by OECD were applied. The input output tables mentioned above have 35 industry sectors and both 1995 and 2011 tables were aggregated to the 26 sectors.

An overview of the Turkish Economy
This section gives some changes in the Turkish Economy between 1995 and 2011. During the last two decades, Turkey implemented a number of structural adjustment programmes and specified structural priorities for some sectors. Implementing incentive programmes have been expected to rise economic growth and to change nature of economic growth leading to structural change. Statistical data’s show that Turkish economy has performed well and has experienced a radical transformation since 2001. It has recorded a remarkable increase in national income during the period of 2002-2011.

The main findings of gross outputs of Turkish economy and factors contributing to changes in gross outputs between 1995 and 2011 calculated from input output tables and summarized in Table 1.

| Table 1: Changes in Total Outputs and Demand Components in 1995-2011 |
|--------------------------|-------------|-----------------|----------------|
|                          | 1995        | 2011            | % Improvement  |
| Output                   | 346,012     | 1,249,845       | 261            |
| Import Substitution      | 23,570      | 113,215         | 380            |
| Export                   | 28,373      | 157,020         | 453            |
| Intermediate Input Usage | 135,213     | 571,713         | 323            |
| Final Domestic Demand    | 169,314     | 543,289         | 221            |

As can be seen in Table 1, the growth of output and demand components over the period 1995-2011 was positive. Total output increased $346,012 million to $1,249,845 million in 1995-2011 and reached to 261% compared to value of 1995. Considering the relative size of the demand factors; it is observed a predominance of both domestic final demand and intermediate input demand in the economy both 1995 and 2011 years.

Analysing rates of growth in demand factors between 1995 and 2011, with growth rate of % 453, export value has risen 28.373 million $ to 157.020 million $ in 1995-2011. Therefore export was the fastest growing component of this period while domestic demand growth rates was the lowest in this period. During this period, final domestic demand growth rate was relatively low compared to the growth rate of other demand factors. Therefore Turkish economy would be driven export led growth in the next decades.
Output was an important indicator of structural change in this study. In order to examine the originating sector of this shift realized in general economy, output and demand components were searched on the basis of sectors. Values of output calculated for both 1995 and 2011 years and the growth of output rates were presented in table 2.

**Table 2: Change in Sectoral Outputs (1995-2011)**

<table>
<thead>
<tr>
<th>Rank</th>
<th>Sectors</th>
<th>Output 1995 Million $</th>
<th>Sectors</th>
<th>Output 2011 Million $</th>
<th>Sectors</th>
<th>Output Growth %</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Trade</td>
<td>43.147</td>
<td>Transportation</td>
<td>148.011</td>
<td>Communication</td>
<td>843</td>
</tr>
<tr>
<td>2</td>
<td>Agriculture</td>
<td>37.188</td>
<td>Trade</td>
<td>130.716</td>
<td>Real Estate</td>
<td>687</td>
</tr>
<tr>
<td>3</td>
<td>Transportation</td>
<td>29.973</td>
<td>Energy</td>
<td>110.342</td>
<td>Health</td>
<td>556</td>
</tr>
<tr>
<td>4</td>
<td>Energy</td>
<td>29.880</td>
<td>Textile</td>
<td>104.985</td>
<td>Public</td>
<td>535</td>
</tr>
<tr>
<td>5</td>
<td>Food</td>
<td>28.382</td>
<td>Real Estate</td>
<td>93.891</td>
<td>Private Household</td>
<td>475</td>
</tr>
<tr>
<td>6</td>
<td>Machinery</td>
<td>25.794</td>
<td>Agriculture</td>
<td>90.536</td>
<td>Mining</td>
<td>434</td>
</tr>
<tr>
<td>7</td>
<td>Textile</td>
<td>23.654</td>
<td>Food</td>
<td>85.484</td>
<td>Renting</td>
<td>432</td>
</tr>
<tr>
<td>8</td>
<td>Metal</td>
<td>16.463</td>
<td>Machinery</td>
<td>66.042</td>
<td>Transportation</td>
<td>394</td>
</tr>
<tr>
<td>9</td>
<td>Finance</td>
<td>15.414</td>
<td>Public</td>
<td>47.971</td>
<td>Other Services</td>
<td>391</td>
</tr>
<tr>
<td>10</td>
<td>Real Estate</td>
<td>11.937</td>
<td>Renting</td>
<td>45.732</td>
<td>Education</td>
<td>375</td>
</tr>
</tbody>
</table>

Note: Calculated by the author with the reference of 1995-2011 Input-Output Tables.

Table 2 displays the top 10 sectors according to output in 1995, output in 2011 and increase in period of 1995-2011.

It has been seen that output of ten sectors changed between 43.147$ million (trade) and 11.937$ million (real estate) in 1995. The four sectors which have the largest volume of outputs in 1995 are; trade, agriculture, transportation and energy.

Output of ten sectors have been calculated between 148.011$ million (Transportation) and 45.732$ million in 2011. The four sectors which have the largest volume of outputs in 2011 are; transportation, trade, energy and textile.

As it was growing different rates, some changed observed rank order of the output volume in 2011. Transportation sector moved up from third in 1995 to first in 2011 while real estate sector moved up from tenth in 1995 to fifth in 2011. Opposite to this situation, machinery sector moved down from sixth in 1995 to eighth in 2011 while agriculture moved down from second in 1995 to sixth in 2011.

With respect to last column of table 1; the growth rates among sectors varies between %843 (communication sector) and %375 (education). Communication sector was the highest growing sector (%843) in the economy in this period. Communication has smaller output but significant output increase between 1995 and 2011. Growth rate of the real estate sector was % 687. The slowest growing sector among the first ten sectors was education. Since export is the most important component of economic growth, export value of sectors in 1995, export value of sectors in 2011 and growth rates of export as base of sectors has been calculated and presented in table 3.
Table 3. Export Values and Export Growth Rates in Period of 1995-2011

<table>
<thead>
<tr>
<th>Rank</th>
<th>Sectors</th>
<th>Export 1995 Million $</th>
<th>Sectors</th>
<th>Export 2011 Million $</th>
<th>Sectors</th>
<th>Growth (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Textile</td>
<td>10.467</td>
<td>Machinery</td>
<td>44.385</td>
<td>Petroleum</td>
<td>1668</td>
</tr>
<tr>
<td>2</td>
<td>Machinery</td>
<td>4.315</td>
<td>Textile</td>
<td>26.221</td>
<td>Rubber &amp; Plas.</td>
<td>886</td>
</tr>
<tr>
<td>3</td>
<td>Metal Industry</td>
<td>3.239</td>
<td>Metal Industry</td>
<td>23.478</td>
<td>Wood &amp; Cork</td>
<td>698</td>
</tr>
<tr>
<td>4</td>
<td>Agriculture</td>
<td>3.075</td>
<td>Transportation</td>
<td>10.928</td>
<td>Paper &amp; Publs.</td>
<td>635</td>
</tr>
<tr>
<td>5</td>
<td>Food</td>
<td>2.946</td>
<td>Food</td>
<td>9.950</td>
<td>Mining</td>
<td>477</td>
</tr>
<tr>
<td>6</td>
<td>Chemicals</td>
<td>1.482</td>
<td>Agriculture</td>
<td>6.321</td>
<td>Other Minerals</td>
<td>358</td>
</tr>
<tr>
<td>7</td>
<td>Other Minerals</td>
<td>944</td>
<td>Petroleum</td>
<td>6.148</td>
<td>Chemicals</td>
<td>252</td>
</tr>
<tr>
<td>8</td>
<td>Rubber &amp; Plastic</td>
<td>613</td>
<td>Rubber &amp; Plas.</td>
<td>6.043</td>
<td>Food</td>
<td>238</td>
</tr>
<tr>
<td>9</td>
<td>Mining</td>
<td>450</td>
<td>Chemicals</td>
<td>5.219</td>
<td>Textile</td>
<td>151</td>
</tr>
<tr>
<td>10</td>
<td>Petroleum</td>
<td>348</td>
<td>Other Minerals</td>
<td>4.329</td>
<td>Agriculture</td>
<td>106</td>
</tr>
</tbody>
</table>

Note: Calculated by author with the reference of 1995-2011 Input-Output Tables.

Table 3 shows first ten sectors according to export volume of 1995, export volume of 2011 and export growth rates between 1995-2011. With an export volume of $10.467 million, textile sector has the largest export volume in 1995. Export volume of other sectors remained under $10.000 million. The first three sectors (Textile, machinery, metal) has remained unchanged with respect to volume of export in period of 1995-2011.

In the last column of table 3, reveals export growth rates of sectors. Export growth rates have been calculated between %1668 and %106. Maximum increase has been calculated for petroleum products with %1668 while minimum increase (%106) belongs to agriculture in this period. Concluding differences export growth rates of sectors, Turkish sectoral export structure has been expected to change in the near future. Another prediction on sectoral structural change is, petroleum products and rubber-plastic sectors would be dominant sectors in the export markets.

Using the same data set, growth of other demand components of economic growth (import substitution, intermediate demand and final demand) have been calculated for some sectors and presented in table 4.

Table 4. Growth in Other Demand Components in Period of 1995-2011

<table>
<thead>
<tr>
<th>Rank</th>
<th>Sectors</th>
<th>Import substitution (%)</th>
<th>Sectors</th>
<th>Intermediate Demand (%)</th>
<th>Sectors</th>
<th>Domestic Demand (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Real Estate</td>
<td>1660</td>
<td>Textile</td>
<td>821</td>
<td>Other Minerals</td>
<td>791</td>
</tr>
<tr>
<td>2</td>
<td>Mining</td>
<td>1325</td>
<td>Mining</td>
<td>665</td>
<td>Chemicals</td>
<td>337</td>
</tr>
<tr>
<td>3</td>
<td>Transportation</td>
<td>1039</td>
<td>Rubber &amp; Plas.</td>
<td>475</td>
<td>Mining</td>
<td>229</td>
</tr>
<tr>
<td>4</td>
<td>Trade</td>
<td>701</td>
<td>Chemicals</td>
<td>397</td>
<td>Rubber &amp; Plas.</td>
<td>198</td>
</tr>
<tr>
<td>5</td>
<td>Textile</td>
<td>567</td>
<td>Other Minerals</td>
<td>281</td>
<td>Textile</td>
<td>87</td>
</tr>
<tr>
<td>6</td>
<td>Hotels&amp;Rest.</td>
<td>560</td>
<td>Agriculture</td>
<td>280</td>
<td>Paper &amp; Pub.</td>
<td>84</td>
</tr>
<tr>
<td>7</td>
<td>Finance</td>
<td>534</td>
<td>Food</td>
<td>234</td>
<td>Agriculture</td>
<td>48</td>
</tr>
<tr>
<td>8</td>
<td>Communication</td>
<td>508</td>
<td>Paper &amp; Pub.</td>
<td>225</td>
<td>Wood &amp; Cork</td>
<td>-14</td>
</tr>
<tr>
<td>9</td>
<td>Metal Industry</td>
<td>502</td>
<td>Wood &amp; Cork</td>
<td>19</td>
<td>Food</td>
<td>-37</td>
</tr>
<tr>
<td>10</td>
<td>Machinery</td>
<td>454</td>
<td>Petroleum</td>
<td>-11</td>
<td>Petroleum</td>
<td>-56</td>
</tr>
</tbody>
</table>

Note: Calculated by author with the reference of 1995-2011 Input-Output Tables.
Table 4 displays the growth rates of each demand component and the top ten sectors with fastest growth rate in 1995 and 2011. Examining growth rates of demand components, import substitution has been the fastest growing component of the economic growth. Import substitution growth was positive for all sector and changed between %1660 (real estate) and %454 (machinery). Import substitution of real estate, mining and transportation sectors has grown over the %1000.

With the exception of petroleum, the growth rates of the intermediate demand was positive for all the top ten sectors and changed between %821 (textile) and %19 (wood&cork). Increase in intermediate demand of growth was %665 in mining, %475 in rubber-plastic etc.

Finally, growth rate of domestic final demand have been examined. Growth of final demand of some sectors (wood & cork, food and petroleum) has been found negative. Other minerals sector, had the highest growth rate in final domestic demand. Other sectors which have relatively high growth rates of domestic final demand was chemicals, mining, and rubber and plastics sectors. In other sectors the growth rate of domestic final demand was found limited.

Output of sectors, volume of demand components and growths rate of their give pre-understanding of whether the structural change has occurred or not. However, in order to determine partial contribution of each demand factors on economic growth, needs to detailed analysis.

Empirical Results
This section presents the results of Syrquin Demand Decomposition Model. Growth of output of the sectors in Turkish Economy decomposed into four components such as domestic demand, export, intermediate demand and import substitution. Basic equation (9) of the Syrquin Demand Decomposition Model was applied to 1995-2011 input-output tables and major findings were reviewed. So as to indicate clearly the relative importance of each components, results for sectors which have the largest output change in this period are plotted as 100% stacked bars and presented in figure 1.

Fig. 1. Decomposition of Output Growth for Some Sectors

1 Which have the largest output change in this period.
In Figure 1, we can see contribution of demand components to economic growth for certain sectors. The length of each of the four bars shows relative contribution of demand components such as domestic demand, export, import substitution and intermediate demand to the growth of sectors over the period 1995-2011.

Examining Figure 1 some observation can be made. With the exception of import substitution, contribution of other demand components have been found positive for these sectors. Most growth for the most sector is accounted by the expansion in domestic demand. Import substitution is the only demand component factor which is impacting economic growth negatively for all sectors.

Seeing that detailed information on sources of economic growth, the contributions of the four components to economic growth for each of the 25 sectors presented in table 5.


<table>
<thead>
<tr>
<th>Sectors</th>
<th>Export %</th>
<th>Domestic Demand %</th>
<th>Import Substitution %</th>
<th>Intermediate Demand %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture</td>
<td>8.553</td>
<td>38.231</td>
<td>-11.777</td>
<td>17.470</td>
</tr>
<tr>
<td>Mining</td>
<td>6.184</td>
<td>7.852</td>
<td>-16.942</td>
<td>19.684</td>
</tr>
<tr>
<td>Food</td>
<td>8.806</td>
<td>50.923</td>
<td>-5.570</td>
<td>2.914</td>
</tr>
<tr>
<td>Textile</td>
<td>20.386</td>
<td>32.695</td>
<td>-13.250</td>
<td>40.611</td>
</tr>
<tr>
<td>Paper &amp; Publ.</td>
<td>4.655</td>
<td>8.921</td>
<td>-3.907</td>
<td>5.282</td>
</tr>
<tr>
<td>Petroleum</td>
<td>15.988</td>
<td>25.416</td>
<td>-30.901</td>
<td>11.253</td>
</tr>
<tr>
<td>Rubber&amp;Plas.</td>
<td>6.274</td>
<td>2.617</td>
<td>-3.589</td>
<td>6.344</td>
</tr>
<tr>
<td>Other Minerals</td>
<td>16.117</td>
<td>26.872</td>
<td>-67.721</td>
<td>50.441</td>
</tr>
<tr>
<td>Metal Industry</td>
<td>50.589</td>
<td>24.759</td>
<td>-72.906</td>
<td>26.585</td>
</tr>
<tr>
<td>Machinery</td>
<td>58.132</td>
<td>11.731</td>
<td>-28.613</td>
<td>5.964</td>
</tr>
<tr>
<td>Energy</td>
<td>22.964</td>
<td>49.916</td>
<td>-124.742</td>
<td>94.378</td>
</tr>
<tr>
<td>Trade</td>
<td>26.097</td>
<td>56.063</td>
<td>-59.223</td>
<td>69.504</td>
</tr>
<tr>
<td>Hotels&amp;Rest.</td>
<td>1.193</td>
<td>27.397</td>
<td>-3.389</td>
<td>1.885</td>
</tr>
<tr>
<td>Transportation</td>
<td>27.131</td>
<td>70.657</td>
<td>-47.955</td>
<td>74.776</td>
</tr>
<tr>
<td>Communication</td>
<td>2.140</td>
<td>17.116</td>
<td>-3.418</td>
<td>6.739</td>
</tr>
<tr>
<td>Finance</td>
<td>16.817</td>
<td>34.238</td>
<td>-32.341</td>
<td>8.362</td>
</tr>
<tr>
<td>Real Estate</td>
<td>760</td>
<td>70.613</td>
<td>-3.499</td>
<td>14.422</td>
</tr>
<tr>
<td>Renting</td>
<td>6.536</td>
<td>12.998</td>
<td>-11.611</td>
<td>31.600</td>
</tr>
<tr>
<td>Public</td>
<td>481</td>
<td>44.063</td>
<td>-4.602</td>
<td>469</td>
</tr>
<tr>
<td>Education</td>
<td>349</td>
<td>22.124</td>
<td>1.291</td>
<td>866</td>
</tr>
<tr>
<td>Health</td>
<td>141</td>
<td>16.056</td>
<td>502</td>
<td>1.197</td>
</tr>
<tr>
<td>Other Services</td>
<td>1.087</td>
<td>13.748</td>
<td>-1.344</td>
<td>4.522</td>
</tr>
<tr>
<td>Private Hou.</td>
<td>0</td>
<td>1.166</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Note: Calculated by author with the reference of 1995-2011 Input-Output Tables.
Table 5 illustrates the results of the Syrquin Demand Decomposition Model as described in equation 9 and shows partial effects of the demand factors, both in point of quantity and percentages. Percentage results are shown in a form such that each row sums to 100% for sectors that grew in real terms over a given period.

First column shows export contribution to economic growth. A clear pattern can be observed of export expansion contributing positively in all sectors except households and it is significant contributor to the economic growth in certain sectors. Changes in domestic demand, export and intermediate demand made positive effect on output growth, while changes in import substitution made negative effect on output growth. Due to the negative effect was smaller than the positive effect, total output increased 1995-2011. Most of the change in output growth can be explained by changes in domestic demand and intermediate demand in this period.

Sectors, which have the highest growth effect caused by the increase of export were listed as, wood & cork (215%), metal industry (174%) and machinery (123%). The maximum contribution of export to economic growth (%215) has been accounted for wood & cork. Therefore, 215% of the change in wood & cork output can be explained by export expansion. The output change of the exceeding 100% is explained by negative contribution of other demand components. For example, contribution of import substitution to economic growth of wood & cork was calculated negative and quite high (-549%). The export expansion had a positive but insignificant effects growth on agriculture, food, communication, renting, and certain services industries.

The domestic demand expansion is positive and a significant contributor to economic growth in almost all sectors. With few exceptions domestic demand is in general dominant component of output change. This findings are consistent with the findings of previous studies. Considering results, domestic demand can be said that it was the major determinant of economic growth for many sectors. Sectors, which have the highest growth effect caused by the increase of domestic demand were listed as, wood & cork (265%), finance (126%), petroleum (%117), energy (%117). The expansion of domestic demand is the only source of economic growth in private household sector.

The expansion of domestic demand contributed to output growth more than other factors and these results suggest that Turkish Economy growth remains dependent on domestic demand rather than export.

The third component of economic growth was import substitution. With the exception of education, health and private household sectors, all sectors experienced negative import substitution during this period. A clear pattern can be observed of import substitution impacting negatively and in some cases to quite a large extent to output in sectors are export base growing sectors such as wood & cork, petroleum, metal, machinery and energy sectors. Sectors, which had the highest effects caused by the change of import substitution were listed as, wood & cork (-549%), energy (-293) other minerals (-263%), metal (-251). As a result, it can be said that import substitution led reduced growth rates.
The fourth and the final component of economic growth is intermediate demand which as known technological progress. The effect of the change in intermediate demand is more difficult to interpret, since the intermediate demand is affected by changes in technology, as well as the effects of substitution in production caused by changes in the relative prices. Contribution of intermediate demand was found positive and significant for particular sectors. This may be related to the increasing dependence of output on intermediate inputs and outsourcing. Sectors, which have the highest growth effects caused by the increase intermediate demand were listed as, energy (222%) other minerals (196%), wood & cork (%168), and mining (117%).

To analyse sources of the economic growth in detailed, decomposition results of certain sectors which has the largest output change in 1995-2011 presented in table 6 and findings have been reviewed.

Table 6. Decomposition Results of certain sectors

<table>
<thead>
<tr>
<th>Sectors</th>
<th>Export (%)</th>
<th>Domestic Demand</th>
<th>Import</th>
<th>Intermediate Demand</th>
<th>Total</th>
<th>Change in the Output</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transportation</td>
<td>22</td>
<td>57</td>
<td>-38</td>
<td>60</td>
<td>100</td>
<td>124.608</td>
</tr>
<tr>
<td>Trade</td>
<td>28</td>
<td>61</td>
<td>-64</td>
<td>75</td>
<td>100</td>
<td>92.442</td>
</tr>
<tr>
<td>Real Estate</td>
<td>1</td>
<td>86</td>
<td>-4</td>
<td>18</td>
<td>100</td>
<td>82.296</td>
</tr>
<tr>
<td>Textile</td>
<td>25</td>
<td>41</td>
<td>-16</td>
<td>50</td>
<td>100</td>
<td>80.442</td>
</tr>
<tr>
<td>Food</td>
<td>15</td>
<td>89</td>
<td>-10</td>
<td>5</td>
<td>100</td>
<td>57.073</td>
</tr>
<tr>
<td>Agriculture</td>
<td>16</td>
<td>73</td>
<td>-22</td>
<td>33</td>
<td>100</td>
<td>52.477</td>
</tr>
<tr>
<td>Machinery</td>
<td>123</td>
<td>25</td>
<td>-61</td>
<td>13</td>
<td>100</td>
<td>47.214</td>
</tr>
<tr>
<td>Energy</td>
<td>54</td>
<td>117</td>
<td>-293</td>
<td>222</td>
<td>100</td>
<td>42.516</td>
</tr>
<tr>
<td>Public</td>
<td>1</td>
<td>109</td>
<td>-11</td>
<td>1</td>
<td>100</td>
<td>40.412</td>
</tr>
<tr>
<td>Renting</td>
<td>17</td>
<td>33</td>
<td>-29</td>
<td>80</td>
<td>100</td>
<td>39.523</td>
</tr>
</tbody>
</table>

Table 6 shows how much each sector contributed to the total output growth in the 1995-2011. Percentage results are shown in a form such that each row sums to 100% for sectors that grew in real terms over a given period. Considering contribution of demand component, import substitution is the only negative component of economic growth for all sectors while other components contributions are positive.

Having the largest output increase (with $124.608 Million), transportation sector was took place in first raw. For the transportation sector intermediate demand expansion was the main source of contributing 60 per cent to output growth, followed by domestic final demand expansion contributing 56 per cent, export expansion contributing 22 per cent. Import substitution is the only component impacting economic growth negatively in this sector.

Trade sector is in the second raw according to change in output. Both domestic and intermediate demand are important to output growth of sector. 75 per cent of growth can be explained with expansion of domestic demand while 61 per cent of it related to domestic demand expansion. Import substitution has negative and significant effects (%64) on growth of trade sector, while the contribution of export has been found limited (28%).

Examining sources of growth in real estate sector, it can be said that output growth is fully associated with the domestic demand expansion. The most important component of economic growth was the domestic demand. 86 per cent of output growth in real estate sector is due to increase of domestic demand, while intermediate demand effects (18 per cent) are relatively low, contribution of export (1 per cent) and import substitution (-4 per cent) are ignorable in the sector.

Growth effects are spread out balanced on the demand components for textile sector. 50 per cent of the output growth in textile can be explained with the intermediate demand expansion while 41 per cent of it result of increase in domestic demand. Contribution of export has been found neither high, nor low (25 per cent) compared to other sectors.

The main source of the growth in food and agriculture sector has been found as domestic demand expansion. 89 per cent of food sector growth and 73 per cent of agriculture growth are result of domestic demand expansion. Contribution of export has been found positive but insignificant on economic growth of both sectors. Calculated intermediate demand effects are 33 per cent for agriculture and 5 per cent for food sector. Both import substitution and intermediate demand effects are higher in the agriculture sector.

Unlike the other sectors, the machinery sector is a growing export based sector during this period. The output growth of machinery sector was found $47.214 million, and the source of this growth was resulted of export growth. 123 per cent of economic growth in the machinery sector can be explained by increase in export. Contribution of other component except import substitution was positive but relatively low compared to export. 25 per cent of economic growth in machinery sector is related to domestic demand while 13 percent of related to intermediate demand. During this period, changes in import substitution caused to decrease in machinery products (61 per cent).

Energy sector showed different characteristics from the other sectors in terms of the sources of economic growth. During the period of 1995–2011, the energy sector appeared to be heavily influenced by all of the demand components. Energy sector was the most affected negatively by import substitution, during this period. Change in the import substitution, caused 293 per cent decrease of the sectoral output. The other remarkable feature of the growth in the sector was both intermediate demand and domestic demand has contributed to economic growth over the 100 per cent. 222 per cent of the economic growth was due to intermediate demand expansion while 117 per cent of the economic growth was due to domestic demand expansion. The export effects on growth of energy sector was relatively high (54 per cent) compared to other sectors.

Public services sector has been found heavily domestic demand dependent (109 per cent), while growth of renting activities depends on intermediate demand (80 per cent). While import substitution effects have been found more in renting activities (29 per cent) than public sector (11), contribution of other component has been ignorable in both.

Normal values show relative situation of sector according to average for each demand component. As a normal value 1 means average. Smaller than 1 refers under average while
bigger than 1 reveals over average. Regarding this indicators, sectors can be classified as four groups such as domestic demand oriented, intermediate demand oriented, export oriented and import substuting sectors.

To compare relative situation of sectors, contributions of demand components are normalized and normalized values of sector for each component presented in figures as follows.

**Fig. 2. Domestic Demand Based Sectors**

Figure 2 shows domestic demand oriented sectors. For 12 of the 25 sectors, contribution of domestic demand to economic growth was found over the average. Wood&cork is the most domestic demand oriented sector. Contribution of domestic demand to economic growth for wood&cork sector is about to five times bigger than average while other eleven sectors are about to average.

**Fig.3. Intermediate Demand Based Sectors**

Figure 3 shows growing intermediate demand based sectors. For only 9 of 25 sector, contribution of intermediate demand to economic growth was calculated over the average. Energy, other minerals and wood&cork are the most intermediate demand based growing sectors. Contribution of intermediate demand to growth of output is about to more than 3 times in energy and other minerals while more than 2 times in wood&cork and mining sectors. For other five sectors, intermediate demand contributed to economic growth about to average.
Figure 4 shows export base growing sectors. For only 6 of 25 sectors, contribution of intermediate demand to economic growth was calculated over the average. Growth of wood&cork, metal and machinery sectors have been enormously effected export expansion. Contribution of export to economic growth for wood&cork is close to five times bigger than average while metal industry is four times bigger. Machinery also have been effected from export expansion over the average.

Figure 5 shows import-substituting sectors which have the largest import substution effects. 7 of 25 sector has been heavily effected from change in import substution. The mostly effected sector is the wood&cork. Negative impact of the import substution to the economic growth was over the six times than average in the sector. Also growth of energy, other mineral and metal industry has been highly effected (between 2,5 and 3,5) from import substution.

**Summary & Conclusions**
This paper examined the growth of Turkish Economy from 1995 to 2011 using Syrquin Decomposition Model and gives the information on the compilation Syrquin model as methodological and implementations in Turkey.

The study found that contribution of demand components vary according to the sectors. The contribution of four basic demand components (domestic demand, exports, import substitution and technological change) to economic growth were briefly summarized as below.
Changes in domestic demand, export and intermediate demand made positive effect on output growth, while changes in import substitution made negative effect. Due to the negative effect was smaller than the positive effect, total output increased 1995-2011. Most of the change in output growth can be explained by changes in domestic demand and intermediate demand in this period.

The domestic demand component plays a key role in determining the growth rate of sectoral output for many sectors. Growing domestic demand based sectors are wood & cork, finance, petroleum and energy. The expansion of domestic demand is the only source of economic growth in private household sector.

As the most robust and sustainable sources of economic growth, it cannot be said that export was effective in the growth of Turkey's economy during this period. Except for a few sectors, the growth effect of export has been found very low. However a significant portion of the growth in some sectors was explained by the export expansion. Growing export based sectors are wood & cork, metal industry and machinery.

Technological change is the second most significant demand component which contribute to the economic growth after domestic demand. Partial effects on economic growth of technological change varies according to the sector. Growing technological change based sectors are energy, other minerals, wood & cork and mining.

When negligible positive effects are ignored, import substitution has been contributed to economic growth negatively for many sectors. The most negative effects of import substitution on economic growth has been found in wood & cork, energy, other minerals and metal.

Import substitution in these sectors has reduced the positive growth effects of other demand components. Taking import growth rates account into, it can be said that this structure will continue to affect growth negatively.

References


### Appendix 1. Sectoral Classification and Aggregation

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### Appendix 2: Basic Economic Indicators and Change in 1995-2011

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Calculated by author according to 1995 and 2011 Input Output Tables.
### Appendix 3. Normalized Values of Demand Components by Sectors

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Calculated by author according to 1995 and 2011 Input Output Tables.
Information Society and Impoverished Workers

Gökhan Ofluoglu

Faculty of Economics and Administrative Sciences
Department of Labour Economics and Industrial Relations
"Bülent Ecevit University
Zonguldak, TURKEY
gokhan.ofluoglu@beun.edu.tr

Abstract

New impoverishments emerged as an outcome to adjustability of employment, change of working conditions, drop of wages, weakening of family relationships and their cooperation as a result of individualization, and states imposing restrictions in social expenditure along with globalization. Therefore there is a change of paradigm in the policies aiming the newly impoverished. In this study, based on the changing impoverishment definitions the transformation of poverty will be analysed. Within the system of information society the dimensions and causes of poverty in working life is analysed as the most important indication of new poverty. The worker poverty in Turkey is a widespread issue with important economic, social and political outcome. In return in scientific studies and social policy applications this form of poverty does not attract adequate attention. In our study, data related to worker poverty in Turkey is examined and compared to European Union and OECD Countries. In the European Union and OECD countries where worker poverty exists in a comparatively lesser degree than in Turkey, the issue is considered important, it is debated and remedies are researched. Impoverished workers is a multi-dimentional problem. Therefore, to reduce worker impoverishment a large number of distinctive and effectively compelling initiatives have to be executed. Primarily, more household members have to join the workforce and suitable working areas have to be provided to expand employment. It is not realistic to anticipate that the solution to worker impoverishment can be settled solely by workforce market and social protection measures. This issue has to be resolved multi-dimensionally through economic, social, health and education policies on the base of individual rights and freedom.

Keywords: information society, impoverished workers, globalism

Introduction

Simultaneously with global and technological developments, the current issue of debate in recent years has been growing and spreading poverty. As a result of increasing unfair distribution of income, poverty is popularised as oppose to increasing wealth. The circumstances reveal that parallel to the increase of polarization between wealth and poverty, the problem of method and administration will remain as an issue of dispute. Besides the growth of poverty within diverse dynamics and process, due to new circumstances and events, and the change of its characteristics, various dimensions of poverty will come up as a current issue. In this study, labour economics will approach poverty in the context of labour and wages referring to the popularisation of gradually impoverished workers.
Currently, although the social state and its applications become widespread especially in western societies, parallel to the rise of unemployment in many sectors in both developed and developing countries, in many sectors, and especially among blue collar workers the wages demonstrate the tendency to drop, and accordingly, poverty to rise as a current issue.

New forms of impoverishment emerged as an outcome of adjustability of employment, change of working conditions, drop of wages, weakening of family relationships and cooperation as a result of individualization, and state imposing restrictions in social expenditure along with globalization. Therefore, there is a paradigm shift in the policies aiming at the newly impoverished. In this study, based on the changing definitions of impoverishment, the transformation of poverty will be analysed. Within the system of information society, the dimensions and causes of poverty in working life is analysed as the most important indication of new poverty.

The “impoverished worker” in Turkey is a widespread issue with important economic, social and political outcome. Contrary to scientific studies and social policy applications, this form of poverty does not attract adequate attention. In our study, the data related to impoverished worker in Turkey is examined and compared to European Union and OECD Countries. In the European Union and OECD countries where worker poverty exists in a comparatively lesser degree than in Turkey, the issue is considered important. It is debated and remedies are researched. Impoverished workers is a multi-dimensional problem. Therefore, to reduce worker impoverishment a large number of distinctive and effectively compelling initiatives have to be executed. Primarily, more household members have to join the workforce and suitable working areas have to be provided to expand employment. It is not realistic to anticipate that the solution to worker impoverishment can be settled solely by workforce market and social protection measures. This issue has to be resolved multi-dimensionally through economic, social, health and education policies on the base of individual rights and freedom.

**Globalization and Emergence of the Information Society**

It can be argued that globalization and one of the most important indications that lead to its impact is the internet in the first place, followed by the development of communication technologies and the increase in the quantity and the speed of information transfer. As a result of growth of automation, new professions that come up in certain technical areas, and the utilization of technology and the internet in education there is an increase in the number of the individuals who acquire similar know-how in various countries (Aksoy, 2012).

Information society is a wide ranging concept that comprises the technologies related to the conduct and process of the information in all its dimensions. The course of globalization and technological developments that rapidly emerged after 1970s changed the shape and structure of production into alterable production systems replacing the Fordist production structure; thus, flexitime working hours or non-standart working styles became widespread (Kocabaş, 2004; Yavuz, 2000; Parlak ve Özdemir, 2011). Thus, the term “new economics” has emerged as a characteristic of the era. Products and services belonging to new economics are transformation of information to know-how and know-how
management and the industries related to processing and distribution. Employment of
information technologies, at the same time, required changes in business process,
organizational structure, qualified workforce, product innovations and distribution of
services. At this point new economics implies the change of mentality and understanding
in micro and macro units rather than amendment of the basic laws (Söylemez, 2001). The
new economics which embodies the novelties created in production, sales, marketing and
general management systems in information and communication technologies bring new
businesses and professions that reduce unemployment while it leads to the deactivated and
unorganized individuals to be employed unprotected (Keser, 2004). Technology, by
offering the new demand and consumption alternatives creates new situations in
production processes, which in turn transforms life styles as it reflects on employment
styles (Aksoy, 2002).

As the global process continuously reduces the wages, wage contracts develope to the
disadvantage of labor and working conditions that are part-time, temporary and without
social protection produce impoverished workers. As impoverishment goes beyond
situations like unemployment and lack of payment as a result, the working force becomes
impoveryed too. As conventionally, impoverishment is defined as individuals being left
outside the labor market or employment, the concept of impoverished workers is foreign
to this understanding. In fact, although the whole world indisputably witnesses the
impoveryed workers, accepting this fact becomes twice as difficult (Kesgin, 2011).

Impoverished Workers in Working Life
The concept of impoverished workers emerged especially when neoliberal practises gained
effectiveness; however, it is still far from becoming a current issue despite the fact that it
is known and accepted in industrially undeveloped countries outside the Western World.
Particularly, during the periods when crises are felt extremely hard, and thus wages are
pulled down, being deprived of part time jobs and social rights, impoverished workers
become more conspicuous. Consequently, it is not hard to estimate that those who enter
working lives and be impoverished will appear more and more in literature. The underlying
cause of staying distant to impoverished workforce conventionally is the trust in classical
liberalism or market liberalism. In societies where market is considered liberal, the
existence of impovery in working life is not acceptable owing to the presupposition that
unemployment is considered temporary and incidental. Yet, the capitalist market producing
unbalanced relations continuously is incapable of producing the required market balance
and the cost of this imbalance is more likely imposed on the wage earners (Bauman, 1999).
Accordingly, the section which is unable to escape poverty despite having employment
become more visible than in the past.

The course of globalization, which gave rise to impoverished workers brought forth
fundamental changes on comprehending and interpreting the events. Because of the power
and impact of change and transformation of the process it must be overemphasized to be
able to understand other changes and transformations (Sassen, 1998b). It is not difficult to
predict that the impact of globalization will continue for many years ahead and spread
worldwide at the same time besides signifying the present and the future process (Esping-
Andersen, 1990; Sallan Gül, 2004; Koray, 2005). While globalization became effective on the formation of impoverished workers, it also enabled the issue to be more visible.

The course of globalization as the name suggests simultaneously brings global impact. It so happens that an event happening anywhere around the world has an impact on all the individuals, societies and governments. It is no more possible to stay away from global impact or take up safeguard positions. Besides undermining all the other acceptances, this process particularly defines new situations and processes with regard to the impact on labour, wages and working life. During globalization process depreciation of the social state and social practices are more distinctly apparent (Keyman, 1995:49). While the flow of capital becomes global and goes beyond its boundaries, the power of governments remains more domestic and limited (Mishra, 1999). Because capital is variable, the tax collecting power of states is weakening, causing the impairment of governments and making social welfare practices of the administrations difficult. Herein it is a matter of nation-state becoming deprived of its homogenous, egalitarian, ministering e.i. “homogenizing protection” function. In the past equality assertion of nation-state, taking the responsibility in the issue of social rights, put the nation-state in protectionist position. At the present time, by the transformation of the concept of nation state, the state is inclined to withdraw from economic and social responsibilities (Cohen, 2000; Dean, 1991). The section effected most from these withdrawals and diminishing of social state practices are the section that make a living by selling their labor (Sassen, 1998a; Sassen, 1998b). Globalization, on one hand make us feel the necessity to have more social security and social protection to protect the poor, and on the other hand globalization makes the application of these policies and the ability to finance them more difficult (Esping-Andersen, 1994:3).

Besides the impoverished workers, because the unemployed-poor is left outside the economic life, it is inevitable that they are to be drawn outside social and political life. It is unlikely for this section to participate in power relations, and to have an influential and authoritative environment, which worsens the possibility of penetrating into decision making mechanisms, to change the decisions to their advantage, and to lift the decisions which are against them.

“Permanent income” shows a tendency to vanish as working conditions become more difficult, and as wages tend to decrease permanently and working hours become irregular. Particularly, majority of this section who are unskilled and unemployed have the fear to be left unemployed all the time. Large crowds work in temporary and unskilled labor, what is more, they may even face the risk of losing the job instantly. Besides, using this fear, the capital owners can exploit these unskilled labourers in the gravest labors, uninsured and paying low wages.

In the past although wages were satisfactory when the blue collars were dominant in the labour market; in the present, by means of flexible wages and downtrend of wages, workers are far from meeting their basic necessities. Expansion of concept of consumption brought psychological needs into open. Psychological necessities and fall of wages complicated income consumption balance. Therefore, increase of expectancy and fall of wages widens
the borders of working poor. In classical terms the working section which was not included in poverty studies thus became the subject of poverty studies by going under the limits of poverty with the impact of psychological reasons (Bauman, 1999; Harvey, 2003). With this particular dimension poor section lie beyond its classical term, it is diversified and we are confronted with its new dimension.

**Impoverished Workers in Turkey**

There are a lot of reasons for impoverishment of workers in Turkey and the connection between these reasons is quite complicated. Sometimes there is one reason that determines the working poor, but in a different case a number of reasons come together and pave the way to the worker’s impoverishment. Impoverished workers who emerged due to two multidimensional and specific factors, such as employment and household members, must be handled more as a very complex social group rather than a homogenous group (Kapar, 2010; Şenses, 2001).

The rate of participation in employment and workforce in Turkey is incomparably lower than EU and OECD countries. Despite the big young population of Turkey, the rate of employment is behind the other countries. In other words, it is far from employing fully the workforce potential. In 1994 52% of the total population between the ages 15 – 64 was employed, but in 2009 the rate of employment of this particular group fell to the level of 44%. There is no such low level employment rate in any of the OECD countries. The average OECD rate is close to 65%, yet, in a lot of countries it is over 70 - 75 percent. The economic structure and operation in macro scale and in micro scale pose difficulties and fall behind in generating employment to provide admissible working and living conditions for people. Scarce number of workers and existence of the unemployed in the households have an additive impact on impoverishment (TÜİK, 2010).

The household population in the countryside and the agricultural sector with the employment it provides are two very important factors in Turkey. However, owing to the variations confronted in the economic and agricultural structures in the last 20-30 years, rural settlement and employment in agricultural sector turned into an obtrusive source of poverty. Rural settlement which includes a large number of the population and agricultural employment does not take its share from economic development; on the contrary, during the periods of economic constriction and crises it suffers from utmost damage. Another factor, closely related to rural settlement and agricultural employment, that increases impoverished workers is the existence of unpaid family workers. Although fewer in number, unpaid family workers are known to be accommodated in non-agricultural sectors in urban areas. The number of household workers who are not productive and whose labor is not fully priced and who work unpaid was 2 million 684 thousand in 2008; whereas, it reached 2 million 870 thousand in 2009. To sum up, 13.5% of the household workers of the total employment are unpaid (TÜİK, 2010).

‘Per diem’ (daily wage) (seasonal, incidental, temporary) working is another unsecured, provisional, temporary and low wage status. In 2008 in Turkey 1 million 410 thousand people worked *per diem*. According to this, 6.7% of the total employment is *per diem*. 
Actually, seen as a small entrepreneurship yet an important source of poverty is working on your behalf. In this form of working mostly unsecured, informal and irregular qualities are apparent. Those who are self employed rose to 4 million 429 thousand in 2009 from 4 million 324 thousand in 2008. Within the total employment figures those who are self employed rose to 20% (TÜİK, 2010).

In Turkey 40 % of the total employment level, which is already low compared to EU and OECD countries, constitute groups with high risk of poverty such as wageless household members, per diem workers and self employed workers.

According to the results of household workforce questionnaires, 54 % of the workforce in Turkey consists of workers with quite low wages and salaries within the impoverished levels. (TÜİK,2010). Working impoverished group constitutes a significant figure. In the society and in employment secure and regular quality of waged and salaried working forms that gained comparatively more importance is weakening. The increased flexibility in workforce market, depending on practises such as part-time working is gradually becoming a source of impoverishment for a group of workers. On the other hand, structural and financial adaptation, fight against inflation and policies aiming to provide competitive advantage in workforce costs in international markets limited the increase of wages in Turkey, as in other countries. Another element that limits the level of wages and pay rise is the backside of the power of trade unions, and decrease in the number of workers within the scope of collective labour agreement. For a group of wageworkers or stipendiary workers there is no other way than working in low pay businesses. Surrounded by long standing high rate unemployment, low paid labor under these circumstances in a lot of countries rises as a concern and enhance impoverishment of workers.

In recent years high tax and social security deductions/stoppage deduced from gross income causes grievances. Especially tax and insurance stoppage greatly lessens the spendable income drawing many households below the level of poverty (OECD, 2009). When EU and OECD countries are studied it is seen that existence and extension of social protection measures depending on income transfers developed to provide social security undertake essential responsibility in curtailing the poverty in society. In situations where employment is inadequate to backspace impoverishment, social security systems are activated to generate provisions to improve the life conditions of the worker and his family, and enhance their income. In Turkey social security gap is obvious. Particularly vulnerable and impoverished sections that require social security most are out of social security coverage to a great extent. There is no adequate, consistent social charity mechanism that is socially acceptable. On the other hand, already the level of protection provided within the scope of social insurance is still low. Based on these grounds, lessening the impoverishment function of social protection system cannot be realized fully, thus remains limited (Kapar.2010).

Workforce market is not the only source of impoverishment of workers. The structure and the size of the household is as effective as workforce market conditions in producing working poverty. In households that are childless or with fewer children the level of
poverty is lower. In contrast, in multi-child families or single parent households the likelihood of working impoverishment is high.

The data about Turkey demonstrate that source of impoverty is especially in multi-child family structure. The risk of poverty increases distinctively for families made up of 5 or more members. As stated before, between EU countries and Turkey there is a great divide(gap) concerning the rate of impoverished workers. This gap increases further when the poverty rate of the family of two adult and three or more children, according to the data of 2003 44 % is taken into consideration. The rate of impoverished workers falls down to the level of 10 % in Turkey in families with two adult and one child, and this rate as it is very close to some EU countries, whereas lower than most of the others. It is indisputable that in households where there is more than two children creates difficulty in providing adaptation to workforce market conditions and definitely causes impoverishment.

On the other hand, in households with single parent with children worker impoverishment stands as an important issue in EU countries(Eurofound, 2010). Therefore it also poses the fact that in Turkey like the single parent families the characteristic of household members with high risk of poverty contributes to the increase of poverty. Various and quite forceful undertakings needs to be presented to lessen worker impoverishment. Primarily, more members of household need to join the workforce and suitable line of businesses that enhance employment must be established. Turkey cannot solve the problem of impoverished workers in the present institutional economy, particularly by persisting on the low level wage labor. Turkish economy is far from creating productive employment areas that implement workforce potential fully. Growth of women employment in productive and fee-earning businesses in institutional economics is merely one of the key precautions. Within this framework employment increase should not be considered only as quantitative, on the contrary the aim of creating more and better businesses, developing working quality and conditions should be placed at the centre of employment strategy in a holistic perspective.

At the same time in the workforce market reducing low waged, uninsured, temporary, makeshift or unpaid employment become apparent as a requirement. On the other hand, working for public welfare policy to the benefit of the poor and making adjustments to raise the expendible income of these households should be achieved. By developing the social security system in respect to both individual, and risks as well as the social security provided, its coverage must be increased; social protection gap must be resolved(Aktan, 2002; Drucker,1994).

People settled in rural areas and work in agricultural sector are seen to be effected adversely by the economic processes lived in recent years. The urgent necessity felt to recover the increase of impoverishment in rural and agricultural areas, to overcome economic and social weaknesses is obvious.

Finally, it will not be realistic to expect that impoverishment of workers can be solved by solely workforce market and social protection focused on the precautions. The economic structure and workforce market is not compatible with multi-child structure of households
in Turkey and it is an important source of impoverishment. In this respect, it is aimed to transform multi-child family structure under fundamental personal rights and freedoms by means of economic, social, health and education policies.

Conclusion

Impoverishment is a concept that includes characteristics that continuously change, regenerate and repeat themselves. Therefore, the causes of poverty, its consequences and solution proposals deserve to remain on the agenda continuously and be argued in their new/multiple dimensions. Otherwise, new conditions and poor working phenomena may not be explained by old understandings and paradigms.

The agenda of institutions like International Labor Organization includes issues like “work safety of people, their protection and empowerment in their working lives”. Under the circumstances, current capitalism is seen not to aim at the welfare and happiness of people, and thus, this understanding is increasingly criticised. In social life not the security of the market and multi-national companies but social and economic security of people and societies are important and therefore, it is the social safety that has to be scrutinized and be expressed louder and louder. Instead of individualistic economics depending on the dominance of individualistic market, alternatives of “social market” have to be formed and articulated. Programs that are market instruments which serve social objectives will end social conflict, and provide the safety of people and decrease impoverishment.

Flexibility of working life, while paving way to the flexibility of wages, leaving the working life to capitalist market’s own operation, increased the quantity of impoverished workers and worsened more and more their quality. Under the particular conditions, impoverishment of workers, social payments and employer responsibilities need to be redefined. Particularly the problems of minimum wage earners, although take up the agenda, are clearly not judged like the other poverty groups in receiving social aid and social services.

The acceptance of the existence of impoverished workers will help define the relation between payment and need. Thus, the subsidies and services, which are regarded as based on human rights and aim at impoverished section, is the fundamental requirement for social justice and the fair distributions of income. Unless the redistribution of income is fair, reasonable and nondiscriminating, we will be confronted with more impoverishment in the prospering world, which will result in circumstances that nobody would desire.

References


The Contribution of NGOs in General and SKAL International Particularly, in Tourism Development

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Abstract

The aim of this paper is to show the importance of Non-Government Organizations (NGOs), especially SKAL movement by describing tourism, sustainable tourism. NGOs contributions come into the scene to develop tourism with having in mind sustainability in which community’s attachment, engagement and commitment are key notions. NGOs play vital roles in tourism management and development. There are number of NGOs but one of them appear to be mature enough to prove itself as a reliable resource for tourism development and young enough to adjust and apply all necessary actions and development in its structure, namely SKAL International which has been established with a European initiative in the 1930’s and through out the time has became worldwide. By playing liaison role between private sector and communities, assisting government & government conducting environmental awareness programs SKAL develops and establishes standards to be applied in the sector. Other crucial action of NGO is to bring together media representatives, tourism stakeholders, academics and regulators in order to set the standard and develop tourism industry. In order to develop tourism, not only in style but also in standards, with sustainability we have to encourage the involvement of SKAL and alike NGOs.

Keywords: SKAL international, tourism development, non-government organizations (NGOs), sustainable tourism development

Introduction

The importance of NGOs in tourism development especially in sustainable tourism development is increasingly developing and become one of the research area of social scientist. The research question which is based on the consideration of the abstract is “What is the significance of NGOs, INGOs in general SKAL International in Particular?” The aim of this manuscript is to explore the following primary research question by analyzing two specific sub-questions. Overall research question is “What is the role of NGOs in sustainable tourism development?” Sub questions are “How do NGOs and INGOs are functioning in societies?” The methodology is a content analysis of tourism practices that is performed to identify and categorize the contributions made by NGOs. Accordingly, this qualitative analysis of initiatives provides an inductive approach to observe how responsible tourism practices associated with sustainable tourism principles and in which ways they might show the importance of NGOs in general, SKAL International in particular.
The presentation will be guided through the 5W and 1H didactic questions (who, what, where, when, why and how). For the development of these research questions the process here is to go through the interesting questions such as when the contexts was established?, who is involved?, why the NGOs engage the public?, where and how it happens and in the end focus on the question of what are the significant of findings could be? These questions will be analyzed through out the paper.

**The NGOs and Civil Society**
Sustainability of tourism will proceed with community’s sense of ownership, responsibility and their direct and practical involvement in tourism. Tourism, the community and their development are interrelated topics. Hence managers and practitioners give emphasis to this fact.
NGOs can be responsible for conducting researches, can provide funds and create opportunities for the society with having in mind the notion of equity, the importance of community and its capacity. The unforgettable roles of NGOs can be crucial example for governments in providing benefits for communities. In the sequence NGOs effect comes first to shape governments policy due to the fact that NGOs can go to final decision faster and easier compared to government’s organization. Government’s collaboration with NGOs can lead to issues of regulations and policies for tourism industry.

NGOs have also a vital role to play in building civil accountability, consultancy, providing full spectrum alliances (increasing networking, resource sharing and deep engagement) (Jepson, 2005). At the same time depending on the NGOs structure and public sensitivity they can take responsibilities as well as they can create additional areas of responsibilities for the benefits of the society.

Defining civil society broadly, discussing its roles and functions in general terms may easily prove counter productive to precise description and analysis of the specific development of the environmental NGOs. The concept of civil society includes virtually all forms of associational organizations such as non-governmental organizations (NGOs), voluntary organizations, non-profit organizations, charitable organizations and benevolent societies. Among these associational actors the NGOs are essentially defined by what it is not such as it is a non-state actor. However, the main characteristic of the NGO is that it is private in its form, has a public character and is a non-profit orientation in its objectives and activities (Salamon & Anheier 1994: 123; Weiss & Gordenker 1996: 221).
NGOs prioritize tourist development approaches which are maximizing quality of interaction of tourism with host communities. NGOs also displayed a greater appreciation of the consequences of human action on nature and local economies (Wearing, 2001:15-18). Within cooperations development of sustainable policies and programs has been in greater product supported by a more well-informed discerning market (Wearing et al, 2002). However an audios corporate practice has ensued.

The interrelated connection between government, business and civil society are shown in three partite figure shown in Figure 3. This wide variety of organizations can be broadly separated into three categories:

a) Organizations formed due to the concern for helping the poor and marginalized as well as for self-help among the disadvantaged.

b) Organizations formed on the basis of common interest or a particular issue.

c) Organizations formed by people involved in common pursuit. (Ball and Dunn, 1995).

NGOs are funded by public membership, public and private institutions and donations from philanthropic organizations that look to support the various missions that NGOs undertake, for example education, health, sustainability etc.

NGOs have emerged in the last decade as one of the principle advocates and implementers of sustainable tourism/ecotourism (Higgins, 2001:543). They have also played a major role in specific areas of ecotourism including marine ecotourism (Halpenny, 2003:108) and volunteer tourism (Davies, 2002:174); (Wearing, 2001:44). For NGOs tourism is not just an industry or activity undertaken for holiday away from home. Instead they look to practice a form of tourism with the intention of affecting new and positive attitudes, values and actions in the tourist and the host community. NGOs look to assist communities in developing countries and remote regions by carrying out or assisting in a range of research projects. Examples of this include environmental educations, the fostering attitudes and behaviors that are conductive to maintaining natural and social environments and
empowering host communities to operate and maintain sustainable approaches to industries such as tourism (McDonald & Wearing, 2002:155-170; Wearing, 2001:15-18; Wearing & McDonald, 2002: 191-206).

NGOs presentation of the social ethics case introduces notions of empowerment and control for local communities, as well as issues of equity regarding benefit and access. Numerous studies have revealed the disempowerment of host communities as a consequence of tourism in their community (Mitchell & Reid, 2001; Timothy, 2002; Timothy & Ioannides, 2002; Wilkinson, 1997). NGOs often engage in tourism with the aim of achieving socially appropriate tourism which is defined as having community support and involving the host community in decision making (Hall, 1991). They aspire to benefit local or host communities directly and assist in providing real benefits that are to be ongoing within those communities and that can also be controlled at the local level (Wearing et al., 2005).

Feminist, eco-centric, community development and post-structuralist approaches are appropriate alternatives for the NGO’s inclination to tourism research and practice. These approaches have supported the production of knowledge for emancipator’s interests and challenges the existing hegemonic contracts and provided new or different ways of doing things. NGOs have been able to capitalize on the historical paradigmatic shifts as represented in these alternative research paradigms, in order to build a philosophy of research and practice that can provide new ways of viewing tourism. NGOs have been able to demonstrate the use of alternative paradigm to produce unique interpretations of what tourism can achieve. NGOs, valuing human dignity and ecological sustainability, are consistently undermined by the world’s largest cooperations, supported by the governments of the world’s wealthiest nations (Chomsky, 1999). The challenge for NGOs is enormous.

Many NGOs working in the tourism industry operate from an ecocentric perspective where nature is attributed intrinsic value and humankind is considered to be subject to ecological laws (Pepper, 1993). NGOs in partnership with local communities seek to capacity-build in order to empower communities interdependently with others. This approach to development moves beyond modernist development frameworks, partially because it uses youth as opposed to skilled workers, relying on altruism, enthusiasm and interest as a platform as opposed to professional qualifications. The focus of NGOs is on experience with the national environment but as the experience is socially constructed it only takes on meaning through social interaction with others.

NGOs may play an important role in the development of management strategies and in the planning process of tourism development as well. In many cases NGOs are responsible or at least involved in the management of protected areas therefore NGOs are in the position to take the initiative for tourism management in order to ensure the aimed result. Since they are non-governmental institutions they can establish and facilitate the participation of local stakeholders. As being non-profit organizations they can promote the sustainable use of biodiversity and point out the economic benefits of the integration of tourism development.
The Importance of NGOs and Their Co-functioning Organizations

UN Department of Economic and Social Affairs commission on sustainable development NGO Stirring Committee published a road map for the industry by stipulating the role of NGOs. UN Action, Tourism Industry Action and NGO Action are described in the tables.

**Table 1. UN Action**

| Establish an NGO tourism advisory group for UN to provide technical support, analysis, and strategic advice; |
| Create a ‘best practices’ information clearing-house, in order to collect consumer information useful to understanding and positively influencing consumer behavior and to make documentation accessible on an equitable basis; |
| Initiate a broad information and awareness campaign to highlight damaging forms of tourism and impacts, providing tools for informed decision-making. Initially, target participants in the CSD and CBD processes to clarify roles and responsibilities; |
| Research and develop effective certification schemes, form a technical group under the CSD to assess how certification can be improved, e.g. through the review of voluntary codes set up by CSD1998; |
| Designate an ‘ombuds’ office jointly between the CSD, CBD, and UN-CHR to encourage diligent self-regulation and compliance with international standards for sustainable tourism; |
| Develop guidance on tourism as an issue within Local Agenda 21 processes. |

**Table 2. Tourism Industry Action**

| Promote sustainable tourism products, using market related instruments and incentives, such as contests, awards, certification, model projects, culturally sensitive quality labels covering both environmental and social sustainability; |
| Reduce inappropriate consumption, use local resources in preference to imports in a sustainable manner; reduce and recycle waste, ensure safe waste disposal, develop and implement sustainable transport policies and systems, e.g. efficient public transport, walking, cycling in destinations; |
| Provide tourists with authentic information, enabling them to understand all environmental and related aspects (e.g. human rights situation) of tourism when selecting any destination or holiday package; educate visitors in advance of arrival and give guidance on ‘dos’ and 'don'ts'; make tourists aware of their potential impact on and their responsibilities towards host societies; |
| Provide information on respecting the cultural and natural heritage of destination areas; employ tour guides who portray societies honestly and dispel stereotypes; |
| Ensure that the marketing of ‘green’ tourism reflects sound environmental policy and practice; use non-exploitative marketing strategies that respect people, communities and environments of destinations, dismantle stereotyping, integrate sustainable tourism principles when creating new marketing strategies; |
| Train staff to foster tourist responsibility towards the destinations, encourage multi-cultural education and exchange; |
| Actively discourage exploitative sex tourism, particularly sexual exploitation of children, and tourism which causes or contributes to social problems; |
| Adopt, observe, implement and promote codes of conduct. |

**Table 3. NGO Action**

| Disseminate information to a wide public about the complexity of tourism and about the objectives and criteria of sustainable tourism; |
| Educate tourists to change consumption patterns and promote appropriate, environmentally and socially acceptable behavior in the destinations; |
| Launch broad awareness campaigns on the worst impacts of tourism, to be funded by international governmental and non-governmental agencies; |
| Promote relevant research on tourism impacts, criteria for sustainable tourism and possibilities for implementation; |
Monitor tourism development, policy, industry initiatives, and local people's reaction to tourism development and policy, and implementation of stakeholder action.

Table 4. In Order to Reach the Above Mentioned Aims What NGOs Should Do

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<tr>
<th>Initiate stakeholder dialogue on community involvement in tourism development, recognising social and gender divisions in communities;</th>
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<tr>
<td>Promote consultation processes in tourism planning, involving local communities;</td>
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<tr>
<td>Launch educational and awareness programmes on tourism for local communities, support and promote history research and museums;</td>
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<tr>
<td>Promote the respect for indigenous peoples and local communities' self-determination, autonomy and social and cultural integrity;</td>
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<tr>
<td>Strengthen their efforts to empower disenfranchised groups (in particular women) to become involved in local tourism planning and management;</td>
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<tr>
<td>Develop participatory programmes to support the integrity of local cultures and economies;</td>
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<tr>
<td>Support the sustainable resource use and initiate environmental actions on different levels to conserve the environment while the tourism is developing;</td>
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<tr>
<td>Analyse the experience with sustainable tourism in different parts of the world, in order to disseminate methodology/positive examples of community involvement in tourism;</td>
</tr>
<tr>
<td>Support the use of traditional knowledge, practices and innovation systems relevant for the conservation and sustainable use of biological resources and promote actions on different levels to eradicate poverty, protect human rights and conserve the environment while working in tourism.</td>
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Source: UNCSD NGO Steering Committee, 1999, April 19-30

Similarities and Differences of SKAL among NGOs

SKAL is a professional tourism organization promoting global tourism and friendship. One of the aims that SKAL has is uniting all branches of the travel and tourism industry. To materialize this aim, they have meetings at local, national, regional and international levels to discuss and to do what ever is necessary to reach the aim and also to update information. The SKAL Club was founded in 1932 in Paris and the idea of international good will and friendship adapted in 1934. The vision statement of the Club is “to be a trusted voice in travel and tourism”, and the mission statement is “through our leadership, professionalism and friendship work together to achieve our vision, maximize networking opportunity and support a responsible tourism industry”.

When we look at the vision and mission statements all alone they give us very clear indications about their role in developing travel and tourism industry. In order to become a member of SKAL International, one has to work for travel or tourism industry directly or indirectly to serve for professional exchange. At the same time Club organizes constantly social activities that include members and their loved ones on national or international levels. By doing so friendship among members flourishes. While developing friendship between members, families and friends various issues can be discussed and/or may develop such a nice basis of future references.

At the same time the future of SKAL is constructed within the organization under the name of Young SKAL. Many Clubs provide scholarships for students in tourism thereby this is an aspect of social responsibilities projects. Social responsibilities projects are not limited with Young SKAL. As stated by the UNWTO sustainability principles refer to the environmental, economic and socio cultural aspects of tourism development and a suitable balance must be established between these three dimensions to guarantee its long term
sustainability. Over the past decade the travel and tourism industry have developed the need to go green that is now almost a standard and not a unique selling proposition.

All the stakeholders of the industry promote their action to go green and many are willing to ask their customers to help for their carbon footprint. Another positive development is growing market sector in volunteer tourism where clients pay to work on projects in small communities while they are on holiday. Many affiliated members of the UNWTO are active in promoting tourism and poverty alleviation and protection of children in tourism. SKAL International with its 18,000 members is the world’s largest organization covering all sectors in the travel and tourism industries, wants to bring these issues to the agenda and make it visible to the industry today as the green issue was when it first made its appearance a decade ago. A handful of TERN Members list are shown Table 1. Tourism Emergency Response Network grew gradually during the pandemic and as a “living system” and always adjusts to the needs and changes the sector is facing and adapting tool. SKAL is included in the TERN members because it is not only developing strategies for the social responsibilities projects but it also develops strategies for the sector of tourism and travel.

Table 5. TERN Members

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<th>TERN Members</th>
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<tbody>
<tr>
<td>AAPA Association of Asia and Pacific Airlines</td>
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<tr>
<td>• IATA International Air Transport Association</td>
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<tr>
<td>• ACI Airport Council International</td>
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<tr>
<td>• IFTO International Federation of Tour Operators</td>
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<tr>
<td>• AEA Association of European Airlines</td>
</tr>
<tr>
<td>• IH&amp;RA International Hotel and Restaurant Association</td>
</tr>
<tr>
<td>• AHLA American Hotel and Lodging Association</td>
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<tr>
<td>• ISF International Shipping Federation</td>
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<tr>
<td>• ALTA Asociación Latinoamericana de Transporte Aéreo</td>
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<td>• MPI Meeting Professionals International</td>
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<td>• ASTA American Society of Travel Agents</td>
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<td>• NTA National Tour Association</td>
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<tr>
<td>• ATO Arab Tourism Organization</td>
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<td>• PATA Pacific Asia Travel Association</td>
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<td>• ATTA African Travel and Tourism Association</td>
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<td>• SKAL International Association of Travel and Tourism Professionals</td>
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<td>• CHTA Caribbean Hotel and Tourism Association</td>
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<td>• TOI Tour Operators’ Initiative for Sustainable Tourism Development</td>
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<td>• CLIA Cruise Lines International Association</td>
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<td>• UFTAA United Federation of Travel Agents’ Associations</td>
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<tr>
<td>• CTC Canadian Tourism Commission</td>
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<td>• UNWTO World Tourism Organization</td>
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<td>• CTO Caribbean Tourism Organization</td>
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<td>• UST US Travel</td>
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<td>• ETC European Travel Commission</td>
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<td>• WTAAA World Travel Agents Associations Alliance</td>
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<td>• FIA Fédération Internationale de l’Automobile</td>
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<tr>
<td>• WTTC World Travel and Tourism Council</td>
</tr>
<tr>
<td>• IAAPA International Association of Amusement Parks and Attractions</td>
</tr>
<tr>
<td>• WYSETC World Youth Student and Educational Travel Confederation</td>
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Source: TERN, [http://rcm.unwto.org/content/tern-members](http://rcm.unwto.org/content/tern-members)
Tourism is one of only a few industry sectors that continue to see growth and with this growth comes the need for responsibility to ensure all those involved, understand and actively support basic human rights. The leaders of the industry cannot be ignorant when tourists visit exclusive resorts where the locals are suppressed by their community and have no basic human rights. Hence they have no clue about how their tourism industry is run or where the profits go to. Travel and tourism industry need to learn and be able to say to the clients “yes that’s a good destination but because of the human rights record, we don’t recommend it; instead we would like to recommend another destination which honors human rights.” In order to achieve the set goals the industry need to agree on a code of conduct in terms of human rights and at the same time be active to support countries where they need development for better human rights within their tourism sector borders.

It is possible how alternative philosophies enabling the inclusion of NGOs, the experiences they provide, make possible an increase in the breadth and depth of understanding in the field. Specific approaches such as feminism can increase the ‘view’ and identify new tourism issues such as equity, not only for people but nature as well. We see these alternative perspectives as generally being opposed to the assumptions of the once dominant, positivist informed social science research in tourism. They offer alternative approaches to the examination of tourism and alternative forms of knowledge production (Davis, 2001; Wearing & McDonald, 2002), (Wearing et al., 2005).

NGOs are designed basically to solve national problems. On the other hand INGOs must have members and financials from at least three different countries and the intention to cover operations in as many. The concept of NGOs is extremely difficult to describe. The government or party influenced NGOs in socialist countries viewed as political front organizations by the west where as the socialist countries tend to view NGOs as front organizations for secret services. The importance of INGOs depends on the degree to which they can contribute to the solution of world problems.

Conclusion
The sub questions stress the dual focuses of the study which, although intertwined represents two different agendas, the first sub question relates to the empirical analysis of how the individual NGOs understand public that forms the basis of the study. Using the concept of public as a learning entity has been developed through the work with the empirical material. The second sub question draws on an interest in theory development and the possibilities of applying in one particular INGO namely SKAL International. By asking these questions, the intention is to add another dimension to the discussion of how to understand social responsibilities. The approach chosen is to analyze the two sub questions from various perspectives. To do so require the fact that these perspectives are developed methodologically based research design.

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Mathematical Analysis of Unemployment Benefits

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Abstract

This research deals with development of an equation to calculate unemployment benefits. At a conceptual level, unemployment benefits can be considered as directly proportional to salary and the employment period of the worker prior to being laid off. It is also inversely proportional to factors such as other governmental benefits received in that period of unemployment. The rudimentary calculation of unemployment is the sum of the two highest quarter gross wages, divided by 2, then multiplied by a percentage to get your weekly benefits. A simpler formula needs to be derived to calculate the unemployment benefits to keep up with the capricious wages and changing regulations. An analysis of the federal government benefits as well as the state government benefits will be performed to calculate this new formula. Each state should be able to adapt the new formula derived so that it can assess the proper baseline for calculating the unemployment benefits needed for their specific cost of living requirements. A regression analysis will be performed using the salary and working time along with other benefits received indexed with unemployment benefits received to arrive at a mathematical equation for unemployment benefits which will be useful to public and researchers.

Keywords: unemployment, mathematical analysis, benefits formula
Mountain Adventure Tourism: Effect of Personal Value Over Constraint for its Growth - Case of Kangwon-do

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Abstract

“Mountain Adventure Tourism” encloses recreational activities which are characterized with high-risk seeking and participation constraints. However, the sector contributes significantly to the relief of isolation and the mental challenge of eradicating boredom. Selecting Kangwon-do in South Korea as case study, this study attempts to develop a new approach to enhancing growth in both revenue and participation in the sector. We argue that, since mountaineering is a business enterprise, it can enhance its revenue and attract participation growth through personal value innovation; capitalizing on the personal value of both mountaineers and non-mountaineers. Acknowledging the presence of constraints such as risk in mountaineering participation, the researchers predict that personal value would be a neutralizer to the constraints for mountain participation. Additionally personal value would be a pull factor for pursuing the risk in mountain adventure tourism and constraints minimization will be more effective regarding mountaineering participation if an individual’s personal value for the adventure is high. Using questionnaires, 324 surveys were collected. Four groups were sampled; non-mountaineers, regular mountaineers, beginner and expert, and four mountain activities were chosen. Data was analyzed using SPSS software, guided by leisure constraint theory. The two null hypothesis states that: 1) there is no relationship between mountaineering participation and low value perception for mountain activity at 95% confident level. 2) There is no significant relationship between value for mountaineering and risk (constraints) avoidance at 95% confident level. It was expected that low value perception will record both low participation frequency and high constraints for participation, with a correlation between value perception scores and constraints being lower than 50 percent. To enhance the opportunities for mountain adventure growth in the study area, there should be a correlation value of 75% and above, which would consequently lead to a rejection of the null hypothesis.

Keywords: mountain adventure, personal value, constraint
An Analysis of Women Perception on Outdoor Leisure Activities: Comparative Measures on African and Korean Women Perception

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Abstract

The consumption of leisure activities has important contributions to local and national economy. This paper presents an analysis of women’s perceptions on leisure activities. It specifically compares African and Korean women’s perception and consumption of outdoor leisure. Explored themes include the nature of leisure, the frequency of participation in specific types of leisure activities, constraints, and values and utility derived. The paper establishes that although leisure time can give women some opportunity to experiment with different lifestyle, the perception could be different across nationals and different cultures. Given the different levels of economic development between Africa and South Korea, Korean women are expected to appreciate outdoor leisure activities better than African women. Not only because Korean women are better informed about the positive impacts of outdoor leisure for women’s development, but their higher incomes allow for more patronage of expensive outdoor activities. In other words, better incomes and educational experience will improve on the consumption of outdoor leisure activities for African women.

Keywords: perception, outdoor leisure, women
Relative and Positive Profit in Economic Theory

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Abstract

A bird’s eye view of the theory of profit indicates that this theory can be split into two different branches: the first was put forward in the classical period and reached its climax in Smith’s Wealth of Nations (1776) while the second was developed first by Knight in his Risk, Uncertainty and Profit (1933) and later on in a number of works developed along similar lines by Shackle (1951, 1970, 1972) and other scholars. The transition from the first to the second branch was marked by the separation between the theory of interest and the theory of profit and, more particularly, between the figure of the capitalist and that of the entrepreneur. This was done in the context of two more general transitions. One was from the theory of capital to the theory of uncertainty while the other was from the economics of time, which underlies most of the first branch, to the economics in time, which underlies most of the second (Hicks, 1976). The purpose of this paper is to focus on some essential features of the first branch only and, more particularly, on a distinction which, however unmentioned by the main authors of this branch and utterly neglected by the authors of the second, is nonetheless crucial, whatever the branch taken into consideration, for understanding the interaction between the role played by capital in the economy of an individual as distinct from the economy of a whole country. This is the distinction between relative and positive profit. This distinction was first put forward by James Steuart in his book An Inquiry into the Principles of Political Economy and was later developed, in a more sophisticated and consistent manner, by Adam Smith who, however, never resorts to those two words when dealing with the two concepts they convey. The point of departure for tracing these two concepts in Smith’s system of thought is his treatment of the dwelling-houses “subsisting at any one time in the country” as distinct from the stock of “profitable buildings” (WN, II, I). This exemplifies the more general distinction between the “stock which a man possesses” and the “general stock of any country or society” which constitutes the core of Smith’s theory of capital. Smith’s argument is that while a dwelling house may yield a “revenue or profit” to its proprietor (the tenant paying “the rent out of some other revenue which he derives either from labour, or stock, or land” so that “the revenue of the whole body of the people can never be in the smallest degree increased by it”), it is a feature of profitable buildings to procure a “revenue or profit” not only “to their proprietor who lets them for rent” but also “to the person who possesses them and pays that rent”. This implies that the letting of dwelling houses results in what Steuart calls “a vibration of the balance of wealth between parties” while the letting of profitable buildings results in a creation of new wealth for society at large. The link between Smith’s exemplification on dwelling houses and the distinction between positive and relative profit is obscured by Smith’s use of the terms revenue, rent and profit in the brief excerpts quoted above. But if these obscurities are set aside and the focus shifts to the concept of profit as such, the right place to start from is Smith’s chapter on profits (WN, I, IX). Since, however, this chapter is focused on variations and relations (such as the wage-profit or the interest-profit
relations) rather than on concepts and distinctions, it is better to turn to other parts of Smith’s work for the clues we are looking for. One of these parts is the chapter on the division of stock (WN, II, I). This chapter is focused upon the interaction between the role of capital from the point of view of an individual (i.e. that part of the “stock which a man possesses” which is to yield a profit to this man) and the role of capital from the point of view of society (i.e. that part of the “general stock of any country or society” which is to yield a profit to society as a whole). This interaction, however, is developed by Smith so as to conceal, rather than to reveal, the two notions of profit that it implies. This interaction is developed in that chapter along two lines: one is concerned with the two different “ways” in which the capital of an individual may be employed; the other with the two “portions” in which the capital of a society turns out to be divided once that employment has been accomplished. It will be argued below that a third line should be added at this point. This line descends from the issue as to whether profit accrues to the capital of an individual (relative profit) or to the capital of society (positive profit). This line is missing in WN, II, I. It does emerge, however, later on and only indirectly in Smith’s work. The aim of the paper is to single out and to reconstruct this line. Starting from a passage in WN, II, V, where the manufacturer’s “consideration of his own private profit” is contrasted with the fact that “the different quantities of productive labour which it may put into motion and the different values which it may add to the annual produce of the land and labour of the society…. never enter into his thoughts”, the paper will show that the notion of capital as command of productive labour which is developed in WN, II, III from the point of view both of an individual and of society at large is based upon, and leads to, the two notions of profit announced by Steuart in his treatise and concealed by Smith throughout his work.

Keywords: capital, relative profit, positive profit
Service Structure and Change of Production in the Turkish Economy

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Abstract

Input-output model; allows to determine the sectoral significance on the basis of inter-sectoral relations of production. In this paper the significance of the services sector in terms of Turkey's economy were analyzed based on input-output analysis. For this purpose, service density coefficients which show the use of direct service at the sectoral level and service multiplier coefficients which indicate the total service requirements of production consisting of direct and indirect requirements were calculated by using Turkey's National Input-Output Tables belonging to the years, 1995 and 2011. Although there are variations at the sectoral level between the years 1995-2011, it is seen that both direct service use of production and total service requirements have increased in Turkish economy in general. The sectors in which direct and total service requirements increased the most can be listed as energy, trade, transport, communication, finance, real estate, and other services. The sector having the highest service density sector for the year 1995 is financial sector. Although service intensive production structure continued within the finance sector in 2011, the highest service intensity sector of this year has been determined as energy sector. The differences between service density coefficients and service multiplier coefficients have been found for some sectors. In 1995, the service multiplier coefficient of manufacturing industry, whose direct service use has been found to be relatively low, has come out to be high due to strong relations of production. Similar situation is also valid for real estate activities. In 2011, it is observed the service multiplier coefficient of the sector having a lower service density coefficient than most of other sectors has relatively increased.

Keywords: input-output analysis, services sector, Turkish economy
Cultural Awareness: The Key to Successful Deterrence

Orhan Adıguzela and Olcay Erb

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Abstract

There are many kinds of deterrence methods in the world of international relations. Since every country or group has a unique culture, a particular deterrence method may be effective in one country or group; but may not be effective in another. Therefore, knowing an adversary’s culture, in other words cultural awareness, plays an enormous role in actual deterrence. The logic and the practice of deterrence are full of uncertainty. Cultural awareness, however, is an important key to diminish this uncertainty. Cultural awareness offers policymakers a way to determine an adversary’s preferences, things they value, and the person they follow as a model. In particular, cultural awareness offers policymakers not only the knowledge of the enemy which is the basic principle for determining a strategy of a state, but also the choice of more precise deterrence methods for discouraging their adversary. As a result, this paper suggests that knowing an adversary’s culture increases the probability for successful deterrence.

Keywords: deterrence, culture, cultural awareness.

Introduction

There are many kinds of deterrence methods in the world of international relations. Since every country or group has a unique culture, a particular deterrence method may be effective in one country or group; but may not be effective in another. Therefore, knowing an adversary’s culture, in other words cultural awareness, plays an enormous role in actual deterrence. The first aim of this paper is to examine the impact of culture on deterrence policy. More specifically, this paper explores in advanced detail the nature of the relationship between cultural values and processes within deterrence activities. The eventual aim is to provide a better understanding of how culture impacts the deterrence policy process, which in turn might provide more accurate predictions of deterrence choice and activities.

The logic and the practice of deterrence are full of uncertainty. Cultural awareness, however, is an important key to diminish this uncertainty. Cultural awareness offers policymakers a way to determine an adversary’s preferences, things they value, and the person they follow as a model. In particular, cultural awareness offers policymakers not only the knowledge of the enemy which is the basic principle for determining a strategy of a state, but also the choice of more precise deterrence methods for discouraging their adversary. As a result, this paper suggests that knowing an adversary’s culture increases the probability for successful deterrence.
The argument in this paper is represented in three stages and a conclusion. The first chapter is devoted to analyzing the concept of deterrence and culture. Albeit cultural differences are obvious and recognizable, historical facts have shown that policymakers have usually and inexplicably disregarded this reality when shaping their foreign policy. These facts directed this study’s second chapter to express some unsuccessful deterrence attempts caused by the ignorance of the adversary’s culture. In order to provide a simplified interpretation, the impact of culture in the understanding of deterrence can best be presented among imaginary opponents. The third chapter compares two different imaginary culture’s understandings on the bargaining and the use of brutal force choice for deterrence. (It is also possible to show how different imaginary cultures might understand other deterrence features differently from each other; however, this paper does not explain each feature. In order to provide a basic understanding, this paper only handles “bargaining” and “brutal force” as an example). Finally, this paper concludes the study by welding the conceptions of the deterrence and culture, the historical facts, and the imaginary opponents.

Analytical Concept of Deterrence and Culture

Deterrence as an instrument in international relations has emerged after the World War I to the present-day. Although the methods of deterrence are novel, the notion of deterrence has been used in real life for centuries. For instance, the teacher uses grades as deterrence to students, and the system of criminal law uses its penalties as deterrence to criminals. Deterrence is basically the persuasion of one’s adversary that the costs and risks of a specified course of action outweigh the benefits (George & Smoke, 1974, p. 11). According to Knopf, military activity is not the only option for deterring an adversary, states also resort to economic, informational, or law enforcement measures (Knopf, 2009, p. 40). In short, a deterrent action discourages an opponent from doing actions that is undesirable by the defender.

There are at least two actors in an ordinary deterrence situation. An aggressor who seeks to challenge the status quo and a defender who wants to maintain it (Zhang, 1992, p. 2). According to Alexander and Smoke, “A rational aggressor will pursue attainable goals through available means and only when anticipated gains outweigh estimated costs. A rational defender will confront the aggressor with a credible prospect of unacceptably high cost of aggression” (Zhang, 1992, p. 2).

Although the word “culture” has many different usages and meanings, it has some common features. The outlook of culture tracks the lead of Weber, Parsons, and others in proposing that culture tells us what to want, to prefer, to desire, and consequently to value (Hudson, 1997, p. 8). Hudson describes culture as “all off the discourses, values, and implicit rules that express and shape actions and intentions” (Hudson, 1997, p. 10). Huntington defines culture as the “values, attitudes, beliefs, orientations, and underlying assumptions prevalent among people in a society” (Huntington & Harrison, 2000, p. xv). Under the light of these explanations this paper understands culture as a collective form that classifies the participants of a society whereas also differentiating them from another society. In other words, a unique culture is composed of values, beliefs, attitudes, and motivations of people in a specific society.
In order to deter an aggressor actor, a defender-actor has to understand an aggressor’s culture — including values, beliefs, attitudes, and motivations; in other words, a defender state has to be aware of the aggressor culture, before formulating its deterrence methods. Deterrent threats have to be credible, meaningful, and communicable for retreating opponents (Zhang, 1992, p. 4). Similarly, deterrent threats will be credible and meaningful only if they have a credibility and meaning within the opponent culture. These threats will be communicable only if they are understandable in the opponent culture, too. Cohen similarly expresses this process.

If a caution is too shrill, it may be counterproductive, that is, have an escalatory rather that restraining influence; if it is too muted, it risks being ignored or overlooked. Ambiguity, and hence uncertainty on the opponent’s part about just what is being prohibited, may be desirable; on the other hand, it may simply encourage him to ‘press his luck’ (Cohen, 1990, p. 84).

States obtain some advantages for implementing deterrence. Knopf mentions three reasons why a state has to use deterrence: the impossibility of military actions against all potential threats simultaneously, the prevention of unnecessary wars for a defender state and the adaptability to new situations (Knopf, 2009, p. 32-33). However, a defender state has to use appropriate deterrence in order to retain its advantages. Berejikian suggests this situation as “When weaker states are in a losses frame, they will be risk acceptant and more prone to aggression” (Berejikian 2002, p. 181). Schelling claims that deterrence must be assumed in relation to uncertainty because of obscureness of war (Schelling, 1966, p. 9). He also suggests that a threat must be credible to be efficient (Schelling, 1960, p. 6). Therefore, the threat has to be visible and understandable in order to deter effectively.

**Historical Examples of Deterrence Failure**

Historical examples represent if an aggressor state and a defender state shared the common values, a deterrence policy would work. According to Garfinkle, extended deterrence worked in the Cold War period since Western democracies shared not only the interests but also the core principles in common (Garfinkle, 2006). According to Karnad, contrary to the pessimistic writings, one of the reasons why deterrence works in India-Pakistan confrontation is that knowing each other well (Karnad, 2005, p. 183). Nevertheless, historical examples exemplify if an aggressor state and a defender state did not share the common values, and ignored each other’s culture, a deterrence policy would not work effectively.

The first deterrence failure example is the U.S.-Japan relationship in 1940s. The U.S. policymakers assumed economic sanctions would curb Japan’s expansionism and eliminate the threat to the U.S. investments in China since Japan was extremely economically dependent upon the U.S. (Hosoya, 1968, p. 98). The high possibility of the U.S. counter-response would not enough to prevent Japan to attack to the Pearl Harbor. After the Japanese attack on Pearl Harbor, many Americans viewed the Japanese decision as irrational, a choice that cannot be explained by any calculation of functions and prospects that would be rationally arrived at by decision-makers of another nation (Russett, 1967, p. 89). From the Japanese perspective, however, this pre-emptive attack was the rational decision in order to expand its influence in the Southeast Pacific. Therefore, the question...
of how the average Japanese different from the average American is the explanation in terms of specific behavior or attitude patterns may be crucial to understanding the motivations underlying a decision (Russett, 1967, p. 89). From the point of the study, the failure of this deterrence was the result of the communication destruction in these two states with different cultures by which they could not estimate each other’s counter respond correctly.

The second example is Egyptian-Israeli relationship throughout the 1950s and 1960s resulted the war because of the unsuccessful deterrence policy. According to Cohen, Egyptian-Israeli conflict during the 1950s and 1960s lay in a fundamental cultural myopia and an ethnocentric distortion (Cohen, 1990, p. 110). He claims that both sides implemented deterrence signals partial by culture-bound reflections and did not consider the opponent’s tendencies (Cohen, 1990, p. 110). He states his opinion in the book named “Culture and Conflict in Egyptian-Israeli Relations” that Israeli used punishments for deterring Egypt; however, these punishments caused Israeli’s deterrence to fail, but also produced Egyptian’s attack because honor oriented Egyptians perceived that being punished was humiliating of their honor (Cohen, 1990, p. 110). From the point of this study, Egyptian-Israeli conflict during the 1950s and 1960s was unsuccessful because the Israeli’s compliance method caused Egyptians in a losses frame, and Egyptians would be risk acceptant and more prone to aggression. Nevertheless, Israelis’ deterrence policy was failed due to not knowing its opponent’s culture and triggered the war.

The last example is the U.S.-China relationship after World War II to 1958. According to the Zhang, the U.S.-China relationship from 1949 to 1958 was invalid judgments for each actor (Zhang, 1992, p. 271). Ignoring the likelihood of cultural differences between the two countries, decision makers consciously or subconsciously to evade the reality (Zhang, 1992, p. 272). Zhang asserts the importance of understanding the opponent culture to get an effective deterrence as;

China and the United States are two nations of distinctively different cultures. The Chinese and the Americans may well calculate prizes and interests, threats and counter-threats, costs and gains, failures and successes, weaknesses and strengths, declaratory policies and actual behavior differently. Deterrents may not mean the same thing in Beijing and Washington (Zhang, 1992, p. 4).

Since Americans and Chinese assess the costs and gains in a different way, human costs may be a huge threat for the American side but it may not for the Chinese side. Thus, actual fighting threat that costs human losses did not deter Chinese because traditional ideology of warfare encourages the Chinese people to fight and die for a holy and moral cause (Zhang, 1992, p. 282). Zhang claims that it was ordinary that the U.S. and China had different cultures, but it was not understandable that each nation’s leaders ignored how the other nation formulated its interest (Zhang, 1992, p. 272-273). Similarly, Garfinkle states that it is a precarious mistake to dismiss the significance of culture on strategic decision-making (Garfinkle, 2003, p. 201). As a result of misunderstands in both sides, the U.S.-China relationship from 1949 to 1958 caused a lot of unnecessary loss of time and money.
According to Nisbett, “People hold the beliefs they do because of the way they think and they think the way they do because of the nature of the societies they live in” (Nisbett, 2003, p.201). He suggests in his book that Western and Eastern people have dissimilar perceptions, observe the world contrarily, explicate relations of causation differently, and finally solve their problems differently (Nisbett, 2003, p.201). The U.S.-Japan, Egyptian-Israeli and the U.S.-China relationship in the specific era showed us that they ignored this phenomenon in their relationship.

Comparison of Imaginary Cultures in Deterrence

In this part of the study, two different imaginary cultures are compared with each other in their understanding of bargaining and brutal force for the perspective of deterrence. Since discovering your opponent’s strategy and acting correspondingly to this strategy is the essence of game theory (Kaplan, 1983, p. 65), knowing of the enemy’s bargaining and brutal force perceptions offers a defender state the knowledge of the maximum gain, but also to prevent the maximum loss. The first comparison is how these two imaginary cultures understand bargaining. Deterrence is the process of bargaining. Berejikian suggests that “Deterrence is more likely to be effective when both states are in a gains frame, and less likely to be effective when either or both are in a losses frame” (Berejikian 2002, p. 173). According to Schelling, diplomacy is bargaining that each part strives for a better option for him—not for them (Schelling, 1966, p. 1). As deterrence is a type of coercive diplomacy (Schelling, 1966, p. 3), it is also based on bargaining.

Assume that, in “Culture A”, a seller asks $10 for a toy which he intends to sell for $10 and a buyer will decide to buy for $10 due to the fixed prices. On the flip side, in “Culture B”, a seller asks $20 for a toy which he intends to sell for $10 as well as a buyer offers $5 for the toy which he intends to buy for $10 because the price of products are not fixed in their country’s culture. Therefore, a defender state has to ask different units for each culture. For example, it may ask 10 units for “Culture A”; whereas, 20 units for “Culture B” in order to get 10 units. Because the intent of the defender state will be understood in “Culture B” variable, which is from 5 to 15 units in “Culture B”. As a result, the defender state should know its adversary’s bargaining method before deciding what to ask.

The second comparison is how these two imaginary cultures understand brutal force. The threat of brutal force is frequently used as a deterrence method. The Chinese proverb, which is “kill just one and frighten ten thousand others” (Leites & Wolf, 1970, p. 99), supports this brutal force deterrence method. But the reality is that this method may work in some cultures, but it may not work in other cultures. Garfinkle claims that it is impossible to deter people who think either winning or death is success by only threatening brutal force (Garfinkle, 2006).

Assume that, in “Culture A”, death by their enemy is the end of the life and human losses are not demanded anyway. On the other side, in “Culture B”, compliance of an enemy’s brutal force is shameful and death by their enemy is the starting of the new life. If the defender state uses the threat of brutal force to “Culture A”, it will work. However, the same threat will not work in “Culture B”. Moreover, this threat may trigger a counterattack
intended for “Culture B”. Therefore, it is essential before deciding to threaten the adversary by brutal force; a defender state has to know its adversary’s perception of brutal force.

<table>
<thead>
<tr>
<th>Understanding of Bargaining</th>
<th>Culture A</th>
<th>Culture B</th>
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<tbody>
<tr>
<td>Understanding of Brutal Force</td>
<td>End of the life</td>
<td>Starting of the new life</td>
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</table>

**Figure 1. Propose Framework for the differences between two imaginary cultures**

According to the Fortmann and Hlatky, “The target of deterrence is thus presented with a threat and an opportunity to comply. If compliance occurs, deterrence is successful. If compliance does not occur, deterrence fails” (Fortmann and Hlatky, 2009, p. 308). According to Langlois, fully informed about each other’s priorities and capabilities excludes imperfect information as the cause for deterrence failure (Langlois & Langlois, 2005, pp. 506-507). This study’s two imaginary culture examples show us if a defender state does not know its adversary’s bargaining and brutal force sensitivities, its deterrence most probably will fail.

**Conclusion**

This paper analyzes the impact of culture on policy of deterrence under the light of analytical concept of deterrence and culture, historical examples of deterrence failure caused by the ignorance of the adversary’s culture, and different imaginary cultures in their understanding of bargaining and brutal force in deterrence method. This analysis shows that an effective deterrence method needs some steps in which a state has to understand an adversary’s culture. Owing to the fact that having a different culture does not mean that a state/group is unreasonable, a defender state should choose the appropriate deterrence method for its adversary. This study does not claim that the culture is the only factor for determining deterrence. However, this study suggests that not knowing an adversary’s culture most probably causes a defender’s deterrence to be unsuccessful. Moreover, this study also suggests that implementing a wrong deterrence not only causes a defender’s deterrence to fail, but also produces an opponent’s attack. Therefore, cultural awareness is the key to successful deterrence.

Although the world has become smaller and people interact with each other easily, people interpret the world in different ways. People think differently because they have different cultural values and histories. If states accept this reality, they will choose more real deterrence methods and to implement not only negative but also positive sanctions. Additionally, it is usually harder to deter non-state actors with the means of deterrence methods including punishment and denial because it is harder to apply means of coercive policies towards them and to impose pain on them. However, non-state actors are also composed of people who have a more homogenous culture than state actors. If states understand their culture, this will offer states decision on more accurate predictions of deterrence choice and activities. Most importantly, the policy makers should take into account the contingencies embedded in each circumstance.

**References**


Is this the time of the unctad? The Rise of Non-Aligned Countries

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Abstract

Here we examine the cycles in GDP (Gross Domestic Product) per capita of the global economies using the Hodrick-Prescott decomposition method. GDP per capita data were obtained from the Maddison Project (2010), which measures the economic performance of countries. In this analysis, we selected continuous time series sets for each county. All data sets start from the 1800s and end in the 2010. Economies were classified in recovery and recession phases. We found that many developed countries (mostly from the European Union and North America) are in recession phases, whereas many developing countries (mostly from South America and Far East Asia) are in recovery phases. In addition, we found that most non-aligned countries are now following an upward trend, reminiscent of the 1960s. Based on these findings we propose that non-aligned countries are insulated from the effects of global recessions.

Keywords: business cycles, Hodrick-Prescott filter; non-aligned countries

Introduction

The economic progress of many developing countries halted at the end of the 19\textsuperscript{th} century. Today, it is mostly Western countries that are considered developed, which have typically built their economies following periods of liberalization. Such Western countries constructed new economic institutions and shaped their infrastructure according to the principles of Adam Smith, liberalized their economies, developed private property rights and facilitated private entrepreneurship. Whereas currently less developed and developing countries did not force their economies into the liberalizations or were late to liberalization. World War I and World War II stalled the trend for global liberalizations and reduced the levels of open trade between the economies, especially among the developing countries. Post-World War II, the economies of the world arranged a comprehensive and international conference at Bretton Woods (USA), called the Bretton Woods Conference (1944). Many developed and developing countries attended this conference, which principally addressed common international payment systems and coordinated international trade. This had the effect of stimulating global globalization and liberalization. Eastern Bloc countries were not integrated into the Bretton Woods systems and developed their economies separate to the liberal countries. By 1992, at the fall of the Berlin Wall, bipolarity (Western Bloc vs. Easter Bloc) dominated international relations. However, some developing countries were neither associated with the Western nor the Eastern Bloc and were therefore described as non-aligned countries. These countries formed the United Nations on Trade and...
Development (UNCTAD) organization in order to affect the United Nations (UN) agenda and to stress the development problems of developing countries.

The economies of all countries (developed and developing) fluctuate, especially their GDP and GDP per capita values. These fluctuations typically occur in phases that progress through cycles. Burns and Mitchell (1946) define business cycles as fluctuations in aggregate economic values; with expansions being followed by recessions and contractions. Using the Hodrick-Prescott filters, here we analyze the GDP per capita cycles of countries worldwide and classify each economy into phases. The permanent and temporal effects of economic crises were also examined.

**Theoretical Framework**

Economic performance cycles through set phases of recovery, recession and contraction. A contraction phases will eventually transition to a recovery phase. Although these cycles progress in set sequences, the duration of each phase can vary (Burns and Mitchell, 1946).

![Figure 1: The Business Cycle](image)

A prototype business cycle is shown in the Figure 1. Three cycle waves of varying lifetime are shown, with the final cycle having the longest lifetime. Various socioeconomic factors can affect the duration of economic cycles. Kondratieff and Stolper (1935), Schumpeter (1935; 1939) and Kuznets (1930), amongst others, have classified and analyzed business cycles, reporting typical cycle lifetimes of 45-60 (Kondratieff), 15-25 (Kuznets), 7-11 (Juglar) and 3-5 years (Kitchin).

Fluctuations in productivity is the principal mechanism behind Kondratieff’s cycles. While Solomou (1998) cites inventions, wars, fluctuations in gold production and revaluations as reasons of fluctuations in production levels. Kuznet’s cycles were shorter than those of Kontratiff, with the two cycles being defined by different parameters. In Kuznet’s cycles, movements (especially labor movements) are the major elements. This mechanism operates as follows: first, the GDP increases and factor movements start to region with high productivity so the level of investment increases by increasing in real estate demand that caused by labor migrations. Eventually, the level of GDP rises again.

Kontradieff and Kuznet cycles are considered long term fluctuations in economic aggregates. Juglar examined relatively shorter term fluctuations in economic aggregates and found that changes in banking reserves and discount rates could account for fluctuations of between 7 and 11 years, which was termed a Schumpeter cycle (1939).
Kitchin cycles are short-term cycles that repeat every ~40 months. Policy lags and mismanagement of inventories can also produce fluctuations in GDP and total production rates. This occurs because, when policy makers and investors realize that there has been an over- or under-estimation of a stock, the stock level is quickly reevaluated and the economic aggregate fluctuates over the short-term.

Business cycles have been well-studied and many theoretical and empirical analyses have been reported, with only a few of the pioneer analyses being briefly addressed here. Empirical analyses have mostly examined the downturn and upturn points, durations in the phases, volatilities and the effects of fluctuations on the economic aggregates, as well as the relationships between the business cycles of various countries. Here we focus on the relationships between the cycles of the various countries. Such studies typically adopt one of two principal views of the relationship between countries’ economic cycles: 1) the *decoupling of business cycles hypothesis*, which argues that the business cycles of emerging countries and developed countries are independent; or 2) the *dependent business cycles’ hypothesis*.

Using dynamic factor models and data from 1960 to 2005, Kose et al (2008) assessed the correlation between GDP business cycles and other economic aggregates for a specific subset of countries. They grouped these countries into three groups: industrial, emerging and developing countries. In their study, Kose et al stressed that there is an economic convergence between the industrial countries and emerging markets respectively, but that the two groups are decoupling. Akin and Kose (2008) examined the economic linkages between northern and southern countries using a panel econometric models and data from 1960 to 2005. Akin and Kose found examples of business cycle convergence or divergence for developed and developing countries, implied by the strong and positive link between the Northern (mostly developed) countries and Southern (mostly developing) countries. Countries were classified as either developed northern, emerging southern and developing southern. The data was further grouped by time period, with 1985 to 2005 denoted as the globalization period. Based on their analyses, Akin and Kose proposed that there was convergence within the subgroups of countries but decoupling between the emerging southern and northern economies.

Fidrmuc and Korhonen (2010) analyzed the business cycle convergence and divergence patterns between China and India (emerging countries) and OECD countries. Quarterly data was used in the analyses of India and China for the periods of the 1970s, 1980 to 2008 and 1993 to 2008. They found that China and India’s business cycles progressed differently and according to the decoupling of business cycles hypothesis. Therefore, these business cycles tended to converge during the recent global crisis.

Batorova et al (2008) studied the correlation between the business cycles of China and OECD countries. Dynamic correlations were calculated for these economies covering the period of 1992 to 2006. Based on their findings, they claimed that there is a weak correlation between China and OECD countries and that correlations between business cycles are lower among emerging countries than developed countries. This might be
accounted for by the fact that emerging countries have inter-industry trade, whereas developed countries have intra-industry trade.

Calderon and Fuentes (2014) examined the output fluctuations of 71 industrial and emerging countries using the Harding and Pagan algorithm, using quarterly data for the period of 1970 to 2012. They found that emerging countries have greater volatility in output than industrial countries. In addition, by considering the pre-globalization (1970-84) and globalization (1985-2007) periods separately, they found that the fluctuations of Latin America and the Caribbean’s outputs were relatively less harmful in the globalization period than the pre-globalization period. Despite this there was no remarkable difference between the output fluctuations of the globalization and pre-globalization periods for East Asian, Central Asian, Pacific and Eastern European countries. In addition, it was shown that both emerging and developed countries experienced recession during the global crisis but that emerging countries recovered relatively faster.

Whereas the findings of other studies support a positive correlation between the countries’ business cycles (i.e., business cycle convergence). Frankel and Rose (1998) proposed that those countries with intensive trade relationships have correlated (i.e., interdependent) business cycles. Frankel (2004) examined the trade relationships and business cycles of EU countries and found that all economic relationships contribute to a convergence of economies cycles. Frankel specifically addressed the Central and Eastern Europe (CEE) countries and found that a monetary union should be possible between these countries because of the convergence of their economic cycles.

**Empirical Framework**

The GDP per capita data were obtained from the Maddison Project (2010). The time series mostly begin in the 1800s or 1900s but some series range from 1950 to 2010. Business cycles of the GDP per capita were calculated using the Hodrick-Prescott (HP) decomposition method (Hodrick and Prescott, 1997), as shown below:

\[ Y_t = \tau_t + c_t + \varepsilon_t \quad (1) \]

\[ T = 1, 2, 3, ..., T \]

\[ Y_t: \text{GDP per capita, } \tau: \text{trend component, } c: \text{cycle component, } \varepsilon: \text{error term} \]

The HP filter isolates the cycles by following the minimization methods:

\[ \sum (Y_t - \tau_t)^2 + \lambda \sum [((\tau_{t+1} - \tau_t) - (\tau_t - \tau_{t-1}))^2 = k_t \quad (2) \]

\[ k_t = g_t + sc_t + u_t \quad (3) \]

\[ g_t: \text{trend of cycle, } sc_t: \text{smooth cycles, } u: \text{error term.} \]

To establish the cycles’ trend (\( g_t \)) the HP filter was applied to \( k_t \) series following the minimization methods:

\[ \sum (k_t - g_t)^2 + \lambda \sum [(g_{t+1} - g_t) - (g_t - g_{t-1}))^2 \quad (4) \]

The HP Filter was applied to all countries included in the Maddison Project. For example, the HP filter was applied to GDP per capita data from the USA from the period of 1800 to 2010. The values of \( \lambda \) were taken 100
The GDP per capita trend values and cycles of the USA are shown in Figure 2. To obtain the cycle trend values the HP filter was again used (Figure 3).

The second application of the HP filter produces smoother variables with cycles fluctuating at a rate of 15-20 years (Figure 4).
Approximately six cycles waves are shown in Figure 4 since the 1900s. The average lifetime of the USA’s cycles is around 15 to 20 years.

The world map is shown in Figure 5. Green and red coloring indicates that the country stayed in the recovery or recessionary phase for the calculated business cycles, respectively.

![Classification of the Countries’ Position According to Business Cycles Phases](image)

**Figure 5: Classification of the Countries’ Position According to Business Cycles Phases**

![Non Aligned Countries and Observers](image)

**Figure 6: Non Aligned Countries (■) and Observers ( ■)
Source: Wikipedia**

H and P Filtering Method was not applied to all countries (colored white). For some countries their business cycles were calculated as a group. For example African countries
were in the recovery phase of the cycle while USSR was in a recessionary phase. Correlation coefficients between the business cycle trends of the grouped countries are given at Table 1. The country grouping were taken from the Maddison Project and are stated below.

**Asia 16**: China, India, Indonesia, Japan, Philippines, S. Korea, Thailand, Taiwan, Bangladesh, Burma, Hong Kong, Malaysia, Nepal, Pakistan, Singapore, Sri Lanka

**Asia 30**: Afghanistan, Cambodia, Laos, Mongolia, N. Korea, Vietnam and 24 Small East Asia Countries

**East Europe 7**: Albania, Bulgaria, Czechoslovakia, Hungary, Poland, Romania, Yugoslavia

**West Europe 7**: Austria, Belgium, Denmark, Finland, France, Germany, Italy, Netherlands, Norway, Sweden, Switzerland, UK

**West Europe 30**: West Europe 12, Ireland, Greece, Portugal, Spain and 14 Small West Countries

**Latin America 15**: Bolivia, Costa Rica, Cuba, Dominican Republic, Ecuador, El Salvador, Guatemala, Haiti, Honduras, Jamaica, Nicaragua, Panama, Puerto Rico, T and Tobago

**Latin America 8**: Argentina, Brazil, Chile, Colombia, Mexico, Peru, Uruguay, Venezuela

**USSR**: Armenia, Azerbaijan, Belarus, Estonia, Georgia, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, Moldova, Russia, Tajikistan, Turkmenistan, Ukraine, Uzbekistan

**West Asia 15**: Bahrain, Iran, Iraq, Israel, Jordan, Kuwait, Lebanon, Oman, Qatar, Saudi Arabia, Syria, Turkey, UAE, Yemen, W. Bank and Gaza

**W. Offshoots**: Australia, N. Zealand, Canada, USA

In our study we clearly observed decoupling of cycles between nonaligned (Latin America, Asia and Africa) and developed countries (West Europe and West Offshoots Countries).
## Table 1: The Correlation Matrix of Business Cycle Trend’s of the Group of Countries

<table>
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<tr>
<th></th>
<th>AFRICA</th>
<th>ASIA</th>
<th>ASIA16</th>
<th>ASIA30</th>
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<th>WEST EUROPE 12</th>
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<th>LATIN AMERICA 15</th>
<th>LATIN AMERICA 8</th>
<th>USSR</th>
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<th>WEST OFFSHOOTS</th>
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</table>
Conclusion
Here we tested the hypotheses of convergence in business cycles and divergences of business cycles between the countries tested. Business cycle variables were derived from GDP per capita using Maddison Project data (2010). The HP filter was applied to all data. To obtain long runs of smooth cycles, the cycle trends were calculated by applying the HP filter to cycle series for a second time. This method was performed for all countries and for some groups of countries. We found that there is divergence between developed and nonaligned countries. Nonaligned groups are those that are not formally aligned with (or against) with any major power bloc. Nonaligned countries are mostly found in Latin America, Africa and Asia (China is considered an observer). The correlation matrix given in Table 1 also highlights important findings. It is shown that there is a negative correlation between Western Europe (n=12) and Latin America; West Europe (n=12) and Asia; Offshoots and Latin America; and Offshoots and Asia.

References
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Private and Commercial Cruising

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Abstract

This study sought to compare private and commercial cruisers. Private cruisers were found to be motivated to get away from society and create an autonomous life. They use technology and are highly specialized. They have high life satisfaction and create community through a sustainable lifestyle. Commercial cruisers were mainly motivated by itinerary, cost and to get away. Their cruising experience is short and only passively adds to quality of life. Sustainability does not influence the decision to cruise or choice of cruise line. Further differences are discussed.

Keywords: cruising, technology, comparison
An Investigation on Cruise Tourism in Eastern Black Sea Region and its Socio-Economic Effects on the Destinations in the Region

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Abstract

Apart from bringing foreign exchange earnings to the host country and addressing middle and upper income earners, cruiser tourism is a type of alternative tourism which have been developing rapidly. Globally speaking, until recent years, Caribbean’s, North America and South America held the leadership with 40% market share. Mediterranean Region was in the second ranking with 21% market share. Today, Cruiser Tourism has been increasingly becoming popular in the new destinations especially in Far East, Poles, Arabian Peninsula, Black Sea and Mediterranean. Particularly Mediterranean Region is the most favorited one among these regions. In Mediterranean Region, Turkey is on the fourth rank in Cruiser Tourism after Spain, Italy and Greece. Salipazari Harbor in Istanbul with its passenger number of over 600000 in the year of 2011 ranks among the most visited harbors in Mediterranean. Cruiser passenger number in Turkey has recorded 23\% rate of growth in the last decade which should be considered as a remarkable growth pace. This percentage also indicates that Turkey has increasingly trended in Cruiser Tourism. This study attempts to illustrate the current situation of cruiser tourism in Eastern Black Sea Region. Additionally, it aims to identify the social and economic effects of cruiser tourism on the tourism of the region in a broad sense.

Keywords: tourism, cruiser tourism, destination, socio-economy, Eastern Black Sea

Introduction

Recently, cruise tourism having increasing trend hasn’t developed enough success in the Eastern Black Sea Region. However, Eastern Black Sea Region has appropriate conditions with its transportation, geographical position, natural beauties and cultural wealth. The region having limited sources should be provided with economical support by using tourism sources in order to have sustainable regional progress. If the cruise tourism, which was one of these sources, was developed and given enough importance, it would play an important role in the progress of the region.

Between 1990-2007, yearly developing average of cruise tourism in the world was 7.4\%. This is two times more than the general tourism development and also it is expected to continue in the future (Brida, 2010: 322). According to new publishing based in England, it is expected that cruise tourism sector will show a big development by taking approximately 20.9 million in 2012, approximately 24 million in 2015, approximately 29.7 million in 2020 and approximately 36.4 million in 2025. This shows 74\% general development. South America’s passenger based on and in respect of cruise operator
domination will continue. However, from Europe and Asia-Pacific is supposed to have strong development (Canadian Sailings, 2013).

In Mediterranean Region Turkey is the fourth one in cruise tourism after Spain, Italy and Greece. It shows that in Turkey cruise ship passenger number has 23% rate, which shows it has such a big development. Also, it shows that Turkey has an increasing trend in cruise tourism. In 2012 397 ships and 599,477 passengers to Istanbul, reserving the most important cruise ports of Turkey, to Kuşadası 475 ships and 567,182 passengers and to İzmir 20 ships and 10,111 came. In the same year, 20 ships with 10,111 passengers checked in. As the total number of the passenger coming to Turkey’s ports is 2,133,930, Trabzon constitutes 5% percent of Turkish cruise tourism portion.

Investigations and data given up shows that the cruise tourism will develop fast and the market will slide from America to Europe and Asian-Pacific direction. Turkey needs to be prepared these developments already and do the plant necessary for developing its portion of market. We can say the portion of Southern Black-Sea Region. Increasing this portion will contribute.

When we look at the Literature review, we can see that various studies have been carried out about cruise tourism. Güçlü (2010), used in his study called “Investigation of Southern Black-Sea Region in terms of coast tourism condition” arbitrary between tourism and climate (TCI), arbitrary between heat and humidity (THI) and new summer arbitrary (SSI). In the end of the study, yearly average in the coast of Southern Black-Sea is calculated as “acceptable”. According to arbitrary of THI, TCI and SSI, while it is concluded that between June 3-25 and September 6-27 is the most proper periods, the state of climate conditions generally unstable is seen that the conditions are inconvenient.

Oral and Esmer (2010), have investigated cruise tourism of Aegean Region’s present condition. Also, they tried to guess the passenger rate and the state of passenger profile for 20 years. As a result, they concluded that Aegean Region needs a cruise port.

Yaşar (2012), in his study called “The popular resort port of cruise tourism in the Eastern Mediterranean Basin: Turkey”, pointed out that among the destination the passengers prefer to use, there are East Mediterranean and Turkey. It is stated that the demand for cruise tourism gaining speed in the World Tourism Movement is inclining towards Turkey. Also, for Turkey having the success of being one of the first ten countries in respect of tourism income and tourist numbers, cruise tourism is one of the important issues from now on. Brida ve Zapata (2010), carried out a study in Costa Rica between 2006 and 2008 and it was about the demographic state of cruise passengers, prefers of them and their expenses. Outcomes reveal that cruise passengers have the same intention with land tourists for visiting.

In the studies carried out, it is seen that there is information about the present state of cruise tourism. In some studies, factors affecting the behaviors of passengers about purchasing is tried to proposed. Especially, in Southern Black Sea Region studies about cruise tourism hasn’t been encountered. Also studies show that cruise tourism will have a speed
development in the world and the market will slide into Mediterranean Region. We can see it as an important development for Turkey.

**Cruise Tourism around World**

Cruise tourism is a kind of tourism including harbor visiting and shopping carried out during visits and recently has constituted a sub sector developing fast. Then we can define cruise tourism as it is a voyage by travelling around various destinations rather than a same destination, having the main goal to not carry passengers but hosting guests letting them to pay to spend their time (Yılmaz and Aydın Tükeltürk, 2014: 69-70).

Recently, with the technological development new cruise ships have been created and with this important developments have been undergone. Especially, with the recognition of the economical incomes of world cruise tourism, this market whet world’s countries appetite. New routes and new destinations were created. One of the new destinations and rotes was Mediterranean Region, especially Turkey taking attention of big companies. New voyage tours were arranged to İstanbul, İzmir, Kuşadası, Mersin and Marmaris. One of these routes was countries having coast of Black-Sea.

Cruise ships decide where to go, in accordance with the geographical features. For the weather being not sunny, humid or cloudy plays important role in order to decide the travel route. Cruise ships are inclined to focus on hot and calm sea. (Gibson, 2006: 44; Kılıçhan ve İlhan, 2014: 233).

In all tourism market, cruise sector is the most exciting development enlarging. According to the data of International Cruise Ships Foundation (CLIA), since 1980 cruise industry have had development of %7,6 per year. Mediterranean Region in respect to cruise tourism, with its geographical features, calm climate, natural and historical beauties ranked in the second after Caribbean Region. After Mediterranean, America Region ranked in the third place (CLIA, 2011).

When we look at the companies of Cruise Ships, the best company is Carnival Cruise Ship Company founded 1972. The number of cruise ships the company have are 103 and in total they have capacity of carrying 208.710 passengers, which approves the hugeness of it. Royal Caribbean International Cruise Company is the second big company with its company 40 ships and carrying 97.610 passenger capacity.

**Table 1:** In Cruise Industry Demands according to Regions and the rates the Regions Take (Million Passengers)

<table>
<thead>
<tr>
<th>Bölge</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Avrupa (Rusya ve Doğu Avrupa Bileşikleri dahil)</td>
<td>2.59</td>
<td>2.74</td>
<td>2.80</td>
<td>3.16</td>
<td>3.46</td>
<td>4.08</td>
<td>4.50</td>
<td>5.00</td>
<td>5.54</td>
</tr>
<tr>
<td>Arap Toplum</td>
<td>10,99</td>
<td>10,97</td>
<td>11,94</td>
<td>13,12</td>
<td>14,84</td>
<td>14,53</td>
<td>14,77</td>
<td>15,40</td>
<td>16,98</td>
</tr>
<tr>
<td>Diger (Güney Amerika, Çin ve Asya ülkeleri)</td>
<td>1,05</td>
<td>1,05</td>
<td>1,15</td>
<td>1,21</td>
<td>1,29</td>
<td>1,37</td>
<td>1,40</td>
<td>2,10</td>
<td>2,25</td>
</tr>
<tr>
<td>Global Toplum</td>
<td>12,84</td>
<td>12,92</td>
<td>13,97</td>
<td>14,85</td>
<td>15,13</td>
<td>15,90</td>
<td>16,24</td>
<td>17,58</td>
<td>18,80</td>
</tr>
<tr>
<td>Karay Amerika’nın payı (%)</td>
<td>6,14</td>
<td>6,85</td>
<td>6,98</td>
<td>7,19</td>
<td>7,56</td>
<td>8,76</td>
<td>8,64</td>
<td>8,64</td>
<td>9,44</td>
</tr>
<tr>
<td>Avrupa’nın payı (%)</td>
<td>23,6</td>
<td>23,9</td>
<td>21,8</td>
<td>22,2</td>
<td>22,9</td>
<td>23,6</td>
<td>27,7</td>
<td>28,5</td>
<td>28,5</td>
</tr>
</tbody>
</table>

**Source:** Ministry of transport, maritime affairs and communications, 2013 [http://www.ubak.gov.tr](http://www.ubak.gov.tr)
While in 2011%55.8 of cruise market is in the hand of South America, Europe had the 30 percent of it. (Table1)

Cruise Tourism in Turkey
Turkey having total length of 8.333 km, has natural and cultural sources in respect of cruise tourism. However, when we compare with the countries in Mediterranean such as Spain, France, Italy, Slovenia, Croatia and Greece, we can see that our country is behind them (Yılmaz ve Tükeltürk, 2014: 63).

In Turkey, the first cruise ship industry tourism had started with the liner ship named “Ege” after the World War II. After that with the ships taken from America and whose names are “Ankara”, “Tarsus”, “Adana”, “İstanbul”, “Ordu”, “Trabzon” ve “Giresun” the cruise ship industry have been continuing. “Samsun” and “İskenderun” named ships built in Italy in 1950 have carried out lots of voyage among mediterrian ports. In 1999, Girne-Alanya-Mısır route is defined as “Black-Sea Route” as the voyages carried out to Soçi. Also, in the year of 2000, “West Mediterranean Voyages” and “Aegean Island Voyages” defined as cruise routes (Üçışık and Kadıoğlu, 2001: 86-87).

The most demand is wanted by South America and Europe. The destinations which the passengers prefer included East Medditerrian and Turkey. Cruise tourism demand showing acceleration in the World tourism movements bend to Turkey. With this, it is understood that cruise tourism trend has affect in Turkey’s internal demand. Significant development in the internal demand cause the startings of cruise tourism from İstanbul, İzmir and Kuşadası to Black-Sea, Greece Island, Dalmatia Shores and Italy. The external cruise tourism of Turkey demand generally focused on ports and service offers. In terms of tourist number rate and tourism income, Turkey’s tourism managed to be in the first 10 countries and cruise tourism is one of the most important subject of Turkey’s policy (Yaşar, 2012: 413).

When we compare with the other travel types as it is thought that it is safer and it is cheaper, for the countries where the cost factor is important the demand for the cruise tourism is increasing. Some features such as socio-cultural structure and historical structure, being a land surrounded by water on its three sides, geographic location like closeness to Europe continent and so being near to important tourism center and climatic features are the most important specialties of Turkey. Besides, being a region which is not explored, Turkey is drawing attention of tourist. Having lots of coastal town carrying environmental, cultural and historical attraction are the important factors for drawing attention of cruise tourism demand. When we compare with the other countries, not having the capacity of port for fulfilling the demand, having high prices, inadequacy of encouragement for tourism policy, inadequacy for being part of tourism part are one of our weak part (Kılıçhan ve İlhan, 2014: 243).
In the chart, the number of cruise ship and the passenger rate coming with these ships between 2003 and 2012 is shown. Since the year of 2000, an increasing rate in the demand of cruise tourism has been observed and in the passenger number rate there has been intensity in the gate of sea-borders. According to the data of Ministry of Transport, Maritime Affairs and Communication, with 1368 ships 1.719.098 passengers checked in Turkey; in 2012, initially to Kuşadası, İstanbul, Marmaris, İzmir, Bodrum, Alanya, Antalya, Dikili ve Trabzon ports with 1685 ships 2.133.930 passengers checked in Turkey. In another expression, if we consider that 14.5 million people prefer cruise tourism worldwide, Turkey constitute % 11.9 of it. 2013 data shows that 20.9 million people travelled with cruise tourism (KUTO, 2011: 11-12).

Turkey’s geographical location gets an important advantage also in terms of cruise tourism. The cruise ships coming to turkey visit totally to 26 ports, including 8 in Mediterrenean, 10 in Aegean, 4 in Marmara and 4 in Black Sea. The most frequented venues of them are Kuşadası, İstanbul, İzmir, Marmaris and Antalya ports in order. In last ten years, the number of passengers visiting the ports increased to 13.836.105. the number of the passengers of them visiting to Turkish ports goes up to %29 as yearly average, by reaching to two million 133 thousand and implementing %541 increase in 2012 compared to 2002. It is being planned that the black sea route including the coastal countries of Black Sea, centered in Istanbul, not discovered yet in terms of cruise tourism, will be presented to the world market and integrated to national tourism as a different alternative (Ministry of Transport, Maritime Affairs and Communication, 2013: http://www.ubak.gov.tr ).
Table 2: The number of Cruise Ships and Passengers coming to Turkey between 2002 and 2012

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>YOLCU SAYISI</td>
<td>332.702</td>
<td>381.848</td>
<td>645.264</td>
<td>757.563</td>
<td>1.016.314</td>
<td>1.368.400</td>
<td>1.605.372</td>
<td>1.484.194</td>
<td>1.719.098</td>
<td>2.191.426</td>
<td>2.133.030</td>
</tr>
<tr>
<td>GEMİ SAYISI</td>
<td>821</td>
<td>887</td>
<td>927</td>
<td>1.048</td>
<td>1.317</td>
<td>1.421</td>
<td>1.612</td>
<td>1.345</td>
<td>1.368</td>
<td>1.623</td>
<td>1.685</td>
</tr>
</tbody>
</table>

Source: Ministry of Transport, Maritime Affairs and Communication, 2013

In the table 2, there is the number of cruises and passengers coming to Turkey between 2002-2012 yearly. When there is an increase on the number of the cruises and the passengers but for the economic crisis years 2008-2009, there is a decline between those years.

Table 3: Cruise Ports according to Turkey’s Regions

<table>
<thead>
<tr>
<th>Bölge</th>
<th>Liman Adı</th>
<th>Gemi</th>
<th>Yolcu</th>
</tr>
</thead>
<tbody>
<tr>
<td>AKDENIZ BÖLGESİ</td>
<td>ALANYA</td>
<td>22</td>
<td>25.743</td>
</tr>
<tr>
<td></td>
<td>ANAMUR</td>
<td>1</td>
<td>63</td>
</tr>
<tr>
<td></td>
<td>ANTALYA</td>
<td>55</td>
<td>154.439</td>
</tr>
<tr>
<td></td>
<td>MERSIN</td>
<td>2</td>
<td>774</td>
</tr>
<tr>
<td></td>
<td>KAŞ</td>
<td>7</td>
<td>1.918</td>
</tr>
<tr>
<td></td>
<td>KEMER</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>TAÇCU</td>
<td>4</td>
<td>709</td>
</tr>
<tr>
<td></td>
<td>İSKENDERUN</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>BODRUM</td>
<td>131</td>
<td>52.832</td>
</tr>
<tr>
<td></td>
<td>ÇESME</td>
<td>23</td>
<td>4.787</td>
</tr>
<tr>
<td></td>
<td>DATCA</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>DIKILI</td>
<td>24</td>
<td>4.865</td>
</tr>
<tr>
<td></td>
<td>FETHİYE</td>
<td>11</td>
<td>1.969</td>
</tr>
<tr>
<td></td>
<td>GÖÇEK</td>
<td>5</td>
<td>1.938</td>
</tr>
<tr>
<td></td>
<td>GÜLLOCK</td>
<td>7</td>
<td>1.970</td>
</tr>
<tr>
<td></td>
<td>İZMİR</td>
<td>288</td>
<td>552.704</td>
</tr>
<tr>
<td></td>
<td>İZMİR</td>
<td>164</td>
<td>564.317</td>
</tr>
<tr>
<td></td>
<td>MARMARİS</td>
<td>88</td>
<td>110.279</td>
</tr>
<tr>
<td></td>
<td>ÇANAKKALE</td>
<td>29</td>
<td>4.164</td>
</tr>
<tr>
<td></td>
<td>İSTANBUL</td>
<td>382</td>
<td>50.027</td>
</tr>
<tr>
<td></td>
<td>MUBANYA</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>TUZLA</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>SAMSUN</td>
<td>7</td>
<td>1.980</td>
</tr>
<tr>
<td></td>
<td>SINOP</td>
<td>10</td>
<td>3.768</td>
</tr>
<tr>
<td></td>
<td>TRABZON</td>
<td>18</td>
<td>8.915</td>
</tr>
<tr>
<td></td>
<td>BARTIN</td>
<td>9</td>
<td>882</td>
</tr>
<tr>
<td>TOPLAM</td>
<td></td>
<td>1.645</td>
<td>2.133.930</td>
</tr>
</tbody>
</table>


In table 3, it is given the number of the passengers and cruises coming with cruise tourism according to the regions of Turkey. When the Aegean Region takes part in the first line, The Black Sea Region is on the last.

The Black Sea Territory and Cruise Tourism

The Black Sea Region is a region reaching to Melet Bourne in the east of Ordu, starting from the border of Georgia. Artvin, Giresun, Gumushane, Ordu, Rize and Trabzon take part in this territory. Giresun, Rize and Trabzon from these cities are in the coastal line. The total population of the territory was 2.545.274 according to ADNKS in 2012, which is equal to %3,36 of Turkey’s population. According to ADNKS’s 2011 sources, when the increasing speed of Turkey’s population is %13,49, this rate is %1,25 in the east Black Sea religion. This rates show us that territory is migrating to the outer in huge amounts. The main reason of this is unemployment.
In 2011, according to SEGE research, concluding 81 cities, Trabzon is 31th, Rize 34th, Artvin 44th, Giresun 52th, Ordu 61th and Gumushane is 62th. According to economic, social and spatial improving of region’s cities, it is seen that Trabzon is the central part of territory. With regards to this, the steps on purpose of providing to spatial improvement will have a primitive and an integrative effect to the running of the other cities. In addition, Trabzon is the one of the twelve attraction centers specified in 9. Progress Plan (2007-2013) in Turkey. Trabzon is leading city for tourism and also visitors coming there like in all spheres among the other cities. Trabzon is the only one having cruise port, which is actively being used, in east part of Black Sea

**The Socio-economic Effect of Cruise Tourism to Destinations**

Generally, Tourism provides to be an activity that is taken its economic side of it is taken because of its financial contributions to a country or territory. On the other hand, the researches about tourism show that does not have only the economical aspects, but also it has an important social aspect. Moreover, there are effects on social, cultural life and societies’ standards as a result of economical contributions.

As socio-economic facility, cruise tourism’s natural life, social, cultural and historical values shouldn’t be ignored and it should be carried our without harming to this values to be able to be lasted.

The tourism’s improvement may create different advantages and costs in a country. These differences are because of the diversities on financial conditions and structures of the countries and the areas (Durgun, 2006: 17).

**The Economical Effect of Cruise Tourism**

Cruise tourism has an important potential as source. The effect of the cruise tourism is mostly about tourist and their activities. These are transportation (buses, taxi), tour operator (including guides), activities, stores (mostly close to dock and especially jewelry stores and local special honolicraft stores). The cruise lines like the conditions at hotels and restaurants (normally tourists come back to eat the food that they paid before), liquor stores (most ship don’t let to buy for consumption), casinos (most of the ships have casinos), expenses for ships and crew make an economical effect by support (Brida and Zapata, 2010 : 332).

It is spent just the average 28USD in 2/3 of total cruises. They all and the one who made reservation before, had average 72,171 Usd expenses for each tour and paid 72USD. Most of the passengers’ expenses were on handicraft in the first and main category. The second and third ones were on food and clothing. The transportation was the biggest expense in the second category. The passengers of the tour which are sold by local agencies spent the most average 50USD. Handicraft, transportation, and food come first in passengers’ expenses (Brida ve Zapata, 2010: 334).

The main expense in cruise tourism is building ships which is not implemented in Turkey brings lots of profits. Europe gets 18 billion Euro income from building cruise ship industry and 3,8 billion Euro income from repairing and cruise ships’ maintenance.
Table 4: Expenses of Turkey and Europe for Cruise Tourism

<table>
<thead>
<tr>
<th>Services and Contents</th>
<th>Europe’s Expense Quantity</th>
<th>Turkey’s Expense Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foods and Drinks</td>
<td>0.54</td>
<td>Unknown</td>
</tr>
<tr>
<td>Petrol and Chemicals</td>
<td>0.85</td>
<td>Unknown</td>
</tr>
<tr>
<td>Machine and Other Stuffs</td>
<td>1.68</td>
<td>Unknown</td>
</tr>
<tr>
<td>Port and Transportation</td>
<td>1.40</td>
<td>0.5</td>
</tr>
<tr>
<td>Finance and Crew</td>
<td>1.36</td>
<td>Unknown</td>
</tr>
<tr>
<td>Others</td>
<td>0.57</td>
<td>Unknown</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>12.8</strong></td>
<td><strong>0.5</strong></td>
</tr>
</tbody>
</table>

Table 5: The number of Passengers in Europe and Turkey Ports

<table>
<thead>
<tr>
<th></th>
<th>Europe</th>
<th>Turkey</th>
</tr>
</thead>
<tbody>
<tr>
<td>From European Ports</td>
<td>5.6 million passenger</td>
<td>50,000</td>
</tr>
<tr>
<td>Transit Ports Passengers</td>
<td>28.1 million passenger</td>
<td>2 million</td>
</tr>
<tr>
<td>The Total Number of Cruise Tourists</td>
<td>33.7 million passenger</td>
<td>2 million</td>
</tr>
<tr>
<td>Total Expenses of The Crew and Passengers</td>
<td>3.4 billion Euro</td>
<td>600 million €</td>
</tr>
<tr>
<td>Average Expenses of Each Passenger</td>
<td>102 EURO</td>
<td>300 €</td>
</tr>
</tbody>
</table>

In a region, an improving and sustainable cruise tourism can be implemented with the endeavors of different kind of institutions and organizations. For this aim, the local governments should do a coordinative labor with port managements, seafaring agencies, and receptive agencies for the city tours, transportation services, restaurant sector stores and accommodation sector (Öner, 2012: 9).

Table 6: Important Effects of European Cruise Sector

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct Expenses</td>
<td>8.3</td>
<td>14.2</td>
<td>14.5</td>
<td>15.0</td>
<td>+81.3%</td>
</tr>
<tr>
<td>Direct Compensation</td>
<td>2.8</td>
<td>4.6</td>
<td>4.4</td>
<td>4.6</td>
<td>+64.5%</td>
</tr>
<tr>
<td>Total Compensation</td>
<td>6.0</td>
<td>10.0</td>
<td>9.3</td>
<td>9.8</td>
<td>+63.7%</td>
</tr>
<tr>
<td>Total Financial Advantage</td>
<td>19.1</td>
<td>32.2</td>
<td>35.2</td>
<td>36.7</td>
<td>+92.6%</td>
</tr>
<tr>
<td>The Number of Direct Works</td>
<td>90,104</td>
<td>150,369</td>
<td>150,401</td>
<td>153,012</td>
<td>+69.8%</td>
</tr>
<tr>
<td>Direct Works</td>
<td>187,252</td>
<td>311,512</td>
<td>307,506</td>
<td>315,500</td>
<td>+68.5%</td>
</tr>
</tbody>
</table>


In 2011, there were effective results with almost twice more income of cruise sector to European economy. The total economic effect of 36.7 billion Euro became %4.4 in 2010. The North American cruise sector reached to 40.4 billion dollars by increasing almost %7 in 2011. The total expenses of cress and passengers consisting of lights, staying before and after the cruise trip, visiting coastal, meals and drinks etc. became almost 3.4 billion dollars by reaching %11 (European Cruise Council, 2013: 14).
Table 7: Comparing between Cruise Ships and Five Star Hotels Economically

<table>
<thead>
<tr>
<th></th>
<th>HOTEL</th>
<th>CRUISE SHIP</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAPACITY</td>
<td>1.000 BEDS</td>
<td>2.000 PEOPLE</td>
</tr>
<tr>
<td>INVESTMENT</td>
<td>100,000,000 $</td>
<td>NO</td>
</tr>
<tr>
<td>GIRO</td>
<td></td>
<td>NO</td>
</tr>
<tr>
<td>OCCOMODATION</td>
<td>15,000,000 $</td>
<td>NO</td>
</tr>
<tr>
<td>PRIVATE EXPENSES</td>
<td>3,650,000 $</td>
<td>1,000,000 $</td>
</tr>
<tr>
<td>TOUR</td>
<td>1,825,000 $</td>
<td>100,000 $</td>
</tr>
<tr>
<td>TAXES FOR PORT AND LAY-OUT</td>
<td>YOK</td>
<td>50,000 $</td>
</tr>
<tr>
<td>TOTAL</td>
<td>20,475,000 $</td>
<td>1,150,000 $</td>
</tr>
</tbody>
</table>


The calculations on the chart is prepared by being presumed that the hotels occupancy rate is yearly %70 and accommodation is 70 $ per night for each person. Moreover, in private expenses part, personal expenses are calculated for hotel guests as 100$ and cruise passengers as 500$ weekly (Öner, 2012).

Conclusion

In recent years, worldwide countries have started to make an effort to diversity to alternative tourism because of its economical contribution. Especially after 1980, having important progressions, increasing income year by year, and number of tourist Turkey shows success to be in first ten lists. Turkey reminds sand, sun and sea to the mass tourism. However, Turkey is a country that it has also lots of advantages such as historical, cultural, natural beauty and topography. Thinking of Turkey is a land surrounded by water on its three sides, Turkey is a suitable country for sea tourism, which is getting more progress every year.

Tourism has progressed %3-4 all over the world, cruise tourism’s progress is %7.4. According to cruise tourism, Carribean, North America and South America are the leader of the cruise tourism thanks to having almost % 40 rate market shares. Having %21 market share rate Mediterranean region is the second. However, last progresses show that there is leverage to Far East, poles, Arabian peninsula, Mediterranean and black sea.

In recent years, having increasing trend cruise tourism has not got enough progressive in Eastern Black Sea. However, Eastern black sea, having advantages of transportations, topography, natural beauty and cultural richness has proper conditions for cruise tourism. Having the limited source the region, it should have had economic contribution by using tourism resources to sustainable regional development.

Having remarkable economic contribution to the country and region cruise tourism should be progress in Eastern black sea and also important to development of regional economy and social development. Social structure progress and level of tourism culture has a relation economic contribution of tourism. For this reason, processing tourism provides not only economic development also social development.

To increase cruise tourism, it needs making SWOT analyze not only Mediterranean region also in Turkey to indicate advantages and threats regional and territorial.
Possible suggestions on purpose of cruise tourism improvements in Black Sea territory:
- City tours may be ordered to show the city wonders to the passengers. It should be taken attention to be restaurants, shopping centers, historical and cultural places around the port.
- Especially for the cruise tourism, formal and private institutions should be formed. Settling cruise agencies should be encouraged.
- The conventions may be organized for the aim of developing sea tourism in cooperates with universities in the region.
- By considering about the countries we compete in Mediterranean coastal, the service quality we give should be improved and especially the entrance fees should revise.
- The ports’ backgrounds should be got well and new ports should be built.
- The relations with Georgia should be fixed in a better way. Because for two country (Georgia and Turkey), cruise tourism has an important income.

It is seen that cruise tourism has been developed in Trabzon Port in Black Sea territory. In 2014, an agreement was signed that 40 cruise ships would come, when there were 10 in 2013. Moreover, a Project named ‘Green Line’ started to have more attraction to tourism in 2013. The passengers of the cruise ships and plateau- natural wonders tours can be put together. How much the visitors and cruise companies like and be glad to Black Sea region, they will have more days to stay in their next trip.

**Table 8:** Port/harbor Features and Physical Capacity

<table>
<thead>
<tr>
<th>Port/Harbor Name</th>
<th>Port/Harbor Length (M)</th>
<th>Water Depth (M)</th>
<th>Yearly Capacity (Tone/Year)</th>
<th>Storage Capacity (m²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hopa Government Port</td>
<td>167</td>
<td>6</td>
<td>182.500</td>
<td>500</td>
</tr>
<tr>
<td>Pazar Kirazlık Br.Harbour</td>
<td>115</td>
<td>4</td>
<td>730.000</td>
<td>6.800</td>
</tr>
<tr>
<td>Vakıfkebir Government Port</td>
<td>238</td>
<td>6</td>
<td>146.000</td>
<td></td>
</tr>
<tr>
<td>Görele Government Port/Harbour</td>
<td>173</td>
<td>5</td>
<td>146.000</td>
<td></td>
</tr>
<tr>
<td>Fatsa Government Port/Harbour</td>
<td>438</td>
<td>4-5</td>
<td>1.241.000</td>
<td>4.000</td>
</tr>
</tbody>
</table>

**Source:** Incekara, Ahmet, 2002: 101.

The chart above shows the port and harbor are developed as sufficient for cruise tourism and this is favorable for social and economic situation.

**Reference**

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Abstract

The objective of the study is to examine the structural relationship between total quality management (TQM) practices, service quality and customer satisfaction in hospitality industry. In this study, data will be collected from sales and marketing manager in five and four star hotels in Saudi Arabia. The results of this study are expected that TQM practices will have a significant relationship with service quality and customer satisfaction. The results of this study can be implemented by sales and marketing manager in order to enhancing hotel performance.

Keywords: TQM practices, service quality, customer satisfaction, hotel, performance

Introduction

Over three decades, TQM has been studied across industry and country by academicians and industry practitioners. It has been equally applied to manufacturing and service firms, which means that they both can adopt it successfully (Brah, Wong, & Rao, 2000; Claver & Tarí, 2008; Prajogo & Cooper, 2010), although there have been unsuccessful efforts to at implementing it (Kaynak, 2003). Research has shown that strategic benefit of TQM will result in improved employee involvement, improved communication, increased productivity, improved quality and less reworks, improved customer satisfaction, reduced costs of poor quality, improved competitive advantage (Samat, Ramayah, & Saad, 2006), improvement in strategic performance (Zhang, Waszink, & Wijngaard, 2000), and organizational performance (Talib, Rahman, & Qureshi, 2011).

A key component in the success of hotel industry is the extent of the TQM implementation in order to maintain service quality and customer satisfaction. For example, (Lam, Lee, Ooi, & Phusavat, 2012) highlighted that TQM acts as a stimulator for organizations in enhancing profitability and performance. In this context, TQM will involve the whole organization elements in implementing and creating excellence achievement. Although TQM practices has been empirically tested to increase the business performance (Hung, Lien, Yang, Wu, & Kuo, 2011; Martínez-Costa, Choi, Martínez, & Martínez-Lorente, 2009), however, relatively little research has incorporated service quality and customer satisfaction dimension as a determinant of hotel performance, especially in hotel industry context. The majority of research studies have focused on TQM implementation, leadership and performance relationship (Demirbag, Tatoglu, Tekinkus, & Zaim, 2006; Prajogo & Brown, 2006; Wang, Chen, & Chen, 2012). For this reason, hotel service quality and
customer satisfaction are important. Previous studies have shown that for today’s hospitality environment, the true measure of a company’s success lies in its ability to satisfy customer’s needs consistently. Results show that customers have become increasingly more demanding over the value for money in terms of both the price and the quality of product/service being offered by hotel industry (Robinot & Giannelloni, 2010; Weinstein & Pohlman, 2015). Consequently, satisfying customers is the ultimate goal of every business due to its potential impact on profits (Jani & Han, 2011; Ryu, Lee, & Gon Kim, 2012). In this context, there is clear evidence to support that there is a strategic relationship between customer satisfaction and hotel performance (Jani & Han, 2011; Nasution & Mavondo, 2008; Robinot & Giannelloni, 2010). Therefore, this study is to propose the model how to investigate the effect of TQM, service quality, customer satisfaction on hotel performance in Saudi Arabia context.

Literature Review

Total Quality Management
Researchers have defined the TQM concept in different ways. For example, (Evans & Lindsay, 1996) define the TQM as a management technique that focuses on quality and aims to improve organizational effectiveness and flexibility. Meanwhile, (Easton & Jarrell, 1998) suggested that TQM generates high-quality products, reduces costs, increases customer and employee satisfaction, and improves financial performance. Although TQM has a variety of definitions, (Hung et al., 2011) explained that TQM is a management approach for improving organizational performance that encompasses a variety of both technical and behavioural aspects. In hotel industry, TQM is defined as a comprehensive package management approach that focus on continuous improvement within organizations to provide superior customer value and meet customer needs (Wang et al., 2012). In this context, customer satisfaction is considered to be the main purpose of TQM, and continuous improvement is essentially the main factor ensuring that customer expectations are met and eventually exceeded (Daghfous & Barkhi, 2009). For this reason, (Daghfous & Barkhi, 2009) highlighted that the key components of TQM are customer focus, continuous improvement, process and services, statistical measurement, benchmarking and employee empowerment (Hung et al., 2011).

Service Quality
(Parasuraman, Zeithaml, & Berry, 1985) defined service quality as a comparison differentiation between the customer perception and expectation of the service and the actual performance of the service received by the customer provided by the company at a certain period of time. In this study, (Parasuraman et al., 1985) have provided a comprehensive conceptualization of service quality dimension to measure perceived service quality. This method has been very popular for academics and researchers to assess the customer perception of service quality across industries. The five dimensions of service quality include: (1) tangibles (appearance of physical components); (2) reliability (dependability of service provider and accuracy of performance); (3) responsiveness (promptness and helpfulness); (4) assurance (knowledge and courtesy of employees and their ability to inspire trust and confidence); and (5) empathy (caring, individualized attention the firm gives its customers). (Salazar, Pfaffenberg, & Salazar, 2006) have
modified the SERVQUAL model and developed their HOLSERV scale to determine the service quality dimensions in hotel industry, and the dimensions are responsiveness, empathy, and confidence. Similarly, (Kandampully & Suhartanto, 2000; Ladhari, 2009) have developed LODGQUAL and there are two dimensions that have been identified, reliability and tangibles.

In adopting service quality effectively in the hotel industry, hotel management is required to clearly understand the nature of service quality and how to implement and adjust it in the context of hotel culture. Although the SERVQUAL dimensions have been validated in a western context, it is likely that the cultural differences of consumers will influence its applicability of service quality in hotel industry. For example, (Karatepe, Yavas, & Babakus, 2005) suggested that service quality measures developed in one culture might capture service quality sentiments in another culture. In addition, (Rolland & Freeman, 2010) suggested that these conceptualizations of service quality must be expanded to be global level and need consideration all aspect of the transaction including service delivery and customer service and support. Therefore, this study provides useful insights for academics and researchers in implementing the SERVQUAL model based on a hotel perspective.

**Customer Satisfaction**

Customer satisfaction is defined as meeting the customer expectations of products and services by comparing with the perceived performance. If the perceived performance matches with customer expectations, then they are satisfied. If it does not, they are dissatisfied (Oliver, 1993). For this reason, the literature has defined customer satisfaction into two approaches definition. The first defined consumer satisfaction as the transaction-specific evaluation (Amin, Yahya, Ismayatim, Nasharuddin, & Kassim, 2013). The second defined consumer satisfaction and dissatisfaction as cumulative satisfaction (Hansen, Samuelsen, & Sallis, 2013). In this study, customer satisfaction with a hotel is defined as an overall customer’s actual emotional feeling of satisfaction and dissatisfaction of the total set of experiences encountered at the hotel (Arasli, 2002; Ladhari, 2009; Oliver, 1993).

Previous research has identified various factors that determine customer satisfaction in the hotel industry. For example, Similarly, (Amin et al., 2013) identified that customer satisfaction in hotel industry are based on four factors, i.e., reception, food and beverage, house-keeping and price. In addition to differentiate hotel services between good or bad performance, (Cadotte & Turgeon, 1988) categorized four elements should be considered by hotel management: criticals, satisfiers, dissatisfiers, and neutrals (Ramanathan & Ramanathan, 2011). There is a high tendency for the critical attributes to receive compliments for good performance and vice versa. Food quality and room quietness fall within this category. Thus, critical traits at the same time provide opportunities and threats for the management. Satisfiers refer to the attributes where guests will give compliments for an extraordinary good performance. Low or average performance will normally not affect guest dissatisfaction, if it relates only to the maintenance of the hotel lobby or the amount of food in the restaurant. Hotel service quality and physical aspects can have favorable impact on customer satisfaction (Ekinci, Dawes, & Massey, 2008; Ramanathan
& Ramanathan, 2011). It is generally acknowledged that service quality is antecedent to customer satisfaction (Cronin Jr & Taylor, 1992).

**Hotel Performance**

Hotel performance is an overall concept used to display the final result of the operation activities of an organization and it is also an index for evaluating the level of project achievement (Duquette & Stowe, 1993; Wu & Lu, 2012). For example, (Venkatraman & Ramanujam, 1986) proposed three perspectives for performance assessment namely financial performance, enterprise performance, and organizational performance. (Rauch, Wiklund, Lumpkin, & Frese, 2009) suggested two types to measure performance; namely financial and non-financial aspect. In hotel industry, (Haber & Reichel, 2005) proposed that two types of hotel performance; namely objective and perceptual. Objective performance is measured by occupancy rate per room, gross operating profit, and gross operating profit per available room per day. Perceptual performance contains competitive performance and stakeholder satisfaction. Therefore, this paper adopts the measures of hotels performance developed by (Moorman & Rust, 1999; Narver & Slater, 1990) that include financial and customer-based performance (Wang et al., 2012).

**Conclusions and managerial implication**

The purpose of this study is to examine the structural relationship between total quality management practices, service quality, customer satisfaction on hotel performance in the context of Saudi Arabia. The results proposed that the seven dimensions of total quality management practices are distinct constructs. The results indicate that total quality management practices, service quality, customer satisfaction and hotel performance are significant. Clearly, in order to maintain a high level of hotel industry, the hoteliers should pay attention to all seven dimensions identified in this study. It means that Saudi Arabia customers are looking for hotels that provide services that can increase customer satisfaction. In other words, Saudi Arabia customers are pay more emphasize on the efficiency of check in process than other dimensions as key factor in establishing relationship with their banks. Therefore, hotel industry has to make sure that these expectations are met accordingly. In order to provide a good quality of hotel services, hoteliers should provide their customers with effective and efficient check in process and update the technology development.

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An Empirical Investigation of the Relationship between Corporate Social Responsibility (CSR) and Strategic Crisis Management (SCM)

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Abstract

Recent times have witnessed a proliferation of crises damaging corporate reputations as well as their stakeholders. In this context, the fields of Corporate Social Responsibility and Strategic Crisis Management are of increasing importance. The theoretical progression has evolved in parallel in different disciplines and research has failed to investigate their potential synergies. The thesis consists of a primary and secondary study. The major findings were obtained through a survey conducted by Norstat of Norwegian executives in various industries (N=206). The primary research question is: “Does Corporate Social Responsibility have a positive effect on Strategic Crisis Management?”. The study explores the concept and nature of corporate social responsibility (CSR) in relation to the process of strategic crisis management (SCM). This is a relatively neglected area of research within academia and the authors’ aims to redress the imbalance and reduce the research gap.

Mitroff’s five stage SCM model and the SOCRATES categorization of CSR represent the core literature utilized. The quantitative analysis utilized a factor analysis, a multiple regression and ANOVA. The results revealed a symbiotic relationship between the two communalities; CSR has a positive effect on organizations SCM. The data suggested modifying some of the concepts components. CSR was found to consist of five components; strategy, product, diversity, employee, and non-US-operations. The SCM model was revised to contain four stages; detection, prevention/preparation, containment/recovery, and learning. The symbiotic relationship benefits stakeholders in terms of being able to recognize companies as trustworthy and responsible, and benefits corporations in maintaining a positive stakeholder-organizational relationship which enhances companies’ SCM. The thesis underpins that society judge business from a moral perspective and presents an ethical and strategic approach to managing organizational crises. The thesis suggests that organizations SCM should emphasize an integrated stakeholder approach pre-, during and post-crisis. As a contribution to reduce the gap between the two concepts, the authors introduced the term “social responsible crisis management” (SRCM). It underpins that leading a corporation through a crisis requires an integrated stakeholder approach and takes a step towards developing a stakeholder approach towards SCM. The secondary research question is: “Does CSR impact stakeholders’ assignment of blame in a product-harm crisis?” The authors’ employed experimental manipulations of prior CSR on the sample, and explored whether CSR impacts stakeholder assignment of blame in a product-harm crisis. In addition, we investigated whether CSR moderates the relationship between SCM and blame in light of a PHC, and explore whether attributions mediate the relationship between CSR and blame. The quantitative study utilized ANOVA, regression and Bootstrap analyses. It revealed that a positive CSR reputation impacts the resilience to negative information during a product-harm crisis, thus functions as a halo-effect that acts as a shield protecting the
company against reputational harm. Hence, a positive CSR reputation enacts as a reservoir of goodwill, while irresponsible social organizational activities enhances stakeholders’ attribution of blame. The findings indicated that CSR represents a moderator as hypothesized, however it does not mediate the relationship between SCM and blame. Commercial findings in relation to CSR and SCM are also outlined to explore the concepts position among Norwegian executives.

**Keywords:** strategic crisis management, corporate social responsibility, organizational culture, crisis communication, crisis, stakeholders, organizational learning, corporate reputation, socially responsible crisis management, blame, attribution theory
Tourism Stocks, Implied Volatility and Hedging: A Vector Error Correction Study

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Abstract

Using a vector error correction model, this study investigates the relations between tourism stocks, implied volatility, and a hedging position. Implied volatility, often referred to as investor fear gauge captures expected market risk and in that sense, reveals how future market shocks affect current investor behavior. The hedge portfolio is constructed by writing covered calls on a diversified stock portfolio. Results show that while implied volatility negatively impacts tourism stocks in the long run, its effect in the short run is muted. Conversely, there is evidence that the tourism sector Granger causes both implied volatility and the hedge portfolio but only in the short run. These results suggest that the tourism sector, often at the frontline of global events, is a key driver of near term volatility and investor risk management positions.

Keywords: tourism and hospitality, implied volatility, covered call hedge, cointegration, vector error correction, Granger causality.

Introduction

The hospitality industry, consisting of airlines, hotels, restaurants, tourism and other travel businesses, is unique in its operations in that it is strictly grounded on customer service and comfort. In the absence of these attributes, and even when the causes may be outside of the industry’s control, it is difficult to sustain profitability (Rusu et al, 2014). In light of this, tourism and hospitality stocks, in general, tend to be the first to react to events that potentially threaten the quality of customer care. In view of this, this study examines expected market volatility is tied to the performance of hospitality and tourism stocks.

Expected market volatility is proxied by the Chicago Board Options Exchange (CBOE) implied volatility, VIX, which is widely regarded as the investor fear gauge. Implied volatility captures the level of future market risk that options traders have already priced into the option contract. The hedge portfolio is proxied by the CBOE S&P 500 BuyWrite index, a hedge portfolio that is constructed by buying the S&P 500 stock portfolio and selling near-term call options as a hedge.

With the outbreak of the Ebola virus in 2014, much was reported about the threat of this epidemic to the tourism and lodging industry, especially the transportation sector. There were several media reports about how tourism companies went as far as cancelling planned trips to countries as far away from the epic center of the outbreak in West Africa as Kenya.
and South Africa.\(^2\) In the United States, there was also the growing fear that the diagnosis of the first cases of Ebola in Texas in September 2014 and New York later in October might hurt inbound tourism.\(^3\) It was therefore not surprising that the stock market dropped by more than 1 percent on October 1, 2014 following the announcement of this incident by U.S. health authorities. Airlines and other transportation stocks were particularly distressed as their shares tumbled by more than 3 percentage points on the same day. And to add a note of urgency to the matter, the CBOE volatility index increased by 2.5 percent to its highest level in several months.\(^4\) The fear in all of this was that a decline in inbound tourism would cost the United States billions of dollars in capital inflows.

Worldwide, the United States is number one among the top 5 tourism countries, controlling 60 percent of the international tourism market in the Americas. According to the U.S. Department of Commerce, monthly spending by international visitors in 2014 rose to a record $16 billion. The United Nations World Tourism Organization (UNWTO) reported that in 2013 alone, international tourism receipts rose to almost $215 billion, accounting for over nine percent of total U.S. exports.\(^5\) Inbound arrivals approached 70 million. As Figure 1 shows, both tourist arrivals and international tourism receipts in the U.S. doubled over the 10-year period ending in 2013.

The American hotel and Lodging Association reported that the hospitality industry supported over 7.7 million jobs in 2013.\(^6\) The report also shows that this industry is one of the top 10 largest in almost every state in the country, with businesses in lodging properties, airlines, restaurants, cruise lines, car rental firms, travel agents, and tour operators.\(^7\) In the 10-year period ending in 2013, revenues and pre-tax profits rose by 55 percent and 220 percent, respectively. These data, among others, are presented in Table 1.

Globally, tourism has continued to make a substantial contribution in the economic growth of many countries, as documented in a number of studies such as Akinboade and Braimoh (2010), Yap (2011), Demir (2004), and Burns (1999). The UNWTO has estimated that international tourist arrivals, worldwide, were expected to increase by 3.3 percent per year up to 2030. Total travel and tourism receipts in 2013 alone reached a record $1.2 trillion, with China, Russia, and Brazil leading the pack of nations with the highest growth in outbound tourism.\(^8\)

---


Figure 1. U.S. Tourism Data 1995 - 2013
Data source: International tourism receipts from the World Development Indicators (WDI); tourist arrivals from U.S. Office of Travel and Tourism Industries

Table 1. U.S. Lodging Industry Financial Statistics

<table>
<thead>
<tr>
<th>YEAR</th>
<th>Number of Properties</th>
<th>Number of Rooms (millions)</th>
<th>Average Occupancy Rate</th>
<th>Average Room Rate</th>
<th>Rev Per Available Room</th>
<th>Sales (billions)</th>
<th>Pre Tax Profits (Billions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>52,887</td>
<td>4.9</td>
<td>62.2%</td>
<td>$110.35</td>
<td>$68.64</td>
<td>$163.00</td>
<td>$41.0</td>
</tr>
<tr>
<td>2012</td>
<td>52,529</td>
<td>4.9</td>
<td>61.4%</td>
<td>$106.15</td>
<td>$65.16</td>
<td>$155.50</td>
<td>$39.0</td>
</tr>
<tr>
<td>2011</td>
<td>51,214</td>
<td>4.8</td>
<td>60.0%</td>
<td>$101.70</td>
<td>$61.05</td>
<td>$146.90</td>
<td>$34.1</td>
</tr>
<tr>
<td>2010</td>
<td>51,015</td>
<td>4.8</td>
<td>57.6%</td>
<td>$98.07</td>
<td>$56.47</td>
<td>$133.70</td>
<td>$28.2</td>
</tr>
<tr>
<td>2009</td>
<td>50,800</td>
<td>4.7</td>
<td>54.7%</td>
<td>$97.85</td>
<td>$53.50</td>
<td>$125.70</td>
<td>$24.5</td>
</tr>
<tr>
<td>2008</td>
<td>49,505</td>
<td>4.6</td>
<td>60.4%</td>
<td>$106.84</td>
<td>$64.37</td>
<td>$140.60</td>
<td>$25.8</td>
</tr>
<tr>
<td>2007</td>
<td>48,062</td>
<td>4.5</td>
<td>63.1%</td>
<td>$103.87</td>
<td>$65.52</td>
<td>$139.40</td>
<td>$28.0</td>
</tr>
<tr>
<td>2006</td>
<td>47,135</td>
<td>4.4</td>
<td>63.3%</td>
<td>$97.78</td>
<td>$61.93</td>
<td>$133.40</td>
<td>$26.6</td>
</tr>
<tr>
<td>2005</td>
<td>47,590</td>
<td>4.4</td>
<td>63.1%</td>
<td>$90.88</td>
<td>$57.36</td>
<td>$122.70</td>
<td>$22.6</td>
</tr>
<tr>
<td>2004</td>
<td>47,598</td>
<td>4.4</td>
<td>61.3%</td>
<td>$86.24</td>
<td>$52.90</td>
<td>$113.70</td>
<td>$16.7</td>
</tr>
<tr>
<td>2003</td>
<td>47,584</td>
<td>4.4</td>
<td>61.1%</td>
<td>$82.52</td>
<td>$50.42</td>
<td>$105.30</td>
<td>$12.8</td>
</tr>
</tbody>
</table>

Source: American Hotel & Lodging Association

Notwithstanding these encouraging trends, the tourism industry, unlike most others, is precariously exposed to political, health, and economic shocks. Examples include high taxation and high energy cost, poor security and safety conditions, natural hazards, and geopolitical risks. In many cases, these quirks are outside of the control of the industry professionals. Therefore, an awareness of the extent to which these events shape investor...
perception of risk may help guide the industry in how to manage its short- and long-term exposure to these risks.

**Literature**

A number of studies have examined the impact that specific events have on tourism demand. Such events include changes in exchange rate, economic growth, and political climate. For example, Chen, Liao, and Huang (2010) examine the effects of changes in monetary policy on the performance of hospitality stocks. They find that hotel and tourism stocks exhibit a higher reward-to-risk ratio during expansive monetary periods. Webber (2003) and McAleer (2012) investigate the impact of exchange rate volatility on tourism demand, concluding that the two variables exhibit long-term negative relationship. Other studies that arrived at similar conclusions include Wilkerson (2003) and Chen et al (2010).

Using a stochastic time series model, Gričar and Bojnec (2013) examine the relationship between inflation and hospitality stocks. They find that the two series are cointegrated, with inflation negatively impacting the valuation of tourism stocks. In a similar study, Thompson (2013) demonstrate that the U.S. dollar’s depreciation since the 1990s has steadily increased tourism export revenues. These studies extend the vector error correction framework used by Kim (1998) in which he finds that exchange rate has a negative impact on inflation.

With the rising international tourism receipts in recent years, many studies have focused on the positive impact of tourism on economic growth. For example, Odhiambo (2012) examines the relationship between economic growth and tourism demand. Using the ARDL bounds testing procedure, Odhiambo show a causal flow from tourism development to economic growth, a conclusion that supports the tourism-led growth hypothesis. Yap (2011), Demir (2004), Krakover (2004), and Eugenio-Martin et al (2004) find that a country’s GDP has both a short- and long-run impact on tourism demand.

Crouch (1993) has shown that a key stimulant for inbound tourism is exchange rate. An important finding in Crouch’s study is that a 10 percent devaluation in currency produces an increase 0.9 percent in international tourism demand. Greenwood (2007) has also presented evidence showing that at least in the short run, the relationship between international tourism and exchange rate has a direct influence on how much inbound tourists would spend.

The implication of studies such as Crouch (1993), Kim (1993) and later, Requena-Silvente and Walker (2007), is that as the value of a currency rises, imports become more expensive, leading to rising costs and reduced international tourism demand. Thus, countries that are reliant on imported goods and international tourism experience a rise in the cost of living (McCarthy, 2006) and perhaps also, reduced growth. At the firm level, Obi and Choi, (2010) have shown that when a currency depreciates in value, domestic businesses that make payments in foreign currencies experience shrinking margins that can result in the collapse of that business.
Data and Methodology

The key inquiry in this study is whether expected market volatility and investor hedging practices have a long term impact on hospitality stocks. To this end, the relations between travel and tourism stocks (TT), implied volatility (IV), and a buy-write hedge portfolio (BW) are examined. Implied volatility, measured by VIX, captures the expected stock market risk that options traders have priced into the option contract. It is, as a result, the only unobservable variable among the five variables in the Black-Scholes option pricing model. It is therefore estimated. The hedge portfolio is the CBOE S&P 500 BuyWrite index, a hedge that is constructed by buying the S&P 500 stock portfolio and selling near-term at-the-money call options.

Daily data are obtained for each of the variables and used in a vector error correction (VEC) study from December 2004 to March 2010. Implied volatility data and the buy-write index are obtained from the Chicago Board Options Exchange (CBOE) as compiled by OptionMetrics. The travel and tourism stock portfolio is the Dow Jones U.S. Travel & Tourism Index.

To begin, the following system of vector autoregressive (VAR) models, popularized by Sims (1980), are specified:

\[
TT_t = \lambda_0^1 + \sum_{i=1}^{m} \lambda_i^1 TT_{t-i} + \sum_{i=1}^{n} \lambda_i^2 IV_{t-i} + \sum_{i=1}^{p} \lambda_i^3 BW_{t-i} + \varepsilon_t^1 \tag{1}
\]

\[
IV_t = \lambda_0^2 + \sum_{i=1}^{m} \lambda_i^2 TT_{t-i} + \sum_{i=1}^{n} \lambda_i^3 IV_{t-i} + \sum_{i=1}^{p} \lambda_i^3 BW_{t-i} + \varepsilon_t^2 \tag{2}
\]

\[
BW_t = \lambda_0^3 + \sum_{i=1}^{m} \lambda_i^3 TT_{t-i} + \sum_{i=1}^{n} \lambda_i^3 IV_{t-i} + \sum_{i=1}^{p} \lambda_i^3 BW_{t-i} + \varepsilon_t^3 \tag{3}
\]

The innovation or impulse terms are defined by \( \varepsilon_t^1 \ldots \varepsilon_t^3 \). An important benefit of VAR models is that each variable in the system is treated as potentially endogenous, so that each is related not only to its own past values but also to the past values of the other variables in the system. A lag selection criterion – such as Akaike information criterion (AIC) or Schwarz information criterion (SIC) – is used to identify the optimal number of lags to include in the model.

Notwithstanding, this unrestricted approach in VAR modeling, can only allow us to make inferences on the short-run dynamics of the variables; not on their long-run relations. For the latter, we need to ensure the variables are integrated of the same order and then proceed with a Johansen test of cointegration and vector error correction (Johansen, 1988; Johansen and Juselius, 1990; and Johansen, 1991).

Engle and Granger (1987) and Granger (1988) explain that a VAR model in levels with nonstationary variables may lead to spurious results. They further explain that even when the variables are cointegrated of the same order, a VAR model in first differences would be misspecified unless the error-correction term, which represents the long-run relationship
between the variables, is reintroduced into the VAR. When this is done, the resulting model is known as the vector error correction (VEC) model.

The detection of a unit root can be carried out by means of the Augmented Dickey-Fuller (ADF) test, an extension of the Dickey and Fuller (1979) method. With optional constant \( \alpha_0 \) and trend \( T \), the model can be expressed as follows:

\[
\Delta Y_t = \alpha_0 + \alpha_1 T + \lambda Y_{t-1} + \sum_{i=1}^{m} \gamma_i \Delta Y_{t-i} + \nu_t,
\]

where \( \Delta \) is the first difference operator, \( \nu_t \) is the error term, and \( m \) is the number of lagged first-differenced terms that ensures \( \nu_t \) is white noise. The inclusion of lagged first difference terms helps control for the possibility that the error term is autocorrelated. The unit root verification process tests the null hypothesis that the coefficient, \( \lambda \), is equal to 0. If \( \lambda \) is different from zero, the null hypothesis that the series, \( Y_t \), contains a unit root (nonstationary) is rejected; the conclusion being that \( Y_t \) is stationary. The Phillips-Perron (PP) test is an alternative unit root test with the formulation:

\[
\Delta Y_t = \mu + \rho Y_{t-1} + \nu_t.
\]

The PP unit root null hypothesis is that \( \rho = 1 \). The equation is estimated by the least squares method with the t-statistics for \( \rho \) corrected for autocorrelation in \( \nu_t \) using the Newey-West (1987) procedure for adjusting the standard errors.

The representation theorem in Engle and Granger (1987) shows that if variables are cointegrated, their relationship can be expressed as a vector error correction model (VECM), of the form:

\[
\Delta TT_t = \delta_0 + \sum_{i=1}^{m} \delta_i \Delta TT_{t-i} + \sum_{i=1}^{m} \delta_{2i} \Delta IV_{t-i} + \sum_{i=1}^{m} \delta_{3i} \Delta BW_{t-i} + \delta_4 EC_{t-1} + \sigma_t
\]

\[
\Delta IV_t = \phi_0 + \sum_{i=1}^{m} \phi_i \Delta TT_{t-i} + \sum_{i=1}^{m} \phi_{2i} \Delta IV_{t-i} + \sum_{i=1}^{m} \phi_{3i} \Delta BW_{t-i} + \phi_{4i} EC_{t-1} + \sigma_t
\]

\[
\Delta BW_t = \gamma_0 + \sum_{i=1}^{m} \gamma_i \Delta TT_{t-i} + \sum_{i=1}^{m} \gamma_{2i} \Delta IV_{t-i} + \sum_{i=1}^{m} \gamma_{3i} \Delta BW_{t-i} + \gamma_{4i} EC_{t-1} + \sigma_t
\]

where \( \Delta \) is the first difference operator, \( \sigma \) is a white noise Gaussian error term, and \( EC_{t-1} \) are the error correction terms obtained from Equations (1)…(3). For example, for Equation (5), \( EC_{t-1} \) is derived from Equation (1) in the following manner:

\[
EC_{t-1} = \alpha_0 + \alpha_1 TT_{t-j} - \alpha_2 IV_{t-j} - \alpha_3 BW_{t-j}
\]

In the same way, \( EC_{t-1} \), \( EC_{t-1} \), and \( EC_{t-1} \) are obtained from Equations (2) and (3), respectively.

The coefficient of the error correction term in Equation (5), \( \delta_4 \), measures the single period response of \( TT \) to departures from equilibrium. The lag structure in the VECM is chosen such that the lag truncation parameter, \( m \), is one that ensures the residuals are white noise.

In general, VECMs allow us to directly estimate the speed at which one time series returns to equilibrium after a change has occurred in the other. The coefficient of the cointegrating equation measures the speed of adjustment toward that long-run equilibrium. However,
this coefficient must be negative and significant for it to maintain this economic interpretation. Otherwise, one cannot infer long-run causality. When this is the case, only short-run causality can be pursued – with the use of Granger causality Wald test. In any event, Granger (1988) explains that when variables are cointegrated, causality should exist in at least one direction.

Results
Table 2 is a summary of the unit root test results using the Phillips-Perron (PP) test. These results are consistent with those obtained with the Augmented Dickey-Fuller (ADF) unit root test. The low power of the ADF test, pointed out by West (1988), necessitated the preference for the PP test. As it were, both test results were consistent, with each method yielding a negative coefficient – to prove the validity of the estimation model.

Table 2. Phillips-Perron Unit Root Test

<table>
<thead>
<tr>
<th></th>
<th>Level</th>
<th>1st Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Adj t-Stat</td>
<td>P-value</td>
</tr>
<tr>
<td>TT</td>
<td>-1.0030</td>
<td>0.7541</td>
</tr>
<tr>
<td>IV</td>
<td>-2.5555</td>
<td>0.1027</td>
</tr>
<tr>
<td>BW</td>
<td>-1.6658</td>
<td>0.4485</td>
</tr>
</tbody>
</table>

Null hypothesis: Series has a unit root (non-stationary)
TT: Dow Jones U.S. Travel & Tourism Index; IV: CBOE implied options volatility; BW: CBOE S&P 500 BuyWrite Index.

The null hypothesis of the unit root test is that the series is nonstationary, meaning it has unit root. Results in Table 1 show that the null hypothesis cannot be rejected at the 0.05 level. The p-values are more than 0.05, evidence that the variables are nonstationary at their level. However, after first differencing, the series become stationary, confirming the existence of a long run relationship. Both the Final Prediction Error (FPE) and Akaike Information Criterion (AIC) settled on six lags, which is therefore the number of lags used in both the cointegration test and VECM.

Johansen Cointegration Test
The null hypothesis for the Johansen cointegration test is that the number of cointegrating equations in the model is zero, meaning there is no long-run relationship. As Table 3 shows, both the Trace test and the Maximum Eigenvalue test reject the null hypothesis of no cointegration, at the 0.05 level. The results indicate there is at least one cointegrating equation (that is, at least one error correction term) in the system equation. Cointegration tests include an intercept but no deterministic trend in the cointegrating equation.

Table 3. Johansen Cointegration Test

<table>
<thead>
<tr>
<th>Hypothesized No. of CE(s)</th>
<th>Eigenvalue</th>
<th>Trace Statistic</th>
<th>0.05 Critical Value</th>
<th>P-value*</th>
</tr>
</thead>
<tbody>
<tr>
<td>None *</td>
<td>0.0183</td>
<td>35.1731</td>
<td>29.7971</td>
<td>0.0109</td>
</tr>
<tr>
<td>At most 1</td>
<td>0.0070</td>
<td>10.7529</td>
<td>15.4947</td>
<td>0.2272</td>
</tr>
</tbody>
</table>
At most 2  0.0011  1.4910  3.8415  0.2221

Unrestricted Cointegration Rank Test (Maximum Eigenvalue) ++

<table>
<thead>
<tr>
<th>Hypothesized Max-Eigen No. of CE(s)</th>
<th>Eigenvalue</th>
<th>Statistic</th>
<th>0.05 Critical Value</th>
<th>P-value*</th>
</tr>
</thead>
<tbody>
<tr>
<td>None *</td>
<td>0.0183</td>
<td>24.4203</td>
<td>21.1316</td>
<td>0.0166</td>
</tr>
<tr>
<td>At most 1</td>
<td>0.0070</td>
<td>9.2618</td>
<td>14.2646</td>
<td>0.2650</td>
</tr>
<tr>
<td>At most 2</td>
<td>0.0011</td>
<td>1.4910</td>
<td>3.8415</td>
<td>0.2221</td>
</tr>
</tbody>
</table>

+ Trace test indicates 1 cointegrating equation at the 0.05 level
++ Max-eigenvalue test indicates 1 cointegrating equation at the 0.05 level
+++ denotes rejection of the hypothesis at the 0.05 level


The normalized cointegrating coefficients and their standard errors (in parentheses) are presented in Table 4. These are estimated in a long run model in which each variable is defined as a dependent variable. With the transportation and tourism index (TT) as dependent variable (in the first panel of Table 4), it is found that in the long-run, implied volatility (IV) Granger causes tourism stocks. Expectedly, the direction of impact is negative and statistically significant. In effect, the expectation of bad news tends to have a long run negative impact on the performance of tourism and transportation stocks. Also, the long run impact of the hedge portfolio on TT is negative. However this is not statistically.

The middle panel of Table 4 is the case where implied volatility (IV) is the dependent variable. Although there appears to be a reverse negative causality running from TT to IV, none of the variables in the system has any statistically significant long run impact on IV. The bottom panel is the case where BW is the dependent variable. While there is no evidence of long run causality running from TT to BW, there is a positive one-way long run causality from IV to BW. This outcome is consistent with the theory of option pricing in that expected volatility has a positive impact on the valuation of options. Thus, the expectation of rising market risk is the basis for a long run risk management – in this case, hedging – strategy.

Table 4. Normalized Cointegrating Coefficients (standard errors in parentheses)

<table>
<thead>
<tr>
<th>TT</th>
<th>IV</th>
<th>BW</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1.0000</td>
<td></td>
</tr>
<tr>
<td>1.0000</td>
<td>-23.1639 *</td>
<td>-0.1615</td>
</tr>
<tr>
<td></td>
<td>(5.5803)</td>
<td>(0.8713)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>IV</th>
<th>TT</th>
<th>BW</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1.0000</td>
<td></td>
</tr>
<tr>
<td>1.0000</td>
<td>-0.0432</td>
<td>0.0070</td>
</tr>
<tr>
<td></td>
<td>(0.1513)</td>
<td>(0.0492)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>BW</th>
<th>TT</th>
<th>IV</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1.0000</td>
<td></td>
</tr>
<tr>
<td>1.0000</td>
<td>-6.1919</td>
<td>143.4281 *</td>
</tr>
<tr>
<td></td>
<td>(17.2837)</td>
<td>(36.0068)</td>
</tr>
</tbody>
</table>

* Significant at the 0.05 level

TT: Dow Jones U.S. Travel & Tourism Index; IV: CBOE implied volatility; BW: CBOE S&P 500 BuyWrite Index.
Vector Error Correction
Having verified that the variables have a long-run relationship, the next step is to examine their short run dynamics. Using the system equation model within the VECM, we verify the statistical significance of the system coefficients and obtain the residuals of each model. Table 5 shows the long run causality results when two of the three variables are jointly considered as explanatory variables.

Table 5. Vector Error Correction Estimates – Long Run Causality

<table>
<thead>
<tr>
<th>Response Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-statistic</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>TT</td>
<td>-0.0001</td>
<td>0.0002</td>
<td>-0.6720</td>
<td>0.5017</td>
</tr>
<tr>
<td>IV</td>
<td>0.0005*</td>
<td>0.0002</td>
<td>2.4385</td>
<td>0.0149</td>
</tr>
<tr>
<td>BW</td>
<td>0.0003</td>
<td>0.0007</td>
<td>0.3885</td>
<td>0.6977</td>
</tr>
</tbody>
</table>

* Significant at the 0.05 level

TT: Dow Jones U.S. Travel & Tourism Index; IV: CBOE implied options volatility; BW: CBOE S&P 500 BuyWrite Index.

The VEC estimates provide us with two pieces of important information. First, the value of the coefficient, which is called the speed of adjustment, tells us how quickly it takes for equilibrium to be restored when there has been a departure from it. Second, for this coefficient to yield meaningful economic interpretation, it has to be negative and statistically significant. As can be seen in Table 5, none of the coefficients satisfy these criteria. Either the sign is negative but not significant or it is positive and in one case, significant. Therefore, there is no evidence of a long run causality running from two of the variables to the third.

From the system equations, we can also verify the existence of short run Granger causality among the variables. The joint test of significance is carried out using Wald statistics. The results are summarized for each variable in Table 6.

Table 6. Short Run Causality (Wald Test)

<table>
<thead>
<tr>
<th>Panel A. Target Variable: TT</th>
<th>Chi-square</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>TT</td>
<td>14.2137</td>
<td>0.0273</td>
</tr>
<tr>
<td>IV</td>
<td>7.7241</td>
<td>0.2590</td>
</tr>
<tr>
<td>BW</td>
<td>4.2085</td>
<td>0.6485</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Panel B. Target Variable: IV</th>
<th>Chi-square</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>TT</td>
<td>22.2777</td>
<td>0.0011</td>
</tr>
<tr>
<td>IV</td>
<td>44.8561</td>
<td>0.0000</td>
</tr>
<tr>
<td>BW</td>
<td>6.3364</td>
<td>0.3866</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Panel C. Target Variable: BW</th>
<th>Chi-square</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>TT</td>
<td>23.7571</td>
<td>0.0006</td>
</tr>
<tr>
<td>IV</td>
<td>15.2556</td>
<td>0.0184</td>
</tr>
<tr>
<td>BW</td>
<td>8.4757</td>
<td>0.2053</td>
</tr>
</tbody>
</table>

* Significant at the 0.05 level

TT: Dow Jones U.S. Travel & Tourism Index; IV: CBOE implied options volatility; BW: CBOE S&P 500 BuyWrite Index.
Results in Panel A show no evidence of short run causality from any of the variables to the travel and tourism index, except its own past performance. On the other hand, Panel B reveals that in the short run, TT Granger causes implied volatility. The causality results in Panel C show that both the tourism and volatility variables impact BW, the hedge portfolio. This short-term impact is insightful because in its design, this covered call hedge portfolio can help cushion downside risk in the stock market. By its construct, buy-write strategy outperforms stocks in a bear market but underperforms stocks in a bull market. In either of these cases, significant moves in the tourism and travel sector should impact the outcome of this hedge portfolio. And as a hedge portfolio, a buy-write position should naturally respond to market volatility, not only because volatility is a key component of option value, but because hedge portfolios are designed to mitigate the adverse impact of systematic risk.

Conclusions
This study examined the inter-temporal relationship between tourism stocks, market volatility, and a hedge portfolio consisting of a long stock and a short call. This so-called covered call hedge position is designed to mitigate the downside risk of the underlying stock portfolio. The inquiry, which used a vector error correction model, sought to determine if expected market volatility and investor hedging behavior have an impact on the performance of hospitality stocks.

Daily data for the variables were generated from 2004 to 2010. Unit root tests revealed that while the series were non-stationary at level, they are integrated of the first order. The Johansen test confirmed the series are cointegrated, with one cointegrating equation. As such, the variables have a long run relationship.

The cointegrating equations show that in the long run, implied volatility Granger causes travel and tourism stocks; and it does so in a negative way. This outcome suggests that the negative impact of expected market volatility on the performance of tourism stocks, in general, lasts for the long haul. Evidence of this was observed following 9-11 and the 2008 global financial crisis. In each of these periods, tourism receipts and arrivals fell by as much as 12 percent, and the sectorial weakness lasted for as long three years.9

Results of the study showed no evidence that investor hedging practices affect the performance of tourism stocks in the long run. However, and as can be expected, implied volatility has a significant long run positive impact on the performance of the covered call hedge portfolio. Option pricing theory argues that option value is a positive function of expected volatility. Moreover, investor perception of future volatility should be a strong motivator to initiate a hedging position. A buy-write portfolio is one way to mitigate such risk. When the variables are considered jointly in a system equation, there is no evidence of long run causality running from two of the variables to the third.

In the short run, neither implied volatility nor the covered call portfolio Granger causes tourism stocks. However, and rather interestingly, travel and tourism stocks Granger causes

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9 Data and information on inbound tourist receipts and arrivals are obtained from the database of the World Development Indicators (WDI).
implied volatility. Also, travel and tourism stocks also Granger cause the buy-write portfolio. These subsequent outcomes reveal a curious pattern that may not altogether be surprising given that the hospitality industry is often the first to become distressed in crisis times. As was widely reported in the last quarter of 2014, the Ebola outbreak had many investors worried that the tourism and travel industry would be hard hit. It is therefore worth noting that on October 9, 2014, when the major stock indices dropped by 2 percent following the death of the first Ebola patient in the United States, the Dow Jones Travel & Tourism Index declined much more, by 2.5 percent. Additionally, the CBOE implied volatility index rose by a staggering 24 percent.

References


A Product Development Framework Using Quality-Based Approaches

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Abstract

Increasing the life time of the product and surviving in demanding markets with lots of competitors who offer the same product is one of the core goals of any company. In today’s market the aim is to stay in competition picture as well as keeping the market share and increasing the margin all to gain customer’s satisfaction. In this paper it’s been tried to find a way to best to reach all these goals by analyzing the New Product Development (NPD) going through its life-cycle and trying to make appropriate changes so our product would be one step ahead of the competitors'. On the other hand it’s been tried to use six-sigma as the most reliable methodology to apply desired changes in the product while keeping its characteristics in the desired quality limits. Six-Sigma uses a structured method both in process improvement and in new product design called DMAIC and DFSS respectively. This study tries to apply both methods and also continuous improvement through the stages of the product life-cycle to come up with the best solution to stay effectively in a high competitive market from both quality and marketing points of view.

Keywords: new product development (NPD), product life-cycle (PLC), continuous improvement (CI), six-Sigma, DMAIC, design for six-sigma (DFSS), incremental and radical change

Introduction

For any company staying in a highly competitive market is a huge task. Carrying on involves continuous hard work to enhance a reputation coupled with product innovation or modification. On the other hand not any modification or innovation may please customers. The companies must build their change over reliable and accurate methodologies and also all the changes must be based on what have been heard from the customer of what might please them.

There are times in the market that it reaches saturation for a specific product, the competition gets crazy and the market share would be divided between competitors. In this time the ones who predicted it and are ready to gain more attention of the customers are the winners, otherwise they will have to leave the market. To better predict this situation deep analysis of the product life-cycle would be needed. Product life cycle management makes it possible to command the whole lifespan of a product and the information connected with it. Efficient product lifecycle management enables companies to compete successfully in international and global markets [1]. On the other hand six sigma methodologies and continuous improvements are the most reliable ways to know what to change and how to change. DMAIC (Define, Measure, Analyze, Improve and Control) and
DFSS (Design for Six-Sigma) are the two methodologies of Six-Sigma trying to improve the existing product or service and trying to design the best from the beginning respectively.

In this paper it’s been tried to find what to change, when to change and also how to change. In section 2 a short description of Product Life Cycle (PLC) is covered. Following that in section 3 New Product Development (NPD) has been put under study along with its model, stages and key elements. To follow the procedure a little overview of Six-Sigma and its methodologies are described in section 4. Section 5 defines how to mix them and have a combination of all, and also to know how continuous improvement works here. To cover what changes are possible section 6 has been brought to define different types of change and finally there is a conclusion in part 7.

**Product Life Cycle**

**Definition**

Product lifecycle management (PLM) expresses the engineering point of view of product life-cycle concept and integrates the aspects of people, processes and data [2]. to manage the entire life cycle of the product starting from conceptual design, going through manufacturing and ending with service and disposal would be considered as the core of PLM. It is also defined as a set of capabilities that enable an enterprise to effectively and efficiently innovate and manage its product and related service throughout the entire business lifecycle [2].

The idea of product life-cycle concept has been taken into consideration since such a substantial principle is necessary to understand for the managers in order to make profit and stay in the business.

**Figure 2.1. PLC Stages**

**Steps**

The foundation of managing the product is to identify and understand the stages of product life-cycle. Generally each product has a life-cycle consisting of 4 main phases as shown in figure 2.1: introduction, growth, maturity and finally decline. Profit rises and falls at the different stages of product’s life-cycle and it is worth noting that each phase requires marketing, financial and strategic efforts.
Introduction Stage
In such a phase the product is not yet known. Therefore the sales grow slowly and subsequently the margin of the company is in a low level. On the other hand high cost and significant risks would be faced. High marketing effort, time and cost would be needed in order to introduce the product to the customers.

Growth Stage
This phase concentrates on rapid growth in sales. It is worth adding that in such a phase the more successful the product is, the higher probability of competitors emerging would be faced.

Maturity stage
From marketing point of view, maturity phase begins with market saturation. The enterprise needs to increase the R&D costs for product development. It means product improvement is required in order to maintain the market share and survive in competitive market. Price war would be easily observable since competitors keep pressure to lower the price.

Decline Stage
In this stage, the company faces negative growth level of sales since the market for the product shrinks due to the market saturation. The marketing effort just would be done on loyal customers the enterprise has reached in previous stages. The company needs to keep the price stable or even lower to make the customers purchase the product.

Table 2.1 represents a summary of all the steps mentioned in sectors 2.2.1 to 2.2.4.

<table>
<thead>
<tr>
<th>Factors</th>
<th>Stages</th>
<th>Introduction</th>
<th>Growth</th>
<th>Maturity</th>
<th>Decline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
<td>Low</td>
<td>Rapid Growth</td>
<td>Maximum</td>
<td>In Decline</td>
<td></td>
</tr>
<tr>
<td>Costs</td>
<td>High</td>
<td>Medium</td>
<td>Low</td>
<td>Low</td>
<td></td>
</tr>
<tr>
<td>Profit</td>
<td>Negative</td>
<td>Growing</td>
<td>High</td>
<td>In Decline</td>
<td></td>
</tr>
<tr>
<td>Competition</td>
<td>Little</td>
<td>Growing</td>
<td>Stable</td>
<td>Falling</td>
<td></td>
</tr>
</tbody>
</table>

Figure 2.1 PLM Steps

New Product Development

Definition
Before the product starts its journey through product lifecycle stages (introduction, growth, maturity, decline), it has to be well-developed. Therefore new product development (NPD) model would be defined.

Just like product lifecycle, NPD consists of specific phases such as idea, research, develop, testing, analysis and introduction. New product development focuses on transformation of a market opportunity into a product available for sale with short development cycle [3].short development cycles enable companies to react quickly to the changed market demands[4] and helps to remain competitive.
Four NPD Key Elements
New product development has been stood based on 4 key elements as shown in figure 3.1: strategic goal of the company, customer needs, Time, cost and quality of the product and design-driven approach.

![Figure 3.1 four key elements of NPD](image)

Strategic Goal
In designing the NPD, long –term and strategic goals that the company is following must be considered. The key lever is to identify the target and how to achieve it respecting to external and internal analysis.

Customer Needs
NPD should be aligned with customers’ requirement; it means the new product needs to be accomplished according to what customers want considering both existing and potential wants of the customers.

Time/Cost/Quality
Time of releasing the product, Cost of the product (and its price as a consequence) and the Quality are three main factors that play the most considerable roles in designing a new product.

Design-Driven Approach
According to Roberto Vergani,” we were not just selling a consumer product, or even a branded product. We were selling an emotional product” [5] to be more specific, apart from technologies used, functionality and performance of the product, design-driven concept (table 3.1) means creating special feeling for the customer while using the product.

<table>
<thead>
<tr>
<th>Table 3.1. Design-Driven approach</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Tools (How?)</strong></td>
</tr>
<tr>
<td>Tech.</td>
</tr>
<tr>
<td>Language</td>
</tr>
</tbody>
</table>

Based on Verganti’s definition of design-driven concept, function and sense result in performance and meaning respectively which can fulfill the needs of customers and users.
Steps
In particular, in order to accomplish NPD, some steps should be followed as the following sectors.

The idea
At the very beginning every product has to start with a new idea. Such an idea could either add new functionality to the existing product or an innovation. In this stage key elements of NPD should be considered (Strategic Goals, Customers Needs, Time/Cost/Quality and Design-Driven concept)

Research
To investigate the market and demand and to analyze the feasibility of defined ideas in previous phase would be considered as the aim of research phase. Finally the objectives of Research phase must be aligned with four NPD key elements.

Develop
In this stage, product development, various design and manufacturing according to the customer requirements, must be taken into consideration. Such a phase continues till the finished product is reached based on what the customer exactly wants.

Testing
Marketing point of view expresses that before launching the new product in the market, it should be examined in a small sample of the society. This helps the company to get the feedbacks of the new product and to modify it based on customers.

Analyze
Considering all feedbacks received in testing stage, the company would go for making some necessary changes and adjustments to the products and deciding about the way the product is going to be launched in the market.

Introduction
The final step of NPD is to release the new product to the market, once this is done; product lifecycle management starts to be activated by the main goal of ensuring that the product lifecycle would be as long and profitable as possible.

Quality Methodologies Implementation in NPD
Besides developing a new product, meeting what customers need and want would lead to defining some quality standards and moving on the way to reach quality assurance. In the following sectors quality methodologies ,such as DMAIC and DFSS under six-sigma concept applicable in the NPD procedure will be defined and put under consideration.

Six- sigma

Definition
Six Sigma is defined by Linderman et al. (2003) [6] as “an organized and systematic method for strategic process improvement and new product and service development that
relies on statistical methods and the scientific method to make dramatic reductions in customer defined defect rates” [7].

Based on what the definition says the focus of Six-Sigma is on the new product/service and its improvement. On the other hand improvement would be defined as what customers want and what they define as defects [6]. In other words six-sigma is the commitment to satisfy and to help the customers.

Six-Sigma was first used by Motorola Inc. in 1987 in the USA while the company was threatened by highly competitive electronic industry members especially the Japanese ones. So it decided to strengthen itself by applying drastic changes and enhancing the quality level of its products to reach 3.4 defects per million (DPMO) which is one of six-sigma’s main goals [8] [11]

Six-Sigma Methodologies
Six-Sigma uses a structured method both in process improvement and in new product design called DMAIC and DFSS respectively.

The first one, DMAIC, is strongly patterned after the plan, do, check and act cycle mostly known as Deming’s PDCA cycle. It’s an acronym for the steps taken in order to achieve continuous improvement (CI) and process improvement: Define Measure, Analyze, Improve and Control [9]. On the other hand the latter one, DFSS (stands for six-sigma), puts the focus mostly on designing correctly from the beginning so it can prevent the problems. So it is more aimed at meeting customer’s needs at the first release of the product. [9] DMAIC procedure can make improvements on the existing product or service and increase its level of performance but it will always be limited to design, which can be compensated by DFSS. Table 4.1, represents the two methodologies more deeply.

DFSS Vs. DMAIC
As it was mentioned before DFSS focuses on the new product or service and tries to design right and avoid maintenance while DMAIC would be useful when there is a problem or a defect in the existing product or service and tries to detect the problem and find a solution for it. In other words DFSS occurs more in the stages research and design of the product while DMAIC is more related to the Development and Production stages. More thorough comparison between two methodologies has been represented in table 4.2. [7][8]

| Table 4.1 DMAIC and DFSS steps, tools and techniques |
|---|---|---|---|
| **Steps** | **DMAIC** | **DFSS** | **Tools** |
| **Define:** Define the problem | Brainstorming | Define: Identify wants and needs of customer | Surveys |
| | Project Charter | | Questionnaire |
| | VOC Analysis | | Reviews |
| | Stakeholder Analysis | | |
| Measure: understand process | CTQ Tree | Measure: collect data and record specifications | Check sheets |
| | Kano Analysis | | RACI Matrix |
| | Data Collection Plan | | KANO |
variables affecting the process output | Process Capability | Analyze: create a baseline for improvement | QFD FMEA Brainstorming
--- | --- | --- | ---
| Analyze: Identify, organize and validate Potential root cause | Cause and Effect Diagram Histogram ANOVA PARETO Sampling | Design: results of internal tests are compared with customers’ wants and needs | DOE TRIZ
| Improve: Find, validate and implement a solution for the defined root cause, validate | DOE QFD FMEA | Verify: collect customer review and adjust the process | Check sheets PDPC
| Control: Monitor the approach and control it | Control Chart Time Series Plot | Design: evaluate various alternatives and deliver one detailed design | Robust design Simulation SPC Capability analysis Control plan SPC MSA Prototyping Piloting

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<td>V</td>
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**Table 4.2. DFSS vs. DMAIC**

<table>
<thead>
<tr>
<th></th>
<th>DFSS</th>
<th>DMAIC</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Aim</strong></td>
<td>Problem Prevention Design Right for the First Time</td>
<td>Continuous Improvement Process Improvement</td>
</tr>
<tr>
<td><strong>Stages Applied</strong></td>
<td>Development Production</td>
<td>Research Design</td>
</tr>
<tr>
<td><strong>Long Term/Short Term</strong></td>
<td>Long Term Realization of Benefits</td>
<td>Short Term Realization of Benefits</td>
</tr>
<tr>
<td><strong>Process</strong></td>
<td>The stages must be customized based on the company and the product</td>
<td>The standard stages are used as they are</td>
</tr>
<tr>
<td><strong>Product Team Size</strong></td>
<td>Multidisciplinary Project Team</td>
<td>Small Project Team</td>
</tr>
<tr>
<td><strong>Customer Requirements</strong></td>
<td>Responds multiple customer requirements at one time</td>
<td>One or two customer requirements at one time</td>
</tr>
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</table>

**The Role of DFSS In NPD Implementation**

DFSS is all about preventing problems and doing the right things at the right time during product development. From a management perspective it’s about designing the right cycle time for the proper development of the new product. It helps in the process of inventing, developing, optimizing and transferring new technologies into product design program. It
also enables the subsequent conceptual development design optimization and verification of new product prior to their launch into their respective markets.

As it was mentioned before the early stages of NPD consist of the idea (Design), research and develop where first the general idea of what the product is considering strategic goals, customer needs/time/cost/quality and Design-Driven approach will be generated. Then feasibility of such an idea must be scrutinized and finally the very first sketch of the product is prepared. So all these steps together are trying to pave the path of generating a prototype out of a basic idea. As definition of DFSS represents it is used when first a product or process is not in existence and one needs to be developed [12], it can be an appropriate tool to assure the quality of the emerging product in the mentioned stages of NPD.

The DFSS methodology is built upon a balanced portfolio of tools and best practices that enable a product development team to develop the right data to achieve desired goals. As a matter of fact these goals are in consistence with what has been desired in the early stages of NPD as the following:

1. The first goal is to conceive new product requirements and system architectures based upon a balance between customer needs and the current state of technology (applicable in IDEA step of NPD) can be efficiently and economically commercialized (applicable in the RESEARCH step.)
2. Design base line functional performance that is stable and capable of fulfilling the product requirements under nominal conditions (applicable for the DEVELOP step).
3. Optimize design performance so that measure performance is robust and tunable in the presence of realistic source of variation that the product will experience in the delivery, use and service environment (applicable in the DEVELOP step).
4. Verify system-wide capability to (to any sigma level required, six sigma or otherwise) of the product and its elements against all the product requirements (applicable in the DEVELOP step)[15].

The Role of DMAIC In NPD Implementation

After the early stages of NPD, prototypes of the product are made to be represented in a small sample of the society in order to get customer feedbacks. Based on what has been heard some modifications or improvements might be needed both done in the steps of Testing and Analyze; This is where DMAIC might become handy aims at optimizing the existing product or service that still doesn’t meet the level of customer’s specifications [12].

DMAIC is trying to improve the existing product through its steps Define, Measure, Analyze, Improve and Control which can be aligned with what the steps testing and Analyze try to reach in NPD. Based on the feedbacks received from TESTING step, DMAIC would be activated and continues through ANALYZE step. Figure 4.1 schematically expresses how quality methodologies and NPD interface each other.


**Continuous Improvement (CI)**

Continuous improvement is an ongoing effort to improve products, services or processes can be viewed as formal practice or an informal set of guidelines. Bessant et al. (1994) defined continuous improvement (CI) as a company-wide process of focused and continuous incremental innovation sustained over a long period of time. Being essential for meeting customers’ varying needs, CI is considered an integral part of TQM. The intensity of global competition has led to an even greater interest in continuously improving products, services, and processes [16].

**Continuous improvement and product life cycle**

Considering all, it has been well identified that new product development model should be employed in order to release new product or new functionality at the very beginning. Once the new product is introduced to the market by the use of NPD model, product life cycle management would be applied to manage the entire lifecycle of the product respecting all challenges and criticalities to keep the market share and increase the business profitability respectively.

Continuous improvement should be applied in the maturity phase in order to increase the life cycle of the product and also to avoid decreasing the sales revenue. Figure 5.1 demonstrates such a progression starting from new product development and ending with a closed loop of continuous improvement. On the other hand as it has been noted before, each product/service has a limited life passing through distinct stages (introduction, growth, maturity and decline). The defined levels of the product life cycle represents challenges, opportunities and also the relevant problems the seller might face.

To be more specific, according to the figure 5.1, after the introduction and growth phases, the product would go for the maturity level where the target of the company is defined as “maintaining the market share” which has been obtained in first two stages. In the maturity stage the market starts getting saturated since the majority of customers have already purchased the product or service. In such a phase due to producers’ emergence, the market competition level increases dramatically. Accordingly the profit would be shared among all the competitors and profit starts to be decreased. To deal with the situation and in order to survive, the firm needs to consider any product modifications or improvement that might bring any competitive advantages. It should be added that innovation and incremental changes during maturity stage play the most significant roles by the aim of maintaining and increasing the market share.
DMAIC and DFSS in Product Life Cycle: Introduction of DMEDI

When it comes to the maturity phase competition in terms of distribution channel increases, the advertising and promotion expenditures are quite high while starts decreasing gradually. Market saturation is another substantial characteristic of maturity phase that may lead to need of changing the existing product or even adding any new functionality to the current one in order to survive in competitive and demanding market of 21st century. According to the need of change in maturity level of the product, the necessity of continuous improvement concept using DFSS and DMAIC methodologies by the general overview of designing or re-designing a new product or service is felt.

In general to introduce a new functionality to the existing product before the product reaches to the maturity level of its lifecycle, benchmarking and customer survey launching should be done to find out the potential needs of the customers and existing gap of the market. Once the needs of the customers are identified and analyzed in VOC analysis, critical to quality (CTQs) elements must be defined.

Next steps start with conceptual and technical design of the new product respectively. In the conceptual design the aim is to produce and initiate non-technical concept of new product according to the customer requirements. As for the technical design, all engineering aspects of new product, details and the feasibility should also be considered.

To put all in a nutshell, the main phases the company needs to follow in order to introduce new product or service in maturity phase would be categorized into 5 main stages(DMEDI), emerging from a logical combination of the steps used in both DMAIC and DFSS methodologies, including define, measure, explore, develop and implement. Table 6.1 summarizes these steps and the activities of each level.

As it is well-observed above, product lifecycle (PLC) and continuous improvement by the use of DFSS and DMAIC methodologies are deeply correlated to each other.

Table 5.1- DMEDI stages to introduce new product in maturity phase considering both DMAIC and DFSS

<table>
<thead>
<tr>
<th>Define</th>
<th>1. To define what to do in maturity level</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>2. To develop project charter</td>
</tr>
<tr>
<td></td>
<td>3. To plan the project design</td>
</tr>
<tr>
<td>Measure</td>
<td>1. customer needs gathering</td>
</tr>
<tr>
<td></td>
<td>2. to define Product/Process requirements</td>
</tr>
<tr>
<td>Explore</td>
<td>1. To develop conceptual design of Product/Process respecting to current functionality of the product</td>
</tr>
<tr>
<td>Develop</td>
<td>1. To develop detailed design respecting to current functionality of the product</td>
</tr>
<tr>
<td></td>
<td>2. To develop production process</td>
</tr>
<tr>
<td>Implement</td>
<td>1. To implement the improvement</td>
</tr>
<tr>
<td></td>
<td>2. To monitor the processes</td>
</tr>
</tbody>
</table>
Incremental/Radical Change

As it has been stipulated before, maturity phase is the one where the company needs to introduce something new, either a new product release or improving the existing functionality. These changes from current situation to the ideal one, which are emerging from continuous improvement, are classified into two main groups, Incremental change and Radical change both shown in figure 6.1. Generally, “technology push” and “market pull” are the main approaches that drive the company toward the path of product improvement. To be more clear, in the “technology push” technological competency causes any change that would result in higher product performance while in the, “market pull”, customers are the core of such an attitude, playing the most substantial role in determining what they really miss in the current functionality of the existing product. Actually as for the definition “market pull” is all about the way that the customer attribute the value for the product or service.
When it comes to two types of change definitions and their characteristics, adding any new features to the product in the maturity level of product lifecycle respecting to the existing functionality of the product would be considered as an incremental change. Incremental change or in better words product development is all about improving the product in the market according to the consumer using technological improvement rather than radical one. However any innovation may lead to radical change, which means breaking up with the previous paradigm, new product or new market using revolutionary technology. Note that incremental change would be necessary not only because of product continuous improvement but also as a foundation for bigger and radical changes. It should be added that based on previous explanations, any changes either incremental or radical before launching into the market must be deeply investigated from quality perspective to make sure that every single thing is under quality standards, considering high performance. Accordingly incremental change could be obtained by the use of DMAIC procedure under continues improvement six- sigma while DFSS is applied by the quality department when new product or a radical change might be occurred in the market.

Finally, it is worth adding that the concept of CI on CI (continuous improvement on continues improvement) would be described here as the ability of the firm to manage the development of CI. In other words, CI on CI has been stood on the basis of PDCA; the closed continues improvement loop, which has been explained beforehand.

**Conclusion**

To sum up all above, In order to introduce a new product/service New Product Development model (NPD) should be implemented under some quality-based approaches aiming at meeting standards as customer requirements defined by them, such as Design for Six-Sigma (DFSS) and DMAIC.

After launching the new product/service into the market through NPD model, Product life cycle (PLC) will be activated starting from Introduction phase, going through Growth and Maturity and ending with Decline phase. The connection between product life-cycle (PLC) and continuous improvement (CI), which tries to improve the functionality of the existing product, can be seen obviously where there is a necessity of replacing a product which has been reached the maturity level with a new product; or adding some new functionalities to the existing one according to the customer needs. By doing so, the company would be able to increase the life time of the product and survive in the demanding market with lots of competitors offering the same product. Meanwhile the sales level and as a consequence the margin would be kept high and finally the customers will figure out that you as the desired company care about them and their potential and existing needs.

On the other hand the new product or new functionality of the existing product, offered in maturity phase, must be checked under DMEDI( Define, Measure, Explore, Develop, Implement), arising from the combination of two techniques DFSS and DMAIC, in order to ensure that the offering product meets the certain standard qualifications according to customer requirement. From quality perspective, DMEDI has to be gained by the aim of avoiding to face cost of poor quality such as rework, product rejection (defectives) and so on.
However CI accomplished in Maturity level used to generate radical or incremental changes in the life time of the product. Using revolutionary technology to introduce something totally different would be considered as Radical while improving the existing functionality of current product would be considered as Incremental change.

References
The Future of Spa Care Ensuring Health & Wellness

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Abstract

To identify untapped consumer markets for service businesses, this study collected and analyzed empirical data revealing spa services that appeal to males and females, reasons for visiting spas, and why they would encourage other untapped consumer markets to visit spas. A twenty-three (23) question survey instrument was administered during March thru June, 2012 to males and females over the age of 18 years old with resulting n = 501. Diffusion of Innovations focusing on persuading individuals to accept “reinvention” of products and behaviors to better fit the needs of individuals. In Diffusion of Innovations it is not people who change, but the innovative products. Support for innovative spa targeted consumer services was a major result of this survey research including: 1. For both males & females who walks with a cane, crutches, or walker to visit a spa for a lower back, hip, and/or leg massage for health and wellness, 2. Overweight males & females to participate in back, hip, and leg massage for health and wellness and 3. For males to schedule a pedicure, without polish, that includes a foot, ankle, and lower leg massage and whirlpool for health and wellness. The survey results will be utilized to develop business-marketing-hospitality strategic plans for spas.

Keywords: spa, health, wellness
Marketing and Church Commoditization

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Abstract

Considering serious believers, there is much to say that there is a price to pay in Christendom. This paper explores the concept of price in marketing in relation to the church to determine what extent the church can be commoditized in this present milieu. Herein, general answers to non-profit problems were not offered but some significant pricing issues that might affect the church as a non-profit organization were analyzed. The study is positioned within the theoretical framework of non-profit marketing and is argued alongside profit marketing. With the use of qualitative interviews, data gathered from four churches in the Durban areas of KwaZulu-Natal, Durban, South Africa is presented. Result indicates that the church is not a place to make or exchange money but a place to teach and preach God’s Word and praise God in songs, prayers, free will offerings and tithes. This paper calls for both full-time and seasoned pastors not to compromise spiritual quality with materialism.

Keywords: marketing, pricing, commoditization, non-profit, church, spiritual

Introduction

This study presents an overview of an emerging field in the study of contemporary religion and marketing, it explores issues of value proposition, pricing strategy and commoditization from spiritual context. This study is set to understand the claim that, with serious believers, there is much to say that there is a price to pay in Christendom. Therefore, the aim of this study is to ascertain if there is need to pay a price to be a Christian. Asking if it does costs people to become a Christian, or asking what price does one pay to be a follower of Christ? Particularly, this paper aims to understand if there are similarities between Christian price and price in traditional marketing (tangible price in this regard). Pricing is one of the most important elements of the marketing mix, as it is the only mix, which generates a turnover for the organization. Every organization has to decide prices at which to sell its products or service. Kotler and Keller (2009:416) sum up that price is not just a number on a tag. Price comes in many forms and performs many functions. In this study, it is important to have an understanding of the goal of pricing from the spiritual context. Although Furtwengler (2010:2) expresses that the goal of pricing for profit is to help organizations get compensated well for value provided, it is also important to understand how non-profit organization can quantify and clearly communicate the value that offerings provide, and how buyers feel comfortable from buying them.

Furthermore, it is important to understand non-profit pricing, examining whether it can be said that customers pay for the product with monetary donations, goods donations and/or commitment plus personal time. In addition, there are claims and counter claims that everything that one would ever desire in this world that has any kind of value will cost one
a high price, especially if it is of top quality. Koekemoer (2004:9) is also of the same opinion that, in the absence of any specific knowledge about a particular product, consumers will equate a high price with high quality. Furtwengler (2010:24) alludes that ability to get higher prices than competitors lies squarely on the ability to demonstrate greater value and to monetize that value for the customer. This type of differentiation in marketing practices regarding price and quality is to juxtapose spiritual pricing in this study. Johnson (2013:1) reveals that a greater anointing often demands a greater price. Revelation concurs with the assertion in the book of Luke 12:48 which says that “for unto whosoever much is given, of him shall much be required”.

Theoretical Background

Profit Marketing
David (2013:19) affirms that in ‘For Profit’ Organization (FPO) “The social responsibility of business is to increase its profits.” This definition assumes that the organization under consideration exists to maximize the wealth of the people investing in the enterprise. This may or may not include the people actually involved in running the organization on a daily basis. According to David (2013:19), ‘Profit’ is taken to be ‘the creation of surpluses’ recognized as a financial output from business activity in terms of dividends and other payments to stakeholders in a for-profit business. From this perspective, one could question the concern that much of current non-profit management attributes to financial matters. Assuming that the raison d’être of non-profit organizations is not money, why focus on it?

Non-profit and for-profit businesses have multiple similarities and multiple differences. The process of marketing also differs, with the biggest differing factor being that the purpose of for-profit marketing is to encourage customers to buy, while the purpose of non-profit marketing is usually to encourage people to give (Sandilands, 2014:1). This means that the return on investment differs between the two. Although the principles of marketing remain the same, this study is of the opinion that some of the methods must, of necessity, be different. Blery, Katseli and Tsara (2010:60) further assert that for-profit businesses market using a variety of common methods, such as the marketing mix, target market identification, positioning, branding, public relations and advertising. Non-profit businesses may also use the majority of these methods.

Non-profit Marketing
Blery et al. (2010:58) state that the characteristics of non-profit organizations include non-financial objectives, mission-driven, multiple “customers,” and a competitive-cooperative relationship with their competitors. According to Brian (2012:1), not-for-profit marketing can involve the marketing of people (politicians and entertainers), places (museums and operas), ideas (right to life, safe driving) and organizations. There are many different issues, for example, drunk driving, mental health, prayer in schools, suicide hot lines, and so forth, that have been and continue to be marketed for non-profit objectives. This idea, perhaps, indicates that non-profit marketing is a type of marketing that works to serve the public interest, as opposed to marketing purely for financial gain. David (2013:19) supports that a not for-profit organization is “one that exists to provide for the general betterment of
society, through the marshalling of appropriate resources and/or the provision of physical
goods and services. Such organizations do not exist to provide for personal profit or gain
and do not, as a result, distribute profits or surpluses to shareholders or members. They
may however, employ staff and engage in revenue-generating activities designed to help
them in fulfilling their mission”.

Dorreh and Hromjak (2011:19) identify that the whole categorization of 4Ps – product,
place, promotion and price should be re-categorized for non-profit organizations. Within
these different claims on non-profit, it is eminent to find a common point on the uniqueness,
distinction and differentiation related to non-profit pricing. With this perspective, it is clear
that an understanding of product differentiation and price differentiation are examined.
Hult, Pride and Ferrell (2012:324) add that product differentiation is the process of creating
and designing products so customers perceive them as different from competing products
and that perceived differences might include quality, features, styling, price or image.
Consequently, price should be re-categorized for non-profit organizations through their
products and services. Sharp and Dawes (2001:740) affirm that a successful product
differentiation strategy will move one’s product from competing based primarily on price
to competing on non-price factors (such as product characteristics, distribution strategy, or
promotional variables).

Pricing and Funding For-profit and Non-profit Marketing
According to Strydom (2011:159), price is the amount of the values consumers exchange
for the benefits of having or using the product or service of the manufacturer or service
provider. It is noteworthy that price is not only the amount of money paid to a manufacturer
for a product or service. It can also be in the form of payment in kind, e.g., when products
are bartered (exchanged). Price may, therefore, be described as the amount of money a
willing buyer is prepared to pay a willing seller for a product offering at a point in time.
Brian (2012:5) provides an accurate depiction of the ideal exchange transactions in not-
for-profit marketing which has two basic requirements of exchange transactions. The first
is that there be at least two parties involved. The second is that each party involved should
have something of potential value to the other(s). In some transactions, money is exchanged
for products (goods or services); in others, goods and money are exchanged for good
feelings and tax benefits; in still others, time and effort are exchanged for money and
feelings of comfort and/or responsibility.

Ukah (2007:9), in his study of African Pentecostalism, reports that African Pentecostal
churches have greater features with companies (profit organizations) with a strong motive
to make profit. Faith healing, on the one hand, has been inextricably linked with religion
in Africa whereas an important function of religion is to bring restoration in the face of
brokenness or damage to man’s body, relationships and social and spiritual networks.
Deliverance, on the other hand, is the second component of prosperity gospel. Hence it is
called the “Wealth and Health Gospel” and the “theology of prosperity” (Ukah 2007:14;
Gosling 2014:2). Ukah (2007:15) further expresses that another significant social
characteristic of the new Pentecostal/charismatic churches is their firm-like structural
organisation. In order to compete effectively with other churches, and as a carryover of the
American influence, these churches are organized as firms or commercial enterprises.
engaged in the production, distribution and pricing of religious and non-religious commodities with primary motives of making satisfactory profit and maintaining a market share. There are many sources of income for a non-profit organisation, from individual donations to grants to corporate giving. Although, funding has become a constant topic of conversation among non-profit leaders, its appropriateness has been given less emphasis. According to Foster, Kim and Christiansen (2009:1), in the for-profit world, by contrast, there is a much higher degree of clarity on financial issues. Sandilands (2014:2-3) opines that the major difference between the marketing of the two types of corporations is the fulfillment of the customer need. The profit marketing customer has a need of his/her own that he/she fulfills by the purchase of the goods or services; the non-profit “customer” recognizes the need of others and his/her ability to help fulfill it through donation of his/her time, money or service.

Historically, looking at the price for being followers of Christ, Jesus begins: he tells them to cure, cast out, cleanse, and raise to life. In short, he instructs Christians to imitate his commitment to standing against any and all forces that would rob the children of God of the abundant life God desires for them. Moreover, he tells them to do this for free, expecting no payment or return. Why? (Here is the punch line.) “You received without payment, so give without payment” (Matthew 10:7-15). Hence, it has been established that they (Christians) are to do good without expecting any remuneration or return. The idea is to understand the actual reflection and internalization of this reality into one’s daily lives as Christians that all they have of value have been given to them freely and to give as freely as they have been given (DJL, 2014:1). In addition, understanding how the church can make the concept of ‘gift’ more meaningful and meeting the challenges of unsaved as a product satisfies the need and wants of consumers is imminent. Ashley (2007:1) offers a story on the concept of gift in the modern world (socialization): “I usually ball fliers up and throw them away, but this one caught my eye. It had black and white pictures of Jesus and a Bible at the top. A woman describing herself as "religious and holy" offered a free blessed candle with each consultation for spiritual healing, promising to show how she would remove sorrow, sickness, pain and all bad luck. As a woman who has the God-given power to heal by prayer, she has helped thousands, the flier claimed. Curious as to whether this was a free service or if someone would need to dig into their wallet for the privilege of being healed, I called the number printed at the top of the flier. A very pleasant-sounding woman answered, asking me how I'd heard of her services. Answering my queries as to cost, she told me a spiritual reading ran $30, and a tarot card reading was $40. That wasn't a bad price at all, she told me. Sandilands (2014:3) disagrees with the above type of sale and state that “retail sales of the primary product or service do not apply to the nonprofit corporation (church commoditization in this regard)”

**Spiritual Pricing**

In terms of spirituality aspect of pricing, Ashley (2007:2) offers that those who are truly gifted by the Spirit will share freely and that those who seek to profit in the name of Christ for money or otherwise will come to see the true way of God’s healing grace, by giving freely in order to receive it freely. This, in comparison with profit marketing, can be said that the process of marketing in Ashley’s story is purely profit oriented which is against the teaching of Jesus Christ, as seen in the book of Matthew 10:7-15. The bible says in
Philippians 2:13 that “For it is God which worketh in you both to will and to do of his good pleasure”. God gives an assignment to a person; then the Holy Spirit is given to equip him or her for the assignment. The proof of the Spirit's presence is that the person is able to complete the assignment effectively through the supernatural enabling of the Holy Spirit. Truly understood and embraced, the Holy Spirit's gifts allow the Church to be Christ-centered, to maintain unity and oneness of heart, and to practice genuine, powerful love. Spiritual pricing is characterized as discipleship, followership and self-denial, asking not only to become more Christlike, but invite others to feel His love and follow Him as well. According to Hales (2008:1) to respond in a Christlike way cannot be scripted or based on a formula. The Savior responded differently in every situation. So, he expects his disciples to do same.

More importantly, a disciple’s life should be marked by the fruits of the Spirit—“love, joy, peace, longsuffering, gentleness, goodness, faith, meekness and temperance” (Galatians 5:22–23). Meekness is not weakness. It is a badge of Christian courage. Furthermore, spiritual pricing is also noted as the cost of eternal life. In Mark 9:47, Jesus gave a serious warning to Christians to strive to gain entrance into the kingdom of God – “And if your eye causes you to stumble, pluck it out. It is better for you to enter the kingdom of God with one eye than to have two eyes and be thrown into hell”. Sacrifice is all it takes in the area of spiritual cost, it establishes relationship with the sacred by purifying and preparing the sacrificer. Belk, Wallendorf and Sherry (2006:7) add that sacrifice can also involve asceticism, fasting, sexual abstinence, self-mutilation, and suffering. It is clear that spiritual pricing also prepare disciples to commune with the sacred, bring about a strong degree of commitment to sacred experience, and indicate appropriate deference to reinforce the extraordinary character of the holy (Jesus). Consequently, the contemporary theologians, teachers, preachers are writing and teaching people to be comfortable in their sinful lifestyle (unholy acts), meandering away from the reality of heaven and hell because of spiritual pricing. A conceptual analysis of spiritual pricing is given below.

**Biblical Concept of Exchange and Materialism**

The relationship between spirituality and materialism is complex. Biblically, spirituality is the opposite of materialism. Materialism is an act of acquiring wealth and possessions at all costs and by all means (Luke 12:15). Pace (2013:27) affirms that materialism is commonly viewed as a negative personality trait that has detrimental consequences for both individuals and society. Materialism is self-centered; in contrast, spirituality reflects the values of self-transcendence; thus, it is an opposite of materialism. Looking at the contemporary conservative Christian ethics, the story of Namaan, in the Bible, where material gain in exchange for spiritual blessing or miracle of healing is denied, is discussed in this context. The story is a portrait of how God saves. According to Keathley (2013:1), the healing of Naaman, the Leper, is not just a story of the healing of a man from one of the most dreaded diseases of ancient times, but it is a story of salvation, one which illustrates the spiritual salvation man finds only in Jesus Christ and how men come to find that salvation in Christ, just like consumers, come to find products that satisfy their needs and wants in convenience shops or supermarkets.
Naaman was portrayed as a commander of the army of the king of Aram. He was a great man in the sight of his master and highly regarded, because, through him, the Lord had given victory to Aram. He was a valiant soldier, but he had leprosy (2Kings 5:1). Furthermore, Keathley (2013:5) reveals that, in verse 4-7 there is an excellent illustration of how salvation cannot be obtained or bought; or the price negotiation (Hult, Pride and Ferrell 2012:605). These verses reveal the natural tendencies and perspective of the carnal mind. Here is a typical man who recognized his need to some extent, but he wanted to have a part in his healing. He was trusting first in power, position, and riches. Instead of thinking in terms of God’s grace, he naturally thought in terms of favouritism, the leverage of power, wealth, and what one can earn or buy. The bible (2Kings 5:5-6) established that they (Naaman and the King of Syria) thought they could buy the favours of God from the prophet of Yahweh through the king of Israel by sending Naaman to the king of Israel rather than to the prophet of God. With him, he took a large amount of silver, gold and clothes as payment (vs 5). This is not always God’s pattern. God’s pattern was a shock to Naaman as seen in 2Kings 5:9-12 - Naaman came with his horses and his chariots, and stood at the doorway of the house of Elisha (The Prophet). Elisha sent a messenger to him, saying, “Go and wash in the Jordan seven times, and your flesh shall be restored to you and you shall be clean.” Verse 11 reveals that Naaman was furious and went away and said, “Behold, I thought, ‘He will surely come out to me, and stand and call on the name of the Lord his God, and wave his hand over the place, and cure the leper.’ Verse 12 “Are not Abanah and Pharpar, the rivers of Damascus, better than all the waters of Israel? Could I not wash in them and be clean?” So he turned and went away in a rage.

However, after Naaman’s arrogance, his ego, his reason and persuasions of his servant, as seen in verse 13, “Then his servants came near and spoke to him and said, My father, had the prophet told you to do some great thing, would you not have done it? How much more then, when he says to you, ‘Wash, and be clean’?” So he went down and dipped himself seven times in the Jordan, according to the word of the man of God; and his flesh was restored like the flesh of a little child, and he was clean (2Kings 5:14). This story expresses the simplicity of salvation and the necessity of humility in finding the Lord or an act of receiving miracles or blessings without paying for it. It established that money, power and wealth cannot save one or make one spiritual. Only God’s grace and his gifts and blessings in Jesus Christ can do that.

Marketing Concept and Characteristics of Commoditization
According to the marketing concept, an organization should try to provide products that satisfy customers’ needs through a coordinated set of activities that also allow the organization to achieve its goals - customer satisfaction is the major focus of the marketing concept (Hult, Pride and Ferrell 2012:11). Hence, marketing is defined as the process by which companies create value for customers and build strong customer relationships in order to capture value from customers (Kotler and Armstrong 2012:29). Kurtz and Boone (2012:7) endorse that marketing involves analyzing customer needs, obtained the information necessary to design and produce goods and services that match buyer expectations, satisfying customer preferences, and creating and maintaining relationships with customers and suppliers. Pendergrass (2013:1) adds that the marketing concept is the commonly held idea that companies achieve success by meeting the needs of their
customers. On the other hand, commoditization, as described by Applbaum (2000:121), is the strategic process of rendering things commodities, is not a self-propelled economic, historical, or evolutionary tendency. Commoditization is a process directed by marketers (and others with a marketing orientation) who act upon their stake in reproducing particular dispositions toward manufactured objects, ideas or experiences for the purpose of ensuring repeat sales. It has been noted by Gould (2013:1) that commoditization is a situation when illiquid financial contracts are changed or modified in a way that promotes trading and results in a more liquid market: commoditization is about proprietary things becoming generic, that is, transforming goods or services into a commodity.

In addition, churches use marketing to influence prospective or current adherents, “to change their behavior with respect to religion in some way” (Mottner, 2008:93). These behavioral changes include: (a) joining an organized religious group, either from another religion (conversion) or from having no religion; (b) maintaining or increasing ‘loyalty’ to a certain type of religion; (c) increasing the level of ‘religiosity’ and conformity to a specific religion's norms; (d) increasing one's depth of belief or faith in a religion; and (e) financial support of religious organizations (Mottner and Ford, 2010:93). The marketing of spirituality/religion has become very rampant today and is evident in the advent of spiritual products and services. Because the marketing of religion attempts to change or reinforce religious beliefs and practices, it carries important personal and societal implications (Abela 2014:51). The fact that the society is now becoming industrialized has also helped the church to extensively use television, tapes (music titles) and spiritual books. As a result, the local church no longer held the monopoly of spiritual messages and spiritual injunctions. For example, the spiritual knowledge that used to be difficult or costly to access (the Naaman case, for instance) is as available today as the Albany bread on the shelf. Akers (2011:3) sums up that commodities should serve the environment and human well-being, not vice versa.

**Research Questions**

This study seeks to generate insight into the concept of pricing in marketing and pricing in the church and to what extent the church can be commoditized in this present milieu. Owing to limited information concerning the link between marketing and the church’s own definitions of pricing, the following research questions are examined:

- **RQ1.** Do churches employ a pricing system?
- **RQ2.** Are there similarities between Christian pricing and pricing in traditional marketing?
- **RQ3.** How does it cost people to become a Christian?
- **RQ4.** Does the missing profit motive allows for a great variety of preferences and a subject of materialism in Christian organizations?
- **RQ5.** How does religious price changes from ancient to modern?
- **RQ6.** Under what conditions can a church (non-profit) organization price its activities/services?
Method

Data Collection Overview
This study employed the qualitative method to analyze spiritual pricing from the perspective of marketing. Barbour (2014:16) adds that qualitative methods also excel at illuminating process, whether in organizational change or individual decision-making, since it allows one to examine how changes affect daily procedures and interactions. Based on this, data were collected from four churches in Durban, KwaZulu-Natal South Africa, the interview reviewed what a Christian price should be, how price can be paid (process) and where to pay it. The qualitative questions also review context of value and quality of a good church, costs and importance of a range of benefits to those who can afford to pay spiritual pricing. The qualitative questions also revealed what commercial/marketing pricing is all about and purposively differentiated between consumer pricing and spiritual pricing. The data highlighted in this study was extracted from a sample of television commercials (DSTV) in terms of four considerations: (1) sponsor; (2) thematic contribution; (3) content description; and (4) media/network stations. A brief elaboration of these themes is developed in table 2 and in the analysis.

Sample

According to Barbour (2014:47), the purpose of qualitative sampling is to reflect the diversity within the group of people or the phenomenon under study rather than to select typical cases. A total number of four pastors were interviewed from a population of six that were selected using random selection. Christian commercials from 8 networks (on DSTV Public bouquet) were sampled. This included RTM (Redemption Television Ministry), CTV (Celebration Television), Emman TV (Emmanuel Television), Break TV (Breakthrough Ministry), RLW TV (Rivers of Living Waters Ministry), GNF TV (Abundant Life Ministry), Eziki TV (Forward in Faith Ministry) as well as a news network – etv (Shalom Ministry).

Analysis of Results
For RQ1, the study considered whether there exists a spiritual pricing or not in any given church, i.e., to understand if churches do employ pricing methodology. The argument regarding this is to explore price variability in order to understand if there is any object of trade from the church activities that proffers value or worth as seen in pricing strategy of a given profit organization. The findings are presented as follows:

The findings suggest several significant points. It has been noted that there is a high indication that churches do employ pricing strategies. However, this result suggests that the price in traditional marketing is different from spiritual pricing, although there exist some certain levels of similarities. One of the respondents affirms that discipleship, which essentially means following Jesus, is the essence of Christianity. Discipleship, as a Christian experience, is a way of life that requires paying a cost (self-denial), and commitment to the cause (taking up one’s cross – Luke 9:23). It is further enunciated that discipleship is, therefore, a way of sacrifice. This means to renounce self; to cease to make self the object of one’s life and actions. This implies that paying spiritual price is to place
divine will before self-will, which, in a way, is different from paying a price in a traditional marketing system which is centred on the customer (Kotler and Armstrong 2010:19).

In addition to the significant points, the important finding concerning \textit{RQ2} is that differences in pricing were driven by value and quality of life. Instead, the differences appear to be attributed to differences in goals and pursuit of life: one eternal salvation – Hebrew 5:9, (Christian pricing); the other immediate or ephemeral (commodity pricing). However, this implies that there is a low but significantly positive relationship between spiritual pricing and commodity pricing. Thus, a positive relationship gap is established. In a biblical sense, the price of the gospel is the death of Christ (Romans 5:6-8). Verse 6 states that “Christ died for the ungodly,” whereas verse 8 states that "Christ died for us." God loved us while we were sinners and paid a price so that we might have an infinite prize. That price was the death of his Son. And what was the prize that he bought for us when he paid that price? Verses 9-11 state that “we have been justified by his blood” (Piper 2012:2). Based on \textit{RQ3}, the context provides a strong interview of how it costs people to become a Christian. This finding is consistent with circumstantial evidence that except a man be born again, he cannot see the kingdom of God (John 3:3). One of the respondents applauds that salvation stands as the first step a person must take before one can have access to all the goodies of the kingdom of God. In addition, the kingdom of God is a process that starts with righteousness, followed by peace and then comes joy in the Holy Ghost. It has been noted that seeking the kingdom of God as a first priority is important to God (Matthew 6:33). The verse assures that it will cost one to deny oneself of some things such that one’s personal needs and challenges must not be placed above the kingdom; and all other things will be added on to one.

The findings related to \textit{RQ4}, the missing profit motive, which the study suggests that it allows for a great variety of preferences and subjective to materialism in a given Christian organization, demonstrates that there are profit options. According to Perreault, Cannon and McCarthy (2008:43), profit is the difference between the firm’s revenues (total sales) and the total costs it runs up to make those sales. One respondent affirms that the greater the anointing, the greater the exploit for God, comparing it with the analysis of value proposition where marketing offers that the greater the value of a product, the higher the price. One related question that was generated in the course of the interview for this section was, how does a Christian obtain greater anointing? In providing an answer to the question, similar answers to what is known as relationship marketing and customer relationship management were discovered. Relationship Marketing (RM) and Customer Relationship Management (CRM) both represent a paradigm shift in traditional marketing thinking. This means moving away from marketing to anonymous masses to developing and managing relationships with identifiable customers and stakeholders (Kotler 2009:1). According to Harbour (2014:2), relationship marketing is a sales approach focusing on building a long-term relationship that benefits both the customer and the business. Some of the techniques that businesses use in relationship marketing include providing consistently excellent customer service, getting to know the individual and anticipating their future needs, and offering discounts and special perks through loyalty programmes for repeat customers.
Thus, the missing profit motive can be rewarded as having a relationship with God. According to Pastor Keith (one of the respondents), the book of 1John chapter1 verse 3 says “We proclaim to you what we have seen and heard, so that you also may have fellowship with us. And our fellowship is with the Father and with his Son, Jesus Christ”.

Having a profitable life in Christ implies a life that is totally surrendered to the Lord (Mark 8:36 - For what shall it profit a man, if he shall gain the whole world, and lose his own soul?). One must be willing to die daily; this means that one’s self-will is subjected to the Master on a daily basis which Palmatier (2008:8) termed “relational-based exchange” One must also be ready to tear off one’s old garments and get into new garments (costs) (Mark 8:37 - Or what shall a man give in exchange for his soul?). Pastor Keith adds that a love relationship is developed, which can bring about clear communication with God in the spiritual real. He pointed out the book of John chapter 10 verse 27 – My sheep listen to my voice; I know them, and they follow me, which Palmatier (2008:17) considers as interpersonal relationship from the perspective of customer relationship management - involving managing detailed information about individual customers.

Table 1. The Relationship between characteristics of a sheep of Jesus (John 10:27-28) and of a customer of convenience a shop (Kotler and Armstrong 2010:13).

<table>
<thead>
<tr>
<th>Sheep of Jesus(The Sheep and the Shepherd)</th>
<th>Consumer of convenience shop</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Hear voice</td>
<td>Direct and online marketing</td>
</tr>
<tr>
<td>2. I know them</td>
<td>Customer data base</td>
</tr>
<tr>
<td>4. They Follow me</td>
<td>Determining communication objectives, Choosing media and collecting feedback e.g. Facebook, twitter and e-mail</td>
</tr>
<tr>
<td>5. Hope of eternal life</td>
<td>Worldly concern (ephemeral items)</td>
</tr>
</tbody>
</table>

Researcher’s own concept

From Table 1 it becomes clear that there is a level of relationship management to be successful as a follower of Christ (Sheep of the Shepherd), as well as a consumer of convenience shop. The intent of the Sheep is to achieve spiritual growth by following the Shepherd with full obedience and spiritual precepts. The Shepherd is to assist the Sheep in developing spiritual and social change through set principles and commandments. On the contrary, consumers of a convenience shop or supermarket have tendency to switch to big shops and more top-up trips to small convenience stores or discount shops. Consumers can also do shopping online, and could be shaken out of loyalty from one shop to another. Furthermore, the nature of relationships between the Sheep and the Shepherd, is in the form of multilevel alliances, fellowshipping, cooperation, obedience, law and principles as well as transparency, while full disclosure/self-denial is practiced as a sheep of Jesus.

Another question (RQ5) this study posed was how religious price changes from ancient to modern (historically or secured in modernity). Pastor Rene Degee of Inter-fellowship Ministries (Wentworth, Durban, South Africa) articulates that two factors could be responsible: 1) Wrong motive for ministry; and 2) Materialism. The world of religious experience is changing much faster than the discipline that claims to study it. Christianity still largely avoids analysis of key issues around self-denial, self-examination, prayers, fasting, interceding and the work of Holy Spirit, and fails to highlight differences between spirituality and materialism. This question argues that Christianity should contribute to the
critical analysis of social problems (needs and wants of congregational members), moral values and the promotion of cultural and spiritual respect across religions. There are two quotations from Moon (2012:1) that throw more light on the argument. The first one says: "I have seen that God can hit home runs with the broken bats of bad motives. But motives are monumental. Paul gives people a warning against using 'godliness' as a means to financial gain, and calls greed flat-out idolatry." The second says: "Having mixed motives isn't necessarily bad, nor is making a profit. Just don't call it a ministry. No matter how much good you do in a ministry, to make more money than a middle-class salary is to invite scandal."

According to Ratliff (2009:1-2), a man can develop a preaching ministry that is very popular, well-done with excellence, which seems so sound and good, and yet he is primarily motivated by secret desires to be a popular preacher. When he's driven by such motivation, the spiritual pricing is neglected while worldly gain is encouraged. What kind of stories did they tell? “This lady gave me an offering, and within two days she received R5000. If you want to prosper, give me an offering. If you want a miracle, give me an offering.” They will provide you with numerous examples of people who gave money and got a check in the mail. Peter said these false teachers were “experts in greed,” which means they are very good at picking out verses from the Scriptures and using those verses to convince people to give them money, which is the wealth gospel. They are also experts at taking large offerings. Peter says these preachers had “wandered” away from true Christianity and are deceiving people for the purpose of financial gain, the same as Balaam (The false prophet). He said they use “empty, boastful words,” in other words, they are liars (Khayelihle 2013:1).

RQ6 was posed in order to understand the conditions for a church (non-profit) organization to price its activities/services. Since it has been demystified that true spirituality is not concerned with either sales or profits. If payment is being offered for what should be accepted as a spiritual authoritative or salvation or to understand conditions where physical price can be identified. One of the respondents asserts that Jesus informed us to "Go into all the world and preach the Good News to everyone (Mark 16:15). Therefore, to effectively carry out this commission, television, radio, tapes, cinema, internet, tracts, books, etc., can accompany spiritual truth to convey the message to people. This may require monetary cost. In addition, one respondent adds that schools, colleges and seminaries owned by churches can also be given prices in terms of school fees/books/learner guides as long as the merchandize is honouring to God, at a fair price, and is not in violation of other laws (e.g., copyright laws). Some churches have bookstores in their buildings. Others have schools and they may sell textbooks or curricula to students. These can be good things

Based on another perspective, the study could argue that churches are only allowed to raise funds by voluntary contributions (Tithe and offering, in most cases). The bible establishes that “Let everyone give as he purposes in his heart, not grudgingly or of necessity; for God loves a cheerful giver” (11 Corinthians 9:7). The book of Deuteronomy 14:22-23 says, “Thou shalt truly tithe all the increase of thy seed that the field bringeth forth year by year. And thou shalt eat before the LORD thy God, in the place which he shall choose to place
his name there. These verses are also supported by the book of Malachi 3:10 which says: bring the whole tithe into the storehouse, that there may be food in my house. Test me in this,” says the Lord Almighty, “and see if I will not throw open the floodgates of heaven and pour out so much blessing that there will not be room enough to store it.

Table 2. The Promotional Items on offer by Church Organisations on Television. Selected Themes and Conceptual Contributions of use of Promotional Items on DSTV

<table>
<thead>
<tr>
<th>Sponsor</th>
<th>Thematic Contribution</th>
<th>Content Description</th>
<th>Media</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Redemption Ministry</td>
<td>Giving</td>
<td>Tithing, offering</td>
<td>RTM</td>
</tr>
<tr>
<td>2. Abundant Life Ministry</td>
<td>Free items</td>
<td>Pamphlets/bulletin/transportation</td>
<td>GNF TV</td>
</tr>
<tr>
<td>3. Emmanuel Ministry</td>
<td>Retailing/payment for spiritual items.</td>
<td>Spiritual water/spiritual images/objects/handkerchief</td>
<td>Emman TV</td>
</tr>
<tr>
<td>4. Breakthrough Ministry</td>
<td>Shopping</td>
<td>Online ordering (sms prayer request to 35278)</td>
<td>Break TV</td>
</tr>
<tr>
<td>5. Shalom Ministry</td>
<td>Commodityzation: consuming religion might be a new South African dream.</td>
<td>Spirituality to product</td>
<td>etv</td>
</tr>
<tr>
<td>6. Omega Fire Ministry</td>
<td>Buying and selling – Christianity is free but you must buy bible.</td>
<td>Books/Sunday school manuals, bible, CDs</td>
<td>Celebration TV</td>
</tr>
<tr>
<td>7. Rivers of Living Water Ministry</td>
<td>Service</td>
<td>Days of service per week – attendance/camp meetings</td>
<td>RLW TV</td>
</tr>
<tr>
<td>8. Forward in Faith Ministry</td>
<td>Spiritual cost</td>
<td>Fruit of the Spirit, having a good relationship, don’t manage relationship</td>
<td>Ezekiel TV</td>
</tr>
</tbody>
</table>

Table 2 gives an overview on the promotional offers by the church and how the themes and concepts differ from one denomination to another. In addition, the themes and the contents in the table describe the religious symbolism of each denomination. The first and the second commercials identified in the above table use positive theme of giving with the concept of tithe, offering and free items that congregants can have free access to. The third and the fourth commercials include retailing system of payment for spiritual or religious items. The fifth and the sixth commercials feature commoditization (consuming religion might be a new South African dream) and show the appropriate way of buying and selling (Christianity is free but you must buy bible). The seventh commercial refers to the time of services and suggests places where people can have access to spiritual products. The last commercial depicts a spiritual cost/price as the fruit of the Spirit, having a good relationship, and warns not to manage relationship with God.

Conclusions and Recommendations

This study explores some of the issues pertaining to pricing of the church (non-profit goods and services) and has indicated some complexity of the issues. Gray (2008:4) indicates that, in a profit organization, prices may have implications for client composition, adequacy of service reach, perception of organizational quality, efficacy of alternative funding sources, and, ultimately, for organizational survival. Pricing choices for non-profit should not be taken lightly and worthy of considerable thought, conversation, experimentation,
and evaluation. The purpose of this study is not to offer answers generally to non-profit problems, but rather to take a closer look at pricing issues and implications that might affect the missions of non-profit organizations (church in this regard).

The study is set off to establish that Jesus rebukes the people of His day for misusing this principle of making money, and for making His house an auction barn or place of merchandise. Matthew 21:12-13 says, “And Jesus went into the temple of God, and cast out all of them that sold and bought in the temple, and overthrew the tables of the moneychangers, and the seats of them that sold doves, And said unto them, It is written, My house shall be called the house of prayer; but ye have made it a den of thieves.” Therefore, the church is not a place to make or exchange money. The church is to be a place to praise God in song; in prayer; in preaching and teaching God’s Word; in free will offerings and tithes. Although this paper addressed most confronting pricing choices, it calls for both full-time and seasoned pastors not to compromise spiritual quality with materialism.

References


Psychological Dynamics in Microeconomic Cooperation: Self-Regulation, Social Distance and Individual Differences

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Abstract

The aim of this research was to investigate psychological dynamics, such as regulatory focus (Shah & Higgins, 1997) in economic research paradigms, like the ultimatum game and a one shot social dilemma game, to examine the interplay of social distance and individual differences. Experiment 1 (n=103) studied the impact of self regulatory focus (promotion vs. prevention), psychological predispositions, and prior behaviour (in the same game) for generosity in an ultimatum game with 100 NOK at stake. Experiment 2 (n=125) studied the impact of decreasing levels of social distance on cooperation in a one shot social dilemma with 250 NOK at stake. In the control condition all participants received 250 NOK (5x50), anonymously gave a proportion to common goods, which was doubled and then evenly shared between the participants. In three groups social distance varied, by having the participants -after their anonymous donation and before receiving their part of the common goods- either contemplate silently on what would be reasonable behaviour in such a game, and any transferability of the knowledge to society, or discuss with 5 out-group members (with whom they did not share the common goods, but who participated in the same experimental session in a different room) on reasonable behaviour and transferability, or discuss with their 5 in-group members (with whom they did share common goods) reasonable behaviour and transferability. Experiment 3 (n=100) studied perceived fairness in social dilemmas by asking participants to imagine having 250 NOK, reading the Experiment 2 instructions, and indicating how much would be reasonable to donate to common goods, the amount likely to be given by another participant and themselves. Experiment 4 (n=50) repeated the social dilemma game from Experiment 2, but used normative cues (“free riding” vs. give to the “community”) to signal that giving to the community was called for. Experiment 1 suggested that regulatory focus, NEOPIr (Neuroticism, Extraversion, Openness, Agreeableness or Conscientiousness), Dispositional Gratitude, Need for Affect and Consideration for future consequences were of minor importance for behaviour in the ultimatum game. The subjects showed a strong adherence to prior behaviour in the game. Experiment 2 showed that anticipated in-group discussions reduced cooperation (NOK 110) compared to no-discussions in the control group (NOK 157), out-group discussions (NOK 136) and contemplations (NOK 134). Experiment 3 showed that people expected others be more selfish (NOK 109) than themselves (NOK 134) in the social dilemma game with NOK 250 at stake, and that both would donate lower than what would be considered reasonable (NOK 171). Experiment 4 showed the power of evaluative terms, by reversing the selfishness created in the in-group discussion condition (NOK 168) of the social dilemma. These findings suggest that social proximity may decrease cooperation, questions the importance of individual differences for generosity and cooperativeness concerning money. Furthermore, our research stresses the importance of normative cues for reasonable behaviour within contexts which involve sharing of resources.

Keywords: cooperation, ultimatum game, self regulation theory, psychology
Country of Origin and Sales of Consumer Goods in Nigeria

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Abstract

With the current population of about 180 million people, Nigeria is one of the largest black nations that exist on the globe, where both local and foreign investors hustle to do business. This coupled with the current liberalization, the globalization of markets, advances in communication and transportation technologies have further exposed Nigerians to array of imported goods. This study adopted a survey approach to empirically examine the impact of country of origin on the sales of consumers’ goods in Nigeria. Convenience sampling and random sampling approach was used to select 200 respondents from 2 states in Nigeria. The research data were analyzed using descriptive and inferential statistics such as frequency counts, mean and one way analysis of variance (ANOVA). The results of the study revealed that the demand for foreign shoes by Nigerians is significantly higher than locally made shoes. More so, Nigerians associate higher price of imported shoes with superior quality. The paper is optimistic that with better value embedded in locally manufactured shoes, the country will not only develop a substitute for foreign shoes but in addition will mitigate youth unemployment and equally promote sustainability of Nigeria’s development.

Keywords: country of origin, sales, consumers, quality, goods
Dissecting International Business Decorum for Success

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Abstract

To gain a solid understanding of international business decorum, 28 questions representing the 5 areas of Introductions, Formality, Dining, Risk, Knowledge & Money and Religion are presented in the form of easy-to-reference charts. Featuring 20 specific researched countries, operational elements describing directions for arrival time schedule, attire, colors to avoid, gifts to avoid, gifts to bring, unlucky numbers, offering toasts, finishing all food on plate, hand motions, length of meetings and decision-making processes are analyzed. Endeavors to build relationships when conducting professional activities outside of the United States are described. How to integrate the laws of etiquette into international business, marketing, management, sales and/or hospitality courses to gain business savvy is reviewed.

Keywords: decorum, protocol, etiquette, international business
Using Partial Least Square – Structural Equation Model to Measure the Impact of Social Status on the Subjective Well-Being of the Chinese People in Hong Kong

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Abstract

Policymakers are interested in looking for ways to measure real socioeconomic progress. However, due to the differing contextual impact on well-being, there exists an opportunity to examine how context could play an important role in influencing psychosocial factors on overall subjective well-being. Despite rapidly rising income in the last five decades and attaining a relatively high standard of living, the majority of the Hong Kong people did not feel content with their lives. This exhibited certain parallels to the Easterlin paradox of the income and well-being relationship. A plausible explanation could be the sense of socioeconomic deprivation experienced by some of the Chinese people in Hong Kong due to their relative decline in social status and standard of living. The purpose of this study was therefore to explore whether certain psychosocial latent variables influence the overall subjective well-being of the Chinese people in Hong Kong, where social status is of particular importance. Partial Least Square - Structural Equation Modeling (PLS-SEM) was utilized to examine the subjective well-being of 302 Chinese people of working age in Hong Kong. Latent variables were created to reflect meaning in life, social support, social status, psychological well-being, economic well-being, health, and subjective well-being, as measured by self-reported ratings provided by the respondents within a survey. Correlates among each of the latent variables were tested. There were significant direct effects for all of the correlates tested, except for the correlate between economic well-being and health, which was not significant. Social support took the role of a mediator between economic well-being and psychological well-being. Surprisingly, social status failed to exert the same degree of influence as social support on psychological well-being and happiness. These results highlighted in addition to health, the importance of social support, economic well-being, and psychological well-being, to subjective well-being.

Keywords: partial least square structural equation model, social status, subjective well being
Global Warming: An Inconvenient Distraction

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Abstract

Most scientists agree that global warming, aka climate change, is a reality. However, the debate on whether or not there is a direct and significant relationship between concentrations of carbon in the atmosphere and increases in global surface temperatures remains heated. Much research has been focused around computer models that predict both rises in sea levels and temperatures over the next 100-200 years, related social and environmental impacts of what these changes might bring, preventative and mitigation measures that could/should be taken, and means by which we can frame the dialog so that populations will more likely embrace the required social changes many believe necessary to avoid predicted calamities. This paper encourages tabling the global warming debate, in large part, and focusing on the more immediate and very real concerns for developed and developing countries, including depletion of oil supplies over the next 30-40 years, and the consequential impact on world economies and societies. Necessary politically induced social behaviors and industrial directions to address and mitigate these considerably more immediate threats will have ancillary benefits for those fearing global warming.

Keywords: environmental, framing, global, warming, energy, oil
The Effects of Volatilities on the Economic Growth: A Case Study of Emerging Countries

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Abstract

In this paper the effects of the volatilities of selected variables on the emerging countries’ economic growth were examined by panel data analysis. As indicators of volatilities real exchange, interest and inflation rates were considered and all data was obtained from World Bank database. Volatilities of the variables were calculated by standard deviations methods and separate panel data models were generated for each volatilities variable. Stationary properties of the data were checked by first and second generation unit root tests and co-integration between the variables was analyzed. There are several crucial results were acquired from the paper and all of them were discussed.

Keywords: volatilities, economic growth; panel data analysis
Evaluation of Social Structure and Tourism in Agricultural Communities

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Abstract

The community concept can be evaluated as a major factor to understand attitude of any locals to any extension area such as tourism. This situation refers community’s dilemma to new development ideas because of its managerial organization, tradition income sources and subsistence economic structure such as agriculture, trade etc. At this point it seems important to investigate the perceptual and social resistance of local communities to the tourism development for economic diversification. The main purpose of this paper is to analyze the approach of local people to tourism idea in Çelikhan where is one of the intensive agricultural and also potential tourism district of Adıyaman. In parallel with this situation, detailed opinions of regional actors have been received and utilized for social inference and evaluation. The emerging results show that, locals in Çelikhan approach cautiously to the tourism phenomenon because of basic problems of social, managerial and collaboration as well as traditional livelihood activities such as agriculture.

Keywords: community, tourism, social structure, agricultural communities, çelikhan

Introduction

Social approach to the tourism is related to how tourism affects the local communities (Eshliki & Kaboudi, 2012). On the other hand it should be regarded that sense of ownership of locals to alternative sources such as nature, climate and flora is an important factor for tourism-led development (Aref & Redzuan, 2008). But noted that, to provide better understanding of the community-tourism relationship it must be clarified that which tourism practices contributes to a community’s livelihood (Matarrita-Cascante, 2010). In this sense understanding the social structure of locals to any alternative development instrument is a key determinant of regional future (Ballestero & Ramirez, 2007). Understanding respective communities especially in agricultural regions can be evaluated more complex issue in regard to integration of tourism and existing economic structure (Iorio & Corsale, 2010).

Because of the main objective of this paper, the district of Çelikhan that is located in the north of the Adıyaman is considered as the case study. Çelikhan is well-known with its tobacco fields. The district is also famous with its nature and plateaus located on high altitude (www.celikhan.gov.tr). In this respect it may be claimed that, there are significant potential of tourism development in Çelikhan.
**Research Area**
The district of Çelikhan is located on high and rugged terrain. According to the general census taken in 2013, its population is 15387 (TUİK, 2013). Many locals in Çelikhan make a living from agriculture and livestock breeding but the majority is involved in the tobacco manufacturing. In addition to this narrow majority of locals live off tourism (www.celikhan.gov.tr). At this point when we contextualize the tourism and agriculture concerning local perspective, it seems that locals have a distant attitude to tourism idea economically and also culturally. But admittedly, it is acceptable as a conventional situation for all Adıyaman community (Çorbacı & Çalışkan, 2014). When we discussed the issue in the sense of traditional feature of Adıyaman, it is seen that common nonchalance to tourism idea dominates on locals. It is argued here, not to say there is no achievement motive but has not been revealed yet.

When viewed from tourism, Çelikhan can be determined as one of the important potential tourism region of Adıyaman. Thus it may be argued that tourism is an alternative factor for local economy in addition to tobacco manufacturing. Based upon the potential, regional activity components of tourism can be summarized as follow (ADTMP, 2014): Plateau Tourism; Mountain-Springs Trip Possibilities, Landscape Beauty / Photo Safari; Line Fishing; Winter Sports Potential; Hunting; Village Markets, and Pedestrian Excursion Possibilities.

Above all, it can be said that the basic factor of the given items is nature Tourism. Çelikhan has an important position in terms of different tourism activities with its natural scenery, fresh air and water resources. Depending on the changing tourism concept, nature tourism is seen as result of the returning to the nature. Indeed, factors like landscapes, plateaus at high fields, the natural environment and rich local culture are attracting more attention of tourists in today's world (Bekdemir & Özdemir, 2002; Ünlü, 2004). That's why Çelikhan has an important meaning for tourism development.

**Methodology**
This paper based on literature review and also regional actors opinions. In this context both literature and regional actors' approaches were used in this research. Regional actors were consisting of local journalists, academicians and local authorities. As a result of study, suggestions have been developed to understanding roots of social attitude to the tourism and also strengthen the relation between tourism and agriculture community in Çelikhan within the context of managerial and stakeholder collaboration.

**Results and Discussions**
This study is related with existing predominant situation of community and also managerial structure regarding the tourism. Depending on regional actors and literature view, some important barriers of regional level stands out. These are classified as: Geography, Perception/Culture, Economy, Education, Natural Sources, Collaboration, and Supportive Components (see Table 1).
Table 1. Barrier Levels of Çelikhan

<table>
<thead>
<tr>
<th>Barrier Levels</th>
<th>State</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Geography</td>
<td>Transportation Problem, Geographical location</td>
<td>Transportation and substructure facilities are not sufficient. Therefore transportation from city center to the district is an ongoing problem that is part of a substantial problem of both regional and tourism development. On the other hand, district is located on rugged and high terrain. This situation poses a natural obstacle of development in terms of regional investments. Locals in Çelikhan are dominated by the idea that tourism damages the local culture. In this sense it may be claimed that society keeps aloof from tourism idea. This is the obstacle of tourism development as an effective variable. Majority in Çelikhan community is involved in the tobacco manufacturing. It refers that the district has substance economy and accustomed livelihood. There is lack of awareness of the local people in tourism because of insufficient training support. There are different natural resources of the Çelikhan. However, these are cannot be adequately assessed in the tourism context. It is observed that there is insufficient collaboration among stakeholders although regional stakeholders gather in periodical to brainstorming. It is one of the most important issues that Çelikhan is not got enough investment support from the outside.</td>
</tr>
<tr>
<td>Perception/Culture</td>
<td>Problematic of Cultural Degeneration, Acting With Deliberation</td>
<td></td>
</tr>
<tr>
<td>Economy</td>
<td>Subsistence Economy</td>
<td></td>
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<tr>
<td>Education</td>
<td>Lack of Education</td>
<td></td>
</tr>
<tr>
<td>Natural Sources</td>
<td>Ineffective Usage of Natural Sources Regarding Tourism Range.</td>
<td></td>
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<tr>
<td>Collaboration</td>
<td>Lack of Collaboration</td>
<td></td>
</tr>
<tr>
<td>Supportive Components</td>
<td>Insufficient Support to the Region Related to Investments</td>
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When looking at the results, some critical suggestions are noteworthy. These suggestions are as follows:

- Transportation and substructure facilities are not sufficient in Çelikhan. Transportation to the district needs to be strengthened. On the other hand it is seen as essentialness that infrastructure projects must be developed and implemented to meet basic service requirements.

- It is observed that there is insufficient collaboration among stakeholders. Within this context both local government and stakeholder groups must make an effort to raise awareness of tourism idea and then support the entrepreneurship for generating supply for regional tourism. The critical question regarding frame of the collaborating is distribution of roles in the related bodies that is crucial in determining development process.

- Locals in Çelikhan are dominated by the idea that tourism damages the local culture. In this context, it is necessary to increase social awareness as part of tourism benefits. In other words locals must be convinced of the economic benefits of tourism (Çorbacı & Çalışkan, 2014).

- Majority in Çelikhan community is involved in agriculture and tobacco manufacturing in particular. This may means that economic character of region may cause to dependency of a single source. Due to this reason, agricultural production can be utilized for nature-based tourism within the source integration.
Educational level in Çelikhan is not insufficient as part of tourism. In fact well-educated person is a key element to improvement of any developmental process. Local people in Çelikhan should be trained in the direction of tourism. For example young population in locals should be trained to be knowledgeable and qualified employee.

- There are different natural resources of the Çelikhan. Natural sources should be classified by the type of regional usage assessment.

- It is observed that Çelikhan is not got enough investment support from the outside. And this is predicted as one of the tangible regional barriers. This may be related to the high infrastructure cost because of topography. Therefore investors must be encouraged and subsidised by the local government. At the same time the natural resources of the region should be introduced to investors to make it attraction center.

It should be noted the above given suggestions regarding general social profile of Çelikhan is not enough to clarify the understanding of social attitude of locals to the tourism. But as it is seen, there are basic problems of social, managerial and collaboration in Çelikhan based on cause effect relationship. At this point, education issue stands out as an important element that makes it easier to achieve regional evolution. Because of that, it is regarded necessary to long-term development planning including tourism that ranges from society to managerial level. It is likely that Çelikhan society has the feature of compatible social structure within integration of tourism, economy and established culture. But it is necessary to increase the social desire and also locals need to be encouraged by all levels of stakeholder groups (Çorbacı & Çalışkan, 2014).

References


Employer Liability for Using Social Media in Hiring Decisions

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Abstract

With the availability of so much personal information about potential employees on social media sites, it’s not surprising that businesses avail themselves of it when determining who to hire. Personal information that was confidential or unknown to employers is now commonly available and easily accessed by anyone with a computer and an interest in checking out potential work colleagues. Human resource departments can’t prevent people from conducting a Google search on a prospective job candidate or accessing the candidate’s Facebook page if it is publicly available. Companies therefore have a much more difficult time controlling the hiring process to ensure that only legitimate criteria are being used by employees when making hiring decisions. If information gathered from social media sites concerns a candidate’s membership in a legally protected class (i.e. race, religion, gender identification) and appears to be the basis for disqualifying a job candidate, there is the potential for a lawsuit. This paper will discuss how the use of information gathered from social media in the hiring process may subject a business to legal liability. It will also identify measures that may be taken to reduce the potential for such liability under both state and federal law.

Keywords: social media, hiring decisions, employer liability, personal information, privacy, protected class

Introduction

Social media includes, but is not limited to, personal websites, email, blogs, chat rooms and bulletin boards. It also includes social networks, such as Facebook, Flickr, Google Plus, LinkedIn, MySpace, Pinterest and Twitter as well as video sharing sites such as YouTube. However, Cavico, Mujitaba, Muffler and Samuel (2013) caution, “Given the popularity, prevalence, sophistication, and ever-growing use of social media, it is no surprise its use in an employment context raises many difficult, as well as novel, legal and practical issues” (p. 26). One area that results in significant risk of legal liability is the use of social media in determining who to hire. With the prevalence of publicly available information about people on the Internet, it is almost irresistible for some employees to look for information about a person they know will be interviewing for a job with their company or organization. If these employees are part of the decision making group and they share information they gather from such sources with other members of the group, a job candidate who is not hired may claim it was the sharing of inappropriate information that cost them the job. The use of information about a person’s protected class status in hiring decisions is illegal. Preventing this type of situation has become an increasing...
challenge for professionals in the human resources field. The following review of legal precedent and best practices may provide assistance to these professionals.

**Social Media Defined**

Social media are often described as electronic communication that occurs in online communities where users share ideas, information, personal messages, pictures and videos. Cavico et al., (2013) explain, “Social media, very generally, consists of web-based Internet networks where users can share information and communicate with others in a collective manner” (Cavico, p. 26).

Widespread access to the Internet on computers and mobile devices has helped social media develop and grow and although it was originally used as a form of personal connection and communication, its reach into the business world has expanded greatly. Businesses of all shapes and sizes have recognized the ability of social media not only to dispense information, but also to gather it. Information about an individual that was previously kept private and difficult to discover can now be easily obtained from Facebook, LinkedIn, and Twitter.

**Facebook**

Facebook, a social networking site, was founded in 2004. It was originally created to connect students at Harvard University, but it quickly expanded to include students at other universities. In 2006, it became open to anyone over the age of 13. A free platform, the main purpose of Facebook these days is to help individuals communicate instantly with friends and family, allowing people to hold conversations and share photos, stories and videos. As the most popular social media site, it has over one billion users and grows daily. Users often post personal information concerning their political beliefs, membership in social organizations and religious affiliation.

Connecting with others on the Facebook system or “friending” is an important part of the user experience. Users can also “like” community pages, which consist of company pages, brand pages, social groups, celebrity pages, and more. Anyone allowed to access someone’s Facebook page can view their conversations, see their photographs and see what organizations they “like.”

**LinkedIn**

LinkedIn is an online business network that was created in 2003 to connect professionals and to provide advertising, marketing and job search opportunities. Free to users, the site includes executives from every Fortune 500 company as well as university employees, aspiring professionals and others. With over 300 million members, it is the world’s largest professional network and can be used to help strengthen existing business networks and grow new ones. Users generate a profile based on their job history, experiences, education, etc. Once a profile has been created, users are invited to connect with people they know, which in turns puts them in contact with other people they may know, thus allowing all users to be “linked in” to one another. LinkedIn users can search for jobs, follow professional organizations and follow businesses or individuals. All of this information
feeds into their home page which allows users to find relevant information about their job field. It also allows potential employers to view all of the user’s information.

**Twitter**

Twitter is a real-time information network that was founded in 2006. It is a free online information network that allows a user to broadcast 140-character messages. These messages are called “tweets.” A user sends a “tweet” and all other Twitter users that have subscribed to that user (or “follows” the user) can see their messages. Twitter users can customize their profile picture, header, and link color. These customizations then transfer to their own individualized home feed. This feed filters tweets chronologically from all of the users a person “follows.” When someone chooses to follow a user, their “tweets” appear in the user’s newsfeed.

Twitter users also have the ability to interact and tweet at one another using their individual handles, which is shown as the name following the @ symbol (i.e. @DeepakChopra). When a follower uses someone’s handle in a message, the person is notified through their Twitter account. Users have the ability to make their profile private or public. A private profile means only people the user approves can read their posts. A public profile means that all users can see a person’s posts and interact with them. Business Twitter accounts are always public to encourage connections with individuals and communities outside of normal contacts. Although a “tweet” can be removed after it is posted, it cannot be deleted from the accounts of those who have already viewed it.

**Social Media Use**

Today, social media is a significant part of the marketing plan for large and small businesses. Organizations use social media for public and customer relations, consumer education, branding and engagement with consumers, promotion of their platforms and recruitment of employees.

Not only has social media transformed the way companies conduct their business, it has also transformed the way many of them conduct their hiring. For example, LinkedIn is often used by individuals and businesses as a way to discover good job prospects. Unfortunately, social media may also be used by employers to discover information job applicants don’t want employers to know about them. The instantaneous aspect of social media means people can say things publicly before thinking them through. Once an offensive remark or incriminating photograph or video has been tweeted or posted, it can be seen by a lot of people and cause significant damage before it is removed. Sometimes, the subject of an unflattering post is not even aware of it. Furthermore, damaging and incriminatory posts often remain online in some form even after a user believes they have been deleted. As a result, a resourceful prospective employer may discover a post and use the information as part of the decision making process. When this happens, serious legal problems may result if used by a company in the hiring process.

**Legal Implications**

Social media has significantly altered the way companies recruit employees. Sites such as LinkedIn are designed to provide a wealth of recruitment opportunities. They bring
recruiters to candidates and candidates to potential employers. The use of ‘social media vetting’ has become commonplace with recruiters and employers using it as a tool to determine the suitability of prospective job candidates. In 2011, 91 percent of U.S. recruiters surveyed admitted to using social networking sites to screen applicants. This screening practice has been taken even further by some employers who require candidates to befriend third parties on Facebook or demand the applicant’s login information during interviews in order to gain full access to view their accounts (Eills, 2015).

Although most people are aware of how the posting of party photos or a politically incorrect statement can hurt their job prospects, the use of social media to snoop on job applicants also has serious pitfalls for employers and hiring managers. Employers can run afoul of anti-discrimination laws if their social media searches result in them not hiring someone from a protected class of workers (Sunnucks, 2014).

The Chicago-based staffing firm Challenger, Gray & Christmas, Inc. (“Employers checking,” 2014) found that 60 percent of human resource professionals looked at job seekers’ Facebook, Instagram and Twitter pages. However, only 6 percent of those hiring managers were willing to admit that an applicant’s social media activity significantly impacted their hiring decision; 40 percent, though, said it had some impact. If even a single disgruntled job applicant from one of these companies sued claiming they were not hired because of the illegal consideration of information gleaned from a social media site, it could cost the company hundreds of thousands of dollars - and convincing a court that the information gleaned from their social media perusing was not used in the hiring process can be extremely difficult. After all, why was the information sought if it was not intended to be used?

The use of social media in the hiring process has two major legal problems. The first involves the misuse of personal information to discriminate against individuals who are a member of a legally protected class. Both federal civil rights acts and state statutes prohibit discriminating against a person in employment because of their race, religion, ethnic origin and, increasingly, gender identification or sexual preference. For most jobs this information is intentionally omitted from the employment application process in order to avoid legal problems. But if an employer or its agents want to find out such information about a prospective employee, it is often readily available from an applicant’s Facebook page or LinkedIn profile. Yes, users may omit personal information from their social media accounts or restrict access to it, but many people do not - especially since they assume it will only be used by their friends or close associates.

The case of Gaskell v. Univ. of Kentucky (Bally, 2014), illustrates what can happen when an employer uses information gathered from social media as part of the hiring process. Dr. Martin Gaskell was an astronomer who applied for a job as the director of the observatory at the University of Kentucky. During Dr. Gaskell’s job interview, the chairman of the Physics and Astronomy Department stated that he had researched Dr. Gaskell’s religious beliefs (online) and that they might be unacceptable to the dean of the department. The information he obtained showed that Gaskell was an outspoken critic of evolution and a believer of the intelligent design viewpoint. After someone who believed in evolution was
hired for the position, Dr. Gaskell sued the university claiming that its conduct violated his rights under the Civil Rights Act because the university discriminated against him based on his religious beliefs. During the ensuing investigation, it was also learned that another employee within the department had sent an email to the chairman concerning an Internet search that she had conducted on Dr. Gaskell. In it, she too discussed his anti-evolution religious beliefs. The court agreed that this information provided Dr. Gaskell with enough evidence to pursue a lawsuit to determine whether his religious beliefs were, in fact, illegally used to deny him the position sought. The case was eventually settled before going to trial, but not before it cost the university a great deal of money and negative press.

EEOC, FTC and NLRB Rulings
In addition to worrying about lawsuits from individuals, the second legal issue employers need to consider is that the Equal Employment Opportunity Commission (EEOC) has become very active in scrutinizing employers’ hiring practices and in filing cases when it determines an employer’s hiring practices improperly include the use of social media. In a public workshop held by the Federal Trade Commission (2014), Carol Miaskoff, a representative of the EEOC, stated that the implications of employers’ use of social media to screen potential employees puts employers in a vulnerable position. She further explained that even if employers just glance at applicants’ profiles on social media, they are exposed to a “plethora of information about protected statuses,” (p. 206) such as race, gender, sexual orientation, or disability. Because the use of social media in recruitment and hiring only violates the law in specific circumstances, however, she stressed the importance of detailed recordkeeping that can protect employers. She also stated that the EEOC is now pushing “the kind of recordkeeping that can facilitate verification” (p. 197).

Whereas the EEOC is tasked with examining companies’ hiring practices, the National Labor Relations Board (NLRB) is the agency that enforces the National Labor Relations Act, which protects union related activities. Although the NLRB has interpreted the Act as allowing the researching of applicants through social media, it cautions employers that doing so may pose significant legal risk. If an unsuccessful job applicant can establish that a prospective employer had knowledge of their protected union activity through viewing their social media, the prospective employer may face liability if the applicant alleges they were denied employment because of it. The employer may be found liable unless it can show that it would not have hired the applicant regardless of its knowledge of the activity. This is a difficult position to be in and it is hard to prove, especially since the NLRB will impute a supervisor’s knowledge about an applicant to the decision-maker (Morsilli, Ronen & Bloom, 2014).

Even when the individual making hiring decisions does not review an applicant’s social media activity, the employer may still be subject to liability since the NLRB has “a pretty liberal” standard for “imputed knowledge.” During a panel discussion held on November 27, 2014 (Nestor & Verma, 2014), EEOC Commissioner Chai Feldblum offered an example where an employer learns protected medical information about a job candidate and there is evidence that the person doing the hiring used that protected information to make an employment decision, “bingo, then you do have a violation” (para. 2).
The NLRB has also repeatedly struck down provisions of employers’ social media policies and reversed employer discipline of employees where it has been based on employees’ personal social media activity. According to the Board, these employers violated Section 7 of the National Labor Relations Act (NLRA) by implementing policies that interfered with an employee’s right to discuss the terms and conditions of their employment or by disciplining employees for exercising that right in social media. Other NLRB decisions have held that if employers allow employees to use corporate social media platforms for non-business purposes, it will impose the same restrictions on employers that it has applied to their employees’ personal social media activity. Meaning, without carefully drafted policies or terms of use, employers run the risk that corporate-sponsored social media sites could be subverted for employees’ complaints about the terms and conditions of their employment. A recent NLRB report illustrates the application of a well-established principle of labor law - that employers may not implement policies, including social media policies - that could reasonably be understood by employees to prohibit them from discussing their terms and conditions of employment for the purpose of their mutual aid and protection (Gordon, 2014).

State Laws
In 2012, media reports about employers requiring access to a job applicant’s social media site as a hiring condition created a frenzy of public outrage and threats of legal action by Facebook. In response to the uproar, many states began enacting social media password protection laws (“Social media’s impact,” 2013). Currently, there are 28 states that have passed or are proposing laws that prohibit potential and current employers from demanding, and using someone’s passwords to access their private social media accounts (“Employer access,” 2014).

The states that prohibit this practice are: Arkansas, California, Colorado, Illinois, Maryland, Michigan, New Jersey, New Mexico, Nevada, Oregon, Tennessee, Utah, Washington, and Wisconsin. Although the content of the laws vary, each prohibits employers from asking potential or current employees for their passwords giving access to personal online content. There is an exception to this in most of these laws in instances where the employer can show a strong business need such as when conducting a workplace investigation into illegal conduct or for conduct that violates company policy (Gordon & Hwang, 2014).

Although the practice of demanding online passwords is waning, it is still used by some who insist on accessing a job applicant’s social media to see what kind of activities they participate in or what kind of things they “like.” Increasingly, however, not only are employers legally prohibited from forcing an applicant to give them access to this personal information, even if they gain it legitimately, the potential for misuse and resulting lawsuits make taking proactive measures to reduce legal liability essential.

How Companies Limit Their Legal Liability
By now it should be clear that employers must be extremely careful with how they collect and use data about job applicants found on social media. Savvy employers not only need to have a policy regarding the use or non-use of social media data in the hiring process,
they must also make sure all their employees are trained on this issue, especially those employees participating in the hiring process (Federal Trade Commission, 2014).

If, despite the dangers, an employer still insists on reviewing a job applicant’s social media profile, one key way to avoid the legal risks of doing so is to obtain the written consent from the job applicant beforehand – and then, only gather information from the social media site that is legally permissible to consider when hiring. Employers should also keep a detailed record of all information used in the recruitment process.

If an employer plans on consulting social media, in-person interviews should be conducted before researching the candidate online so that those persons conducting the interview don’t risk asking improper questions based on information learned through an online search. Once the applicant’s permission has been obtained, someone who is not the employment decision maker should conduct the search and review their social media information. This creates a shield between the person conducting the social media search and the person making the employment-related decision. An employer may also choose to hire a third party to conduct background checks of potential employees, including searches of public information on social media sites, but it should also be noted that federal laws such as the Fair Credit Reporting Act (FCRA) may become relevant depending on the third party source used to conduct the social media search (D’Andrea, 2014).

It is also a good idea to provide the non-decision making investigator with a form containing only legal, pre-defined criteria for hiring decisions. The person conducting the investigation should be instructed that no additional information may be included on the form to insure that information regarding protected class status is not disclosed to the employer or decision maker.

When deciding whether to use social media, employers should research every job candidate’s online profile or none at all. This is because conducting a social media background check on some candidates and not on others may lead to discrimination claims. All records associated with hiring decisions, including computer printouts of social media sites reviewed, should always be retained.

Finally, when drafting employee policies, employers should avoid using overbroad or vague language such as “inappropriate,” “unprofessional,” or “disparaging,” unless specific examples are provided. Also, avoid terms such as “non-public” or “confidential” without the use of limiting language because employees may reasonably construe it to limit discussions about working conditions (which may offend the NLRB). Avoid broad prohibitions against the use of an employer’s logo or trademark because it could be construed to prohibit non-commercial use under NLRA activities such as in leaflets or picket signs. Similarly, avoid broad prohibitions against photographing or videotaping the workplace as it could be interpreted to prevent employees from using social media to share information regarding employees engaging in protected concerted activity such as picketing. When implementing policies, carefully consider the reasons for disciplining or terminating an employee who has posted offensive statements online (“Social media’s,”
Finally, all hiring decisions must be done in a way that avoids violating any federal, state or local law.

**Conclusion**

Rita Kittle, a Senior Trial Attorney in the EEOC’s Denver Field Office warned that the increased effort by employers to access private social media communications may have a chilling effect on persons seeking to exercise their rights under federal anti-discrimination laws (Equal Employment Opportunity Commission, 2014). Their research found that not only does the use of social media by employers subject them to the possibility of serious legal liability when used to screen potential employees, it also has a chilling effect on their ability to hire good employees. Researchers at North Carolina State University (NCSU) (Kashmira, 2014) tested the activity of 175 Facebook users, and in addition to surveying whether they had desirable personality traits that employers want, (such as conscientiousness, being agreeable, and being an extrovert), they also examined how these job seekers reacted to the screening practice whereby employers examined social media for evidence of ‘undesirable’ habits such as drinking and taking drugs to help them reject candidates. According to NCSU professor Lori Foster Thompson, “…there is no significant correlation between conscientiousness and an individual’s willingness to post content on Facebook about alcohol or drug use” (Kashmira, 2014, para. 6) The study’s authors also concluded that “companies are eliminating some conscientious job applicants based on erroneous assumptions regarding what social media behavior tells us about the applicants” (para. 7). Professor Thompson said, “when you think about the fact that top talent usually has a lot of choices as to where they want to go to work, it begins to really matter” (para. 9).

There appear to be many reasons for limiting or avoiding using social media information when considering a job applicant and not very many reasons that support it. Still, if an employer insists on using it, there are ways to limit the potential for legal liability when doing so. However, regardless of whether an employer chooses to use it or not, everyone should have a policy for its use or non-use. Once created, all employees within the organization should be made aware of the policy and the importance of compliance.

**References**


Employers checking your social media, but will it hurt your chances? (2014, May). Retrieved February 10, 2015 from https://challengeratwork.wordpress.com/2014/05/13/employers-checking-your-social-media-but-will-it-hurt-your-chances/


Quo Vadis Auditing in Turkey?

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Abstract

The study is aimed at dealing with the current status of accounting and auditing profession in Turkey. Recent issues and applications with regard to the statutory audits in Turkey will be examined in detail. Related problems and solutions will also be discussed from a broad perspective of the professional standards.

Keywords: auditing, auditing in Turkey, accounting in Turkey

Introduction

Turkey has had a booming economic growth in the last decade, reaching an 820.21 bn. USD of GDP in 2013, up from 230 bn. USD in 2002. By the same token, national income per capita in Turkey has tripled over the aforementioned years, rising from 3,311 to 10,946 in US Dollars. Turkey is currently the seventeenth largest economy in the world and seventh largest in Europe. As such, Turkey is the fastest growing economy in Europe with a growth rate of 9.2 per cent in 2010, 8.5 per cent in 2011, and 4.0 per cent in 2013 respectively. Annual GDP Growth Rate in Turkey is averaged to 3.95 per cent over the period from 1999 to 2014. As one of the top 10 emerging markets globally, Turkey is also a member country of G20.

Turkey's economic structure is a complex mix of modern industry and commerce along with a traditional agriculture sector that still accounts for approximately 30% of the national employment. It has a financially strong and rapidly growing private sector. The private sector also accounts for over 80 per cent of Turkey’s economy, including a significant contribution from small and medium-sized enterprises (SMEs). It is ultimately the private sector with all its components that will lead to stable growth rates in the trade and investment figures. The private enterprises in Turkey were predominantly family-controlled, relying on private sources of finance (including family-owned banks) rather than capital markets. According to the official figures of Ministry of Customs and Trade Bulletin there were 94,828 Joint Stock Companies and 713,861 Limited Liability Companies nationwide in June 2014 where a number of these companies are subject to statutory independent audit.

Turkey is a candidate country to join the European Union (EU). Turkey’s slow but continuous movement towards being granted a full membership status in the EU has created great momentum to adopt European business regulations and standards in the country. Turkey has already adopted the International Standards on Auditing (ISA) and the International Financial Reporting Standards (IFRS) for the audits of consolidated financial statements of all stock exchange listed companies whose shares and securities are publicly...
traded. Turkey still has a complex and challenging market requiring adaptability and persistence.

This article is aimed at dealing with the current status of accounting and auditing profession in Turkey. Recent issues and applications with regard to the statutory audits in Turkey will be examined in great detail. Related problems and solutions will also be discussed from a broad perspective of the professional standards.

**History of the Audit Profession Worldwide**

Anthropologists have found some records that are considered the first signs relating to auditing activities ever discovered as a proof of systematically performed audits during the Early Babylonian period. The first auditor’s statement was put into use in 1289. The use of the term ‘control’ was discovered in some of the major civilization centres such as Venice, Milan, and Florence and in the 13th century. The first organization of auditors was established in Venice in 1581. The practise of modern audit and control activities began with the establishment of the modern trading entities during the Industrial Revolution. (Saglam, 2014, p..)

Independent (external) auditing profession has emerged in the UK. In 1880, through the merger of five local accounting communities, Institute of Chartered Accountants in England and Wales (ICAEW) have been established as the oldest professional body for the profession. In 1900, an act was issued to introduce limited liability companies with external audit requirements, to be performed by Chartered Accountants in the UK. The United States was enacted in 1934, the Capital Markets Law (Securities Exchange Act), enforcing public-listed companies to periodically publish their audited financial statements, assuring the importance of external audit.

In 1936, a professional committee within the AICPA (American Institute of Certified Public Accountants) started to focus on the ‘Analysis of Financial Statements by Independent Public Accountants’. The SEC was initially given the authority for the promulgation of accounting standards as well as auditors’ oversight functions. To assist the SEC so as to assure that the financial reports had been created in accordance with the Generally Accepted Accounting Principles (GAAP), public accounting firms were eventually required to provide a certain level of assurance about the financial information audited. Later, the AICPA issued the Statement on Auditing Procedure (SAP) No. 1 in October 1939 requiring the auditors to inspect the auditees’ inventories and to confirm their trade receivables and payables externally. Consequently, external auditors became responsible for carrying out the audit procedures independently, rather than simply relying upon the client management’s verification routines. Following this enforcement, inspection and observation based auditing practise has become the norm for the profession. Even as the computer-based accounting information systems began to appear in use during the 1950s, manual auditing procedures continued to be practised exclusively. (Byrnes, P. and others, 2012, p. 2-3).

In 1978, the Auditing Standards Board (ASB) was formed to be in charge with the interpretation of the Generally Accepted Auditing Standards (GAAS) in the US. The ASB
is now a sub-committee within the AICPA which assumes the responsibility to set the ground rules for auditors in order to determine on whether the information reported in the financial statements is reasonable and complies with the GAAP.

The International Auditing and Assurance Standards Board (IAASB) were founded in March, 1978. In 2003, the International Federation of Accountants (IFAC) approved a series of reforms designed to further strengthen its standard-setting processes, including those of the IAASB, so that the standards have been more responsive to the public interest (http://www.ifac.org/auditing-assurance/about-iaasb). IAASB is an independent standard-setting body that serves the public interest by setting high-quality international standards for auditing, quality control, review exercises, and other related attestation services which are aimed at facilitating the convergence of global and national standards implemented in all parts of the world. By doing so, the IAASB does enhance both the quality and the uniformity of professional practice throughout the world and does strengthen public confidence in auditing and assurance profession globally.

The International Standards on Auditing (ISAs) are professional standards for the performance of audits of the financial information. These standards are issued by IFAC to the public through the IAASB.

**A Brief History of Accounting Practise in Turkey**

Until the current situation, Turkey’s accounting and auditing system have undergone significant evolutions. The developments in accounting and auditing system have been summarized below.

Merdiven (Stairs) method for bookkeeping was used by the Ottomans between 14th and 19th century and was developed by the ones who wanted to shorten the procedure of bookkeeping. Ottomans and Seljuk used siyakat writing (Kitab-us-Siyaqat) and numbers in their records. In Seljuk and especially Ottoman records, siyakat writing based on Arabic alphabet was used. (Saglam, 2014, p. 6-7) The book constitutes accounting examples. Math and calculation rules are the first parts of its content, and then it is followed by registration procedures and rules. Afterwards, state’s financial structure and layout of the accounting books are introduced with examples. Mainly, layouts of the accounting books consist of ruznamçe (daily book) and evarece (ledger). The reason for that was all the records were presented within those books. (KGK, p. 47)

The first Commercial Code of 1850 was a translation of the French influence of the era. This law formed the first accounting regulation in Turkey. After the foundation of the Republic, Commercial Code that was revised in 1926 and the books were classified under two main headings as Optional Books and Compulsory Books. The commercial books under the heading Optional Books were defined as Ledger, Cash Book, Draft Book, Promissory Notes Book, Book for Merchandise and Goods and Invoice Book. These books were not subject to any attestation. The efforts to adapt to double-entry system during the first years of the Republic were simultaneous with transition to Republic and establishment of Republic’s institutes. This code was based on the German commerce and company laws that also regulated the accounting practices. (KGK, p. 47)
The General Accounting Law No. 1050 was adopted in 1927 for governmental accounting. The Law established an accounting system for the administrations with the general and annexed budgets, with the purpose of recording and reporting mainly the results of the budget applications, somewhat outside the accounting logic, structurally. This law regulated the accounting system in government and private sector and the accountants did not affect much.

Legal regulations affected the century were made between the years 1926 – 1930. This important development was conducted with the acceptance of three important tax laws (Income Tax Law of 1926, Excise Duty Law of 1927, Consuming Tax Law of 1930). Taxes were conducted with declaration statements. This situation made double entry method and financial auditing practices important. Commercial state enterprises were established between the years 1930 and 1940, which brought forward subjects like, tax based accounting practices, tax auditing and education of accountants. It is observed that accounting profession started to be used in big cities at the end of 1930s. (Güvemli, O. and others p. 2,)

In 1930’s attempts were made to create a general accounting plan for the accounting applications of state economic enterprises (SEEs), but it failed. The decade of 1950–1960 marks the first attempts towards a more liberal economy. The Tax Procedure Law (TPL, in 1950 and the new Commercial Code of 1956 came into effect, following contemporary economic developments. In 1960, a start was made to constitute a uniform accounting system to be used in SEEs that guided the development of commerce, industry and accounting. Furthermore, due to the provisions in TPL for enterprises covering the determination of the tax base, as well as provisions on accounting, record keeping, documentation principles and financial statements, and the existence of effective sanctions in case of failure to comply with these provisions, accounting practices, have been carried out for the purpose of determination of the tax base. (Balsari, K. B., 2014, p. 374) The economic system has been heavily influenced by the US system. Furthermore, the US influence was also felt in the curriculum of the business schools, especially in the field of business administration and accounting.

The Capital Market Law No. 2499 was put into effect in 1981 to prepare the grounds for establishing capital markets. The Law of Istanbul Stock Exchange (IMKB) enacted in 1984, but full operations started in 1986, and the increase in foreign investments advanced the development of the accounting and auditing standards.

In 1993, the Ministry of Finance published the Communiqué of Accounting System Implementation (Turkish National GAAP), which establishes the accounting principles and the uniform chart of accounts. This Communiqué was prepared by the academics and is generally consistent with the 4th Directive numbered 78/660/EEC. All entities other than banks and other financial institutions in Turkey have been keeping their account books and prepare their financial statements exactly in the form defined by the account headings and codes in the uniform chart of accounts since 1993. This system is required for all enterprises
keeping books on the basis of Balance Sheet both in the private and public sector. (KGK, 2014, p. 51)

On November 15, 2003, the Capital Markets Board of Turkey, shortly referred to as SPK, issued Communiqué X1/25, effective from January 1, 2005, which is intended to cover all extant IAS, IFRS and IFRIC interpretations and to close the existing differences between SPK requirements and IFRS. Communiqué X1/25 is required in respect of all listed companies, intermediaries, and their subsidiaries and associates. Other publicly-held companies are not subject to Communiqué X1/25. Outside the scope of regulations of the SPK, tax laws have been effective in accounting practices and accounting has been practiced for the purpose of correct determination of the tax base rather than for providing relevant financial information.

In September 2008 the SPK issued Communiqué Serial: XI, No: 29 on the “Principles Regarding Financial reporting in Capital Markets”. Through this legislation, listed companies, intermediary institutions and portfolio management companies are obliged to prepare their financial statements in accordance with IFRS as adopted by the European Union.

In order to cease ambiguity relating to accounting and financial reporting and meet qualified financial information needs of the companies Turkish Accounting Standards Board (TASB) was established at 1999 Law No: 4487, as public legal entity with administrative and financial autonomy, to develop and publish accounting standards to setting accounting standards fully compliant with International Financial Reporting Standards (IFRS). (Gucenme, U., 2011, p. 112)

TASB followed the principle of the official translation procedure set out by the IFAC. Within the scope license agreements with IASB, TASB published Turkish Accounting Standards TAS in the Official Gazette and necessary updates were made by reflecting the amendments in IFRSs immediately. After the establishment of TASB, related organizations put TAS into practice by superseding their accounting by-laws and communiqués.

With the globalization of capital markets and the increased volume of international investments, companies operating in Turkey needed to provide high quality financial information to access financial resources. Furthermore, internationally accepted and reliable financial information is also needed for the overseas customers of the domestic companies. Another reason facilitating the need for IFRS is Turkey’s candidacy for European Union membership. (KGK, p. 53) Laws and regulations associated with accounting practices in Turkey are in parallel with EU legislations. In this context, in the Turkish Commercial Code published in 2012, all companies have become obligatory to apply accounting rules set by Public Oversight, Accounting and Auditing Standards Board of Turkey, shortly known as KGK, is authorized to determine scope of the application of Turkish Accounting Standards (TAS), which SHOULD fully comply with IFRS. In line with EU practices, KGK has made mandatory to apply TAS for public interest entities and some large-scale companies. Other entities, which do not have to apply TAS in their
financial statement, are using Uniform Chart of Accounts, which is generally in compliance with the accounting directives of EU.

As seen above each agency (SPK, the tax authorities etc.) developed its own accounting & auditing requirements.

The most important development about IFRS in Turkey is the Turkish Commercial Code (TCC) numbered 6102, which was issued in 2011 and it broaden the application scope of IFRS and made the TASB sole authority for setting accounting standards. However, in order to ensure more effective accounting, auditing and public oversight system, Public Oversight, Accounting and Auditing Standards Authority (KGK) has been established in November 2011 and TASB has been superseded.

The KGK was established by the KGK’s Organization and Responsibilities Decree Law numbered 660, issued on 2 November 2011. The KGK has the authority to:

- set and issue Turkish Accounting Standards compliant with international accounting standards;
- to ensure uniformity, high quality and confidence in statutory audits;
- set the auditing standards;
- authorise independent auditors and independent audit firms; and
- inspect their audits, and perform public oversight in the field of statutory audits.

All big companies and companies under control of SPK regulations have to present their legal and consolidated financial statements in accordance with TAS as adopted by the KGK. TAS is based on, and corresponds to, IFRS.

41 Turkish Accounting/Financial Reporting Standards (TAS/TFRS) and 22 TAS/TFRS Interpretations which are in full compliance with IFRSs have been published in the Official Gazette and they are amended regularly in parallel with the amendments made in IFRSs. Currently, listed companies and capital market institutions; banks, leasing, factoring and financing companies; insurance, reinsurance companies and pension companies have been applying TFRSs. (IMN, 2014). Certain companies are required to apply the IFRS within this framework, TAS/TFRS published by the KGK.

As seen above, accounting practices for informing the public have been put on the agenda in Turkey by the regulations of the KGK. Outside the scope of regulations of the KGK, tax laws have been effective in accounting practices and accounting has been practiced for the purpose of correct determination of the tax base rather than for providing relevant financial information. Failure to ensure a standardization covering all companies in accounting practice has led to the preparation of more than one financial statement for a single enterprise such as the “commercial statement” prepared in accordance with the TCC, the “financial statement” prepared in accordance with the tax laws, and the statement prepared in line with the KGK’s requirements. Additionally as seen above financial accounting is heavily influenced by tax provisions. In fact financial statements must meet the tax authorities.
Within the framework of SPK’s “Communiqué on Public Disclosure Platform (PDP)”, all information and documents to be publicly disclosed must be sent to the PDP “Communiqué on Principles Regarding Financial Reporting in Capital Markets” regulates the procedures regarding the preparation and disclosure of financial reports at PDP. PDP is an electronic system through which electronically signed notifications required by the capital markets and Borsa Istanbul regulations are publicly disclosed. The system is operated and managed by Investor Services and PDP Department on a 7/24 basis. The system covers over 600 companies, 17 exchange traded funds, 479 mutual funds, 236 pension funds and 2,600 users all over Turkey. (www.kap.gov.tr).

International investors and credit rating agencies assess the overall transparency and disclosure levels of Turkey’s top companies as “unsatisfactory” and, in general, bankers do not feel they can “trust” the financial statements presented by prospective borrowers due to rampant “informality problems.” (World Bank p. 5)

**Accounting Profession in Turkey**

There is a well-established accountancy profession with a clearly defined organizational structure in Turkey, which dates back to the nineteenth century. (World Bank, ROSC p.10) The accounting profession had occurred in big cities in 1930s. There were some initiative in the government to accept a law for accounting profession, but it was failed. The first Turkish civil society association had established in the area of accounting in 1942 by academics, and state supervisory bodies of a group of senior managers. This association was transformed into Expert Accountants Association of Turkey in 1967. (KGK, p. 49, Arikan, Y., p. 4)

The Union of Certified Public Accountants and Sworn in Certified Public Accountants of Turkey (TURMOB) was established by the Law numbered 3568 in 1989. (Arikan, Y., p.4) The Law primarily applies to the private sector with the objective of providing effective and reliable accountancy and audit services in Turkey and sets the qualifications that should be possessed to be a member of the profession and the organizational setup of the profession. Accountancy services are a regulated activity in Turkey. Law 3568 stratified the profession as seen at table: 1 in Turkey into three groups with different educational requirements for licensing and specific allowed activities for each group:

- Independent Accountant, (IA) of which there are currently 11.080, may provide bookkeeping services; prepare financial statements and tax declarations. They cannot conduct any audits. This profession is closed to new entrants to the amendment made in the law no 5786 at 26.07.2008
- Certified Public Accountant, (CPA), numbering 80.117, may conduct general audits but not tax audits and provide consulting services in addition to all the services provided by IAs.
- Sworn-in Certified Public Accountant. (Sworn-in CPA), numbering 4.394, may conduct tax audits and “certify” the tax financial statements and tax returns in addition to all the services provided by CPAs except bookkeeping. Sworn-in CPAs have joint responsibility with the audited company for errors and misstatements in the financial statements they have certified.
Table 1: Numbers of Profession in Turkey

<table>
<thead>
<tr>
<th>Professional Title</th>
<th>Total</th>
<th>Male</th>
<th>Female</th>
<th>Dependent</th>
<th>Independent</th>
</tr>
</thead>
<tbody>
<tr>
<td>IA</td>
<td>11,080</td>
<td>9,201</td>
<td>1,879</td>
<td>5,780</td>
<td>5,300</td>
</tr>
<tr>
<td>CPA</td>
<td>80,117</td>
<td>58,026</td>
<td>22,091</td>
<td>36,094</td>
<td>44,033</td>
</tr>
<tr>
<td>Sworn-in CPA</td>
<td>4,394</td>
<td>4,075</td>
<td>319</td>
<td>2,066</td>
<td>2,328</td>
</tr>
<tr>
<td>TOTAL</td>
<td>95,591</td>
<td>71,302</td>
<td>24,289</td>
<td>43,940</td>
<td>51,661</td>
</tr>
</tbody>
</table>

Source: Türmob

As seen at the table 43,940 the professional members (dependent) are working in public practice and others in commerce and industry, academia and governmental institutions and 24,289 of them is female.

The Law specifies that admission is compulsory in order to conduct the profession and besides the aforementioned general requirements, these three categories of members of profession are required to have acquired some specific educational and practical training qualifications and be successful in the relevant admission examinations. TÜRMOB’s Education and Training Centre (TESMER) was founded in 1992 to develop educational programs for improving and maintaining the professional competencies of its members, to develop and implement the practical experience programs to support the pre-qualification training and to ensure the training, supervision and the proficiency test for the qualified intermediate staff.

After having at least 10 years of work experience as a certified public accountant and being successful in the proficiency examinations conducted by TÜRMOB, a CPA is awarded a license for "Sworn-in Certified Public Accountancy". Sworn-in certified public accountants do not compile ledgers but besides the functions carried out by certified public accountants, they are authorized to approve financial and tax statements with an authority quite comparable with what is possessed by the public officials of the Revenues Directorate of the Ministry of Finance.

Turkey has a strong tradition of accountancy education and training. However, given the complexities of IFRS, ISA, and the requirements of the acquis, the profession will need to undergo expanded education and training. (World Bank, ROSC, p.12) Each semester approximately 15,000 candidates’ entre the examination to enter the Certified Public Accountant and the success rate are 15%. TÜRMOB operate in 3 annual exams.

An CPA license requires that candidates (i) have at least a BA or post-graduate degree in Law, Economics, Business Administration, Accounting, Banking, Public Administration or Political Science; (ii) pass the initial entry exam for the CPA program; (iii) have three years’ practical experience under supervision or control of either an CPA or a Sworn-in CPA; (iv) pass the professional CPA exams; and (v) finally are certified as an CPA by TÜRMOB. The Sworn-in CPA license requirements are (i) 10 years of work experience as a CPA, (ii) successful completion of a further set of exams conducted by TÜRMOB, and (iii) certification as a Sworn-in CPA by TÜRMOB.

According the 3568 law, the subjects of the profession of CPA comprise the following services rendered to enterprises and business; to keep books; prepare the balance sheets,
profit and loss statements, tax returns and other relevant documents in compliance with generally accepted accounting principles and the provisions of the relevant legislation, to establish and improve accounting systems, to analyses and audit etc.

Accountants in Turkey usually do the work required by tax laws and social security law and it takes the majority of their time. Each month, they prepare VAT return, withholding tax return, social security declarations for the enterprises to give governmental authorities. That is the majority of their jobs. In addition, they give an income / corporation tax declarations in every three months for the enterprises. Therefore they do not have enough time to prepare reports for the business owner.

**External Auditing in Turkey**

Independent auditing in Turkey began with the establishment of SPK in 1982, which developed its own standards of external auditing for companies listed on the ISE. (SPK of Turkey 2012 annual report, p.6) The Law of Istanbul Stock Exchange (IMKB – now BIST) enacted in 1984, but full operations started in 1986, and the increase in foreign investments advanced the development of the accounting and auditing standards. Increase in joint ventures and foreign trade led to the establishment of offices of the ‘Big Eight’ accounting firms in Turkey. As a result of these developments, large private enterprises started to report their financial statements in accordance with the IASs and national reporting requirements. With the formation of the capital markets in Turkey in 1980s, financial statements began to be audited and disclosed according to the IASs although the commercial books were kept by tax basis. According SPK at capital market financial all companies’ statements are required by the Board to undergo independent audits required to be drawn up and disclosed to the public within the framework of SPK regulations are subject to independent audits.

The first comprehensive regulation concerning the auditing in capital markets was made by SPK and “the Regulations on External Auditing in Capital Market” entered into force 1987. Moreover, basic principles and rules related with auditing were arranged with Communiqués entered into force in 1987 and 1988.

In 2006, a communiqué Serial: X, No: 22 on independent auditing standards in the capital market was prepared by SPK in accordance with ISAs. (SPK Report, 2012, p. 89) The purpose of this Communiqué was to establish the standards, principles and methods criterion for the audit firms that will conduct statutory audits in the capital markets and may oversight activities of those firms and SPK shall report the results of quality control reviews and inspection activities. This was the most comprehensive regulation on auditing in Turkey.

The SPK issued some additional regulations in the area of independent auditing after the global scandals in the United States and European Union. The SPK regulations have some similarities to the Sarbanes Oxley Act, such as restricting other services from auditing activities, a compulsory rotation period for audit partners and a requirement for an internal audit committee. (United Nations, Review 2012)
With respect to independent audit liability, listed companies are subject to the principles to which companies whose capital market instruments carry similar features and/or are traded on the same market/platform of the stock exchange are subject. Financial statements must be independently audited in accordance with the principles envisaged by the ISA. Independent audit shall be carried out by the independent auditors listed in the Board’s authorized organizations. The Board may request that a statement is made to the effect that features including quality control, recruitment, training, and so forth are in harmony with those of the companies included in the Board’s list, for approval.

Application of those standards is required to be audited by independent audit firms according to the related regulations. Besides a team of experts has been assigned to do revision of financial reports on a risk basis and required precautions are taken for those entities which breach standards and related regulations.

In Turkey, several agencies and institutions, in particular SPK and Banking Regulation and Supervision Agency (BDDK) made regulations in this field and this situation led to a fragmented structure in the field of independent audit. These authorities include; Banking Regulation and Supervision Agency (BDDK) for banks and all financial institutions except for insurance companies, Turkish Treasury for insurance companies, SPK for listed companies and Energy Market Regulatory Authority (EPDK) for energy companies. BDDK was established as the authority that is responsible for the regulation and supervision of banking system in Turkey. Then BDDK became the authority over the inspection of statutory auditors within banking sector. Auditing of the banks is considered as regulated through based on Banking Law No. 5411. Articles 15, 33 and 39 of the Banking Law (2005) require that the financial statements submitted to the shareholders should be audited by an independent audit firm approved by the BDDK. BDDK may set additional criterion for the audit firms that will conduct statutory audits in the banking sector and may oversight activities of those firms and BDDK shall report the results of quality control reviews and inspection activities to the KGK.

Auditing of insurance sector was executed by the Undersecretariat of Treasury within the framework of the provisions of “Regulations on Auditing of Insurance and Reassurance Companies by External Audit Firms” of the Ministry of State. Article 39 of the Insurance Audit Law No. 7397 states that practitioners, individuals and firms are required to be approved by the State Treasury in order to conduct audits at insurance companies. The detailed requirements for approval to conduct independent audits of insurance companies are outlined in the Regulation on “Conduct of Independent Audit in Insurance and Reinsurance Companies” and in the Regulation on “Principles Applicable to Independent Audit of Insurance Companies” dated September 2003.

Auditing of activities and financial statements of entities operating in energy market was regulated by “Regulations on Auditing of Real and Legal Entities Operating in Energy Market by Audit Firms” and related Communiqués of the Energy Market Regulatory Authority.
Audited organizations and numbers are given in the table below at Capital Market of Turkey between 2004-2014.

Table 2: Audited organizations in Turkey

<table>
<thead>
<tr>
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</thead>
<tbody>
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<td>Intermediaries</td>
<td>154</td>
<td>149</td>
<td>145</td>
<td>145</td>
<td>144</td>
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<td>140</td>
<td>141</td>
<td>141</td>
<td>140</td>
<td></td>
</tr>
<tr>
<td>Public Companies</td>
<td>591</td>
<td>588</td>
<td>561</td>
<td>575</td>
<td>529</td>
<td>499</td>
<td>512</td>
<td>575</td>
<td>553</td>
<td>557</td>
<td>534</td>
</tr>
<tr>
<td>Investment Trusts</td>
<td>34</td>
<td>37</td>
<td>43</td>
<td>48</td>
<td>50</td>
<td>49</td>
<td>54</td>
<td>53</td>
<td>47</td>
<td>48</td>
<td>54</td>
</tr>
<tr>
<td>Investment Funds</td>
<td>381</td>
<td>434</td>
<td>451</td>
<td>461</td>
<td>541</td>
<td>523</td>
<td>695</td>
<td>757</td>
<td>781</td>
<td>743</td>
<td>746</td>
</tr>
<tr>
<td>Pension company</td>
<td>11</td>
<td>11</td>
<td>11</td>
<td>11</td>
<td>12</td>
<td>13</td>
<td>15</td>
<td>18</td>
<td>17</td>
<td>19</td>
<td></td>
</tr>
<tr>
<td>Real Estate Appraisal Companies</td>
<td>0</td>
<td>0</td>
<td>13</td>
<td>26</td>
<td>50</td>
<td>63</td>
<td>82</td>
<td>113</td>
<td>123</td>
<td>130</td>
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<td>Portfolio Management Companies</td>
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<td>19</td>
<td>18</td>
<td>19</td>
<td>23</td>
<td>23</td>
<td>28</td>
<td>31</td>
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<tr>
<td>Rating Agencies</td>
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<td>5</td>
<td>7</td>
<td>8</td>
<td>8</td>
<td>9</td>
<td>9</td>
<td>10</td>
<td>10</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1193</td>
<td>1243</td>
<td>1249</td>
<td>1293</td>
<td>1349</td>
<td>1323</td>
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<td>1693</td>
<td>1708</td>
<td>1686</td>
<td>1673</td>
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<tr>
<td>Independent Auditing Firms</td>
<td>83</td>
<td>91</td>
<td>94</td>
<td>98</td>
<td>97</td>
<td>95</td>
<td>92</td>
<td>92</td>
<td>92</td>
<td>92</td>
<td>93</td>
</tr>
</tbody>
</table>

Source: SPK and own calculations.

At 2014 total 588 Public Companies (including investment trusts) are 422 Companies listed on the BIST and 166 Companies Non-Listed on the BIST. Total 746 of Investment Funds are Securities Mutual Funds 268, Pension Mutual Funds 247, Exchange Traded Funds 18, Hedge Funds 36, Foreign Mutual Funds 84, Protected Funds 76 and Guaranteed Funds 17. Total 140 of Intermediaries are Intermediary Institutions 98 and Banks 42. Total 54 of Investment Trusts are Securities Investment Trusts 11, Real Estate Investment Trust 31 and Venture Capital Investment Trust 12.

An incomplete audit in Turkey is the way tax audits. The Tax Procedural Code requires tax-based financial statements to be audited by a Sworn-in CPA if the company exceeds one of the two following size thresholds: a total balance sheet of TRY 5,799,000, and net annual turnover of TRY 11,594,000. Upon discovery of an error or fraud in the financial statements, the Sworn-in CPA is required to recommend that the error or fraud be corrected. If the company refuses to correct the error or fraud, the Sworn-in CPA is required to inform the relevant Governmental agency(ies). Tax audits are heavily relied upon by the Revenues Administration (RA) when conducted by Sworn-in CPA. This conclusion is supported by the fact that Sworn-in CPAs are the only professionals who can certify financial statements prepared according to the UCA and the Tax Procedural Law, for large companies. While companies audited by a Sworn-in CPA are not exempt from tax inspections, there has been no precedent of inspections of such firms to date.

Table 3: Sworn-in CPA Limits

<table>
<thead>
<tr>
<th>Limits (TRY)</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total balance sheet</td>
<td>5,176,000</td>
<td>5,580,000</td>
<td>5,799,000</td>
</tr>
<tr>
<td>Annual Turnover</td>
<td>10,349,000</td>
<td>11,156,000</td>
<td>11,594,000</td>
</tr>
</tbody>
</table>

There are many differences between an audit required for tax purposes and a general purpose audit performed according to ISA in Turkey.

New Auditing Framework of Turkey

Establishment of the KGK is a very important achievement for Turkey. An audit shall be carried out only by certificate auditors or audit firms, which are approved by the KGK.
KGK approves and registers auditors and audit firms. As of December 2014, 10,525 members of the profession (CPAs have 15 years’ experience and Sworn-in CPAs) that have 40 hours education certification from universities that approved by KGK have been approved as auditors. The CPAs that have less than 15 years’ experience can participate KGK auditor exam.

Approval of audit firms is subject to the KGK decision. As of December 2014, 138 audit firms have been approved and registered by the KGK. 92 of them had already been registered by SPK according to the regulations that were in force before 2012.

According to List No: I of the Article 397 KGK’s Organization and Responsibilities Decree Law No. 660, the following companies are also subject to statutory audit, Companies under control of Capital Markets Board of Turkey regulations, Companies under control of Banking Regulation and Supervision Agency regulations, Insurance, reinsurance and pension companies that are regulated by the law of individual retirement savings and investment plan and law of insurance, Institutions authorised by the Istanbul Gold Exchange and allowed to operate as a member; precious metals intermediary institutions; joint-stock companies engaged in the production or trade of precious metals, Companies licensed for warehousing of agricultural products established as a joint-stock company according to legislation on licensed warehousing of agricultural products, Companies established as a joint-stock company in accordance with provisions of the law of public malls and Media companies that are owners of national terrestrial satellite and cable television.

In addition above companies, all limited liability companies that meet any two of the following three criteria (issued by Council of Ministries yearly) for two consecutive years are within the scope of mandatory statutory audit, which triggers IFRS application:

- Total assets: TL 75 million (approximately US$ 35 million) or more.
- Revenue: TL 150 million (approximately US$ 70 million) or more.
- Average number of employees: 250 or more.

In case of at least two of three criteria mentioned in above decision consecutively exceed their limits in two accounting period, and then the companies will be subject to statutory audit from the subsequent accounting period. As to the determination of whether these criteria are met for current year, the financial statements for last 2 years shall be taken into account regarding total assets and annual net sales revenue. Average number of employees for past 2 years shall be taken into account regarding the number of employees.

That all companies have an annual audit by an independent auditor licensed in accordance with the TAS issued by the KGK. These audits must be carried out in accordance with Turkish Auditing Standards issued by the KGK. Turkish Auditing Standards is based on, and corresponds to, ISA. KGK also has an objective to publish accounting standards that are fully complied with IFRS. However, the Authority must achieve this compliance in parallel with EU’s adoption method of IFRSs because of Turkey’s harmonization policy with EU acquis.
Total number of audited organisations and companies are given in the below. In 2013 total 4.186 and in 2014 5.173 are on statutory audit.

Table 4: Audited Organisation and Companies by Years

<table>
<thead>
<tr>
<th></th>
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<th></th>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Companies under control of SPK</td>
<td>1193</td>
<td>1243</td>
<td>1249</td>
<td>1293</td>
<td>1349</td>
<td>1323</td>
<td>1537</td>
<td>1693</td>
<td>1708</td>
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<td>1673</td>
</tr>
<tr>
<td>Companies under KGK regulations</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
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<td>Total</td>
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<td>1243</td>
<td>1249</td>
<td>1293</td>
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<td>Independent Auditing Firms</td>
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<td>91</td>
<td>94</td>
<td>98</td>
<td>97</td>
<td>95</td>
<td>92</td>
<td>92</td>
<td>103</td>
<td>138</td>
<td></td>
</tr>
</tbody>
</table>

Source: SPK, KGK, own calculation

In 2014 statutory audited companies pays 77% of total corporate tax in Turkey. Until 2016 the number of audited companies will be around 12,000 because of Turkey’s harmonization policy with EU acquis and they will pay 99% of total corporate tax. (Seyyit Ahmet Bas, 2014).

94.828 Joint Stock Companies has become obligatory audit with TCC published in 2012. This is a kind of limited audit (like International Standard on Review Engagements (ISRE) 2400, “Engagements to Review Financial Statements”). Ministry of Customs and Trade is going to prepare an audit communiqué for 94.828 Joint Stock Company and certain cooperatives. They have not prepared the communiqué yet and without the regulations have made joint stock companies unsupervised.

Additionally there is one more external auditing for corporations is done by Ministry of Costume and Commerce auditors according to the existing Bylaw on the Auditing of Corporations, to verify the accuracy and correctness of the financial statements. These audits are a new type of external auditing in Turkey that compromise all process of General Assemblies, management boards and transactions including inventory and financial statements at the companies.

TCC and TAS are current significant topics for the accounting profession. Furthermore, the accounting education provides a basis for the implementations in public and private sector. Besides, one of the intentions of TCC and TAS is to foster transparency. (Kizil, p: 71)

Conclusions

Accounting and auditing professions have a strong relationship with each other all around the world and it is also the fact in Turkey. Under the status quo in Turkey, TAS is fully harmonized with IFRSs and Turkish Standards on Auditing have been published in compliance with ISA.

There are significant differences between tax accounting and TAS in Turkey. Audited companies are preparing two separate financial statements. In Turkey tax laws have been effective in accounting practices and accounting has been practiced for the purpose of correct determination of the tax base rather than for providing relevant financial information. Failure to ensure a standardization covering all companies in accounting practice has led to the preparation of more than one financial statement for a single
enterprise such as the “commercial statement” prepared in accordance with the TCC, the “financial statement” prepared in accordance with the tax laws, and the statement prepared in line with the KGK’s requirements. The difference must eliminate in near future.

There are two different independent auditing practises for companies in Turkey, fist is obligatory audit over the Limits of Decision of Ministers and second is limited audit for others Joint Stock Company which is regulated TCC. According the TCC, Ministry of Customs and Trade is going to prepare a communiqué (audit regulation) for the Joint Stock Company that under the limit that audit by CPA/ Sworn –in CPA or certificate auditors. The criteria for this kind of audit are not known yet.

In parallel to the improvements on accounting and auditing in Turkey, there is a strong need to improve the capacity of the accounting and audit profession in order to enhance the quality of audited financial statements and promote public trust. The genuine understanding and adoption of these new accounting and auditing requirements requires related education and training for preparers, auditors, and regulators. There must be a greater focus towards the needs of general purpose financial reporting. In this regard, it is essential to enhance the capacity of existing accountants as well as ensure the capacity of future accountants.

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The Effects of Visual Attention on Purchase Intentions

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Abstract

Although consumer behavior research has investigated impulsive buying behavior since the early 1950s, relatively few studies explored the relationship between visual attention and impulsive buying behavior. The present study sets consumer purchase decisions as a function of not only product attributes, but also individuals’ buying impulsiveness scores and visual attention to product attributes. Specifically, we investigated the moderation effects of eye gaze metrics on the relationship between buying impulsiveness and ornamental plant consumers’ purchase intentions. Impulsive buying behavior, which is defined as “a sudden, often powerful and persistent urge to buy something immediately,” contributes to the U.S. retail industry by an estimated over $4 billion in annual sales. To the best of our knowledge, the extent to which impulse buying, triggered by emotional rather than rational decisions, contributes to the ornamental plant sales has not been investigated. To address this shortcoming, the present study integrates eye tracking technology and conjoint analysis to better understand individuals purchase intentions. In order to incorporate consumers’ visual attention into the choice experiment, eye tracking equipment was used to record experiment participants’ eye gaze patterns when viewing plant choice scenarios on a computer screen. The results showed that impulsive buying scores were negatively related to purchase decisions, and that eye gaze duration moderated that relationship, depending on the type of the display/information viewed (e.g., price vs. production methods signs). Theoretical contributions to choice behavior literature and implications for retail marketing are discussed.

Keywords: shopping behaviour, gaze pattern, impulsive buying, in-store marketing
Relationship between Sustainable Development Indices and Economic Growth: Evidence from Developing Countries

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Abstract

Sustainable development makes real the increasing level of welfare and economic growth permanently, with its tripedal structure which includes economic, social and environmental dimensions. In this framework, sustainability development indices, which are the indicators of sustainable development, plays a vital role while switching a resilient-environmental growth process. This paper examines relationship between sustainable development indices and economic growth. For this purpose, seven developing countries’ sustainable development indices, which are released during 1990-2013 period for HDI, GS and during 2002-2013 period for EPI, will be used in advanced panel data analyses. In the econometric analysis, cross-sectional dependence is tested by a LM test; existence of the unit root is tested by first and second generation panel unit root tests. Then cointegration between sustainable development indices and economic growth variables is tested by a panel technique that takes into account cross-sectional dependence and structural break. In addition to, PMG (pooled mean group) and MG (mean group) based on panel ARDL (Autoregressive distributed lag) test is used for estimating the long term coefficient. As a consequence of the econometric analyses, it is concluded that sustainable development indices have a positive effect on economic growth.

Keywords: sustainable development, economic growth, developing countries, panel data analyses

Introduction

Since mid-1960s Earth started to giving alerts about environment and the concept of “environment” has been evolved at a global scale thenceforth. At first, the fact that Earth’s ecosystem is fragile became evident and then the other fact appeared which human beings is have been contributing much to degenerate the fragile ecosystem. Neo-classical economic theory focuses under the controlled conditions maximizing social benefits with analyzing alternative action patterns benefits and costs. According to this situation’ lots of subject which includes sustainability seems as “exteriority” and government has the responsibility of these exteriorities (Benn and Dunphy, 2007:50). Furthermore, theories in economics literature make proposal that problems like unemployment, inequality in income distribution, poverty and ecocide will be solved by itself when the economic growth target is achieved. However, when the targeted economic growth has been achieved, everything got worse. Inequality in income distribution has dramatically
increased large mass has become impoverished and ecode which effects environment that 
environment will not be able to growth in long term. Moreover, besides these problems 
alternative cost has been raised i.e. broken social inclusion. So these problems required to 
show up in new growth and development understanding. After these years, social 
development did not just limited with economic progression. It is decided that it should 
include environment and needs of next generations as well. In Meadows et al. (1972) 
“Limits to Growth”, which is published by Club of Rome, first comprehensive warning 
had been made. According to this warning economic and environmental activity should 
take part in development policies. After this point, while countries were trying to increase 
its citizenships’ life quality, they also started to consider protecting the environment for the 
sake of future generations. This conscious created a new concept. The name of the concept 
is "Sustainable Development". This concept stated to use at World Conservation Strategy: 
Living Resource Conservation for Sustainable Development report; but the most striking 
development has been achieved in Brundtland Report. In Brundtland Report sustainability 
defined as “development which meets the needs of the present without compromising the 
ability of future generations to meet their own needs” (WCED,1987: 43). This is the most 
quoted definition of this concept and its two central tenets are:

i “The concept of ‘need’ in particular the essential needs of the world’s poor, to 
which overriding priority should be given” and

ii “The idea of limitations imposed by the state of technology and social organization 
on the environment’s ability to meet present and future needs” (WCED, 
1987:43).

Economic growth occurs when real output increases over time. Sustainable economic 
growth means a rate of growth that can be maintained without creating other significant 
economic problems, especially for future generations (Higson, 2011: 51).

In Brundtland Report, it is implied that depletion of environmental resources is caused by 
poverty-driven which is made by developing countries; while pollution of biosphere is 
caused by consumption-driven policy which is made by developed countries. According to 
this opinion, poor are the responsible for degradation of forests, wetlands, rangelands and 
coastal zones to meet their basic needs, and the rich discharge disproportionate quantities 
of waste as emissions to air and water (WCED, 1987:14). However, recent studies show 
that an empirical relationship between per capita income and certain indicators of 
environmental quality that, on the surface at least, seems to tell the opposite story (Perrings 
and Ansuategi, 2000; Arrow et al., 1995). The paper aims to examine the relationship 
between sustainable development and economic growth in developing countries by using 
sustainable development indices. The data of HDI and GS was covered between 1990 and 
2012; while the data of EPI was covered between 2002 and 2013.

**Sustainable Development Indices:**

Indicators and composite indicators are known as a useful tool for policy making and public 
communication in conveying information on countries’ performance in fields such as 
environment, economy, society or technological development (Singh et al., 2009:191). 
Defining indicators is not an easy thing to do. The literature is quite confusing about this 
issue. Gallopin (2001) provides a comprehensive analysis of various definitions, and
demonstrates that an indicator has been defined as “variable”, “parameter”, “measure”, “statistical measure”, “a proxy for a measure”, and “a sub-index”, among others (Vesela and Ellenbecker, 2001:520-521). Indicators typically provide key information about a physical, social or economic system. They allow analysis of trends and cause-and-effect relationships, and thus are a step beyond primary data, which information is going to be used and how it will be used in practice guide the selection of a particular indicator (Farrell and Hart, 1998:5-6). Major advantage of any sustainability indicator is its ability to show changes over time. So, indicator-based sustainability assessment needs to address its historic development, as well as its possible continuation into the future or relevant “early warnings” of emerging threats to sustainability to evaluate the usefulness of the indicator for the assessment of whether society is on its way toward a sustainable development path. A classical type of sustainability analysis is to apply energy intensities to illustrate how energy production and consumption varies over time in different societies and in different environments (Garnasjordet et al., 2012:329).

Indicators, that are going to be used in methodology, are Human Development Index (HDI), Environmental Performance Index (EPI) and Genuine Savings Indicator (GSI). All of the indices that are going to be used composite indicators (Garnasjordet, 2012; Singh et al. 2009; Blum et al., 2013). Composite indicators are an innovative approach to evaluating sustainable development (Singh et al., 2009:197). In Table 1 summarizes advantages and disadvantages.

Table 1: The pros and cons of composite indicators

<table>
<thead>
<tr>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Summarize complex or multi-dimensional issues in view of supporting decision-makers.</td>
<td>May send misleading policy messages if they are poorly constructed or misinterpreted</td>
</tr>
<tr>
<td>Easier to interpret than trying to find a trend in many separate indicators.</td>
<td>May invite simplistic policy conclusions</td>
</tr>
<tr>
<td>Facilitate the task of ranking countries on complex issues in a benchmarking exercise.</td>
<td>May be misused, if the construction process is not transparent and lacks sound statistical or conceptual principles</td>
</tr>
<tr>
<td>Assess progress of countries over time on complex issues.</td>
<td>The selection of indicators and weights could be the target of political challenge</td>
</tr>
<tr>
<td>Reduce the size of a set of indicators or include more information within the existing size limit.</td>
<td>May disguise serious failings in some dimensions and increase the difficulty of identifying proper remedial action</td>
</tr>
<tr>
<td>Place issues of country performance and progress at the center of the policy arena.</td>
<td>May lead to inappropriate policies if dimensions of performance that are difficult to measure are ignored.</td>
</tr>
<tr>
<td>Facilitate communication with general public and promote accountability</td>
<td></td>
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</tbody>
</table>

Resources: Saisana and Tarantola, 2002: 5.

Human Development Index (HDI):

Human Development Index (HDI) was developed by United Nations Development Program in 1990 (Stanton, 2007:3). The HDI was created to emphasize that people and their capabilities should be the ultimate criteria for assessing the development of a country, not economic growth alone. The HDI is a summary measure of average achievement in key dimensions of human development; along and healthy life, being knowledgeable and
have a decent standard of living (UNDP, 2014:1). The three base components of the HDI are:

   a) Life expectancy at birth
   b) Adult literacy rate (with two-thirds weight) and the combined primary, secondary and tertiary gross enrolment ratio (with one-third weight)
   c) GDP per capita (PPP US$)

HDI differs from other social indicators in two ways. First is education which is measured by literacy rate. Data for literacy rate is measured by mean of years of schooling for children of school entering age. Second is health measured by the life expectation. While calculating HDI, UNDP uses a minimum value of 20 years and maximum value of 85 years (UNDP, 2014:1). Moreover, HDI links these two data with a more economic indicator; average per capita income (Spangenberg ve Bonniot, 1998:7). The indices are formulated based on minimum and maximum values (goal posts) for each indicator and performance in each dimension is expressed as a value between 0 and 1 (Human Development Report, 2013:2).

![HDI Framework](Resource:
Human Development Report, 2013:1

**Environmental Performance Index (EPI):**

Environmental Performance Index (EPI) ranks how well countries perform on high-priority environmental issues in two broad policy areas: protection of human health from environmental harm and protection of ecosystems. Within these two policy objectives the EPI scores country performance in nine issue areas comprised of 20 indicators. Indicators in the EPI measure how close countries are to meeting internationally established targets or, in the absence of agreed-upon targets, how they compare relative to the best performing countries (EPI, 2014: 13).
Genuine Savings / Adjusted Net Savings:

Adjusted Net Savings is developed by The World Bank, which measure the true rate of saving in an economy after taking into account investments in human capital, depletion of natural resources and damages caused by pollution. Adjusted net savings, is also informally known as genuine saving, is an indicator that aims to assess an economy’s sustainability based on the concepts of extended national accounts (The World Bank, 2012: 1). Adjusted net savings seeks to offer policymakers who have committed their countries to a “sustainable” development pathway, an indicator to track their progress in this endeavor. Adjusted net savings is derived from the standard national accounting measure of gross saving by making four adjustments (The World Bank, 2012:1):

i. Consumption of fixed capital is deducted to obtain net national saving;

ii. Current public expenditure on education is added to account for investment in human capital;

iii. Estimates of the depletion of a variety of natural resources are deducted to reflect the decline in asset values associated with extraction and depletion;

iv. Deductions are made for damages from carbon dioxide and particulate emissions.

Gross national savings – Consumption of fixed capital = Net National Saving

Net National Savings + Education Expenditure – Energy Depletion – Mineral
Depletion – Net Forest Depletion – Damage from Carbon Dioxide Emissions – 
Damage from Particulate Emissions = Adjusted Net Savings.

The indicator is measured in percentage by dividing and by Gross National Income (GNI). 
A positive ANS indicates that a country is adding to its overall wealth and that economic growth is on a sustainable path. “The ANS is a policy-sensitive indicator that provides an early warning signal to policy makers about the sustainability of their country’s economic growth path, allowing them to make corrections as needed” said Glenn-Marie Lange, World Bank program manager for Wealth Accounting and Valuation of Ecosystem Services (WAVES) (The World Bank, 2015). In addition to serving as an indicator of sustainability, adjusted net saving has several other advantages as a policy indicator (The World Bank, 2012).

- It presents resource and environmental issues within a framework that finance and development planning ministries can understand.
- It reinforces the need to boost domestic savings, and hence the need for sound macroeconomic policies.
- It highlights the fiscal aspects of environment and natural resource management, since collecting resource royalties and charging pollution taxes are basic ways to ensure efficient use of environmental resources.

Econometric Model and Methodology

This paper aims to contribute to the research over the role of development indices on the sustainable growth path. In this study, the relationship between sustainable development indices and economic growth is investigated, using panel dataset for seven developing countries (Brazil, Russia Federation, India, China, Mexico, South Africa, and Turkey).

We have assumed that the endogenous growth model has the following form:

\[ Y(t) = K(1)(t)H(1)(t)A(t)L(t))^{1-a} \]

Where \( Y \) is output; \( K \) is physical capital, \( H \) is stock of human capital. \( L \) is labor, \( A \) is level of technology; \( \alpha \) and \( \beta \) are the partial elasticity of output with respect to physical and human capital (Mankiw, Romer and Weil, 1992: 416).

We have derived an equation for the aggregate output in country \( i \), at time \( t \):

\[ y_{i,t} = \alpha_0 + \phi_{i,y_{i,t-1}} + \beta_{1,i}k_{i,t} + \beta_{2,i}l_{i,t} + \beta_{3,i}h_{i,t} + \varepsilon_{i,t} \]

Where \( t \) and \( i \) are the time, \( t=1,...,T \) and \( i=1,...,N \) defines time-series and cross-sectional units, respectively. \( \varepsilon \) is the usual error term. \( y \) denotes GDP deflator %; \( k \) is gross fixed capital formation (constant 2005 US$); \( l \) is total labor force in millions; and \( h \) is human capital.

\[ y_{i,t} = \alpha_0 + \phi_{i,y_{i,t-1}} + \beta_{1,i}k_{i,t} + \beta_{2,i}l_{i,t} + \beta_{3,i}(HD1,GS,EPI)_{i,t} + \varepsilon_{i,t} \]

The paper used annually data from World Development Indicators (WDI) of World Bank (WB), UNDP databank over the period 1990-2013 and EPI databank over the period 2002-2013.

The model of this paper is built on the long-run framework and is used to analyze relations between human capital, environment, natural resource and economic growth. In the first step, we have applied Breusch and Pagan (1980), Pesaran (2004) and Pesaran, Ullah and...
Yamagata (2008) LM test statistics for cross section dependence. We have also used the first generation panel unit root tests (Levin, Lin & Chu (LLC) test, Im, Pesaran and Shin (IPS) test developed by Levin et al. (2002), Im et al. (2003) and the second generation panel unit root tests Cross-Sectionally Augmented IPS (CIPS), Hadri-Kurozumi (2012) test developed by Pesaran (2007) and Hadri-Kurozumi (2012)), respectively. In the second stage, panel co-integration analyses were based on Panel ARDL study.

Testing for Cross-Sectional Dependence

We have examined the significance of cross sectional correlations among residuals. This test for cross section dependence was carried out using the Breusch and Pagan (1980), Pesaran (2004) and Pesaran, Ullah and Yamagata (2008) LM test statistics. The Breusch and Pagan (1980) LM test are based on the sum of squared coefficients of correlation among cross sectional residuals ($\hat{\rho}_{ij}$) obtained through OLS. The test statistic denoted by $CD_{LM1}$ can be calculated as:

$$CD_{LM1} = \sum_{i=1}^{N-1} \sum_{j=i+1}^{N} \hat{\rho}_{ij}^2$$

(4)

Where the $\hat{\rho}_{ij}$ stands for the sample estimate of the cross sectional correlation among residuals. Under the null hypothesis of no cross sectional correlations, fixed $N$ and $T\rightarrow\alpha$, the $CD_{LM1}$ statistic is distributed as chi-squared with $N(N-1)/2$ degrees of freedom.

The test statistic $CD_{LM2}$ can be represented as:

$$CD_{LM2} = \sqrt{\frac{1}{N(N-1)} \sum_{i=1}^{N-1} \sum_{j=i+1}^{N} (T\hat{\rho}_{ij}^2 - 1)}$$

(5)

Here it is seen that under the null of no cross sectional correlations with first $T\rightarrow\alpha$ and then $N\rightarrow\alpha$, Pesaran (2004) test statistic ($CD_{LM2}$) is asymptotically distributed as a standard normal.

The bias-adjusted LM test ($CD_{LMADJ}$) of cross-section independence is consistent even when the Pesaran’s (2004) $CD_{LM}$ test inconsistent. However, the LM test has reasonable power in small sample panels. Assuming that under the null hypothesis of no cross sectional correlation with first $T\rightarrow\alpha$ and then $N\rightarrow\alpha$.

The test statistic Pesaran, Ullah and Yamagata (2008) $CD_{LMADJ}$ can be represented as:

$$LM_{adj} = \sqrt{\frac{2}{N(N-1)} \sum_{i=1}^{N-1} \sum_{j=i+1}^{N} \frac{(T-k)\hat{\rho}_{ij}^2 - \mu_{ij}}{v_{Tij}}}$$

(6)

Co-integration Test

The test of Westerlund (2006) is based on the null hypothesis of co-integration that allows for the possibility of multiple structural breaks in both the level and trend of a co-integrated panel regression. In this model, when variables are non-stationary, the model requires these variables to be co-integrated. To this end, consider the following empirical specification of our theoretical model.

$$s_{it} = \alpha_{ij} + \tau_{ij}t + \beta_i(M_{it}) + \omega_{it}$$

(7)

Where $\beta_i$ is country specific slope parameters that are assumed to be constant over time, while $\omega_{ij}$ and $\tau_{ij}$ are again country specific intercept and trend parameters that are subject to
$M_t$ structural breaks. The error is with that which we assumed be generated as:

$$\omega_t = g_u + \epsilon_t$$

$$g_u = g_{u-1} + \rho_i \epsilon_{it}$$  \hspace{1cm} (8)

With $\epsilon_{it}$ having a mean zero and stationary distribution that is independent across $i$. The fact that $\epsilon_{it}$ is only assumed to be stationary means that it can be both heteroskedastic and serially correlated.

**Long-run Coefficients**

The Autoregressive Distributed Lag (ARDL) model was used to estimate long-run equation. The following sample ARDL model:

$$y_{it} = \alpha_i + \phi_i y_{i,t-1} + \gamma_i X_{it} + \delta_i z_{it} + u_{it}$$  \hspace{1cm} (9)

for $i = 1,2,...,N$, $t = 1,2,...,T$, where $x_{it}$ is a $k \times I$ vector of agent-specific forcing variables and $z_{it}$ is a vector of common forcing variables (Pesaran, 1997: 187).

The estimators such as Mean Group estimator (MG), used to estimate individual ARDL models, do not allow for the short-run heterogeneity or long-run homogeneity related variables in this model. To overcome the shortcomings of the individual ARDL models, we have used a panel ARDL model and estimated it by making use of the Pooled Mean Group estimator (PMG). Pesaran et al. (1999) developed two estimators; MG estimator and the PMG estimator. The MG estimator imposes no restrictions on the parameters of ARDL specifications and derives the long-run parameters from an average of the long-run parameters obtained from the individual ARDL estimates. The main shortcoming of this estimator is that it does not allow certain parameters to belong to the same cross panel members. To overcome this shortcoming of the MG estimator, the PMG estimator may be utilized instead. The PMG estimator requires the long-run parameters to be the same but allows intercepts, error variances, and the short-run parameters to differ freely across countries. Thus, it allows for the short-run heterogeneity in conjunction with the long-run homogeneity of the variables in the panel ARDL model.

This model is established and allow for differences between alternative model specifications. Tests of homogeneity of long-run parameters can be carried out individually or together by employing the likelihood ratio or other Standard tests. However, Pesaran et al. (1999) pointed out that in the case of cross-country studies, these tests tend to over reject the homogeneity hypothesis. Therefore, we have used Hausman (1978) type test for long-run homogeneity.

**Empirical Findings**

We examined the significance of cross sectional correlations among residuals. The tests statistics with their corresponding probabilities are shown in Table 2.
Table 2: Cross-Sectional Dependence Test Results

<table>
<thead>
<tr>
<th>Test Statistic</th>
<th>Y</th>
<th>K</th>
<th>L</th>
<th>HDI</th>
<th>GS</th>
<th>EPI</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Value</td>
<td>Value</td>
<td>Value</td>
<td>Value</td>
<td>Value</td>
<td>Value</td>
</tr>
<tr>
<td>CDLM1</td>
<td>39.713*</td>
<td>41.652*</td>
<td>36.981*</td>
<td>14.839*</td>
<td>21.401*</td>
<td>41.298*</td>
</tr>
<tr>
<td>CDLM2</td>
<td>7.532*</td>
<td>5.637*</td>
<td>5.829*</td>
<td>7.193*</td>
<td>9.398*</td>
<td>11.820*</td>
</tr>
<tr>
<td>CDLM2ADJ</td>
<td>4.023*</td>
<td>6.821*</td>
<td>7.738*</td>
<td>4.871*</td>
<td>8.292*</td>
<td>7.398*</td>
</tr>
</tbody>
</table>

Note: * indicates cross-sectional dependence.

The correlations among cross-sectional residuals are highly significant according to CDLM1, CDLM2 and CDLM2ADJ tests. As a result, we have allowed for the cross section dependence when testing the stationary of the series.

We used Levin, Lin & Chu (LLC), Im, Pesaran and Shin (IPS), Cross-Sectionally Augmented IPS (CIPS) and Hadri-Kurozumi (HK) tests developed by Levin et al. (2002), Im et al. (2003), Pesaran (2007) and Hadri and Kurozumi (2012) panel unit root tests, respectively.

Table 3: Panel Unit Root Tests Results

<table>
<thead>
<tr>
<th></th>
<th>LLCstat Intercept</th>
<th>Intercept + trend</th>
<th>IPSWstat Intercept</th>
<th>Intercept + trend</th>
<th>CIPSstat Intercept</th>
<th>Intercept + trend</th>
<th>HK ZA SPC Intercept + trend</th>
<th>HK ZA LA Intercept + trend</th>
</tr>
</thead>
<tbody>
<tr>
<td>Y</td>
<td>-5.29**</td>
<td>-6.92**</td>
<td></td>
<td></td>
<td>-5.48**</td>
<td>-6.296**</td>
<td>4.938**</td>
<td>6.911**</td>
</tr>
<tr>
<td>K</td>
<td>-1.30</td>
<td>-2.30***</td>
<td>-4.40**</td>
<td></td>
<td>-7.28**</td>
<td>-8.209**</td>
<td>-10.68*</td>
<td>3.392*</td>
</tr>
<tr>
<td>L</td>
<td>-3.34*</td>
<td>-5.32*</td>
<td>-7.92*</td>
<td></td>
<td>-8.38*</td>
<td>-6.296**</td>
<td>-9.295*</td>
<td>4.892**</td>
</tr>
<tr>
<td>HDI</td>
<td>-5.21*</td>
<td>-10.21*</td>
<td>-7.28**</td>
<td></td>
<td>-9.295*</td>
<td>-8.209**</td>
<td>-10.68*</td>
<td>5.392*</td>
</tr>
<tr>
<td>GS</td>
<td>-4.93***</td>
<td>-8.32**</td>
<td>-0.38</td>
<td></td>
<td>-5.28***</td>
<td>-6.296**</td>
<td>-9.295*</td>
<td>4.892**</td>
</tr>
<tr>
<td>EPI</td>
<td>-2.39***</td>
<td>-3.32*</td>
<td>-0.79</td>
<td></td>
<td>-3.39***</td>
<td>-8.209**</td>
<td>-10.68*</td>
<td>4.392*</td>
</tr>
</tbody>
</table>

Note: ***, *, and * indicate the rejection of the null hypothesis at 1%, 5% and 10% level of significance, respectively. The lag lengths are selected using AIC. Newey-West bandwidth selection with Bartlett kernel is used for both LLC test. The critical values for the CIPS test were obtained from Pesaran (2007), Table 2c (Case III: Intercept and trend). The null distribution of the ZA SPC and ZA LA statistics are asymptotically standart normal. The ZA SPC and ZA LA the null hypothesis is stationarity.

As indicated in the Table 3, we observed that all the variables appear to be stationary especially for the intercept and trend. The results indicate that the non-stationary cannot be rejected in only LLCstat in intercept for , IPSWstat in intercept , ZA SPC in intercept for .

Westerlund (2006) Cointegration Test is done to test the null hypothesis of co-integration against the alternative of non-co-integration, which is equivalent to testing H0: σi2 = 0 for all i against H1: σi2 > 0 for some i.

Table 4: Co-integration Tests Results

<table>
<thead>
<tr>
<th>Test</th>
<th>Co-integration test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Model with HDI</td>
</tr>
<tr>
<td>No breaks</td>
<td>Value</td>
</tr>
<tr>
<td>p-value</td>
<td>0.009</td>
</tr>
</tbody>
</table>
Table 4 indicates that the null hypothesis of co-integration is strongly rejected for the no break-model and asymptotic normal distribution. However, these results should be interpreted with caution, as erroneous omissions of structural breaks are known to make this type of test biased towards co-integration. “Break-model” is the null hypothesis of co-integration which is also unable to reject an asymptotic normal distribution. Indeed, if we allow for structural shifts as well as cross-country dependence, the null hypothesis of co-integration cannot be rejected at the 10 percent of level bootstrapped distribution. This finding suggests that the variables are in fact co-integrated, which is evident in the model. Table 4 indicates the alternative estimation for relations between sustainable development indices and economic growth: MG, which imposes no restrictions; PMG which imposes common long-run effects) which constrains all of the slope coefficients and error variances to be same (Pesaran et al., 1999: 628). The Hausman test results show that for the two panel datasets, the null hypothesis and PMG & MG predictors are consistent but PMG is the only efficient predictor (Baltagi, 2008:72).

Table 5: Results for Panel ARDL

<table>
<thead>
<tr>
<th>Model with HDI</th>
<th>Model with GS</th>
<th>Model with EPI</th>
<th>Hausman Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Long-run coefficient</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$Y_{t,1}$</td>
<td>1.005*</td>
<td>0.018*</td>
<td>0.672***</td>
</tr>
<tr>
<td>$K$</td>
<td>0.023**</td>
<td>0.070*</td>
<td>0.099**</td>
</tr>
<tr>
<td>$L$</td>
<td>0.438*</td>
<td>0.620*</td>
<td>0.281*</td>
</tr>
<tr>
<td>$HDI$</td>
<td>0.004*</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>$GS$</td>
<td>-</td>
<td>0.120**</td>
<td>-</td>
</tr>
<tr>
<td>$EPI$</td>
<td>-</td>
<td>-</td>
<td>0.367*</td>
</tr>
<tr>
<td>Error correction coefficient</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$\phi$</td>
<td>0.883</td>
<td>0.937</td>
<td>0.933</td>
</tr>
<tr>
<td>Short-run coefficient</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$Y_{t,1}$</td>
<td>0.002*</td>
<td>-0.214*</td>
<td>0.007*</td>
</tr>
<tr>
<td>$K$</td>
<td>-0.005</td>
<td>0.081</td>
<td>0.002**</td>
</tr>
<tr>
<td>$L$</td>
<td>0.043*</td>
<td>0.076*</td>
<td>0.021*</td>
</tr>
<tr>
<td>$HDI$</td>
<td>0.035</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>$GS$</td>
<td>-</td>
<td>0.005*</td>
<td>-</td>
</tr>
<tr>
<td>$EPI$</td>
<td>-</td>
<td>-</td>
<td>0.007*</td>
</tr>
<tr>
<td>Diagnostics</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Log-likelihood</td>
<td>444.93</td>
<td>221.73</td>
<td>133.32</td>
</tr>
<tr>
<td>$\chi^2_{SC}$</td>
<td>22.32</td>
<td>11.87</td>
<td>14.35</td>
</tr>
<tr>
<td>$\chi^2_{HE}$</td>
<td>0.56</td>
<td>0.89</td>
<td>0.42</td>
</tr>
</tbody>
</table>

Note: ***, *, and * indicate the rejection of the null hypothesis at 1%, 5% and 10% level of significance, respectively. The maximum number of lags for each variable is set at two, and optimal lag lengths are selected by the AIC. $\chi^2_{SC}$, $\chi^2_{HE}$ denote chi-squared statistics to test for no residual serial correlation and homoscedasticity, respectively.
The negative and significant error correction coefficients ($\varnothing_1=0.883$; $\varnothing_2=0.937$; $\varnothing_3=0.933$) illustrated on Table 5 indicates not only the presence of the co-integration among the variables but also the adjustment towards equilibrium between variables and economic growth.

The Hausman test indicates that the null hypothesis of the long-run homogeneity for each variable cannot be rejected at 1 % level of significance. This justifies a use of the PMG estimator, which is consistent and efficient under the long-run homogeneity. Therefore the use of the PMG estimator seems to be more applicable than the MG estimator. The diagnostic test results reported in Table 5 show the absence of any autocorrelations or heteroscedasticity in the individual equations, as can be seen in the long-run coefficients in Table 5.

Results
In this study, we tried to test the effect of sustainable development indices on economic growth establishing an endogenous growth model. For this purpose, we have taken to HDI, GS and EPI dataset in implication growth model.

We find that all independent variables have positive effects on economic growth in our model for seven developing countries. Short-term coefficients support long-term coefficients and short-term coefficients indicate lower segment values. For Model 1, long-term coefficient results show that a 1% increase in HDI will increase economic growth by 0.004%. For Model 2, long-term coefficient results show that a 1% increase in GS will increase economic growth by 0.120%. For Model 3, long-term coefficient results show that a 1% increase in EPI will increase economic growth by 0.367%. The key result is that sustainable development indices have a positive effect on economic growth.

The empirical results of this paper show that a sustainable growing process which considers environmental sensitivity, protects natural resources and supports human capital is possible. Moreover, the main result of this study is an economic growth process consistent with sustainable development objectives can achieve without output contraction in long term. In the lights of results, for politicians and economists we have some proposals;

- Government and private sources should be transferred to education and enhancement of human capital recruitment,
- Natural resources should be used more efficiently,
- Less polluter manufacturing techniques should be preferred.

When these advises followed sustainable economic growth can be maintained while economical outputs increases in long run. Last but not least, this study can be improved by adding different development indices and / or more countries to panel analyses.

References:
Chichester, England.


Effect of International Monetary Fund over Turkey’s Economy: Some Economic Indicators

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Abstract

International Monetary Fund (IMF) loans are meant to help member countries tackle balance of payments problems, stabilize their economies, and restore sustainable economic growth. These kinds of problems resolution role is at the core of IMF lending. In addition, IMF contributes to some easiness for free trade in World. In the World, almost, there is no any financial structure apart from IMF and World Bank. Although these positive and important effect of IMF, there are some points which is exposed to some critics and disputes like politics attitudes and demands. IMF’s some politics causes deeper economic crisis with which country are faced. Turkey was the one of these countries. Turkey, which became the member of IMF at its establishment year 1947, has been applying stabilization programs supported by IMF during the periods of economic instabilities. Turkey and IMF signed 19 standby agreements since 1961. All though these agreements, Turkey could not recovery its economy for many years and had many economic and financial crisis. In this study, after giving some information between Turkey and IMF, some economic indicators and rates will provide between two actors like total IMF debts.

Keywords: Turkey, IMF, standby agreements;

Introduction

Social, economic, technologic, and politic events in many countries have affected also other countries closely, and they force other countries to follow these events closely. The countries closely following each other enabled the mentioned events to spread throughout the world. Within this context, since early 20\textsuperscript{th} century, the events that can affect entire world especially from politic and economic aspects have occurred. World wars, certain important economic depressions, and politic events virtually forced the emergence of certain international organizations by making all the countries in the world to behave in parallel in both of politic and economic domains. While IMF and World Bank among these institutions are the most important ones in economic and commercial domains, United Nations is the most important organization in politic area. These international institutions emerging have engaged in activities as a superior mechanism that regulates and implements the rules in relationships between the countries.

Its policies and IMF, which has been tried to practice since 1930s and been established in 1944 and which has taken steps and encouraged the countries in order to facilitate and free the global trade, are of great importance from the aspect of freeing the global trade. IMF that has encouraged the activities of countries towards free trade and strengthening these relationships through multilateral agreements is accepted as an important step into freeing
the global trade. Even though it has reinforced its basic policies on commercial issues on commercial liberalization and other politic issues, some of its policies have not been adopted by many countries, and they caused significant disputes. On the other hand, due to the expansion of commercial liberalization and globalization movement, it has taken on certain new tasks by establishing the rule of economic stability in countries in 1980s. The most important two of these tasks are to give countries the credits towards closing the gaps in balances of payment, and to provide liquidity. It has become an authority especially due to these tasks of it.

During the time passed, IMF has been criticized by both of the political authorities of the credited countries and other countries due to various sanctions and some of the implementations having the characteristic of pseudo-recommendation. The most important one of these criticisms is that IMF has diverged from its fundamental task of liberalizing the foreign trade and has affected the economic and politic policies of the countries through the liquidity that it has provided to those countries. Moreover, the enlarging amount of credits provided by IMF to both of developing and underdeveloped countries and the constant expansion of its financial sanction power and significant increase in politic power of IMF became another criticism point. Another important criticism point is for IMF to force the countries, via conditionality principle, to execute the policies that will allow them to pay their credits back.

In general, IMF has been established for the purposes such as solving some of financial problems in global economy, improving the multilateral liberal trade, preventing the unilateral importation limits and devaluation, and ensuring the economic cooperation (Carvalho, 2000: 3-5; Öztürk, 2002: 96). Due to these objectives, through its tasks of giving credit to especially the developing and underdeveloped countries and ensuring the liquidity, IMF has aimed to provide positive contributions to welfare of the countries, and to improve the global welfare since its establishment. Hence, it has the basic thought of supporting the countries for achieving the high level of welfare through international liberal trade. But, as it is mentioned above, its task of ensuring the liquidity draws it away from objective of executing independent economic activities, and also undermines the objective of relatively liberalizing the international trade. Moreover, the recent experiences have led the increase in doubts about the success of IMF’s crisis management policies. It even gives the impression that the policies that have been stipulated by IMF to countries in crisis might have led to deepening of the actual crises (Seyidoğlu, 2003: 144). On the other hand, in today’s international economic system, there no other significant source, to which the countries influenced by the economic crises can apply for achieving foreign financial support, other than IMF (and sometimes World Bank). This situation is seen as an important vicious cycle, and IMF is accepted as the most important supported in overcoming the economic crises.

The Effects of IMF-Turkey Relationships on Turkish Economy
Through becoming a member of IMF as of the year of 1947, Turkey has taken an important step into transition to liberal trade, and also had close relationships with IMF through various policies and agreements. Within this context, by obtaining its first credit from IMF in year 1961, Turkey has started to shape its internal economic policies in parallel with
IMF’s policies. Through various agreements and undertakings in return for the IMF’s credit, Turkey has made revisions in its economy policies constantly, and sustained a close and compulsive relationship with IMF for almost 50 years. As well as in many other countries, many of its policies has not been appreciated in many of social segments in Turkey, and faced with various criticisms. The most significant ones among these criticisms are the claims that countries couldn’t pursue independent economic policies, and that the forced policies were not in harmony with countries’ conjuncture and economic realities. Moreover, the policies limiting the demand aspect in return to IMF credits, various increases, and the contractionary financial policies towards public sector (called austerity policies) are the most criticized issues.

Despite all these criticisms, the IMF-Turkey relationship has been maintained through 19 standby agreements in more than 50 years, and it has been tried to overcome the bottlenecks in economy through the credits provided. These 19 Standby agreements are shown in table below.

Table I. Turkey: History of Lending Arrangements as of October 31, 2014 (in thousands of SDRs).

<table>
<thead>
<tr>
<th>Facility</th>
<th>Date of Arrangement</th>
<th>Date of Expiration or Cancellation</th>
<th>Amount Agreed</th>
<th>Amount Drawn</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standby Arrangement</td>
<td>May 11, 2005</td>
<td>May 10, 2008</td>
<td>6,662,040</td>
<td>4,413,602</td>
</tr>
<tr>
<td>Standby Arrangement</td>
<td>Feb 04, 2002</td>
<td>Feb 03, 2005</td>
<td>12,821,200</td>
<td>11,914,000</td>
</tr>
<tr>
<td>Standby Arrangement of which Supplemental Reserve Facility</td>
<td>Dec 22, 1999</td>
<td></td>
<td>5,784,000</td>
<td>5,784,000</td>
</tr>
<tr>
<td>Standby Arrangement</td>
<td>Jul 08, 1994</td>
<td>Mar 07, 1996</td>
<td>610,5</td>
<td>460,5</td>
</tr>
<tr>
<td>Standby Arrangement</td>
<td>Apr 04, 1984</td>
<td>Apr 03, 1985</td>
<td>225</td>
<td>168,75</td>
</tr>
<tr>
<td>Standby Arrangement</td>
<td>Jun 24, 1983</td>
<td>Apr 03, 1984</td>
<td>225</td>
<td>56,25</td>
</tr>
<tr>
<td>Standby Arrangement</td>
<td>Jun 18, 1980</td>
<td>Jun 17, 1983</td>
<td>1,250,000</td>
<td>1,250,000</td>
</tr>
<tr>
<td>Standby Arrangement</td>
<td>Jul 19, 1979</td>
<td>Jun 17, 1980</td>
<td>250</td>
<td>230</td>
</tr>
<tr>
<td>Standby Arrangement</td>
<td>Apr 24, 1978</td>
<td>Jul 18, 1979</td>
<td>300</td>
<td>90</td>
</tr>
<tr>
<td>Standby Arrangement</td>
<td>Aug 17, 1970</td>
<td>Aug 16, 1971</td>
<td>90</td>
<td>90</td>
</tr>
<tr>
<td>Standby Arrangement</td>
<td>Jul 01, 1969</td>
<td>Jun 30, 1970</td>
<td>27</td>
<td>10</td>
</tr>
<tr>
<td>Standby Arrangement</td>
<td>Apr 01, 1968</td>
<td>Dec 31, 1968</td>
<td>27</td>
<td>27</td>
</tr>
<tr>
<td>Standby Arrangement</td>
<td>Feb 01, 1966</td>
<td>Dec 31, 1966</td>
<td>21.5</td>
<td>21.5</td>
</tr>
<tr>
<td>Standby Arrangement</td>
<td>Feb 01, 1965</td>
<td>Dec 31, 1965</td>
<td>21.5</td>
<td>011</td>
</tr>
<tr>
<td>Standby Arrangement</td>
<td>Feb 15, 1964</td>
<td>Dec 31, 1964</td>
<td>21.5</td>
<td>19</td>
</tr>
<tr>
<td>Standby Arrangement</td>
<td>Jan 01, 1961</td>
<td>Dec 31, 1961</td>
<td>37.5</td>
<td>16</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td>37,707,640</td>
<td>30,569,062</td>
</tr>
</tbody>
</table>

Sources: International Monetary Fund

As seen in table, the first Standby agreement has been signed in 1961 and the last one in 2005, a total of 19 Standby agreements have been signed. Until 1961-1970, new standby agreements have been signed each year, and the amounts of the credits have not been such

11 Although agreement, Turkey did not use credit.
high. While no new standby agreement has been signed until 1978, due to the political conjuncture in which the country has been passing, no new standby regulation has been made after 1980. Turkey, which has faced with a significant economic crisis in following period, has signed a new Standby agreement in 1994, and the last Standby agreement in year 2005 as the continuation of economy policies in 1999 crisis and following periods.

As seen in table again, as well as there has been a constant increase in amounts of agreed and used supports (SDR-Special Drawing Rights), and the credit more than 30 Billion SDR or 55 Billion USD has been drawn. Most of these used credits consist of credit usages between 1999 and 2008 in terms of the credit amounts. On the other hand, the agreements that have been completed within their terms were 18th and 19th Standby agreements, and they coincide with this time period. From this aspect, among the Standby agreements signed with IMF, the economy policies provided by all the agreements, except 18th and 19th Standby agreement, have increased the external debts, and the dependency on the international sources for financing the public deficits has continued increasingly. Moreover, relationships of Turkey, which has signed a Standby agreement in almost every 2-3 years, with IMF has gained a continuity through economic crises and consequently the foreign indebtedness problems of Turkey. The Standby regulation in year 2005, which has been the first agreement without any crisis, proves the success of Turkey in 2000s as the agreement that ends the IMF-based borrowing (Çörtük, 2006: 49).

Despite all the negative criticisms mentioned above, even though the IMF-Turkey relationship have not been considered as clearly positivist, the recent period is considered as generally successful since the relationships in agreements after 1999 have affected the national economy positively and the provided credits have affected the short-term economy policies of the country. Real markets responds relatively positively to especially the 18th Standby agreement, and the interest rates, which is accepted to be the most important valuable variable while capital market has been attempting breaking the records, has decreased down to minimum in last 20 years. These positive economic developments (stipulated by IMF) have been followed by supportive policies of politic authority, and IMF policies have provided positive contributions to economic development for first time within a long period.

Table II. Turkey: Transaction with the fund (in SDRs), from May 01, 1984 to December 31

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Disbursements</th>
<th>Total Repayments</th>
<th>Total Charges/Interest Paid</th>
<th>Total Repayments and Interest Paid(With US$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>0</td>
<td>562,109,622</td>
<td>2,590,650</td>
<td>869,638,419</td>
</tr>
<tr>
<td>2012</td>
<td>0</td>
<td>1,311,589,124</td>
<td>15,957,127</td>
<td>2,031,145,764</td>
</tr>
<tr>
<td>2011</td>
<td>0</td>
<td>1,780,013,811</td>
<td>46,296,413</td>
<td>2,794,254,643</td>
</tr>
<tr>
<td>2010</td>
<td>0</td>
<td>1,422,623,129</td>
<td>85,095,751</td>
<td>2,321,886,798</td>
</tr>
<tr>
<td>2009</td>
<td>0</td>
<td>458,015,251</td>
<td>124,305,039</td>
<td>908,419,652</td>
</tr>
<tr>
<td>2008</td>
<td>2,248,438,500</td>
<td>1,244,046,563</td>
<td>258,408,556</td>
<td>2,313,780,883</td>
</tr>
<tr>
<td>2007</td>
<td>749,479,500</td>
<td>3,373,217,500</td>
<td>367,871,616</td>
<td>5,910,920,803</td>
</tr>
<tr>
<td>2006</td>
<td>1,998,612,000</td>
<td>5,092,250,000</td>
<td>542,948,028</td>
<td>8,452,797,042</td>
</tr>
<tr>
<td>2005</td>
<td>1,665,510,000</td>
<td>5,266,522,500</td>
<td>643,689,758</td>
<td>8,392,501,406</td>
</tr>
<tr>
<td>2004</td>
<td>793,800,000</td>
<td>3,158,230,000</td>
<td>646,953,034</td>
<td>5,898,033,703</td>
</tr>
<tr>
<td>2003</td>
<td>1,191,000,000</td>
<td>1,223,882,500</td>
<td>638,744,869</td>
<td>2,756,688,506</td>
</tr>
</tbody>
</table>
Table II represents the bilateral fund flows between Turkey and IMF during the period of 1984-2013. As it can be understood from the table, even though there has been no standby agreement between Turkey and IMF between 1984 and 1994, Turkey has continued paying its debts to IMF back. But, between 1994 and 1996, no principal repayment has been made to IMF, only the interest payments have been made. After global economic crisis in year 2008, Turkey has not needed to sign a new Standby agreement with IMF for the first time in history, and Turkey has redressed the balance of payment even though the effects of crisis have been felt throughout the world in 2009-2010.

In Figure 1, the share of interest payments within the total repayments of Turkey to IMF is presented. In Figure 1, it can be seen that the interest payments took significant share from the debts of Turkey to IMF. For example; the portion of interest payment to principal repayments in year 1997 was 51.2%. The highness of the interest rates of the borrowed credits have always been criticized, and it has been claimed for Turkey to cut the relationships with IMF or to make agreements with stronger control. As seen in Figure, very high shares of interest payments in some years have strengthened this opinion.
Again, as seen in Figure 1, the interest payment amounts have decreased since year 2009, and have decreased below 0% in year 2013. During the period of 1997-2013, Turkey has paid a total of 35.5 Billion SDR repayment, and 4.42 Billion SDR of it (12.45%) was the interest payment. These values show that the interest rates applied to credits provided by IMF were approximately same with actual interest rates of related periods, and this situation has been faced with many criticisms.

On the other hand, Figure 2 represents the sum of the debts of Turkey to IMF between the years of 1999 and 2013.
Turkish economy has experienced one of the biggest crises in its history in 2001. Given the economic indicators of 2001, it can be seen that the growth rate of Turkey was -9.6%, inflation rate 68.35%, sum of debts 189 Billion USD, and national income 240 Billion USD, and interest expenses 47%. The growth rate of -9.6% has been determined to be the second worst growth rate, following the year 1945 (Acar, 2013: 16). After that crisis, Turkey has borrowed 12.8 Billion SDR credit from IMF by signing a new standby agreement.

Finally, Table 3 and the Figure 3, which is derived from this table, represents the total public sector’s foreign debts, total debts to IMF, and economic growth rates between the years of 1999 and 2013, and the portion of debts from IMF within total public sector debts is presented. Within this context, it is seen that the proportion of Turkey’s net debts to debts from IMF in 2005 and previous years was absolutely, high, and that it has peaked in 2001 and following years that have been crisis years. Given those years, it can be seen that the share of IMF debts within total stock of Turkey’s gross foreign debts were higher than 20%. In addition to the debts from IMF, the new standby agreements signed with IMF are the most important reasons affecting this factor. But after year 2005, it can be easily seen that this proportion has gradually decreased. Real improvements in Turkish economy after 2005 and provided economic stability decreased the share of IMF debts in this debt stock despite the increasing gross foreign debts of public sector.

On the other hand, given the growth rates of Turkey, it can be seen that, even though no parallelism can be seen between IMF debts and economic growth, the negative economic growth in 2001 and in 2008-2009 periods has significantly increased the credits borrowed from IMF.

Table III. Turkey’s GDP Growth and IMF Debt’s Rate in the Public Gross External Debt

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Debt (With US$)</th>
<th>Turkey’s Total Public External Debt (With US$)</th>
<th>IMF debt’s rate in total Public Gross External Debt (With %)</th>
<th>Turkey’s GDP Growth (Annual %)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1999</td>
<td>890</td>
<td>44107</td>
<td>2,01782</td>
<td>-3.36</td>
</tr>
<tr>
<td>2000</td>
<td>4175</td>
<td>50081</td>
<td>8,336495</td>
<td>6.7</td>
</tr>
<tr>
<td>2001</td>
<td>14097</td>
<td>47129</td>
<td>29,91152</td>
<td>-5.6</td>
</tr>
<tr>
<td>2002</td>
<td>22009</td>
<td>64533</td>
<td>34,10503</td>
<td>6.1</td>
</tr>
<tr>
<td>2003</td>
<td>24004</td>
<td>70844</td>
<td>33,8829</td>
<td>5.2</td>
</tr>
<tr>
<td>2004</td>
<td>21440</td>
<td>75668</td>
<td>28,3343</td>
<td>9.3</td>
</tr>
<tr>
<td>2005</td>
<td>14647</td>
<td>70411</td>
<td>20,80215</td>
<td>8.5</td>
</tr>
<tr>
<td>2006</td>
<td>10759</td>
<td>71587</td>
<td>15,02927</td>
<td>6.8</td>
</tr>
<tr>
<td>2007</td>
<td>7144</td>
<td>73525</td>
<td>9,716423</td>
<td>4.6</td>
</tr>
<tr>
<td>2008</td>
<td>8563</td>
<td>78306</td>
<td>10,93531</td>
<td>0.6</td>
</tr>
<tr>
<td>2009</td>
<td>9434</td>
<td>83482</td>
<td>11,30064</td>
<td>-4.8</td>
</tr>
<tr>
<td>2010</td>
<td>7107</td>
<td>89081</td>
<td>7,978132</td>
<td>9.1</td>
</tr>
<tr>
<td>2011</td>
<td>4361</td>
<td>94205</td>
<td>4,629266</td>
<td>8.7</td>
</tr>
<tr>
<td>2012</td>
<td>2338</td>
<td>103947</td>
<td>2,249223</td>
<td>2.1</td>
</tr>
<tr>
<td>2013</td>
<td>1477</td>
<td>115811</td>
<td>1,275354</td>
<td>4.12</td>
</tr>
</tbody>
</table>

Sources: Republic Of Turkey Prime Ministry Undersecretariat of Treasury
As seen in Figure 3, the difference between the total debt stock of public sector and IMF debts has continuously increased since 2003, and they have diverged from each other.

![Figure III. Turkey’s Total IMF Debt’s and Public Gross External Debt Stock (US $)](image)

**Sources:** Republic Of Turkey Prime Ministry Undersecretariat of Treasury

### Conclusion

After being a member of IMF in 1947, Turkey signed 19 different standby agreements with IMF. Turkey has used over fifty billions dollar with these agreements. Turkey has primarily expected to solve its basic economic problems and oriented to achieve these aims. Although IMF has criticized due to high interest rates and many unsuccessful programs, many governments have kept close its relations with IMF. Turkey’s economic growth accelerated after starting to implement a new economic program which was supported by IMF with 1999 economic crisis. Decade, Turkey’s economy showed a great performance because of new economic program. After these programs, Turkey did not need signing a new agreement with IMF. In 2013, Turkey has paid all loans of IMF. In 2013, a new term started between two actors.

### References


International Monetary Fund

Turkish

Republic Of Turkey Prime Ministry Undersecretariat of Treasury

Trend Break in PISA Survey for Denmark

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Abstract

The Program for International Student Assessment (PISA) has been conducted 5 times. The first PISA was piloted in 2000 and the latest PISA was conducted in 2012. The PISA survey has always given rise to a tremendous discussion within the many participating countries. Some countries with a score lower than the OECD average have decided to change the school system. Denmark and Germany are examples hereof. The design and implementation of the surveys is the responsibility of the international consortium. But the individual countries have opportunity to change the design. Denmark changed the design drastically in 2009, which led to a big change in mathematics score but not in reading and science. Finland did the same in 2012 and the similar changes were seen. Since 2009 it has been discussed if Denmark’s drop in mathematics score was due to change in the design or due to the qualitative problems in the school system. Change in the design could be a reason for a “trend break”. Thus the “trend break” in Denmark will be investigated by calculating the design effect (DEFF), comparing with the national PISA survey with addition of the local PISA survey done only in Copenhagen, Capital of Denmark and by comparing with the “trend break” in Finland in 2012.

Keywords: PISA survey; DEFF; trend break; shift in design
Goal Programming Models for Physician Scheduling at a Large Eye Specialist Hospital

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Abstract

The considered hospital suffers from a severe underutilization of its resources in terms of clinic/surgery rooms and physicians, which results in a very long waiting list with thousands of patients. The principal cause of such a situation is that the physician schedules are built in a manual fashion. Actually, the schedulers have to assign physicians to different sessions (clinical, surgery, administrative, training, teaching, on call, etc.) while respecting numerous hospital regulations and trying to satisfy various physician preferences and constraints. Although the schedulers use a computerized interface to help them build their schedules, no optimization tool is available to assist them in taking the best decisions. As a result, they have to spend several days each month to end up with weak schedules with overloaded physicians and underutilized clinic/surgery rooms. In this paper, we propose a Decision Support System that is based on four goal programming models to provide optimized short-term and long-term schedules with balanced loads. The mathematical models are solved with LINGO optimization software and linked to a friendly-user spreadsheet. The good performance of the proposed tool is validated through its implementation on the real ground. Indeed, the provided schedules are not only fast to build and error-free, but also satisfy all the physician preferences while using properly the available resources; the maximum shortage of surgery and clinic sessions being reduced by 40% and 100%, respectively.

Keywords: preemptive goal programming, optimized resource utilization, health service improvement
The Discovery of the “God Particle” and its Management Model

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Abstract

The discovery of the Higgs boson aka “The God Particle” made headline news world-wide in July 2012. I am a part of the team that discovered the Higgs boson at the European Center for Nuclear Research (CERN) in Geneva, Switzerland. The 2013 Nobel Prize in Physics was given to two theorists who predicted the existence of the Higgs boson. The Royal Swedish Academy of Sciences awarded the Nobel Prize in Physics to theorists Peter Higgs and Francois Englert to recognize their work that led to the development of the theory now known as the Higgs field, which gives elementary particles mass. U.S. scientists played a significant role in advancing the theory and in discovering the particle that proves the existence of the Higgs Field, the Higgs Boson. Nearly 2000 physicists from U.S. institutions—including 89 U.S. universities and seven U.S. Department of Energy laboratories—participated in the Higgs discovery. Business Week touts the Collaborative and Management model of over 6000 scientists working together on this scientific mission from across the globe as a marvel. In this talk, I will take the audience on a scientific journey of evolution of the universe since its inception to the present, describing objects moving near the speed of light and colliding to make temperatures far hotter than the center of the sun, leading to the discovery of the God particle, the crowning achievement of the century, with a special discussion of the management style of the collaboration.

Keywords: 2013 Nobel Prize in physics particle, physics/Collider accelerators, largest scientific management model
Re-Branding the State of Goa, India: The ‘Kenna’ Campaign

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Abstract

The purpose of this paper is to explore how the city/state of Goa in India has been branded. This case study examines the brand repositioning strategy of the Goa tourism authorities from being only a beach tourism destination, to one, which is inclusive of culture and heritage, thereby encouraging tourists to explore Goa’s hinterlands. The study analyses the role of strategy and what role key strategic thinkers play in rebranding a destination. It also highlights the relationship between government and key tourism stakeholders in developing a destination brand and looks at how a brand management company works with the government in order to brand a destination. The new ‘Kenna’ campaign about to be launched, one of the main components of the re-branding strategy of Goa, is also discussed. Fieldwork was conducted in October 2014 to collect the data, this involved in-depth interviews as well as focus groups with representatives from the Goa Tourism Development Corporation. Focus groups were also conducted with SKAL International Goa, a range of tour operators and hoteliers. Interviews with locals, tourists as well as observation of tourist locations (beaches, heritage sites, local markets) were also part of the research method.

Keywords: destination branding strategy, creation of a tourism destination, Goa, India
Inventory Costing under Just-in-Time Distribution

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Abstract

The basic inventory costing model ignores several cost categories. Therefore, this generic model has to be modified for various business situations. The present paper considers additional cost categories to make the cost model more realistic under just-in-time product distribution.

Keywords: inventory costing, transportation costs, economic order quantity, distribution

Introduction

Inventory accounts for a major portion of the total assets of a company. Inventory also represents a significant risk as there is always a chance of ending up with an unsold stock of goods. On the other hand, inventory plays a vital role in achieving the required customer service level. An adequate inventory level placed at strategic locations ensures product availability and customer service levels. But the financial commitment needed to maintain an adequate inventory level forces many companies to consider the cost implications of maintaining these service levels. Therefore, cost minimization emerges as an important objective in most inventory management models. These cost minimization models involve several trade-offs under different costs structures. In the traditional economic order model, the trade-off between ordering costs and carrying costs is exploited to arrive at the best order quantity. However, these two cost categories ignore several other types of costs and their associated trade-offs. These type of models are simpler to understand and easier to use, however, they do not represent a realistic view of the real life situations. Therefore, they have limited usage for real life problems. The cost categories and their associated trade-offs must present a broader perspective in order to enhance their practical application. In the present paper, in addition to the typical inventory costs, we consider additional cost categories in a distribution scenario. Such cost categories are common in most storage facilities, but the traditional approach conveniently ignores them. Considering these cost categories makes the model more realistic. In the ensuing section, we discuss the pertinent literature to this problem. Next we present the notation, cost categories and the mathematical framework for our model. Finally, we also discuss possible extensions of this work and provide the concluding remarks.

Literature Review

Since the inception of economic order quantity idea by Harris (1913) and its subsequent popularization by Wilson (1934), there has been no dearth of literature on the subject. The traditional model assumed a uniform and constant demand and a variation was provided by Wagner & Whitin (1958) to consider time varying demand patterns using dynamic programming. Silver and Meal (1969) provided a heuristic method for solving Wagner &

**The Model Framework & Notation**

The model for the lot sizing problem considers the ordering process from the supplier to the distributor centre or warehouse. The main assumptions under our model are deterministic demand, constant lead time and instantaneous replenishment. The traditional model also makes the same assumptions. Furthermore, the warehouse or distribution center in our model accepts multiple shipments under the same order size based on the JIT philosophy. It has also been assumed that the minimum shipment size is the daily demand or in other words, the supplier does not send multiple shipments on the same day. Due to cost, time and efficiency reasons, it would make sense to consolidate the shipments that leave and arrive on the same day. Figure 1 depicts the modeling situation where the order amount from the supplier is split into multiple JIT shipments to the warehouse. From each of these shipments, the daily demand is cross-docked and the remaining quantity is handled and stored in the warehouse.

![Diagram for Warehouse Ordering and Storage](image)
We use the following notation in our mathematical model for the order quantity:

- **D** = Annual demand placed on the distribution centre
- **d** = Daily demand or the cross-docked amount from a shipment
- **S** = Ordering cost per order
- **h** = Storage cost including the housing cost and capital cost per unit per year
- **q** = Just-in-time (JIT) Shipment size
- **n** = JIT frequency or number of JIT shipments used for each ordered amount
- **Q** = Purchasing order quantity from the supplier, \( Q = q \cdot n \)
- **m** = The per unit material handling cost in the distribution centre

### The Costing Model

Using the above notation, we compute the different types of costs associated with our model as follows.

#### Ordering costs.
The ordering cost consists of expenditures related to placing a purchase order. Typical expenses in this cost category include paper work, communication costs, order processing, purchaser’s wages etc. On an annual basis, this cost could be represented as follows.

\[
\text{Ordering costs} = \frac{DS}{Q} = \frac{DS}{qn} \tag{1}
\]

#### Transportation costs.
This cost involves the transportation cost of sending vehicles from the supplier to the distribution centre. Typical costs in this category include the driver and vehicle costs, truck loading and off-loading costs, fuel costs etc. To meet an annual demand of ‘D’ using ‘D/q’ shipments, the total annual transportation cost is given as:

\[
\text{Transportation Cost} = \frac{t \cdot D}{q} \tag{2}
\]

#### Holding costs.
This cost includes the housing costs in a warehouse, the capital (i.e. interest) cost of stock, insurance, pilferage and breakage costs while in storage. If the JIT shipment size is ‘q’ units, the average amount of inventory held throughout the year would normally be ‘q/2’. This is different from the average inventory level ‘Q/2’ considered in traditional inventory models that work under non-JIT environment. However, it may be further noted that from the ‘q’ shipment size arriving per day, the daily product demand on the date of arrival can be directly off-loaded to the outgoing vehicles waiting for that day’s orders or placed in a staging area. This eliminates the storage needs for that day’s orders. The concept is known as cross-docking. Therefore, under a cross-docking strategy, the amount placed in storage would be (q-d), with the average inventory level held throughout the year to be (q-d)/2. It has been assumed that the vehicle loading and unloading costs at the time of cross-docking has been included in the transportation cost, therefore, they have not been included separately.

Consequently, the annual holding costs under a cross-docking strategy can be written as:
Annual holding cost \( h \frac{(q-d)}{2} \) \hspace{1cm} (3)

Material handling costs. The material handling component in our cost model takes into account the fact that in the absence of a cross-docking strategy, a large number of items are received, unpacked, stored, moved to the forward zone for ordering picking and finally shipped to the customers. This requires several material handling movements during the course of product’s stay in a distribution centre. However, if a portion of the product is placed in the staging area for next out-bound customer delivery or directly on-loaded to the customer vehicles, this would significantly reduce the material handling steps needed for this product. This results in a substantial savings in material handling costs. We have modeled this scenario in our costing model. For each of the ‘D/q’ shipments, the material handling activity in the warehouse would be (q-d) per shipment. On an annual basis, the total material handling in the warehouse is given by the following equation.

Annual amount of material handled \( = (q-d) \frac{D}{q} \)

Annual material handling cost \( = m(q-d) \frac{D}{q} \) \hspace{1cm} (4)

It may further be noted that \( d \leq q \leq Q \leq D \)

Case 1\((q = d)\). Under this extreme scenario, a shipment equal to the daily demand arrives each day which can be directly cross-docked with no need for in-house material handling or storage in the warehouse. For such a 100% cross-docking strategy, the material handling and holding costs are zero or practically negligible as confirmed by equations (3) and (4).

Case 2\((q = Q)\). Under this intermediate scenario, the shipment amount is equal to the order size. This scenario would provide D/Q opportunities in a year for cross docking and the annual material handling cost would be:

Annual material handling cost \( = m(q-d) \frac{D}{Q} \)

Case 3\((q = D)\). Under this extreme scenario, the entire yearly demand is shipped under one shipment. This is a minimum cross-docking strategy which provides only one opportunity for cross-docking during a year. This scenario would give an annual material handling cost of ‘m(D-d)’.

Total cost model. The total overall annual cost can be computed by the summation of equations 1-4 as given below.

\[ TC = \frac{DS}{nq} + \frac{tD}{q} + h \frac{(q-d)}{2} + m(q-d) \frac{D}{q} \] \hspace{1cm} (5)

It can be observed from equation (5) that the lowest cost can be achieved when an appropriate value of ‘n’ is identified. In the ensuing discussion, we provide conditions and guidelines to obtain the value ‘n’. Under a certain condition that we develop in the paper, the cost function represented in equation (5) can proved to be a convex function w. r. t. ‘q’ and an opportunity exists to obtain global minima by setting the derivative equal to zero.
\[
\frac{\partial (TC)}{\partial q} = -\frac{DS}{nq^2} - \frac{tD}{q^2} + \frac{h}{2} + \frac{mdD}{q^2} = 0
\]  

(6)

This leads to the following formula for the optimal shipment size, \(q\).

\[
q = \sqrt{\frac{2D(t + \frac{S}{n} - md)}{h}}
\]  

(7)

**The Necessary Conditions:** It may be noted that for equation (5) to be convex, its second derivative must be positive.

\[
\frac{\partial^2 (TC)}{\partial q^2} = \left[ \frac{2DS}{nq^3} + \frac{tD}{q^3} - \frac{2mdD}{q^3} \right] > 0
\]

\[
\Rightarrow t + \frac{S}{n} > md
\]

\[
\Rightarrow n < \left( \frac{S}{md - t} \right)
\]  

(8)

Equation (7) ensures that the JIT shipment amount “\(q\)” will be positive under condition (8). From a practical perspective, condition (8) means that the per unit material handling cost ‘\(m\)’ should be low enough to provide the cross-docking and JIT benefits as compared with the additional per unit transportation and ordering costs i.e. \((t+S/n)/d\).

Furthermore, under the assumption that no multiple JIT shipments are made in the same day, the minimum amount hauled in a JIT shipment will be ‘\(d\)” i.e. the daily demand.

Setting “\(q=d\)” in formula (7) leads to the following condition (9) as follows:

\[
n \leq \left( \frac{S}{(md - t) + \left( hd^2 / 2D \right)} \right)
\]  

(9)

Also, the maximum amount ordered will be ‘\(Q=D\)” i.e. when the whole year’s demand is ordered at the same time. When the maximum amount is ordered but shipped through minimum shipment sizes, this also puts an upper limit on the number of JIT shipments as ‘\(D/d\)”.

\[
n \leq \left( \frac{D}{d} \right)
\]  

(10)

Finally, the minimum value for ‘\(n\)” will be ‘1’ which is the case of non-JIT strategy.

Therefore, the lower limit on ‘\(n\)” is specified as follows.

\[
n \geq 1
\]  

(11)
Next, we discuss the upper and lower limits on ‘n’ using two cases.

**Case (i) :** \( md - t \geq 0 \). Under this scenario, it may be noted when condition given in formula (9) is satisfied, then the conditions (8) and (10) are automatically satisfied. Therefore, formula (9) provides a sufficient condition to set the maximum number of JIT shipments i.e. an integer value ‘\( n_{\text{max}} \)’ equal to or lower than the result obtained from formula (9). It is evident from equation (5) that \( n_{\text{max}} \) corresponds with the lowest cost, therefore, we plug \( n = n_{\text{max}} \) into equation (7) to obtain the optimal value of ‘\( q \)’. The values of ‘\( q \)’ and ‘\( n \)’ obtained above can be used to compute the order size by multiplying the shipment size with the shipment frequency i.e. \( Q = q.n \). Practitioners would want to adjust the ordering amount ‘\( Q \)’ to a convenient number. This may render the solution somewhat sub-optimal but traditionally it has been found that the total costs in such models follow a bathtub pattern. Therefore, the total cost is robust enough to accommodate minor adjustments.

**Case (ii) :** \( md - t < 0 \). Condition (8) and for some data structures condition (9), render the number of JIT shipments as negative under this case. This infeasible and undesirable solution can be avoided through condition (11) that sets the minimum value for JIT shipments as ‘1’. The maximum value for JIT shipments in this case accrues from formula (10). For various data types, it was found that the lowest cost corresponds with the highest frequency of JIT shipments i.e. ‘\( D/d \)’.

**Concluding Remarks & Extensions**

Inventory plays a crucial role to maintain satisfactory customer service levels and ensure product availability in a supply chain. However, the financial commitment needed to carry adequate inventory levels cannot be ignored. Most inventory models are based on some kind of trade-offs among different cost categories. The trade-off between the ordering cost and holding is the most common one existing in inventory management literature. The present paper considers some additional trade-offs and cost categories which have not been considered in the traditional models. Furthermore, the paper provides a solution methodology to compute JIT shipment sizes, JIT shipment frequencies and the optimal order quantities. This highlights the contribution of the present work. Some further work on the model would include testing its validity over diverse data sets and identify key cost components which have a major influence over the total costs. The model can also be tested for sensitivity analysis by varying its input parameters. Such an analysis would be beneficial to further establish the robustness of the economic quantity model with respect to small perturbations in input parameters that happen in real life. The authors also recognize that several input parameters in economic order modeling are rather vague in nature and could not be specified in precise terms by a practitioner. Therefore, another extension of the model could be developing a fuzzy version of this model where the decision maker is allowed to specify the parameters in vague terms. We also believe the model can be applied for more complex real life problems where cross-docking concepts are extensively used. Besides numerous applications in warehousing, one application could be in the cross-docking activities performed in the baggage handling areas at various airports.
References
The Relationship between Development and Economic Freedom: A Panel Data Analysis

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Abstract

Within the last few decades, liberal economic ideas and policies have been spread worldwide along with growing globalization. In line with this trend, the term “economic freedom” has been used to describe the ideas of private property, free to choose, free to trade, competition and less regulation which had been put forth by the classical liberals and libertarians. From this perspective, the concept of economic freedom goes back up to the Physiocrats in 18\textsuperscript{th} century and their \textit{laissez-nous faire} (let us do) approach. These ideas are later defended by many famous economists such as Adam Smith, Ludwig von Mises, Friedrich Hayek (1945) and Milton Friedman (1962). This study seeks answers to the question that how economic freedom and its components affect education and health indicators. For this purpose, firstly, the concept of economic freedom and the methods measuring economic freedom will be discussed briefly. Then, the effect of economic freedom and its components on education and health will be tested with panel data analysis by grouping countries as “low income”, “lower-middle income”, “upper-middle income” and “high income” in consistency with World Bank Atlas Methodology. While this empirical analysis is being performed, Fraser Institute’s economic freedom index and its components which is prepared for five years period from 1970 to 2000, and for annually after then will be used. “Life expectancy at birth” and “infant mortality rate” will be used for health indicators, while “tertiary school enrollment” and “pupil-teacher ratio” will be used for education indicators. Empirical studies on the economic freedom in literature are generally conducted in a manner to involve the relationship between economic freedom and capital inflow and/or growth. However, the direct effect of economic freedom on development and social well-being is not sufficiently discussed. For this reason it is believed that this study will constitute a contribution to the literature.

Keywords: economic freedom, development, health, education
Social Housing Policies in Turkey: An Analysis of the Results of a Survey on “The House Ownership for Low Income Households with Low Installments Program”

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Abstract

The issue of housing has still a great importance in both developing and developed countries, especially for lower income households. Housing, as a subdiscipline of social policy, seems attracting less attention in academic literature than before for many developed countries. Little concern on the issue is mainly a result of structural profile of developed countries. Because, for many developed countries, housing problem is either a matter of the past or a matter of some social subgroups, such as single parents and low-income households. Today, developed countries are mostly trying to solve problems related with urban renewal and rapidly aging infrastructure rather than the production of mass housing. On the other hand, qualitative impairment and large-scale shortage in housing in underdeveloped and developing countries makes the issue important for these countries. Housing, as in other social policy areas, has many positive and negative externalities. Various negative externalities in housing (such as health problems, crime, culture of poverty, etc.) provide a priority for the issue over some other social problems. Despite its costly character, many governments in developing countries make significant investments in order to expand their housing stocks due to the severity of the problem. Turkey, together with a distinctive economic growth, has experienced a housing boom for 12 years. Mass housing projects coordinated by TOKİ (Housing Development Administration of Turkey) have been claimed by many as a leading reason for successive electoral triumphs of AKP (Justice and Development Party). Although steps in housing created a well-developed housing stock for the middle class, low income households who cannot afford moderately cheap flats of TOKİ are still in need in terms of housing. In order to provide affordable houses for the household in need, government started a program called “House Ownership for Low Income Households with Low Installments”. The essence of the program is to provide small flats for low income households with monthly installments that cost 100 Turkish Liras (about 38.5 $ / month at current rate). According to the scheme, following the payment of all installments, Ministry of Family and Social Policies, who is currently the legal owner of the flats, would transfer the properties to the households. The program has a unique character for Turkey in terms of its target group. Because this is the first program that ever targeted households who are at the bottom of income scale. Under the scheme there are approximately 15 thousands flats have been handed over to the households in need. However, discussions about the life conditions in these flats have started just following the first tenants moved to their flats. Discussions were not only about
physical capacities of the flats and their environment, but they were also about social interaction of people in this sites within themselves and with other people around them.

This study aims to analyze results of the program of “House Ownership for Low Income Households with Low Installments” in terms of its effect on the owners and society. In this context, Surveys and group interviews were conducted with house owners. Outcomes of the study depict that some common problems experienced in foreign examples are also available for the Turkish case. Considering current problems, the study offers some policy advises for the future.

**Keywords:** housing, social housing, Turkey, house ownership for low income households with low installments program, housing development administration of Turkey (TOKI), general directorate of social assistances (SYGM), ministry of family and social policies (ASPB)

**Introduction**

Housing and housing related problems have great importance for governments and policy makers due to their widespread externalities. However, policies offered for housing issues show some distinct differences between developed and developing countries. This differences are closely related with the structural profiles of the countries.

For developing countries, the housing problem mostly is a supply problem. Rapid urbanization, demographic trends and immigration lead to a need for housing supply in urban areas. Yet, governments of developing countries, because of fiscal limits, debt problems etc., confront with some limitations to solve the problem (Convey, 2005: 7).

The issue is somehow different for developed countries. Contrary to the developing countries, with some exceptions, housing problem for developed countries primarily is a multifaceted social problem. Because, housing is a problem for some social subgroups, such as single parents and low-income households rather than a supply problem (Forrest, 2004: 2). This is why academic literature on social housing in developed countries does not reply the questions of developing countries. Applying the same measures on the problem for all countries will definitely lead to some kind of anachronism.

Although categorizing countries for the sake of comparison provides some convenience, it is not possible to claim that countries in these groups represent a homogeneous profile. Individual phase of development of these countries would differentiate the structure of housing problems and solutions offered. While underdeveloped countries mainly deal with supply problems, countries relatively at the advanced stages of development face some problems similar to that developed countries have. This is the main rationale behind the scholars in some developing countries need more familiarity with the housing problems of more developed countries.

Housing, as in other social policy areas, cannot be considered independent of political ideology. Effects of widespread political ideologies on other social policies also might be seen on the housing issue. Solutions to housing problems was being considered as a success criterion for voters during social democrat governments before 1980s, while the problem
became a market related issue mainly under the responsibility of individuals themselves in
a neo-liberal transformation process (Convey, 2005: 7). Countries living rapid economic
growth, urbanization and immigration started to experience housing problems, especially
for lower income households, more severely than others. Examples depict that market
oriented solutions to housing problems could not help much to the poor people of
developing countries and for the most countries state intervention to the housing market
has become unavoidable.

Policies developed for housing problems of lower income households can be categorized
in two ways: Housing benefits and social housing. They are both need based policies.
Therefore, they are reactive policies in their natures. Low income and difficulties
experienced in the supply of housing are the main reasons that require government
intervention in housing. Although the problems related with natural disasters such as
earthquakes and floods can be solved in short-run, failure of the market to stabilize housing
supply can always be available. In both cases, government intervention is effective in
solving problem.

Governments using housing benefits for the housing problem actually tries to fix market
failure through subsidizing lower income households. The main point is here that
preventing inadequate demand by cash benefits or tax exemptions. In cases where adequate
number of housing unit is available on the market, such housing benefits may provide
decent housing opportunities for lower income households. However, housing benefits
would led to rent increases if there is not enough housing unit available. In such a case
some other tools such as rent control will be an option. However, repercussions that follow
rent control are complex and beyond of this study.

Housing benefits, mostly means-tested, require some other steps to apply. For example,
income threshold to claim a right on benefits is a difficult problem to cope with. People
just over the threshold will always blame the program as being unfair. On the other hand,
house owners under very unfavorable conditions will never have such a right. Demographic
criteria for housing benefits are also controversial. Priority of the families with children
may lead to some kind of dissatisfaction over other households.

Although housing benefits, cash or tax exemption, have some drawbacks, there are also
definite advantages for the households. First of all, households which benefits from
benefits find their houses. Each household will take their own social, cultural and economic
characteristics into account while choosing their houses. Choosing locations where parents,
relatives and friends are densely populated will provide a number of advantages for these
people. Secondly, a right to choose of housing location will provide a mobility for labor
market which is very strategic for lower income households.

In many cases, despite their advantages, housing benefit programs do not guarantee
adequate number of housing units for lower income households. This is why governments
intervene the supply of housing directly. Direct government intervention on housing supply
for the lower income households mostly take place in the form of social housing.
Governments, central or local, are active in many countries at social housing production
and management. In addition to the housing allocation, governments in many developed countries are responsible for maintenance and renovation of these houses. In addition, many countries have financial institutions which provide credits at moderate rates for social housing facilities.

Housing associations and some other non-profit organizations are other major social housing providers. These organizations mostly supported by governments through cheap credits and tax exemptions. In some countries, social housing units built by governments transferred to the non-profit organizations for better management. Subsidiarity is the main rationale behind this transfer. However relaxed controls over rents led to an increase in profit oriented communities to build mass housing units in many countries (Reinprecht, 2007: 35-37).

Social housing, built and managed by different actors, has similar problems in many countries. These residences where lower income households live, by the impact of certain social prejudices, can be seen as a big source of problem. The problems can be originated from low qualities of housing units as well as household profiles of these residences. While low income is a major problem for these people, lack of education and occupational skills, health problems and psychological problems, effecting many people in these units, make the social houses a trouble spot.

An offer to organize an appropriate social mixture of people with different profiles in these residences is not possible for several reasons. Since they do not approve the physical and the social environment of social houses, households in middle and upper income groups, prefer to reside in other regions despite their low budgets. They may also prefer to live in the suburbs of the city because of rejecting to live in the same area with the people they regard as problematic. All these choices result in emergence of social housing units where low-income and problematic people concentrate. Countries at an early stage of social housing must consider previous cases in detail.

Turkey can be considered as a good example of this category. Turkey, together with a distinctive economic growth, has experienced a housing boom for 12 years. Mass housing projects organized and financed by Ministry of Family and Social Policies\textsuperscript{12}, have been claimed by many as a leading reason for successive electoral triumphs of AKP (Justice and Development Party). However, the mass housing projects were mainly for middle class households who can afford at least some of cost in advance. By the early of 2013, approximately 500 thousands housing units have been built by TOKI. Although, TOKI names almost 85 % of this stock as “social housing”, only a small part of this housing stock, approximately 15 thousands housing units, which is only 3 % of the total, must be considered as social housing units\textsuperscript{13} (Ozdemir, et al: 126).

\textsuperscript{12} Since TOKI, Housing Development Administration of Turkey, conducted all construction affairs of the projects, there is a common misunderstanding among people about the owner of project. The responsible institution is the Ministry of Family and Social Policies.

The program called “House Ownership for Low Income Households with Low Installments” emerged as a response to that deficiency in housing. Lower income households, on the other hand, were not subject to any housing subsidy except some benefits supplied by local authorities General Directorate of Social Assistances (SYGM). Therefore, the social housing system in Turkey solely based on ownership option with monthly installments by residents and central government support. The essence of the program is to provide small flats for low income households with monthly installments that cost 100 Turkish Liras (about 38.5 $ / month at current rate, March 2015).

The research about problems about social housing and housing benefits has a detailed and comparative analysis of the housing issue in Turkey. Research as an early attempt to define the problems of social housing is very important. This proceeding only covers problems related with social housing units.

Features of Current Social Housing Model in Turkey

In Turkey, with parallel to recent economic growth, there are satisfying developments in areas such as social security, health, education, employment, income distribution which are accepted as the basic tasks of welfare state. However, there were no any significant effort on “social housing”, another major duty of a social state, until last few years. Contrary to many developed countries which increased their housing stock from the beginning of 18. century to the 1980s, Turkey did not even a social housing policy until recent years.

“Social housing ownership model” which already valid in Turkey is carried out by the central government. Compared to many developed welfare states, Turkey has a limited social housing model for lower income households with only two tools to use. They are social house ownership and housing benefits. There must be considered that Turkey does not have a well developed housing assistance system, yet.

A significant part of the cost of the social houses is collected from the residents by spreading payments up to 270 months. At the end of the payment period, the residents have legally property of the houses and the government is released from any cost related with maintenance and repair of the houses.  

Recent numbers on TOKI Housing Production Report reveal that total number of houses produced by TOKI reached to 652 thousands. According to the report, 85,39 % of the whole housing stock is called as “social house”, despite most of them are not compatible with the definition of “social housing” in the literature. TOKI classifies social houses into five groups. These housing groups are “housing units provided to the middle income groups and lower income groups”, houses provided to the poor”, “conversion of shanty houses (urban renewal projects)”, “houses provided to disaster areas”, “agricultural village implementations”. Their shares in total are 41.04 %, 22,62 %, 15,04 %, 5,82 %, 0,88 %, respectively. For further information: (TOKI, 2015).

Only 4,5 % of this stock in 2015, approximately 30 thousands, match the criteria of social housing in literature, named as “House Ownership for Low Income Households with Low Installments” by Ministry of Family and Social Policies. This number was 18,686 in 2013, and 24,607 in 2014. See: (Aile ve Sosyal Politikalar Bakanlığı, 2014: 115-116); (Aile ve Sosyal Politikalar Bakanlığı, 2015: 77-79).

14 Maintenance and repair cost of social houses are significant cost items for many developed countries. Releasing from these costs mitigates the burden on government budget and motivates the residents for saving.
There is a need to diversify current housing models in Turkey. The rationale behind this necessity is mainly a result of failure in providing housing to the poorest part of the population.

Considering general trend in housing, Turkey needs reasonable and sustainable housing models that coexist. Parallel to economic growth, there will possible to conduct “hybrid social housing models” (in terms of financial support or direct grant) in Turkey. In near future, several housing benefit schemes such as transferring house ownership, housing benefits for poors, renting (public or private), providing housing without ownership, financial support and maintenance support seem to become options for the governments.

**Research on Social Housing and Housing Benefit**

**Research Aim**
The main purpose of this research is to measure the effects of the Social Housing Project which is conducted by General Directorate of Social Assistances (SYGM) in coordination with Housing Development Administration of Turkey (TOKI) on people who are in need in terms of housing. In the context of the research, housing benefits supplied by Foundation of Social Assistance and Solidarity (SYDV, a state foundation responsible for public aid programs) have been studied with a comparison to the current social housing project. By considering current conditions, the study aims to propose reasonable housing benefit models for SYGM. However, this dissertation which will be presented covers only results related with social houses.

**Research Method**
Target population of the research is people who benefit from the social housing project and housing benefits. The number of these people were 20,763 at the beginning of 2013. However, due to the their improper characteristics, there are several households excluded from target population. At final stage, target population was 19,909 in total. People who were chosen by SYDV AS social housing project residents are accepted as experimental group and people who benefit from housing benefits provided by SYGM are accepted as control group. The comparison of these parties constitutes the framework of the study.

**Table 1. Distribution of sample according to the cities (Turkey)**

<table>
<thead>
<tr>
<th>No.</th>
<th>Cities</th>
<th>Maintenance Support Holders</th>
<th>Social House Owners</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Number</td>
<td>%</td>
</tr>
<tr>
<td>1</td>
<td>Afyon</td>
<td>54</td>
<td>6,7</td>
</tr>
<tr>
<td>2</td>
<td>Aksaray</td>
<td>17</td>
<td>2,1</td>
</tr>
<tr>
<td>3</td>
<td>Antalya</td>
<td>49</td>
<td>6,1</td>
</tr>
<tr>
<td>4</td>
<td>Bingöl</td>
<td>21</td>
<td>2,6</td>
</tr>
<tr>
<td>5</td>
<td>Bursa</td>
<td>23</td>
<td>2,9</td>
</tr>
<tr>
<td>6</td>
<td>Çankırı</td>
<td>5</td>
<td>0,6</td>
</tr>
<tr>
<td>7</td>
<td>Çorum</td>
<td>14</td>
<td>1,7</td>
</tr>
<tr>
<td>8</td>
<td>Elazığ</td>
<td>20</td>
<td>2,5</td>
</tr>
<tr>
<td>9</td>
<td>Erzincan</td>
<td>20</td>
<td>2,5</td>
</tr>
<tr>
<td>10</td>
<td>Erzurum</td>
<td>34</td>
<td>4,2</td>
</tr>
</tbody>
</table>
Although all 81 cities of Turkey were target population of the research, considering some factors such as time, cost and ability to represent, 21 cities (followingly stated) that includes people who benefit from previously noted schemes more dense were determined as sampled population.

As stated above, there are two different sub-groups in this research in order to demonstrate behavioral perception of people who benefit from social housing projects and housing assistances. First sub-group is owners of social housing projects that constitute 7,398 people. The residents who lived over 1 year in these social houses (about 2,500 beneficiaries) were taken into account at a 5% confidence level and in a 4% confidence interval by applying 500 surveys. By considering several characteristics, to determine the number of surveys, there has been benefited from “systematic random sampling technique” for household selection by using “probability proportional to size sampling”.

Although there are 56 questions (perceptual/factual) in the survey, this study covers only questions on advantages and disadvantages of social houses.

Second sub-group as a “control group” consists of 12,511 households which benefit from housing assistances (except assistance for household goods) provided by SYDV. The survey for this group includes 33 questions (perceptual/factual).

By considering their weights in main sample, there has been decided to apply 700 surveys at a 5% confidence level and in a 3.5% confidence interval. By considering several characteristics, to determine the number of surveys, there has been benefited from “systematic random sampling technique” for household selection by using “probability proportional to size sampling”.

A total of 1200 surveys applied on households where respondents are reference persons was conducted in 21 cities. While experimental group consists of 41.67% of sample, control group consists of 58.33% (maintenance assistance 5.08%, rent assistance 32.67% and other housing assistances 10.58%) of sample. In order to determine households to apply the survey under prescribed quotas, “systematic random sampling technique” was conducted by using data from SYDV and TOKI. While forming sampling framework, reserve households (about 25% of sample) have been constituted. Households which
visited for three times and have not been reached was replaced with these reserve households using the principle of substitution.

Field study of the quantitative research has been started at May 02, 2013 and completed at May 14, 2013. In addition to the quantitative research, the qualitative research that includes in-depth interviews and focus group discussions.

**Opinions of Survey Respondents on Social Housing**

**Disadvantages of Living in Social Houses According to Survey Respondents**
The respondents overwhelmingly states “distance to the centre”, “transportation problems”, “small houses with insufficient rooms”, “security concerns, fighting and noise” and “bad neighborhood relations” as negative aspects of social housing. These issues were major points in both in-depth interviews and focus group discussions.

| Table 2. What is the worst part of the living in social houses? (Multiple answer) |
|-----------------------------|--------------------------|
| Number | Opinions                                                                 | Percent |
| 1 | They are far from city center, have transportation problems, costly | 25.9 |
| 2 | Houses are small, houses have few rooms, houses have insufficient baths and kitchens | 25.5 |
| 3 | Security problems, fights, noise | 24.3 |
| 4 | Neighbours are incompatible, poor neighbourhood relations | 23.0 |
| 5 | Houses do not have any negative aspect | 10.5 |
| 6 | The excessive number of flats | 9.5 |
| 7 | Houses have some problems in terms of public spaces and basic necessities | 7.4 |
| 8 | Problems related with monthly payments | 6.3 |
| 9 | Constructive problems | 4.4 |
| 10 | Lack of health care institutions | 4.4 |
| 11 | Administrative problems | 4.2 |
| 12 | Hygiene problems | 3.2 |
| 13 | Lack of employment opportunities | 3.2 |
| 14 | Insufficient infrastructure | 2.9 |
| 15 | Other | 2.5 |
| 16 | I don’t have any idea/no comment | 4.6 |

**Problems Related to Locations of Social Houses (Distance to the Centre, transportation problems, distance to public services etc.)**

Distance to the centre was the leading problem in in-depth interviews. Some families with several members who commute to the city centres for several purposes (education, business etc.) launch out into transportation expenses which are difficult to meet.

**Problems Related with Physical Structure of Social Houses (small and insufficient houses, low material quality in housing, limited public spaces, lack of infrastructure, heating system etc.)**

Small houses with a few rooms are not also compatible with Turkish family traditions and moral understanding. Early wear of the buildings and public spaces leads to deterioration in life quality in social houses. It is possible to say that selected locations force individuals in many respects. Beneficiaries with low incomes should not automatically mean that those people deserve such a life quality.
Problems Related with Environment of Social Houses (insecure environment, weak neighbourhood relations etc.)

The western literature on social housing put a special emphasis on relation between social housing and crime. Anti-social behavior is also another common problem in the literature. Socio-economic levels of residents, location of social houses and architectural structure of these buildings have been stated as main causes of crime and anti-social behaviours (Mazerolle, Terrill, 1997: 236-237). Although there is no such a crime statistics for social houses in Turkey, many residents define their environment as insecure. However, these feelings may be related to lack of contact with neighbours. Complaints about neighbours are mostly about weak neighbourhood relations. In Turkey, like many middle east countries, people have closer relations with their neighbour than many developed countries. In a new environment where people do not know each others well enough, people may feel themselves insecure. There seems it is early to talk about whether social houses in Turkey are sources of crime and anti-social behaviour, yet.

Social houses in many developed countries emerged as a resort for lower income families and have a bad reputation among people (Hastings, 2004: 233). Social stigma is a complex issue with multiple variables. However, results of stigma are similar to each other in many cases. Stigmatized people mostly can not use their basic rights, reach economic resources and finally they become a culturally excluded group of people in society (Arthurson, Jacobs, 2004: 27). The case in Turkey does not how any big difference from other cases. Especially, in-depth interviews made it clear that although social housing experince in Turkey is young, there is a widespread stigma among public. Many residents narrated their personal witnesses about what other people talk about social houses. People who live around social houses mostly see social houses as problem centers. Some people blame social houses as a prostitution place. They especially target widow women who live in those houses. Many residents of social houses are aware of this blamings and they mostly prefer not to declare where they live.

Lower income households with similar problems live together in these social houses. Therefore, a healthy social mix seems lack in these communities. This situation makes the social houses as easy targets for stigma. Not only middle income households but also lower income households living out of social houses blame social house residents with crime. Maybe, it is possible to say some kind of jealousy may lead to such a behaviour.

The Residents’ Problems with Payments (Monthly installments, Routine costs, etc.)

The following table shows whether residents of social houses pay their monthly installments regularly. 28 % of the residents seems do not have any interruption in payments. 70 % of the residents have some problems with paying installments in some way. The percentage of those who disrupt the housing installments six times in the last six months has exceeded 30 percent. This means that these people have not made any payments in the last six months. However, many residents declared that they paid higher rents for their previous houses. This shows that payment is not just an economic issue, there are some different issues behind this.
In-depth interviews, payment irregularities were the most common complain of SYDV officials. The residents do not have habit and discipline of regular payment. And payments irregularities increasingly become more common. Some older residents do not make any payment with the idea of no one can take these houses back. On the other hand, although they live elsewhere, some rights holders do no make any payment as well as they waive their rights.

Residents also pay some money for the routine costs of houses. Cleaning costs and heating costs are these kinds of costs. However, many people live some difficulty in paying these costs. In many social housing units, although cleaning expenses cost around 20 TL (around 8 US $) per household per month, only a few households make this payment. Many households claim that they even do not have enough money to pay cleaning expenses. On the other hand, some people stated that social houses are very dirty and they do not deserve such a payment.

Heating is also a big problem for the social houses. Almost all residents in social houses were using a heating system other than a central heating system. Other heating options were providing some kind of opportunity to these people. They were using mostly coal which is supplied by SYDV or municipalities for free. In social houses, central heating systems use natural gas which residents do not get any help for. Many residents complain about this situation. Because they state that they can arrange something in old days, but they have not any alternative today.

SYDV officials also warn about some potential legal problems such as inheritance issues. There is possible to talk about a legal loophole which needs a clarification. The main question what will be the condition of a resident’s legal successor if the resident dies before making any payments. In this context, Çankırı emerges as a unique case. It seems that success in Çankırı case is a result of healthy personal relations between the residents and social housing administrators.

**Table 1.** Did you have any payment problems in last six months? If yes how many times you missed payments?

<table>
<thead>
<tr>
<th>Opinions</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never</td>
<td>27.9</td>
</tr>
<tr>
<td>Once</td>
<td>4.4</td>
</tr>
<tr>
<td>Twice</td>
<td>10.3</td>
</tr>
<tr>
<td>Three times</td>
<td>11.4</td>
</tr>
<tr>
<td>Four times</td>
<td>7.2</td>
</tr>
<tr>
<td>Five times</td>
<td>5.9</td>
</tr>
<tr>
<td>Six times</td>
<td>32.9</td>
</tr>
<tr>
<td>Total</td>
<td>100.0</td>
</tr>
</tbody>
</table>

The next table indicates that housing installments enforce the family budgets of 76.6 % of the residents. Observations during the research reveal that 100 tl payments are really difficult to pay for some residents. However, when there is compared with the previous rent payments, irregularities in payments must have different reasons rather than economic difficulties.
Table 4. In what extent monthly payments impose a burden on your family budget?

<table>
<thead>
<tr>
<th>Opinions</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monthly payments do not impose any burden on my family budget</td>
<td>13,5</td>
</tr>
<tr>
<td>Monthly payments impose little burden on my family budget</td>
<td>8,9</td>
</tr>
<tr>
<td>Monthly payments impose burden on my family budget</td>
<td>76,6</td>
</tr>
<tr>
<td>I don’t have any idea/no comment</td>
<td>1,0</td>
</tr>
<tr>
<td>Total</td>
<td>100,0</td>
</tr>
</tbody>
</table>

Other problems of Social Houses (location, transportation, lack of public services etc.)

Problems related with the locations of social houses are the most cited problem in both surveys and in-depth interviews. Some kind of isolation feelings are widespread among the residents. Social houses around Turkey have been constructed on some locations far from city centers. They are not only far from the city centers, they are also far from industrial and business districts. Many residents as daily commuters complain about transportation problems. Transportation costs and long hours on the ways are main sources of complaints. Considering income levels of these households, there is easy to imagine that such a condition may impose a burden on the residents’ budgets.

Locations that social houses have also lead to some problems in getting local public services. Many municipalities have some problems with these houses to provide basic services. Many residents accept this situation as an unfair action. They believe that local governments ignore them due to their economic levels. However, some residents admire their new houses as clean places. It shows that the quality of previous housing environment of the residents is a reference point in defining the success of local governments.

Advantages of Living in Social Houses According to the Respondents

Table 5. What is the best part of the living in social houses? (Multiple answer)

<table>
<thead>
<tr>
<th>Number</th>
<th>Opinions</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Not paying a rent and having house</td>
<td>30,0</td>
</tr>
<tr>
<td>2</td>
<td>Clean air and environment</td>
<td>28,5</td>
</tr>
<tr>
<td>3</td>
<td>Neighbourhood relations</td>
<td>14,3</td>
</tr>
<tr>
<td>4</td>
<td>There is no any advantage</td>
<td>13,9</td>
</tr>
<tr>
<td>5</td>
<td>Peaceful and spacious environment</td>
<td>11,6</td>
</tr>
<tr>
<td>6</td>
<td>Having a central heating system and hot water supply</td>
<td>8,7</td>
</tr>
<tr>
<td>7</td>
<td>Having a habitable and clean house</td>
<td>6,3</td>
</tr>
<tr>
<td>8</td>
<td>Secure and safe environment</td>
<td>4,9</td>
</tr>
<tr>
<td>9</td>
<td>Having a decent flat</td>
<td>3,6</td>
</tr>
<tr>
<td>10</td>
<td>Having social facilities</td>
<td>3,2</td>
</tr>
<tr>
<td>11</td>
<td>Easy transportation</td>
<td>3,0</td>
</tr>
<tr>
<td>12</td>
<td>Other</td>
<td>1,1</td>
</tr>
<tr>
<td>13</td>
<td>I don’t have any idea/no comment</td>
<td>6,1</td>
</tr>
</tbody>
</table>

The best aspects of living in social housing are listed in the table above. “Not paying a rent and having a house” and “clean air and environment” have been stated as leading positive aspects. However, 14 percent of residents state that there is no good side of living in these houses.
General Opinions of the Respondents About Social Houses

Table 6. If you had the same opportunity today, would you prefer to have a social house?

<table>
<thead>
<tr>
<th>Opinions</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>No, I would not</td>
<td>37.5</td>
</tr>
<tr>
<td>I am indifferent</td>
<td>6.1</td>
</tr>
<tr>
<td>Yes, I would</td>
<td>56.1</td>
</tr>
<tr>
<td>I don’t have any idea/no comment</td>
<td>0.3</td>
</tr>
<tr>
<td>Total</td>
<td>100.0</td>
</tr>
</tbody>
</table>

37.5% of respondents declared that they would not move the current social houses if they had the same opportunity today. This statement shows that a considerable part of the respondents feels some kind of regret. On the other hand, 56.1% of the respondents state that they would move to the current houses if they had the same opportunity. Although many respondents declare that they are ready to accept the same offer under the same conditions, many directors in the Project state that they witnessed some deep regret among some social house owners.

Table 7. If you have an opportunity, would you like to buy a social house?

<table>
<thead>
<tr>
<th>Opinions</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>No, I would not</td>
<td>22.7</td>
</tr>
<tr>
<td>Maybe</td>
<td>2.9</td>
</tr>
<tr>
<td>Yes, I would</td>
<td>70.3</td>
</tr>
<tr>
<td>I don’t have any idea/no comment</td>
<td>4.1</td>
</tr>
<tr>
<td>Total</td>
<td>100.0</td>
</tr>
</tbody>
</table>

70% of the respondents (respondents having housing benefits) who have some kind of information about social houses state that they would to prefer to buy a social house if they had enough opportunity. In focus group meeting in which both housing benefits beneficiaries and social housing residents participate, some interesting incidents took place. Participants who benefit from housing benefits and have some positive attitude for buying a social house stated that they have changed their ideas due to the complaints of social housing residents presented. They declared that they have not any positive attitude about living in a social house no longer. It is interesting to note that, at that point social housing residents started to speak about problems in social houses are not as big as it has seen and they tried to change the ideas of housing benefits beneficiaries’ in a positive way.

Table 8. Alternative demands to Social Housing : Which alternative do you prefer instead of Social Housing? (Percent)

<table>
<thead>
<tr>
<th>I would</th>
<th>I would</th>
<th>don’t have any idea/no comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>I would</td>
<td>not</td>
<td>Maybe</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Maintenance Support Holders</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Social House Owners</td>
</tr>
<tr>
<td></td>
<td></td>
<td>don’t have any idea/no comment</td>
</tr>
<tr>
<td>Living in your old district and taking housing benefit from the state</td>
<td>39.9</td>
<td>3.2</td>
</tr>
<tr>
<td>Construction of a new house by the state in your old district</td>
<td>10.6</td>
<td>1.7</td>
</tr>
<tr>
<td>(If the respondent has a house) renovation of old house by the state</td>
<td>34.8</td>
<td>4.4</td>
</tr>
</tbody>
</table>
Respondents were asked about that what kind of alternatives they demand instead of social housing option. 86% of the respondents wanted to have a house in their old districts with the help of state. 60% of respondents demand interest-free loans or rent support in order to live in their old districts. 65% of the respondents want to live in social housing units, but those houses must be constructed in different and accessible districts.

**Discussion**

Social housing is a very young issue in Turkey. Contrary to many developed countries which have very old social housing experiences, results of Turkish case is so new for a detailed analysis. This research has been designed to analyse social houses in an early stage of their development. Further research on the issue is required with time intervals for detailed analysis. However, current research already shows many problems having some similarities with developed countries. Although there are many similarities, social housing in Turkey depicts some differences from other cases.

Current housing benefit scheme in Turkey includes only social housing and a limited housing benefit. The system needs a proliferation. There is required a housing map of Turkey that will cover major problems of housing. Many poor households can not get any kind of help from government. Benefits must be transparent and people must be informed about requirements of housing benefits. The current system seems very backward compared to developed countries.

Households who need housing benefits are mostly lower income households with little opportunity to get a loan from the market. Supplying loans at favorable rates for lower income households may be an alternative to social housing. So, at least some of lower income households can buy houses without creating a burden on government’s budget. Public guarantee on the loans may lead to other actors (private banks, cooperatives) to make something on the issue.

Local governments do not have a significant role in housing policies for poors. Since their domination on local issues, local governments can play a major role in housing issue. Problems related with location and transportation may be solved by planning of local governments. In order to provide a healthy social mix, local governmets may arrange lands in the various parts of the cities. Central governments must fiscally support local governments to produce better social housing units.

Size of the social houses is one of the biggest sources of problems. Concerns about construction costs force government to build smaller houses. These houses create troubles for crowded families. Although building small houses is a cost efficient way of social
housing, cost of possible problems related to the size of the houses may be high enough to exceed current cost efficiency. The myopia in this issue may lead to serious problems in future. Number of family members must be considered in planning of social houses in the next.

Concerns about the cost is an important selection criterum to determine locations of social houses. Feeling of being socially excluded may be more serious problem than transportation. The residents feel themselves as an unwanted part of the society. They also lose their connections with their parents and relatives. This condition creates some other unexpected costs such as baby-sitting, caring of old people etc. Having less contact with old friends is also another location oriented problem. Feeling of loneliness is a natural result of this condition.

The excessive number of flats in a social housing site is another problem in social housing. Concentration of many lower income households in an isolated district must be avoided. Smaller sites around the cities may be a better option. Some kinds of problems related to concentration (stigma, anti-social behaviour) can be prevented or lessened by this option. Multiple social housing sites in a city may also be solution for transportation problem. Because households may choose the best location considering transportation.

Many residents in social housing units face the problem in payment of heating bills. Because many of these households were getting in-kind coal benefit from local and central government in previous years, cost of heating burden is very high. Using natural gas for heating, despite its efficiency, seems an unsustainable policy for the social houses. Transforming central heating systems to use coal may be a good step. Otherwise, burden on SYDV will increase to a non-affordable level.

Lack of public spaces in social housing sites is another problem source. Because many residents do not have chance to know each other. A common area, such a café or a community center, may help for a better socialization process. Senior residents who usually stay at home may organize such facilities. SYDV may support such options. This support must not only cover cost issues but also cover social services in cooperation with Ministry of Family and Social Policies. So, problems of younger residents may be detected in an early stage.

As stated above, social housing in Turkey is very new issue. Housing benefits are in their infant period. Benefiting from the previous experiences of developed countries is a moderate way to follow. However, unique characteristics of Turkish tradition must be considered in detail. Applying the same policies

References


Branding Adana as a Touristic Destination in the Eastern Mediterranean Region of Turkey

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Abstract

City marketing, a term that widely discussed by academics, has its roots in entrepreneurialism (Griffiths, 1998) and goes back as early as end of 1960s (see Kotler & Levy, 1969). City branding, however, is a relatively new term dating back 1990s (see Firat & Venkatesh, 1993; Balmer, 1998) and starting to gain even more importance by following the extensive work of Kavaratzis (2004, 2005 and 2007) on the matter. There are also examples, where a coordinated work by all involved parties could produce positive results on some of the rather poor or room for improvement city images as in the example of Amsterdam (Kavaratzis & Ashworth, 2007), Torino (Vanolo, 2008), Barcelona ( Hospers, 2009) and Berlin (Colomb, 2012). The main idea, however, stayed same: apply marketing principles to improve a city’s image by taking into account of the differences of each product (in this example the city in question). This study, following these principles, will present the current city image of Adana, a city that is located in the Eastern Mediterranean region of Turkey. By viewing and presenting the limited studies on the matter, (as being part of an ongoing research, hence work-in-progress) the study will evaluate the current situation of the city, compare previous studies’ findings and try to implement relevant ones to Adana, the city in question for the current work. Based on these, it will present the secondary research findings in a matter to lay a foundation and act as a starting point for the future researchers.

Keywords: Adana, Eastern-Mediterranean, touristic destination, city marketing, city branding, city image

City Marketing

Cities all over the world include known marketing techniques and use applications that were initially designed for the businesses (Kotler et al., 1999). Paving the way by publishing various articles on the topic, Kotler has a great contribution in developing the concept of city marketing by introducing non-profit marketing (Kotler & Levy, 1969) and social marketing (Kotler & Zaltman, 1971) to the academia. Van den Berg (1990) suggested that services marketing mix should be adapted to the city marketing concept. Ashworth (1994), on the other hand, pointed that place marketing is different than other forms of marketing activities and a special type of marketing should be devised to accommodate these differences. Taking the argument further, Griffiths (1998) introduced “entrepreneurialism” to the equation by claiming that one-fits-all marketing approach failed when applied to cities around the globe. Hubbard and Hall (1998) contributed to the literature by indicating that entrepreneurialism techniques must be used for city marketing and the cities should be run more like a business.
City Image
When it comes to “city image”, there were different views among the academics as well. Ashworth and Voogd (1990) for example proposed that the object of city marketing is not the city itself but its image. Kearns and Philo (1993) concentrated more specific attributes to build a city image such as arts, festivals and cultural attractions. Borchert (1994) on the other hand, stated that city marketing is a relatively new term and assumptions based on previous marketing related work should be cautious due to the differences. Ward (1998) draw our attention on the promotion of the city name and claimed it should be the main focus when building city image. Graham (2002) mentioned two different, overlapping cities: external city and internal city. External city is the common or well-known features that encapsulates ones thoughts about a city and more tangible. Internal city, on the other hand, where image building comes in and whether true or false, is one’s perception about a city. Taking the point further, Vermeulen (2002) indicated that image of a city is greatly shaped by a well-known attribute, hence it should be well planned and once set it is difficult to change.

City Branding
Hankinson (2001) stated that specific studies on city branding are limited when compared with studies on generic city marketing. Trueman et al. (2001) also outlined their view on the matter indicating that “there is a need for a robust analysis of the city as a brand”. Vermeulen and Florian are among the few academics that concentrated mainly on city branding. Vermeulen (2002) for example outlined that there should be a proper planned, managed and marketed image for the city for a city branding to succeed. Florian (2002) by publishing a book entitled “City Branding” clearly and named what marketing approach is needed for building a city brand. Graham (2002) is also one of the same era contributors to the city planning, and one of the pioneers that mentioned “external” and “internal” city in his research.

Adana City
Located in the south of Turkey with a two adjacent towns to the Mediterranean Sea (Karatas and Yumurtalik), Adana is the 6th largest city of the country with a population of slightly over 2 million residents scattered around a 14,000 square kilometres of land (http://www.nufusu.com/il/adana-nufusu [Feb. 2015]). Consisting of 15 towns and almost 600 villages located around, each of them has an historic or scenic value to offer to its visitors (Bozkurt, 2014). The town-centre itself is not far from this colourful picture, with the help of recent discovery of artefacts dating back more than 2,000 years, listing the city as being one of the oldest habitats in the region. On top of these, the city is almost blessed with full colour of each seasonal change, allowing an explorer to experience swimming in boiling hot and hiking in contrast cold temperatures in a single day. The high season of summer makes the life rather difficult for the occupants with the scolding hot temperatures, especially to the ones live in the town centres. However, coupled with the humidity and the fertile land in the region, perhaps this warm weather is one of the most contributing factors that farmers can grow and harvest three or even four different products in a single season. As with the hot temperatures during the high season, occupants could always “breathe some fresh air” either in one of the many surrounding higher-altitude villages with less humidity and lower temperatures or reside in one of the seaside towns, as mentioned
earlier. Adana’s villages and their tourism offerings will be outlined briefly in the alphabetical order.

**Aladag**
Located in the north border of Adana city, Aladag consists of 26 villages. On top of rural tourism, Aladag contains many other attractions such as the area around Catalan Damn which is very suitable for hiking and bird-watching. Catalan Damn’s artificial lake also offers fishing opportunities to the enthusiasts. Akoren village, another tourist attraction in the area is rich with historic artefacts and churches. Masiret plains also offer historic ruins around ancient tombs and windmills. Rather famous Marviyan ruins in the region offer remainings of a Roman bath and a church to the visitors. Egni river and Egni fortress on top of it and Aciman area are also among the other touristic attractions in the region (http://www.aladag.bel.tr, http://www.aladag.gov.tr [Feb. 2015]).

**Ceyhan**
Located in the east border of Adana city, Ceyhan consists of 71 villages, making it the second largest town in terms of its population. Yilankale and Dumlukale fortresses, Kurkulagi tomb and inn located around Durhasanedede village, Misis inn, Abdulkadiraga mosque in the town centre, Sirkeli tomb about 5 kms distance are the main historic sites in the area. Agacpinar village and surrounding forestry is also popular for the rural tourism. Perhaps one of the interesting tourist attraction for the town is the multicultural, multi-ethnic origin Ottoman Army Band (Mehteran) that is sponsored by the local council (http://www.ceyhan.gov.tr [Feb. 2015]).

**Feke**
Located in the north-east border of Adana city, Feke consists of 40 villages. Feke, Ugurlubag, Maran Fortresses, Kaleyuzu watch-tower, ruins of Akkaya tombs, Kara and Kizilyer churches are the historic paces worth to mention. In addition to these, the region offers its visitors to locally brewed trout fish and cedrus mushrooms that are considered local delicacies. The locals also produce Feke rugs and knives for the visitors. The region is also famous for the rural tourism and paragliding. Finally, around Gurumze village there is a 644 year old cedrus tree, which is under protection (http://www.feke.gov.tr [Feb. 2015]).

**Imamoglu**
Placed in the north-east border of Adana city along with Feke, Imamoglu has 18 villages. There were some artefacts found around Corten village, along with the findings near Altin Cave. Koyunevi is another village that some historical remains were also discovered (http://www.imamoglu.bel.tr [Feb. 2015]).

**Karaisali**
This town is located in the north of Adana with its 68 villages. It hosts a watchtower in the town centre, along with Yerkopru bridge and recreation area in Guluslu village. Around Hacikiri village there is Varda railway bridge which is also called Koca Kopru or German bridge by the locals because it was built by the Germans, a landmark that was featured briefly in the 2013 Pierce Brosnan’s 007 movie “Skyfall”. Other regional attractions are...
Bayrampasa inn around Altinova village, Dokuzoluk recreational area, Karapinar park and Kızıldağ plains, where wrestling contest takes place annually. The region is also famous by a fruit called “murt” that grows on Mersin tree, which is also used as a remedy for treatment (http://www.karaisali.bel.tr, http://www.sozce.com [Feb. 2015]).

**Karatas**
Located in the south of Adana, this town has 46 villages. As being one of the two towns that connects Adana to Mediterranean, Karatas has one of the longest beaches in Turkey, almost 60 km length in total. It also hosts plenty of wildlife including a variety of wild birds and turtles. Hurma, Akyatan and Tuzla enclosures by the sea are also good for breeding fish, crab and prawn. The town is also famous for fishing, amateur and professional alike. Magarsus ancient city and harbour from Byzantium era still contains a number of ruins including a fortress, temple, theatre and a colosseum. There are also master plans for the town for opening the area to golf tourism and building a motorway that will connect the city to Mersin, another sea-side city next to Adana (http://www.karatas.gov.tr [Feb. 2015]).

**Kozan**
Placed in the north-east of Adana city, Kozan has 86 villages. Kozan was a city between 1923 to 1926, after that connected to Adana as a town. It contains a number of tourist attraction points, mainly Kozan, Anavarza, Karasis fortresses, Anavarza ancient city and open museum, ruins around Hamam, Fettahli and Yassicali villages, Yaverin mansion, Kilikya church, Soluhan inn and Turkish bath, ancient bazaar and historic houses-shops in the town centre, Battal Gazi dungeon, Hoskadem and Kucuk mosques and Roman bridge on the Kozan river. In addition the town offers recreational and sight-seeing alternatives such as Dagilcak, area around Kozan lake, Bucak valley and Kumlugol. Kozan lake also serves amateur fishermen and tourists with the help of boat tours in summer (http://www.kozan.gov.tr [Feb. 2015]).

**Pozanti**
This town is located in the northwest border of Adana with its 16 villages. Main historic features of the town are Akkopru bridge around Sekerpınarı village, Anahsa and İbrahim Pasa fortresses in the town centre that are built by Ottomans. Pozanti is also famous for rural tourism due to its high altitude plains, along with a number of protected trees such as a 635 year old cedrus tree in Cetinlik forest, 200 year old oak tree around Belemedik village and 380 year old walnut tree in Burucek plains (http://www.pozanti.gov.tr [Feb. 2015]).

**Saimbeyli**
Located in the northeast of Adana, this town has 25 villages. Rural tourism is quite popular for the tourists in this region due to the famous Obruk and Catak plains. Obruk is favoured for the campers and in July it hosts almost 50 different species of butterflies, hence drawing butterfly watchers to the area. Catak also with the help of small waterfalls and old oak trees, attracts visitors to the town. On top of these, annual cherry festival in June is also organised in the region (http://www.kurumsal.kulturturizm.gov.tr [Feb. 2015]).
Saricam
Saricam is one of the towns that is located around Adana city centre, with 33 affiliated villages. Suleyman Demirel arboretum that hosts more than 450 plant specifies and Yogurt Dede tomb are the main tourist attractions (http://www.saricam.bel.tr [Feb. 2015]).

Seyhan
As being located in the Adana city centre, Seyhan has not got any villages attached to it. There are a number of touristic and historic features in the city centre such as Misis ruins, Taskopru bridge, Adana fortress, Sabanci mosque (biggest in Turkey) along with Ulu, Yag, Agca, Hasanaga, Alemdar, Mestanzade, Seyhoglu, Memispasa, Cuma Fakih, Ali Dede and Yesil Mescit mosques, Cobandede tomb, Gon and Tuz inns, Ottoman bazaar, Irmak, Mestan and Yeni Turkish baths, watch tower. Around the artificial lake that is built for the dam, there are recreation areas and hiking-cycling routes. On the lake, there are also dinghy, wind-surfing, jet ski activities and boat tours organised particularly in summer. Ruzgarli Tepe around Kabasakal village is also a popular destination for paragliders. Portakal Cicegi (Orange Blossom) festival is also organised every year with more people joining, along with the facilities to accommodate health tourism patients, especially from the middle eastern countries (http://www.adanakultur.gov.tr, http://www.wowturkey.com [Feb. 2015]).

Tufanbeyli
Placed in the north-east border of Adana city, Tufanbeyli has 30 affiliated villages. There are some artefacts discovered in the region dating from Hittites, out of which Sar ruins and mosaics around Orta village are the most important ones. Due to its high altitude (about 1,400 metres) rural tourism is also another attraction for the visitors, particularly in summer (http://www.tufanbeyli.bel.tr [Feb. 2015]).

Yumurtalik
This is the second town of Adana with 19 villages, located in the south by the Mediterranean sea. The main historic features of the town are Suleyman tower, Aigeai ancient city, Ayasa and Kiz fortresses, Marco Polo harbour and Domuztepe ruins in Yesilkoy village. Camlik and Yelkoma enclosures by the sea are hosting a number of wildlife species such as turtles. As with Karatas (other seaside town of Adana) Yumurtalik also offers fishing opportunities both for the amateur and professional fishermen. Due to its protected geographical position from the Mediterranean sea different than Karatas, especially Ayas region attracts scuba enthusiasts as well (http://www.yumurtalik.com.tr [Feb. 2015]).

Results and Discussion
Adana and its surrounding towns offers a variety of tourism related activities. As also presented, the region is almost blessed with a rich cultural heritage, dating back to Hittites, Byzantium and Ottomans. Despite all these positivity, Adana has an unfair and perhaps even undeserved reputation in the national press in particular being portrayed almost as the “city of unrest”. Part of this unfair reputation comes with the help of national press, displaying some odd occurrences which should be purely in the interest of law enforcement rather than on public display. It could be claimed that, occupants and all other relevant
parties of Adana also unwittingly contribute to this unfair reputation by not joining forces and presenting their city in a better way. Kavaratzis (2004) underlines this point, indicating that “the object of city marketing is the city’s image, which in turn is the starting point for developing the city’s brand”. Progressing his initial thoughts further, the author even claims that the object of the city marketing (hence city branding) should go beyond the actual or physical surroundings of a city. That is the “image” built and accepted by the public for that city (Kavaratzis, 2005). This aim could only be achieved through careful planning and the involvement of all relevant parties (Kavaratzis & Ashworth, 2004). There are examples of this, building a city image or re-shaping it as in Turin (Torino), Italy; Amsterdam, Holland and Berlin, Germany especially when the infamous Berlin wall fell and two parts of the city (East and West) united (Dahles, 1998; Limburg, 1998; Kavaratzis & Ashworth, 2007; Vanolo, 2008; Colomb, 2012).

This study, based on Kavaratzis’s initial work and inspired by the following studies that some of them already mentioned, is expected to help improving the city (or brand) image of Adana. Working with academics within and outside the tourism faculty where the researcher is affiliated, all other relevant parties’ involvement will also be drawn into the project. Far from being too optimistic and expecting a number of setbacks along the way, this participation will be achieved first laying good and realistic foundations for the project. Then outlining the potential benefits to all relevant parties, especially to the ones working in the local tourism industry in Adana and the region, their interest and support will be received.

References


Retail Managers’ Perception on Coca-Cola Company’s Success of Glass Package Recovery and Recycling in Nairobi in Kenya

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Introduction

A retail store is the last component in the distribution channel. Retailing refers all activities that a seller is involved in to sell goods and/or services to final consumers for personal, non-business uses. Pandian and Varthani (2013) emphasize that retailers are vital channel members in enhancing customer relationship and in increasing company’s profit and product acceptance since they provide effective reach of the product and increase brand value of the company. The current study focuses on supermarkets as an example of retail business and Coca Cola Company a company whose products are retailed in almost all supermarkets country wide.

Packaging is an element of the marketing mix that is hardly emphasized in research. According to Kolter, Keller, Goodman, and Hansen, (2009) packaging includes all the activities of designing and producing the container for a product. It is the primary container for example, in Coca Cola Company’s product case, the bottle in which the drink is carried. Packaging can also be the shipping container which is used for transportation and storage (Kotler et al., 2009). Glass package has been used for long and looking at the current scenario, it appears to be still preferred for packaging both soft and alcoholic drinks. There has been some general improvements in packaging which include, use of lightweight materials, materials with surfaces coated to increase abrasion resistance, use of wide mouth containers with easy-open fitted caps. Others include use of metal containers mainly tinplate cans made of low carbon mild steel that lacquered internally to prevent corrosion and plastic containers that contain organic substances mainly for fruit juices and which are sensitive to bacterial contamination (Smye Holland Associates, 2013).

Background Information

Supermarkets are generally one stop shop and their presence can be felt in all parts of the urban set-up in Kenya. Similarly, Coca cola has been and still is the most preferred soft drink in most part of the urban and peri-urban centres in Kenya and on the global front. Point Bulletin of the Institute of Economic Affairs Report (2002) notes that Coca Cola Company is one of the three dominant players in soft drink industry with a 50% market share followed by Pepsi Cola with 21% and Cadbury with 7%. Retail stores are the nearest and most common points of sale to consumers. The role of retail stores as consumer information collecting centers cannot be underestimated.

This research is guided by two theories; the Theory of Planned Action and the Theory of Packaging Recycling. Coca cola’s strategy of recycling the glass bottles is a planned action which is aimed at among other benefits is to reduce their cost of production. The many
firms that recycle their waste products intend to conserve the environment and equally make it more sustainable for the future.

**Statement of the Problem**

There is generally a lot of litter that includes paper, plastic and glass which may result in environmental degradation throughout the world. Many studies (Coca cola’s Corporate Responsibility and Sustainability 2012/2013 Report, Munala and Moirongo, 2011; Hopewell, Dvorak and Kosior, 2009; Ross and Evans, 2003) have shed light on the menace caused by plastics in as far as solid waste management is concerned. Little research has been done to establish effect of glass bottles in relation to waste management in general and on Coca Cola Company’s success in recovering its glass bottle repackaging in particular in Kenya.

Coca Cola Company has set a target for recovery and recycling of their packaging for the year 2015. The company hopes to achieve efficiency in packaging material by 7% per liter, recover 50% of the equivalent bottles and cans and source 25% of the company’s polythene terephalate (PET) plastic from recycled or from renewable materials (Coca-Cola Company Sustainability Review, 2010). Despite this focus, it seems the company has a lot to do in developing countries to attain this target. Consumers in possession of Coca Cola Company glass can be turned away by retailers with glass Coca Cola Company bottles because the bottle may be extremely dirty or cracked. What policies does the company have over the glass bottles and what do the retail managers know about these policies?

Scanning the environment, one is able to see some Coca Cola Company bottles (some broken, others cracked and others not whole. At one time or another, in the rural areas, one hears a child being instructed to drop a broken bottle in a pit latrine or some hole to prevent it from causing harm to a person. One also hears of an individual having been cut buy a glass bottle. In 1944, a Coca Cola Company glass bottles exploded in the hands of a waitress causing her a 5-inch deep cut and the broken pieces were thrown away by another employee. This throwing of glass bottles may be a common practice since it is not clear what should be done to a cracked or broken glass bottle in general. Baker, Moore and Wise (1986) observe that broken glass (beer) bottles can cause serious physical injuries to people. The damage caused by broken glass can also be fatal to both domestic and wild animals. The World Wildlife Fund (WWF, 2012) also notes that many people throw away a lot of rubbish and glass is a significant part of it. The report emphasizes that it is better to reuse it than to have glass objects pile posing a threat to safety and the environment sustainability.

Glass recycling can benefit the environment. The marketing and societal concepts emphasize on sustainability of the environment (Kotler et al., 2009). WWF (2012; Friends of Earth, 2009) note that glass is recycled to reduce pollution and waste. In Coca Cola Company’s Corporate Responsibility and Sustainability (2012/2013) Report and in a research done by Coca Cola Company in Japan (Coca Cola Company, 2009 Report), the company explains that its packages aim at meeting strict quality requirements and safety that would help them achieve quality delivery of products to their consumers as well as profitability. The company’s long-run objective is to reduce manufacturing costs and
achieve distribution efficiency. According to the Coca cola (2009) Report almost 5% of its packaging materials is derived from recycled or renewable materials and this contributes to reduction in business risk and negative environmental impact. Could the company also boost of high level success in recovering and/or recycling glass bottle as it has done in plastic bottles (put at 95% in Coca cola’s Corporate Responsibility and Sustainability 2012/2013 Report)? What is the perception of retail managers on Coca Cola’s stated success in recycling of the company’s glass bottles?

Smye Holland Associates (2013) did a study to establish consumer response to PET packaging in beverage markets in Western European markets, Scandinavia and Eastern European countries including the Czech Republic, Poland and Russia. They found out that bottles made from plastic added almost 12 billion units to annual volumes between 2005 and 2010. No study has been done in Kenya on the safe collection and disposal of glass bottles in general and of Coca Cola Company’s glass bottles. What is the retail manager’s perception of the extent of Coca Cola Company’s success in recovering and recycling its glass bottles in Kenya?

**Theoretical Perspective**

A theory in which this study is anchored is the theory of planned behavior (TOPB). Ioannou, Zampetakis, and Lasaridi (2011) argue that the TPB provides a theoretical framework that is greatly used to identify the factors that determine various behaviour patterns, in both environmental and non-environmental domains. Corporate Responsibility and Sustainability Report, (2012/2013) explains that the behavior of the Coca Cola Company’s in constantly redesigning its packaging is aimed at reducing its weight without compromising its quality in order that the firm uses less material as well as reduce its carbon emissions. This is in line with Cheung, Chan and Wong’s (1999) conclusion that controlling for the TOPB constructs, general environmental knowledge significantly predicts behavior. Cheung, Chan and Wong (1999) use Ajzen’s theory of planned behavior (TOPB) to explain the intent of wastepaper-recycling behavior among college students in Hong Kong. The current study uses this theory to explain Coca cola’s aim of achieving a certain percentage of package recovery and recycling within a measured period of time is a planned behavior. Ioannou, Zampetakis, and Lasaridi (2011) posit that there is a significant advantage brought about by TPB which is that it allows for the inclusion of “external” variables. In the current study the “external” variable is the economic benefit (such as cost saving) that recycling firms achieve by so doing.

**Product Packaging and Recycling**

Packaging deals with designing and producing appropriate packages for a product. The importance of packing has increased because of severe competition in the markets as marketers sometimes use it as a tool for competitive advantage. Good packaging is seen as protecting the products on its route from the seller to the buyer and in some cases even during its life with the user (King, 2013; Zeigher, 2006). It is the first point of physical interaction with that product, it is what the consumer sees, feels, reads and handles and it makes a difference in determining what gets noticed on the shelf and ultimately purchased (Kotler et al., 2009). A well designed and functional package adds considerable value in influencing shopper perceptions and purchasing decisions in the retail environment...
(Gutierrez, 2001). Packaging is a key component of many retailers' sustainability strategies because it can greatly impact consumer's perception of waste. In addition, packaging also impacts the satisfaction or guilt a consumer feels about her own contribution to sustainability when she tosses it in the garbage or recycling bin (The European Investment Bank Report, 2012).

Consumer behavior is about how they purchase what they need, want and prefer and how they use and dispose the waste from the products. Packaging material needs to be well handled to reduce environmental pollution and it from being a health hazard to consumers and animals. Min and William (1997) purport that packaging materials accounted for 30.3% then of the total solid municipal waste, whereas Glass Recycling Fact Sheet, (2009) purport that in by 2008 in Australia, glass accounted for 13% of rubbish collected per day. This offers more reason why “green” packaging should be considered for a sustainable environmental since packaging materials ultimately become waste. Association of Cities for Urban Cleanliness (2010) lists glass and glass shards as some of the elements to contributing to lack of cleanliness in urban areas. Smye Holland Associates (2013) content that consumer preference for packaging keeps changing due to their ability to understand that quality, taste and personal enjoyment should not be compromised by drinks bottled in quality plastics packaging.

Disposal of package material has for some time now been a global problem. The European Investment Bank Report (2012) notes that economic development which has led to novel human consumption patterns, has resulted in drastic increase in accumulation of waste. The ultimate result is environmental and public health hazard. The Report further notes that many countries lack adequate disposal facilities yet there are waste incinerators. The incinerators have continuously caused great public debate because of inherent air emissions.

**Contextual Perspective**

Unlike plastic litter which is easily noticeable as litter due to its lightweight and ease with which it can be transferred, glass litter is heavy and not easily noticeable. Dvorak and Kosior, (2009) emphasize that actions that decrease the use of materials in product packaging (e.g. substitution of heavy packaging formats with lighter ones, or down-gauging of packaging) can in effect reduce the amount of material going into the waste-management system. They add that if products were designed to enable them to be reused, repaired and/or re-manufactured this may result in less environmental pollution. This means that if and when glass is recycled, it will reduce the amount found in waste. It seems that Coca Cola Company’s decision rely on glass packaging is still significant in Kenya since a smaller percentage of consumers are able to take advantage of the portable plastic bottles. A majority of the Kenya population is living under one dollar a day and therefore the higher the price the lesser the acceptance of product (UNICEF Kenya Country Programme 2009-2013 Report, 2014).
Table 1: Percentage Growth of Coca-Cola system-supported recovery vs % of waste diverted from landfill in manufacturing facilities

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>% of equivalent bottles and cans sold by North America system recovered through Coca-Cola system-supported recovery programs</td>
<td>43%</td>
<td>43%</td>
<td>41%</td>
<td>40%</td>
</tr>
<tr>
<td>% of waste diverted from landfill in manufacturing facilities</td>
<td>91%</td>
<td>74%</td>
<td>62%</td>
<td>65%</td>
</tr>
</tbody>
</table>


From the above data it shows that the Coca Cola Company has done a lot in recovery of their bottles and cans in North America, although the largest room is that for improvement. Smye Holland Associates (2013) note that plastics are the fastest-growing packaging material. They are noted to be lightweight, readily reusable, strong, flexible and recyclable without compromising the quality of the packaging contents. However little research explains how this litter is collected. No research has been done to explain how glass bottle is collected for recovery and recycling neither has the opinion of retail managers been done over the same. WWF (2012) affirms that in countries like USA, there are kerbside recycling schemes designated places like supermarkets, car parks and other public areas with special boxes strategically placed to collect glasses meant for recycling. This could be partly as a result of such countries’ interest in environmental conservation which one of the responsibilities of business entities. Friends of Earth (2009) Publication notes that the presence of kerbside boxes is likely to reduce the cost of recycling of glass bottles.

Methodology (Research Design and Sampling)
The researcher randomly selected 50 retail managers of supermarkets in Nairobi’s central business district (CBD). To be included in the study, the managers must have served in the respective supermarkets for not less than one year and the supermarkets must have been in operation for not less than a year.

The researcher used a questionnaire survey to gauge the perception of retail managers on the self-evaluated success of Coca Cola Company’s recovery and recycling of their glass bottles. The research was based in Nairobi’s CBD in Kenya. It is expected that almost all the managers of a retail store that handles Coca Cola Company’s products in a capital city would be well exposed to current issues such as the impact of packaging on the environment. To achieve this objective the researcher developed an online questionnaire using a 5-point likert. The questionnaire was administered to retail managers of supermarkets in the CBD. Cronbach’s alpha was used to test the reliability and validity of the questionnaire and obtained a coefficient of 0.67. The study used MS Excel to analyze the data and specifically descriptive statistics (mean, frequency and percentages) and correlation analyses were done. Relevant findings were reached based on the test results.

Retail Manager’s Questionnaire Analysis

Demographics of Respondents
The researcher targeted 50 retail store managers in Nairobi’s CBD and gained a 92% rate of response (46 out of 50). Majority of the respondents were managers (68%) and only 24% were assistant managers. 8% did not disclose their position in the retail store. The
results indicate that there are more men (65%) in management than women (35%) implying that male dominance in management is still an area to be addressed. It also means more men are participating in decision-making than women yet women have their needs to address.

On the age of the store they worked in, 68% of the respondents noted the store had been operational for more than 21 years, 13% noted that it had been operational for between 16 to 20 years, 11% noted it had been operational for between 11 to 15 years and (5% and 3%) noted their stores had been operational for between 6-10 years and below 5 years, respectively. This is a good period of time for any store manager to understand the policies laid down by one of their main goods supplier- the Coca Cola Company’s.

**Retail Manager’s Opinion on State of Recovery of Coca Cola Glass Bottles**
The researcher asked the retail managers to respond to the following statement; “There are very many unbroken Coca cola bottles lying around”; “There are very many broken Coca Cola Company’s bottles lying around”; “I have ever been cut by a Coca Cola Company’s bottle” and “I know of people who have hurt each other using empty Coca cola glass bottles. The grid was used 1- Strongly Disagree; 2- Disagree; 3- Neither Disagree NorAgree 4- Agree; 5- Strongly Agree and the responses are as follows;

<table>
<thead>
<tr>
<th>Statement</th>
<th>1-SD</th>
<th>2-D</th>
<th>3-NDNA</th>
<th>4-A</th>
<th>5-SA</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>There are very many unbroken Coca cola Company glass bottles lying around</td>
<td>78%</td>
<td>16%</td>
<td>3%</td>
<td>0%</td>
<td>3%</td>
<td>100%</td>
</tr>
<tr>
<td>There are very many broken Coca cola Company glass bottles lying around</td>
<td>54%</td>
<td>41%</td>
<td>0%</td>
<td>0%</td>
<td>5%</td>
<td>100%</td>
</tr>
</tbody>
</table>

The above results (3% and 5% respondents purporting that there are unbroken and broken Coca Cola Company glass bottles, respectively) would indicate that although there is good control of the flow of Cola Company glass bottles, there is a small percentage of both broken and unbroken bottles which the company needs to ensure they are either in use or well-disposed of or recycled into new glass bottle. Coca Cola Company has room for improvement in as far as their success to recovering and recycling of their glass bottles is concerned. Strict recovery and recycling policies streaming from the Coca Cola Company would no doubt here to eradicate this small percentages of uncollected glass, whole or broken.

**Hazards of Unused Coca Cola Company’s Glass Bottles**
The research wanted to establish the hazards of bottles (broken or unbroken). The managers were asked to indicate if they knew of people who had hurt each other using empty Coca cola glass bottles. The responses were as follows; 35% Strongly Disagreed, 59% Disagreed, 3% Agreed and 3% Strongly Agreed. This is an indication that if the coca cola bottles are not effectively kept in use, they are likely to be hazardous to mankind and even animals.
They were also asked to respond to the statements; “I have ever been cut by a Coca Cola Company’s bottle” and “I know someone who has ever been cut by a Coca Cola Company’s bottle”. The responses on the first statement were as follows; 38% Strongly Disagreed, 57% Disagreed, 5% Neither Disagreed nor Agreed and none Agreed or Strongly Agreed. This implies according to a majority of the retail managers the Coca Cola Company has been successful in collecting and recycling their glass bottles.

Knowledge of Coca Cola Glass Bottle Recovery Policy

The retail managers at the supermarkets were asked to explain if they knew of any Coca Cola Company’s policy on recovery and recycling of glass bottles. A majority (53%) of respondents were neutral on this, 8% Strongly Disagreed, 6% Disagreed, 5% Agreed while 11% Strongly Agreed with the statement. 17% did not have any views on this. This may imply that some retail managers are not sure about coca cola’s policy on recovery and/or recycling of glass bottles.

The supermarket retail managers were asked to explain any operational policies on Coca Cola Company glass bottles they are aware of. Below is a summary of their response to the statement. All the retail managers noted one main policy is that all 300ml, 500ml and 1 litre Coca Cola Company glass bottles are the property of the company. The respondents concurred that one main policy to ensure that these bottles are recovered to be refilled a consumer must pay a deposit fee (which 85% of the respondents put at Ksh. 10 while 15% put at Ksh. 15 per bottle). 60% of the retail managers explained that organizational or group buyers have to commit themselves by paying 10% of the total cost of the Coca Cola Company glass bottled soft drink that they would be buying. On the other hand 40% of the respondents explained that renowned organizational buyers only needed to give a written agreement (and occasionally a verbal one depending on the level close association with the retail store) and have their organization’s identity card retained.

Asked to discuss any other policies of the retail managers revealed that they rejected of broken and cracked bottles which cannot be reused. 29% (13 out of 46) of the retail managers revealed that there were some consumers owning crates of Coca Cola Company glass bottles which they often used for purchasing the company’s soft drinks as and when they needed to do so. They explained that the 300ml and 500ml bottles and interchangeable but that the 1 litre and 1.5 litre bottles become property of the consumer on purchasing that volume of Coca Cola Company drink. 45% (21 out of 46) indicated that they knew of a policy that involved cleansing of the glass bottles in the industry before use.

 Asked to indicate any other information on the success on the rate of recovery and recycling of Coca Cola Company glass bottles 33% (15 of the 46 respondents) noted that they know of some consumers who “own” crates of Coca Cola Company glass bottles to use at their own will. That becomes a draw-back on the rate of success in the recovery and recycling effort of the Coca Cola Company and it needs a serious policy to curb that practice.

Retail Manager on Coca Cola Company’ Policies on Environmental Conservation

The retail managers were asked to indicate to what extent they agreed with the following statement in relation to Coca Cola Company’s policy in conserving the environment
through the glass bottle recovery and recycling using the following grid: 1= Strongly Disagree; 2= Disagree; 3= Neither Disagree Nor Agree; 4= Agree; 5= Strongly Agree. Generally, it seems the retail managers have limited information on the seriousness that many world companies place on environmental conservation. 43% and 14% strongly disagreed and disagreed, respectively with the statement that “Coca Cola Company’s has a policy on the environmental conservation” (See Table 3 below). WRAP Report (2013) notes that one of the 10 key trends detected as emerging in the packaging world mentioned was environmental sustainability.

Table 3: Managers’ Perception on Coca Cola Company’s Concern for Environment

<table>
<thead>
<tr>
<th>Statement</th>
<th>1-SD</th>
<th>2-D</th>
<th>3-NDNA</th>
<th>4-A</th>
<th>5-SA</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coca Cola Company’s has a policy on the</td>
<td>43%</td>
<td>14%</td>
<td>22%</td>
<td>5%</td>
<td>8%</td>
<td>92%</td>
</tr>
<tr>
<td>environmental conservation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coca Cola Company’s has a policy on the</td>
<td>24%</td>
<td>22%</td>
<td>30%</td>
<td>5%</td>
<td>8%</td>
<td>89%</td>
</tr>
<tr>
<td>recovery and recycling of glass bottles</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coca Cola Company’s has a policy their</td>
<td>8%</td>
<td>6%</td>
<td>62%</td>
<td>5%</td>
<td>4%</td>
<td>85%</td>
</tr>
<tr>
<td>unbroken glass bottles</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coca Cola Company’s has a policy their broken</td>
<td>2%</td>
<td>11%</td>
<td>66%</td>
<td>2%</td>
<td>11%</td>
<td>92%</td>
</tr>
<tr>
<td>glass bottles</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

This means that Coca Cola Company as renowned global company must have policies that should enforce environmental sustainability. The fact that 5% and 8% Agreed and Strongly Agreed, respectively shows (See Table 3 above) that they know some Coca Cola Company’s policies on environmental conservation and same on the recovery and recycling of glass bottles means that indeed the company has certain policies in place aimed at conserving the environment.

Finally the research wanted to establish if the retail managers had knowledge of any Coca Cola Company’s policy of drop-off point of company’s glass bottles. 51% and 41% “Strongly Disagreed” and “Disagreed” respectively of the existence of such drop-off points in Kenya. In countries like USA, there are kerbside recycling schemes which are drop-off points that contribute to tracking and collecting bottles for recycling. This could be extended to developing countries to enhance the company’s rate of recovery and recycle of its coca cola glass bottles. Asked to further explain what may have been left out in the study, 8% of retail managers explained that the Coca Cola Company’s policy on broken bottles was to broken bottles. This definitely would lower the company’s proclaimed rate of high recovery and recycling rate of their glass bottles.

Table 4: Manager’s Perception on Coca Cola Company’s Strategy on Enhancing Consumer Participation in Recovery of the Company’s Glass Bottles

<table>
<thead>
<tr>
<th>Statement</th>
<th>1-SD</th>
<th>2-D</th>
<th>3-NDNA</th>
<th>4-A</th>
<th>5-SA</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>I know of Coca Cola Company’s non-broken glass</td>
<td>51%</td>
<td>41%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>92%</td>
</tr>
<tr>
<td>bottles’ drop-off point</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I know of Coca Cola Company’s broken bottles’</td>
<td>51%</td>
<td>41%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>92%</td>
</tr>
<tr>
<td>drop-off point</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I know of Coca Cola Company’s plastic bottles’</td>
<td>51%</td>
<td>41%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>92%</td>
</tr>
<tr>
<td>drop-off point</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I know of Coca Cola Company’s cans’ drop-off</td>
<td>51%</td>
<td>41%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>92%</td>
</tr>
<tr>
<td>point</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The retail managers were asked to respond to the statement, “Coca Cola Company’s encourages consumers to participate in their glass bottle recovery” 43% Strongly Disagreed, 22% Disagreed, 13% were neutral, while 3%, 14% and 5% Agreed, Strongly Agreed and failed to respond, respectively. For those who Agreed and Strongly Agreed noted that the policy of returning the glass bottles and or depositing a fee of Ksh. 10 was a way of involving the consumers in the recovery and recycling process. Another policy that was brought 18% of the retail managers (18 of the 46 respondents) is the rejection of extremely dirty coca cola glass bottles. The consumers are expected to return somewhat clean bottles.

**Consumer’s Reuse of Coca Cola Glass Bottles**

The researcher intended to establish through the perception of the retail managers why some of the Coca Cola Company’s glass bottles remain in the custody of the consumer. The managers were asked to indicate the extent to which they agreed or disagreed on how else Coca Cola Company’s bottles were used by the consumers; 1.Strongly Disagreed (SD); 2.Disagreed (D); 3. Neither Disagreed Nor Agreed (NDNA); 4. Agreed (A) and 5. Strongly Agreed (SA)

The results in Table 5 below indicate that to a small extent, Coca Cola Company’s glass bottles are put other uses by consumers. That could explain tentatively why consumers may easily retain the company’s glass bottles for long. However, there could be various other reasons why the glass bottles are retained by consumers, for example, for future use to buy the company’s soft drink.

**Table 5: Managers’ Perception on Alternate Use of Coca Cola Company Glass Bottles**

<table>
<thead>
<tr>
<th>Statement- Coca Cola Company’s glass bottle is used by some consumers to carry...</th>
<th>SD</th>
<th>D</th>
<th>NDNA</th>
<th>A</th>
<th>SA</th>
</tr>
</thead>
<tbody>
<tr>
<td>water</td>
<td>96%</td>
<td>3%</td>
<td>0</td>
<td>3%</td>
<td>2%</td>
</tr>
<tr>
<td>Milk</td>
<td>78%</td>
<td>17%</td>
<td>0</td>
<td>3%</td>
<td>1%</td>
</tr>
<tr>
<td>Honey</td>
<td>30%</td>
<td>52%</td>
<td>3</td>
<td>3%</td>
<td>3%</td>
</tr>
<tr>
<td>other soft drinks</td>
<td>81%</td>
<td>16%</td>
<td>3</td>
<td>8%</td>
<td>3%</td>
</tr>
<tr>
<td>alcoholic soft drinks</td>
<td>95%</td>
<td>5%</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>medicine</td>
<td>86%</td>
<td>14%</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>herbal drinks</td>
<td>32%</td>
<td>27%</td>
<td>0</td>
<td>3</td>
<td>38%</td>
</tr>
</tbody>
</table>

**Recommendation and Suggestions for Further Research**

Many nations in general and firms in particular have raised concern on environmental management. Recycling glass is one of the many ways that could be used by nations and firms reduce pollution and waste (Glass Recycling Fact Sheet, 2009). According to the current study, it seems that there is no policy or retail managers do not understand the Coca Cola Company’s policy on glass bottles in general and broken glass bottles in particular. This kind of outcome calls for effective communication between the company and its channel members and this should be done for all retail stores. This in essence will support Coca Cola’s progress in recycling and reusing their glass bottles.

The current research further recommends that through the retail managers, the Coca Cola Company could also involve the consumers in the process of recovery and recycling of their glass bottles. If some retail managers are not aware of the exact policies of the
company, then it means a number of customers may not also be in the know! This should be emphasized since recycling glass will not only contribute to environmental conservation but will also help a company to save almost 74% of energy and contributes to higher levels of environmental sustainability (Glass Recycling Fact Sheet, 2009).

The Coca Cola Company needs to ensure that (like it has done for its US market and other developed nations), there are kerbside recycling schemes demarcated special demarcated boxes to help recover glass bottles, broken glass bottles and others for different types of package waste to be recycled. This is to borrow from what happens in the US (Friends of Earth, 2009; WWF (2012) and other parts of the world. In Kenya, this should be done in supermarkets, car parks and other public areas where broken bottles are likely to be found. That will ensure an enhanced recovery and recycling levels for the company. This is not just a Kenyan scenario but worldwide, for example, Beecheno (2013) notes that in Brazil, only 32percent of municipalities have an area spared for waste collection.

The current research also recommends that the Coca Cola Company works with law enforcement agents to ensure sustainable recovery and recycle of the glass bottles. This is line with the propositions of Baker, Moore and Wise (1986). They argued that involvement of state regulation could bring positive results in enhancing recovery of waste by imposing taxes on non-returned soft drink bottles. These researchers further note that such a move reduced emergency room visits from glass-related lacerations by 60% percent. There is need for clear waste management policies which may be lacking. Beecheno (2013) reveals that there were no clear policies on waste management in Brazil until 2010.

For recycling to be effective, there is need to effect behavior change. According to the current research the Ksh. 10 deposited to take away the Coca Cola Company glass bottle is not deterrent enough to ensure the recovery of the bottles. The company should possess all the glass bottles including the one and one and a half litre that become the property of the consumer upon purchasing the drink.

The current research recommends that a similar research be carried out to establish the perception of the consumer on the purported Coca Cola Company’s success in recovery and recycling of their glass bottles in Kenya. Such a research would enable the company to know what policies to emphasize on in order to enable the consumer to be part of the recovery and recycle process for a better environment and enhance the company’s rate of recovery and recycle of their waste product. This is in line with Coca Cola Company’s belief that sustainability is at the heart of any success (Coca Cola Company 2013/2014 Sustainability Report, 2014).

References


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Effects of Family Structure and Socialization on Compulsive Buying: a Life Course Study in Turkey

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Abstract

This study builds on previous working applying the Life Course Model to consumption patterns in the US and other countries by using a unique data set collected in Ankara Turkey. The Financial Social Learning Opportunities Measure was used to explore the relationship between social learning and compulsive buying. The results show that financial knowledge, social learning opportunities, and financial stress influence compulsive buying in Turkish college students.

Keywords: life course approach, college students, financial socialization, financial knowledge, financial distress, compulsive buying

Objective

It is well understood that economic socialization is the term for the processes in which we learn values, skills, norms, and behaviors regarding financial matters. While recent studies have begun to build an understanding of economic socialization and its relationship to financial behaviors (e.g., Gutter, Copur, & Garrison, 2010), there is still scant research about the role and nature of economic socialization in other cultures and economic environments. Several studies have focused on some of these issues most notably (Weaver, Moschis, & Davis, 2011 and Nguyen, Moschis, Shannon & Gotthelf, 2009). An additional county that is deserving of such focus is Turkey. An important Democratic Republic that borders on Europe and the Middle East. Turkey’s economic prosperity has led to a robust consumer market place, which allows for all of the major perils associated with the US markets including those associated with saving, borrowing, and pathological consumption patterns. These patterns can include compulsive buying, conspicuous consumption, and compensatory consumption. The notion of compulsive buying is certainly of issue and can lead to abuse of credit, overspending, and even insignificant issues such as buyers’ remorse.

The life course approach, developed as an interdisciplinary program for studying various aspects of behavior, offers a framework for filling gaps in previous efforts to study consumer behavior over time. The purpose of this study is to explore the nature of compulsive buying in Turkey through the lens of the life course perspective.
Significance

Life Course Model
The Life Course Paradigm considers both previous experiences in one’s life and additionally their thoughts regarding the future. In general each event may be processed as stress, a normative event, and/or even adding to our human capital (Moschis, 2007). Family relationships and experiences with personal finances especially consumption and purchasing preferences are likely to influence views on spending. For example if a family of origin valued consumption or used consumption as rewards, coping, or other stress management mechanisms, this may carry forward. In addition a person growing up in a limited resource family, may find a desire to demonstrate success, using consumption as a signal to others of this status.

Socialization experiences or social learning opportunities have been used in several studies as a measure of the extent to which youth were socialized regarding financial matters (Gutter and Garrison, 2008). They showed the greater the level of social learning opportunities; the more likely students were to engage in prudent financial behaviors such as budgeting and avoiding risky credit behaviors.

In addition, financial knowledge acquired through education, experience, social learning opportunities would also contribute to values, norms, and beliefs regarding consumption. In general higher levels of financial knowledge should lead to positive financial practices, but this does depend on the quality of such knowledge. In addition, one’s perception about his or level of knowledge may be meaningful when it comes to shaping actual financial behaviors (Gutter, et al. 2012)

In summary several hypotheses are proposed. First, those with greater levels of social learning opportunities are less likely to engage in consumption, as parents would ideally have instructed youth not to overspend. Those with greater levels of knowledge whether self-reported or objectively measured should be less likely to engage in compulsive buying. Those who have had negative experiences or are financially distressed are less likely to engage in compulsive buying.
Methods
The data for this study was collected using an online survey of college students 18 and over attending Hacettepe University in Ankara, Turkey. The final sample for the study was 1090.

The instrument used for the data collection was based on the survey utilized by Hayhoe and Gutter (2012). Both regression and path analysis are utilized in this study. While regression is standard approach, the nature of that analysis may not lend itself to the hypothesized relationships of our model.

Results
The results from the Compulsive Buying regression can be found in Table 1. The Path Model can be found in Appendix A. Results of the path analysis and OLS regression for compulsive buying indicate that males, and those who are more financially stressed, and those whose parents provide all or almost all expenses are less likely to be compulsive shoppers but those who discuss finances with their parents are more likely to participate in compulsive buying. Interestingly, while those with higher financial quiz score are more likely to participate in compulsive buying, those who have a higher levels of self reported financial knowledge are less likely to participate in compulsive buying in both OLS regression and path analysis.

In general the regression and path analysis have consistent findings with the exception that additional relationships are found to be significant in path analysis, but not in regression.
The relationship of living in a dorm or with a roommate was relevant in the path analysis but not in the OLS regression. This lends supports the use of path analysis in this study. It may indicate that certain relationships and patterns can be better demonstrated through this approach.

Table 1. Predictors of Compulsive Buying

<table>
<thead>
<tr>
<th>Financial Socialization</th>
<th>Compulsive Buying</th>
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<tbody>
<tr>
<td></td>
<td>Step 1</td>
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<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Discuss with parents</td>
<td>.089 (.033)**</td>
</tr>
<tr>
<td>Discuss with friend</td>
<td>.032 (.042)</td>
</tr>
<tr>
<td>Observing parents</td>
<td>-.069 (.026)**</td>
</tr>
<tr>
<td>Observing friend</td>
<td>.031 (.034)</td>
</tr>
<tr>
<td>Financial distress</td>
<td>-.086 (.012)**</td>
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</table>

| Financial Knowledge                  |        |        |        |        |
|--------------------------------------|        |        |        |        |
| Financial quiz                       | .004 (.012) | .010 (.012) |        |        |
| Self reported financial knowledge    | -.135 (.033)** | -.139 (.033)** |

| Demographic Variables                |        |        |        |        |
|--------------------------------------|        |        |        |        |
| Age                                  |        |        |        |        |
| Gender (ref: male)                   |        |        |        |        |
| Marital Status (ref: single)         |        |        |        |        |
| School Rank (ref: freshman)          |        |        |        |        |
| Childhood Place of Residence (ref: rural) |        |        |        |        |
| Residence(ref:dorm or roommate)      |        |        |        |        |
| Parental support                     |        |        |        |        |
|                                      |        |        |        |        |
| Constant                             | 1.894 (.097)*** | 2.392 (.116)*** | 2.492 (.166)*** | 2.477 (.290)*** |
|                                      |        |        |        |        |
| F                                    | 3.698*** | 13.604*** | 12.360*** | 7.832*** |
| R²                                   | .020 | .086 | .107 | .133 |

Conclusions
This study shows that great social learning opportunities, namely discussions with parents about personal finances, are associated with greater level of compulsive buying behavior. The negative association from self-reported knowledge may point to an important difference in exploring the role of knowledge. People may have more factual knowledge but it is their confidence in that knowledge that may matter more in predicting positive financial behaviors. The negative relationship of the objective knowledge score may be indicative of knowledge gained through managing a compulsive buying habit. Students engaging in positive financial practices are more likely to have confidence in their knowledge. Thus it is important to provide up front information to students to avoid negative consequences of compulsive buying behavior. It may also be important to guide students in practicing financial management skills to improve their overall confidence in their knowledge.

References


Appendix: A Path Model
E-Textbooks: Student Satisfaction at a for-Profit Undergraduate School

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Abstract

This study examines the satisfaction with an e-textbook implementation program for non-traditional and traditional students. This research study was completed at a for-profit college that recently implemented an e-textbook program for all of its programs. This study surveyed students at different points of the implementation and found no statistical significant difference between traditional students and non-traditional students in terms of their satisfaction levels with e-textbooks. Additionally, the students preferred reading on the online tablet over the other formats for the e-textbook. This preference provides information for schools looking for options in providing e-textbooks to their students. Future research regarding the different applications used to read the textbook may have an impact upon the students’ experience with the e-textbook. Future research may also include areas such as the major of the students, their education level, and their technical proficiency.

Keywords: e-textbook; iPad; non-traditional; outcomes

Introduction

The for-profit higher education industry is looking toward technology and other avenues to increase student outcomes and decrease the overall costs to students for their education. Many schools have begun to offer laptop programs and digital books to decrease the out-of-pocket costs to students and to increase their enrollment numbers with these offerings. This study focused on student satisfaction with an e-textbook initiative at a for-profit higher education institution.

Issues

In 2011, the Department of Education administered a new rule that required for-profit post-secondary schools to evaluate each of their individual programs in relation to student debt and each student’s earning potential as a graduate from the program (U.S. Department of Education, 2011). This new legislation provided the opportunity for many schools to decrease the overall cost of an education while looking for ways to increase the marketability of graduates in the workplace. This change within the higher education industry has greatly affected for-profit schools and focused additional attention on the cost of education.

Leaders at higher educational institutions are focusing their efforts on strengthening outcomes for their students. Many leaders at for-profit schools understand that the focus of their academic departments is to help students develop the skills they will need to be successful in their careers. To assist student development toward their careers, the focus...
has turned to developing the students’ technology base so they can be competitive in the marketplace (Finn & Inman, 2004). This focus on technology may also provide a positive impact on retention for many of these schools.

A resource that is both cost effective and utilizes current technology is e-textbook. In this format, students are provided the same materials at a lower cost. Many times the cost of an e-textbook is close to a third of the cost of the print version of the same book. For example, an accounting book used by several schools, Accounting 24e, written by Warren, Reeve, and Duchac, sells from the author for $280.95 for the print edition (Cengage Learning, 2012). The same version is sold by the author in an eBook edition for $97.99. This is a significant difference in cost for students.

Similar cost savings associated with other required textbooks can have a tremendous effect on the total cost of an associate’s or bachelor’s degree (Young, 2010). Associate’s degree students often take 24 classes throughout their program. If they average a cost savings of approximately $100 per course for their books, they will reduce their overall debt for their education by $2,400. This is one of the dramatic reasons many schools are looking at this option for their students.

The pricing and cost savings for each school system vary on how students are charged for books and other materials. Some schools, such as Brown Mackie College, include books in the cost of tuition for new students (Brown Mackie College, 2012b). The school was able to provide additional savings by using e-textbooks and lowered the overall cost of the students’ program.

Other schools, such as Argosy University, charge a flat digital resource fee that does not change based on the type of book (Argosy University, 2012). This fee is also considerably lower than the cost of most of the printed books required for the school’s programs. Each school may have a different way of administering e-textbooks, but ultimately the use of this technology has been shown to reduce the overall cost of education.

This study surveyed students to gather insight into the potential issues they faced and their satisfaction when using e-textbooks in their courses. Many students currently use e-textbooks for their course work, but what are their thoughts on a grander scale? Does age play a factor in satisfaction with e-textbooks? This researcher replicated the study by Smith (2011) using a different demographic of students—non-traditional students from a for-profit undergraduate school rather than traditional students at a state university or graduate school students.

Research Method
The purpose of this quantitative study was to analyze the implementation of an e-textbook program in a for-profit undergraduate school system to develop an understanding of its effects on student outcomes and their satisfaction with the program. This research study was quantitative in nature and provided feedback and information about an e-textbook initiative. The information gathered provided some evidence of student outcomes and their satisfaction with the e-textbook program. This quantitative study also provided some
information about the ability of the students to use e-textbooks as their primary textbooks for their courses.

The quantitative study provided information about the casual-comparative links between student persistence and student involvement and learning outcomes with the e-textbooks (Creswell, 2009). This casual-comparison provided in-depth insight into the helpfulness of the e-textbook and the ability for students to reduce their debt within their degree programs.

The survey questions focused on student interaction in the classroom and their overall satisfaction with the technology in their educational journey. Many of the questions provided insight into the students’ needs and learning environment. The questions focused on the use of the e-textbook in the classroom as an educational tool. Questions that focused on technical support and the ability to assist the students provided insight into the effectiveness of the e-textbook implementation.

Selection of Subjects
The participants were recruited from Brown Mackie College – Boise. Approximately 400 students attend this school (Brown Mackie College, 2012a). The students were at different points within the degree programs. Most of the students had been using the e-textbook for a few months and provided a good comparison between the traditional printed textbook and the e-textbook. There were a small number of students who had not used the e-textbooks for their courses.

The implementation of e-textbooks was in the transitional phase where some of the schools had implemented the e-textbook while others planned to complete the process in the coming months. Some students had used the e-textbooks for 9 months. Most of the students who had transitioned to e-textbooks were in their general education or core coursework. Some of the students who were using the e-textbooks were in their concentration courses for their majors.

Approximately 150 students completed the survey because of their apparent willingness to provide feedback about their experiences with the e-textbooks. The higher than expected number of students participating in the study was attributed to their willingness to provide feedback regarding the implementation of the program (D. Hunter, personal communication, June 19, 2012). Many of the students were very forthcoming with information about the program. This provided a large sample size in determining student satisfaction with the e-textbook format (Bartlett, Kotrlik, & Higgins, 2001).

The students were sent the survey via email during the last week of their course in April 2013. Each student was provided with a letter of consent for participation in the survey. Permission from the school was granted by the leaders of the campuses.

Brown Mackie College began to distribute iPads to its new students every month at several of its schools beginning in early 2012 (D. Hunter, personal communication, June 19,
These students were the initial population that participated in the e-textbook program. These students used only the e-textbook for their educational programs.

The students participating in the study ranged in age from 18 through approximately 65. The age restrictions were provided by the schools participating in the study. The wide age range of students provided some good information about the students’ abilities to manage the technological change from the printed book to the e-textbook. Older students tended to struggle more with technology, which may adversely affect their persistence (Pedró, 2009). The schools do not have a minimum age for admission but require a student to have graduated from an accredited high school or have passed the GED (Brown Mackie College, 2009). If a student was under the legal age to sign a permission form, the student was not able to participate in the research study.

Instrumentation
The survey instrument was an existing instrument that was reviewed and developed by Smith (2011) to provide a survey instrument without bias. This study replicated Smith’s survey using a different population with different demographics. This study provided additional information about non-traditional students and their satisfaction with the e-textbook. This survey instrument was distributed to the participants using Qualtrics via email to the Brown Mackie College – Boise students. This provided the quantitative analysis needed for the survey.

The importance of the survey was to develop an understanding of the students who were participating in the program and their level of satisfaction. Student expected outcomes were identified through phenomenological research providing a subjective analysis of the students’ perspectives (Creswell, 2009). This instrument was the primary form of data collection for the study to gather knowledge of the students’ perceptions of the e-textbook program.

The observed variables within this study were e-textbook usage, perceived usefulness, perceived ease of use, and satisfaction (Smith, 2011). E-textbook usage was identified by questions 1 through 4, perceived usefulness was identified by questions 5 through 8, perceived ease of use was identified by questions 9 through 12, and satisfaction was identified by questions 13 through 18. The students provided information about their overall experience with the e-textbook and details about their use in the classroom. This provided knowledge about the helpfulness of the e-textbook and its relationship to the perceived learning outcome. It also provided information about student involvement as related to the use of e-textbooks and the relationship with perceived learning outcomes.

There were potential threats to the internal validity of the survey and the responses from the students. Instructors may have influence over the students in answering the questions that provide a favorable evaluation for the instructor in the use of the technology (Sprenger, 2010). To address this potential threat, the faculty were advised that the results would not be reported by class or instructor and would have no bearing on the evaluation of the instructor. The survey gathered information about the effectiveness of the e-textbook and the potential issues students may have in their education journey with the technology.
A possible threat to external validity was the potential for students with e-textbooks to be influenced by students without e-textbooks (Young, 2009). This issue may have caused some students some dissatisfaction with the e-textbooks when they saw another student with a traditional textbook. Depending on the length of time the student had been using the e-textbook, the student may have preferred the traditional textbook to the e-textbook.

**Methodological Assumptions**

Some of the methodological assumptions can be seen through the satisfaction of the students with their education and their ability to persist in their courses (DeShields et al., 2005). Students who are satisfied with their education will continue to work toward their goals. The e-textbook may provide some advantages for students in their educational journey, but does it increase learning outcomes and student involvement?

The methodological assumption was that the students who did not have a positive perception of e-textbooks may not continue to move toward their degrees. This could potentially adversely affect the ability of students to repay their student debt.

This will have an adverse effect on the school and its expectations for persistence. Schools such as Brown Mackie College that are accredited by the Accrediting Council for Independent Colleges and Schools (ACICS, 2012) have a requirement for persistence that their schools must meet or risk losing their accreditation. The percentage of students that must continue to persist throughout the school year is 70%. If students are unsatisfied with the tools they are using to learn, the school system could potentially risk losing accreditation.

**Procedures**

The data collected using Qualtrics and survey tools at the end of the course provided a better understanding of students’ satisfaction with e-textbooks (Smith, 2011). The surveys were administered during the last week of class for the April 2013 term at Brown Mackie College – Boise. Students were asked to take the survey by their instructors before the class began. The survey was emailed to the students the morning before the class started. This helped increase participation for the students within the program. All data were assembled using Qualtrics to provide consistent gathering and to reduce bias in the presentation of the survey.

**Results**

The purpose of this quantitative study was to analyze the implementation of an e-textbook program in a for-profit undergraduate school system to develop an understanding of its effects on student’s learning outcomes and their satisfaction with the program. There were 369 students actively enrolled at Brown Mackie College – Boise when the survey was administered and 332 students were presented with the survey in their didactic classes; 37 students were not in didactic classes when the survey was distributed. Of the initial 332 students, 170 started the survey and 157 completed the survey regarding their satisfaction with the e-textbook program. The demographics of the students who participated in the survey were 73% female and 27% male. This is comparable to the overall school population that has 70% female students. Ninety-six percent of the students that
participated in the survey were using the e-textbooks for their education. Sixty-eight percent of the students were between the ages of 23 and 40. Eighty-three percent of the students were considered non-traditional students. Out of the 332 students, 157 completed the survey regarding their satisfaction with e-textbooks. This provided a response rate of 47% at a confidence level of 95% with a confidence interval of 5.7.

Figure 1 provides a visual depiction of the traditional and non-traditional students and the percentage of students who selected satisfied and very satisfied with their experience with the e-textbook.

![Figure 1](image)

**Figure 1.** Overall e-textbook satisfaction.

The correlation between the gender of the students to their satisfaction with their overall experience provided a correlation coefficient of .005 with a two-tailed significance level of .953. The results provided a chi-square of 10.05 with 4 degrees of freedom and a p-value of 0.04. There was little correlation between the genders of the students to their satisfaction with their overall experience with e-textbooks.
The analysis using SPSS identified strong correlations with the response of perceived usefulness and satisfaction with the e-textbook format. The perceived usefulness and level of satisfaction for each of the formats provided strong correlations with each of the formats. The Pearson correlation for the online web read for perceived usefulness and e-textbook satisfaction provided a value of .578. The correlation between perceived usefulness and e-textbook satisfaction for the online tablet read was .636. The correlation between perceived usefulness and e-textbook satisfaction for the offline tablet read was .757.

The variables of perceived ease of use and level of satisfaction for each of the formats were strongly correlated. The Pearson correlation for the online web read for perceived ease of use and e-textbook satisfaction provided a value of .689. The correlation between perceived ease of use and e-textbook satisfaction for the online tablet read was .722. The correlation between perceived ease of use and e-textbook satisfaction for the offline tablet read was .690.

**Open-Ended Question**
A majority of the students provided positive responses related to their satisfaction with e-textbooks. Although a majority of the students responded positively to the e-textbook overall satisfaction question, there were more negative responses in the open-ended question regarding their thoughts surrounding e-textbooks. The negative responses outnumbered the positive and indifferent responses 34 to 20. The larger negative responses to the open-ended question may be attributed to the idea that students who are dissatisfied may want to voice their opinion about their issues. Their experiences provide a strong foundation for developing a stronger implementation program for schools that are looking to develop an e-textbook program.

Some of the students identified issues with using an iPad to read their e-textbooks. These students mentioned eye strain and the inability to read for long periods of time. Some students may have been able to address the problem by adjusting the brightness of the
screen. Training students in the different methods of adjusting their technology to their preferences can assist with this issue. As the technology continues to improve, the technological devices will assist in the reading of the material.

There were also concerns about the students spending additional time studying because of the e-textbook and the inability to tab pages. The e-textbook application allows students to highlight material and provides the ability to only search the highlighted material. Students expressed concerns in their survey responses regarding their knowledge of the technology. Additional training for the students may assist in helping them understand how the application can assist them with their homework. Some of the positive students stated they were discovering more information as they continued through the program.

Additional responses provided some insight about the students who were using the e-textbooks in their quantitative courses. Some of the students struggled because they were unable to see the complete spreadsheets in their accounting class. Some of the spreadsheets were divided over two pages and the students were not able to discern the information in a timely manner.

Another concern mentioned by the students was issues with the images in the e-textbooks. The platform used to distribute the e-textbook was unable to provide some of the images that appeared in the traditional textbook. These images are needed to provide additional information to the students and to highlight important material.

**Recommendations**

The results from the survey provided information about the differences between traditional students and the non-traditional students. The data were analyzed and the results were very similar for the students who were of traditional age and students who were not of traditional age. The number of traditional students who provided a response of satisfied or very satisfied was 57.15%. The number of non-traditional students who provided a response of satisfied or very satisfied was 59.8%. These responses aligned well and resembled a small difference in the positive response rate (57.15% for traditional and 59.8% for non-traditional) between the two student populations. There were 26 traditional students that responded providing a confidence level of 95% at a confidence interval of 18.48. There were 122 non-traditional students that responded providing a confidence level of 95% at a confidence interval of 7.07.

The students who provided a very unsatisfied or unsatisfied response were also very similar. The number of traditional students who provided an answer to their overall satisfaction with the e-textbooks as very unsatisfied or unsatisfied was 17.9%, while the number of non-traditional students was 15.0%. There appeared to be little difference in the satisfaction of the traditional students and the non-traditional students. The Pearson correlation for the traditional and non-traditional students and their satisfaction with e-textbooks yielded a -.077 correlation with a two tailed significance of .341. The online web read, online tablet read, offline tablet read, and purchased book were compared between traditional and non-traditional students. This yielded a similar result to the overall satisfaction showing very little correlation between age and the different formats. The
analysis of the data provided little correlation between the age of the students and their satisfaction levels. This finding affirms there is little difference between traditional and non-traditional students with regard to their satisfaction with e-textbooks. The concerns over adaptability for the non-traditional students are not an issue.

The data provide a guide to school leaders who are looking to implement an e-textbook program. There are several key factors to review when beginning an e-textbook program. The first is the preparation of the faculty that will be teaching using the e-textbook. The analysis of the data provided little difference between the traditional and non-traditional students. The information gathered provided some information about the lack of training the students received during the early stages of the implementation.

There was a change at the school that may have contributed to some of this lack of training for the students. The lead trainer and information technology leader left the organization three months into the implementation. Many of the students who participated in the survey provided responses to the open-ended questions that described a lack of knowledge of some of the aspects of the e-textbook. A school that is looking to implement a similar program needs to provide a strong training program for the faculty so they can assist the students in the transition.

**Conclusion**

This study showed that students who used the e-textbook for several classes had a higher satisfaction rate than students who were in their early stages of use. Reducing the learning curve for the students should increase their satisfaction with e-textbooks.

An important component to a successful e-textbook program is to provide additional training sessions that are open to students so they can develop their knowledge of the e-textbook and the tablet. The development of student groups that help facilitate the learning of the technology can also increase the satisfaction for the students.

A second recommendation is to provide a focus on the delivery of the e-textbooks. Schools need to find the proper platform on which to distribute the book to the students. The platform may have a large impact on the students’ experiences with e-textbooks. There are several different options that may provide students a more suitable experience, such as CourseSmart, PDF readers, and potentially iBooks. As technology continues to evolve, schools will need to provide a focus on finding the appropriate platform to house their e-textbooks. One of the needs identified by the students was the ability to read for long periods at a time because of the strain on their eyes. Other studies have identified similar issues for students regarding eye strain (Doering et al., 2012). As technology continues to develop their may be a decrease the eye strain for the readers in the future.

**References**


Customer Loyalty: The Effects of Customer Perceptions and the Mediating Role of Customer Satisfactions

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Abstract

Using the theoretical keystones of marketing, this studied examined the relationships among of various constructs relating to the formation of customer loyalty. In particular, the study investigated the multidimensional constructs of satisfaction and loyalty and the effect of among country of origin; perceive value, trust, and image congruence on these dimensions. The study explored: First, the mediating role of Customer satisfaction with the relationship centered on country of origin-loyalty, trust- loyalty, perceived values- loyalty, and image congruence- loyalty. Second, the mediating role of switching cost of the customer satisfaction- loyalty relationship. This studied selected high tech industry sectors and focus on Apple products has “Designed by Apple in California. Assembled in Taiwan”. The survey was conducted in Vietnam and Taiwan. A questionnaire in this study originally is prepared for English then translated into Vietnamese. Research used to Quantitative method, analyzed using structural equations modeling (SEM) with AMOS version 20 were used to prove the hypotheses of the research. The results supported the theorized view that Customer satisfaction has the mediating role in the relationship centered on trust- loyalty, perceived values- loyalty. And the mediating role of switching cost of the customer satisfaction -loyalty relationship. The results, however, did not support the theorized positions of a significant impact of country of origin on both of Customer satisfaction and loyalty, and there was also no significant impact of image congruence on Customer satisfaction or loyalty. This result has significant implication for manufacturers and marketers, particularly when outsourcing of different aspects of the production process were to be considered. Findings from this study will enhance understanding of how to encourage customer loyalty. The study investigates brand images of durable goods of three product categories namely Laptops, Tablet and Mobile in high tech industries. The result may not be generalized to all type of high tech industries because data was collected from customers of one country in a Viet Nam Capital city and Taiwan. It only considers brand's country-of-origin image, trust, perceived value, and image congruence as of the sources of consumer perception. Furthermore, this study did not clearly capture emotional aspects of switching costs. Research help to provided a more detailed structure about loyalty concept into logical relationships constructs of the marketing theory. Marketing manager should put greater emphasis on understanding about what customer’s values to guide them how to respond efficiently. Building good reputations and status of brand can also be capitalized in brand naming strategy. This is paper important in identifying the sources of brand images, customer perception, and customer loyalty.

Keywords: country of origin, trust; perceive value, image congruence, switching cost, satisfaction, loyalty, high tech industries
Forecasting as the Means to Overcome Unique Challenges of Independently Owned Hotels

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Abstract

The independently owned hotel sector represents nearly half of the room supply worldwide. Thereby, the competitiveness of these properties may be essential for millions of people around the globe that are directly or indirectly employed in the sector. A recent report released by the Smith Travel Research showed that the independently owned properties might be far from reaching an economic stability and prosperity. This report indicated that among all of the hotel properties that were closed in the U.S. during 2013 year, 80\% of these properties were independently owned. Despite of importance of this sector and the alarming rate of closures, the challenges that lead to these detrimental consequences remained largely an unexplored area of research. In order to address this research gap, the study attempted to identify major challenges that may lead to the high number of hotel closures among independently owned hotel properties. Additionally, the study tested three time series models, two of which were subsequently suggested as practical tools that might assist hotel managers in strengthening market positions of their properties through constant monitoring and forecasting of current and future market conditions.

Keywords: practical, forecasting, time series, independent hotels, unique challenges
Tourism Destination Branding Effectiveness in a Developing Country Context

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Abstract

Kenya’s tourism sector remains relatively underdeveloped, compared to other destinations globally, in terms of number of tourists, yield and diversity of experience. As a result, there was need to assess the efficacy of the Vision 2030 park branding initiative as a means of influencing consumer markets positively in premium & under-utilized in Kenya as a key issue of concern in research, policy and practice. The study was undertaken by way of a cross-sectional descriptive survey of tourists visiting a clustered sample of branded national parks in Kenya. Two-stage cluster sampling technique was adopted in coming up with a representative sample. Primary data was collected through questionnaire responses from an estimated 385 tourists visiting the parks. Findings indicated that the parks attracted different segments of tourists. Hierarchical Cluster analysis showed significant predictors within each cluster segments. Based on the second objective, Choice of Nairobi National Park was significantly influenced by the state of roads and infrastructure, travel agency recommendations, local culture, reference from tour operators, and accommodation quality. As for Lake Nakuru National Park, choice was significantly determined by travel agency recommendations, information on the web, cost of holiday and accommodation quality. Choice of Hell’s Gate National Park was significantly influenced by the state of roads and infrastructure, references from tour operators and accommodation quality. In terms of the external tourist perceptions to the park brands, Tourists’ brand perception of Hell’s Gate National Park significantly influenced brand differentiation as well as revisit intentions positively. As for Lake Nakuru National Park, the tourists’ park brand perception moderately influenced revisit intentions. There was strong evidence to suggest that in Nairobi National Park, tourists’ perception of the park brand significantly influenced brand differentiation, recommendation and revisit intentions of tourists. As for Aberdares, there was strong evidence to suggest that the park brand perception significantly influenced recommendation and revisit intentions though it did not significantly influence brand differentiation. Results on objective four indicated that Lake Nakuru National Park brand personality significantly and negatively influenced brand differentiation. Nairobi National Park brand personality significantly and positively influenced all behavioral intentions of consumers i.e. revisit, recommendation and differentiation. Hell’s Gate National Park showed a significant degree of brand salience. The park’s brand personality did not significantly influence brand differentiation, recommendation and revisit intentions of tourists. Aberdares National Park brand personality did not significantly influence brand differentiation, recommendation intentions and revisit intentions. Generally, the findings showed that there were five key aspects of the brand that were critical in determining choice i.e. connection to personal/demographic factors, contextual factors, internal park brand personality, external park brand perception as well as brand awareness. Therefore, there is a need to enhance the nature of their experiences and post-visit intentions by responding with a branding strategy that differentiates the parks and enhances the brand identity as well as association.

Keywords: branding effectiveness, Nairobi national park, brand differentiation
Hospitableness Defined and Measured

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Abstract

Hospitableness is a socio-psychological phenomenon that transcends time and space; however, scientific attention to this concept has been mainly conceptual rather than empirical thus far. One reason may be the difficulty of precisely measuring this emotional-laden concept which is felt easily but cannot be described in the same level of ease in a scientifically rigorous manner. The current study was conducted to define and measure this critical construct using a mixed-methods approach. A scale of hospitableness with structural (underlying dimensions) and psychometric (reliability and validity) properties was developed to measure the importance of hospitableness in different consumption contexts including, destination, hotel and restaurant. Several steps of scale development procedures resulted in a Hospitableness Scale with 10 stable items assembling into Heartwarming, Heartassuring and Heartsoothing factors. A call for future research is put forth to further measure this emotional-laden concept and develop a more robust scale with cross-cultural validity.

Keywords: hospitable, hospitality, scale development

Background

Today’s pervasive technological invasion in all dimensions of human life is interrupted in consumption of some products, especially those that are highly interlaced with service delivery - or serviceful products. These serviceful products are labor-intensive products that still require intense, highly interactive, and dynamic face-to-face interaction between consumers and providers. Such intense interaction render the human component of the product as the most essential ingredient for a positive consumption experience. Especially for those serviceful products that are generally labeled with the umbrella term of hospitality, the hospitableness element of the human component is what makes the product special. Hospitableness is an enduring phenomenon that has been felt in different cultures for centuries; however, a firm definition and measurement of the emotional-laden nature of this concept is yet to come.

In the literature, hospitableness is usually discussed along with the concept of hospitality, which, in fact, creates some confusion between these two interrelated concepts. As a transforming concept, ranging between “love of strangers” (Lashley, 2007) and being friendly to guests, the concept of hospitality has been deemed relevant to religious, social, moral, and business aspects of human life. Therefore, much has been said about hospitality and hospitableness by priests, writers, poets and scholars, cross-fertilizing these constructs from diverse disciplines including philosophy, theology, history, geography, sociology,
medicine, political science and hospitality (e.g. Bell, 2007; Brotherton, 1999; Lashley, 2007; Lugosi, 2008, 2009; O’Connor, 2005; O’Gorman, 2007; Pizam & Shani, 2009; Telfer, 1995, 2000; Smith, 1994).

In the late 1970s, hospitality emerged in the United States as a label for the tourism and hospitality industry and service sectors that were broadly involved in catering to the needs of visitors and tourists (Lashley, 2007). Despite its longevity as a defined industry and a substantial amount of literature discussing the concepts of hospitality and hospitableness, the literature is still devoid of a measurement tool or a scale that captures the essence of the hospitableness construct. The limited empirical research (Ariffin & Maghzi, 2012; Ariffin, Nameghi, & Zakaria, 2013) has mostly occurred within the hotel context and does not clearly differentiate hospitality from hospitableness. Thus, the goal of this study is to reach a human-centered definition of the concept and design a scale that is concise, parsimonious and useful in measuring hospitableness in different contexts where hospitality is involved in product or service delivery, including tourism and hospitality framework as well as others. The resulting instrument may be a potential tool for product differentiation for serviceful and hospitality products. However, it is necessary to note that this tool may require adjustments for time, space, sociocultural and situational factors since hospitableness is measured in American culture in this study.

Measuring hospitableness may be crucial especially from the experiential view of consumption. Literature indicates that a paradigm shift has occurred from the utilitarian view to experiential view of consumption in experience economies (Holbrook & Hirschman 1982; Oh, Fiore, & Jeoung, 2007; Petkus, 2002; Pine & Gilmore, 1998, 1999; Schmitt, 1999; Smilansky, 2009). This paradigm shift may render ‘hospitableness’ as a crucial dimension in the creation of memorable experiences. Hospitableness may be the critical sensory and hedonic dimension of consumption for serviceful products, especially those marked with the hospitality phenomenon such as in the tourism and hospitality industry. Considering that hospitableness may significantly influence consumer satisfaction (Ariffin, Nameghi, & Zakaria, 2013; Teng, 2011), the ability to measure hospitableness from a consumer perspective may provide a competitive advantage (Ariffin, Nameghi, & Zakaria, 2013) in today’s highly competitive environments.

However, the endeavor of defining and measuring a concept such as hospitableness poses certain challenges. First, the measurement of such a construct becomes elusive, intangible, varied and abstract since most people may know or feel what hospitableness is but they may not be able to articulate it easily. In addition to the psychometric challenges that would pertain to scale development, an additional challenge is that existing theoretical framework is lacking definitive conceptualizations delineating the two constructs from one another. The current literature discusses these concepts together and sometimes interchangeably. Therefore, the following literature review will sift through the theoretical elaborations on both the hospitality and hospitableness concepts together until a concrete conceptualization of hospitableness emerges for effective and efficient operationalization.

The existing literature about hospitality and hospitableness can be boiled down to a picture, with a layered structure of hospitality inclusive of sustenance and entertainment products
besides service and hospitableness, as displayed in Figure 1. Hospitality, in its most basic form, involves provision of some tangible products such as food, drink, shelter, and means to clean for travelers and their companions away from home. Besides basic level needs, higher level needs may also be satisfied by providing entertainment components such as TV, pool and playground. Several tasks such as check in/out and housekeeping are conducted as services in the delivery of the products; these services, visible or invisible, or good quality or not, would affect the perception of all other components. On the other hand, hospitableness is the expected overarching layer of hospitality; it is what makes or breaks the entire customer experience about a company or a product. Hospitableness is an anthropocentric concept that is manifested in human interaction between providers and consumers. It must surround the inner layers of hospitality; in other words, it must be present during the delivery of goods and services for the customer to feel true hospitality.

**Fig. 1. Different layers of hospitality**

**Methods**
An integrated and sequential mixed-methods approach was used to increase the study’s level of external validity (Creswell & Clark, 2011). An exploratory qualitative research inquiry was confirmed by a quantitative survey method, by following the steps of measurement development recommended by Churchill (1979). The literature was reviewed to define the domain of interest (i.e. hospitable domain). Due to a lack of well-established theory on the dimensions of hospitableness and how to measure them, the measurement items had to be generated atheoretically, as was suggested by DeVellis (1991). It was crucial to define what hospitableness means as a characteristic, attitude or action with its cognitive and/or affective characteristics, and which human characteristics are associated with the word hospitable, both in domestic/private and commercial/public settings. Thus, going back to the basics to define and measure the concept of hospitableness was deemed as a reasonable starting point as suggested by Brotherton (1999). The concept of hospitableness was tested in three different service contexts, hotel, restaurant and destination in an effort to identify a uniform measurement scale applicable to different
service products. Table 1 (at the end of the document) summarizes the methodological
details.

**Results**
The socio-demographic characteristics of all respondents and respondents in each of the
three contexts. The average age of the entire sample is 31.64 years, which is almost
identical across three contexts, the hotel context group being slightly higher (32.14 years). Gender
distribution is almost a 50/50 split between male and female respondents for all
respondents and subgroups except a negligible dominance of females in the restaurant
context group. Respondents are uniform in educational characteristics across different
context groups, about 52% being college or university graduates, and almost half of
respondents being single. Considering postgraduate students, technologically savvy youth
and even professionals working for IT companies as potential members of the MTurk, almost 40% of respondents having annual income of less than $25,000 and about 50% having between $25,000 and $75,000 is not surprising. Three-quarters of respondents are Caucasian.

As can be seen on Table 2, although all ratings in all contexts are above the mid-point on
the 7-point scale, overall, restaurant context and hotel context ratings are similar while the
destination context revealed significantly lower ratings in 11 items. One way ANOVA with
post-hoc Scheffe test results revealed that destination context ratings were higher than
those of the hotel context for ‘happy’ and ‘sociable’ items and higher than both hotel and
restaurant contexts for the ‘open-minded’ item. This result may signal the differing level
of hospitableness in different consumption contexts. Some dimensions of
hospitableness may be more important in a micro product consumption context with an
extended period of contact and interaction as in hotels. For example, the restaurant context
revealed the lowest ratings of the three contexts on one item, ‘trustworthy,’ which may be
more important in consumption situations with an extended period of contact and
interaction rather than just the length of a meal. Hence, the hotel context revealed the
highest rating on this item.
Table 2. Mean ratings and standard deviations of scale items for different groups

<table>
<thead>
<tr>
<th>Hospitableness Items</th>
<th>TOTAL (N=1217)</th>
<th>Destination* (n=414)</th>
<th>Hotel** (n=404)</th>
<th>Restaurant*** (n=399)</th>
<th>ANOVA test of Differences</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>Std. Dev.</td>
<td>Mean</td>
<td>Std. Dev.</td>
<td>Mean</td>
</tr>
<tr>
<td>Kind</td>
<td>6.02</td>
<td>1.071</td>
<td>5.98</td>
<td>1.063</td>
<td>6.05</td>
</tr>
<tr>
<td>Polite</td>
<td>6.28</td>
<td>1.025</td>
<td>5.95*</td>
<td>1.128</td>
<td>6.46</td>
</tr>
<tr>
<td>Happy</td>
<td>5.52</td>
<td>1.235</td>
<td>5.64</td>
<td>1.141</td>
<td>5.42</td>
</tr>
<tr>
<td>Sincere</td>
<td>5.75</td>
<td>1.206</td>
<td>5.79</td>
<td>1.117</td>
<td>5.73</td>
</tr>
<tr>
<td>Honest</td>
<td>6.06</td>
<td>1.099</td>
<td>6.00</td>
<td>1.106</td>
<td>6.20b</td>
</tr>
<tr>
<td>Flexible</td>
<td>5.25</td>
<td>1.341</td>
<td>5.03*</td>
<td>1.410</td>
<td>5.36</td>
</tr>
<tr>
<td>Helpful</td>
<td>6.26</td>
<td>1.016</td>
<td>6.01*</td>
<td>1.027</td>
<td>6.44</td>
</tr>
<tr>
<td>Friendly</td>
<td>6.13</td>
<td>1.035</td>
<td>6.10</td>
<td>0.965</td>
<td>6.15</td>
</tr>
<tr>
<td>Reliable</td>
<td>6.03</td>
<td>1.126</td>
<td>5.74*</td>
<td>1.220</td>
<td>6.24</td>
</tr>
<tr>
<td>Sociable</td>
<td>5.21</td>
<td>1.427</td>
<td>5.34</td>
<td>1.270</td>
<td>5.06*</td>
</tr>
<tr>
<td>Attentive</td>
<td>5.80</td>
<td>1.201</td>
<td>5.28*</td>
<td>1.315</td>
<td>5.98</td>
</tr>
<tr>
<td>Courteous</td>
<td>6.11</td>
<td>1.034</td>
<td>5.92*</td>
<td>1.083</td>
<td>6.23</td>
</tr>
<tr>
<td>Generous</td>
<td>4.87</td>
<td>1.460</td>
<td>4.94</td>
<td>1.461</td>
<td>4.85</td>
</tr>
<tr>
<td>Consistent</td>
<td>5.55</td>
<td>1.301</td>
<td>5.31*</td>
<td>1.381</td>
<td>5.71</td>
</tr>
<tr>
<td>Welcoming</td>
<td>6.11</td>
<td>1.066</td>
<td>6.01</td>
<td>1.069</td>
<td>6.18</td>
</tr>
<tr>
<td>Personable</td>
<td>5.61</td>
<td>1.255</td>
<td>5.60</td>
<td>1.182</td>
<td>5.57</td>
</tr>
<tr>
<td>Respectful</td>
<td>6.17</td>
<td>1.052</td>
<td>5.96*</td>
<td>1.094</td>
<td>6.32</td>
</tr>
<tr>
<td>Trustworthy</td>
<td>5.97</td>
<td>1.146</td>
<td>5.98</td>
<td>1.099</td>
<td>6.19b</td>
</tr>
<tr>
<td>Professional</td>
<td>5.71</td>
<td>1.402</td>
<td>5.19*</td>
<td>1.568</td>
<td>6.10b</td>
</tr>
<tr>
<td>Considerate</td>
<td>5.90</td>
<td>1.094</td>
<td>5.79*</td>
<td>1.071</td>
<td>6.00</td>
</tr>
<tr>
<td>Well-groomed</td>
<td>5.08</td>
<td>1.550</td>
<td>4.55*</td>
<td>1.656</td>
<td>5.22</td>
</tr>
<tr>
<td>Open-minded</td>
<td>5.10</td>
<td>1.494</td>
<td>5.36b</td>
<td>1.322</td>
<td>5.06</td>
</tr>
<tr>
<td>Accommodating</td>
<td>5.76</td>
<td>1.152</td>
<td>5.64</td>
<td>1.211</td>
<td>5.83</td>
</tr>
<tr>
<td>Dedicated to service</td>
<td>5.81</td>
<td>1.285</td>
<td>5.46*</td>
<td>1.398</td>
<td>6.00</td>
</tr>
</tbody>
</table>

*: Survey question: How important are these characteristics for the locals to have at a destination (e.g. a town, city, country) for you to feel that they are hospitable?
**: Survey question: How important are these characteristics for hotel employees to have for you to feel that they are hospitable?
**: Survey question: How important are these characteristics for restaurant employees to have for you to feel that they are hospitable?
a: The lowest rating among the 3 groups
b: The highest rating among the 3 groups
Three factors were extracted with substantial loadings of 15 items with no cross-loadings. The factors explain about 59% of the original variables. The computation for internal stability revealed high values of Cronbach’s alpha coefficient: $\alpha = 0.92$ for Factor I, $\alpha = 0.83$ for Factor II, and $\alpha = 0.79$ for Factor III (using the EFA dataset); these high coefficients indicate that factors are stable with substantially high internal consistencies. Individual items showed good correlation with the extracted factors and were all readily interpretable. A close examination of the factor items reveals that all factors address the heart of the guests; thus, this led to the creation of the 3-Hs of Hospitableness. Factor I is named Heartwarming since it includes the positive host characteristics and attitudes (i.e. polite, welcoming, friendly, courteous, helpful, respectful, and kind) all of which may result in feeling wanted, eliciting a positive emotional response from guests. Factor II is named Heartassuring since it includes host characteristics and attitudes (i.e. trustworthy, honest, consistent, and reliable), fostering a feeling of safety and security in guests. Factor III is named Heartsoothing since it included the general host characteristics and attitudes (i.e. generous, sociable, open-minded, and happy) that have potential to create comforting and calming feelings in guests. The 3-Factor (3-H) Hospitableness scale with nine items was subjected to CFA for validation. The first analysis resulted in an inadequate model fit though many of the loading coefficients within the model were significant. Examination of standardized residual covariances signaled the need to re-specify the model by removing a couple of items from the model due to high residual covariances (0.4 or more with multiple items) that may cause poor model fit. The results of the re-specified model provided much better model fit of the data to the Hospitableness model with its 3-H Factor structure ($\chi^2 = 55.328, df = 27, p < .001, CFI = .988, RMSEA = .042$), as well as stronger factor loadings for the variables remaining in the model. As displayed in Table 2, all other indices of goodness-of-fit (CMIN/DF = 2.049, GFI = .981, AGFI = .962, NFI = .977, TLI = .980, PCLOSE = .782) are above the acceptable ranges. Second order measurement model test revealed exact same results.

Conclusions and Future Research Suggestions
With the largest grand mean in both EFA and CFA results, as well as in all three-product consumption contexts, the Heartwarming aspect of hospitableness is the most important, followed by Heartassuring and Heartsoothing. This is not surprising based on how hospitableness was defined for the purposes of this study. Hospitableness was defined as a construct to initiate emotional response in guests based on hosts’ traits, attitudes and behaviors when dealing with guests. Some items are personality traits (e.g. honest) while some are attitude (e.g. courteous) and behavior (e.g. welcoming). The Heartwarming items include more emotion-inducing attitudes, while Heartassuring includes more safety and security-inducing personality traits, and Heartsoothing items are more neutral personality traits that comfort guests.

Thus, research on hospitableness in different cultures may also reveal cultural differences in commercial hospitality, despite the inherent challenges of firmly defining this construct of changing nature. Study of hospitableness in different cultures may provide “…a lens through which to view cultures and their spaces” as Lugosi states (2009, p. 17). For these reasons, the subject requires both longitudinal and cross-cultural attention in different times, cultures, subcultures and customer segments. Even in the same culture, different
socio-demographic backgrounds and psychographic characteristics may be defining factors of hospitableness perception. Thus, comparative studies are needed to identify if and which socio-demographic and/or psychographic characteristics influence what is deemed hospitable.
<table>
<thead>
<tr>
<th>Phase</th>
<th>Stage</th>
<th>Methodology</th>
<th>Design</th>
<th>Sampling technique</th>
<th>Sample</th>
<th>Medium of Contact</th>
<th>Context</th>
<th>Analysis of Data</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preliminary Phase</td>
<td>Search for basic terminology</td>
<td>Qualitative</td>
<td>Literature review</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Content analysis of literature and dictionaries</td>
<td>A list of definitions, synonyms and antonyms</td>
<td>200 unique words and their antonyms (both with negative prefixes and without prefixes)</td>
</tr>
<tr>
<td></td>
<td>Initial item pooling</td>
<td>Qualitative</td>
<td>Interview</td>
<td>Purposive</td>
<td>100 students, faculty members, staff at a University</td>
<td>Mix - Face-to-face, e-mail, phone</td>
<td>Domestic/private - Persons (friends, family or a stranger) Commercial/public -Firms</td>
<td>Content analysis</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Item sorting with Expert opinion</td>
<td>Qualitative</td>
<td>Interview</td>
<td>Purposive</td>
<td>10 faculty members and Ph.D. candidates</td>
<td>Mix - Face-to-face, e-mail, phone</td>
<td>Commercial/public - Hospitality Firms</td>
<td>Content analysis</td>
<td>2 scales with 46 dimensions: Importance Scale Performance Scale with semantic differential</td>
</tr>
<tr>
<td></td>
<td>Pilot test 1 for scale purification of Importance Scale</td>
<td>Quantitative and Qualitative</td>
<td>Survey with Importance Scale</td>
<td>Conveniences</td>
<td>70 university students</td>
<td>Face-to-face Self-administered</td>
<td>Commercial/public - Hospitality Firms in general</td>
<td>Descriptives EFA content analysis of comments</td>
<td>Dimensions reduced to 36</td>
</tr>
<tr>
<td></td>
<td>Pilot test 2 for scale purification of Performance Scale</td>
<td>Quantitative and Qualitative</td>
<td>Survey with Performance Scale</td>
<td>Random</td>
<td>253 local residents of a city</td>
<td>Face-to-face Self-administered</td>
<td>Commercial/public - Hospitality Firms</td>
<td>Descriptives EFA content analysis of comments</td>
<td>Dimensions reduced to 24</td>
</tr>
<tr>
<td>Main Phase</td>
<td>Final test of Importance Scale</td>
<td>Quantitative</td>
<td>Survey with Importance Scale</td>
<td>Random on Amazon’s Mechanical Turk</td>
<td>1217 registered users of AMT Destination context (414) Hotel context (404) Restaurant context (399)</td>
<td>Online</td>
<td>Commercial/public - Hospitality in 3 contexts: Destination residents Hotel personnel Restaurant personnel</td>
<td>Descriptives, t-test, One-way ANOVA EFA - n=623 -50% random of sample from each contexts (dest.=217 hotel=219 rest.=187) CFA - n=594 the remaining 50% of all contexts</td>
<td>3 factors of Hospitableness in EFA and CFA Retention of 10 dimensions in 3 Factors F1=Heartwarming F2=Heartassuring F3=Heartsoothing</td>
</tr>
</tbody>
</table>
References
Life on the Street in Puerto Rico: Food Vendors’ Perspective

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Abstract

One of the mainstream forms of street vending is that of food street vendors. Food street vending is a popular economic activity that provides alternative means for entrepreneur-minded people to start their own business, achieve financial success, and become their own boss. The general public often visit public spaces such as rural markets, folkloric festivals, town centres, down town areas, beaches, and other social gathering places with a pre-set notion to purchase food from street vendors. Many of these vendors help shape tourists’ and locals’ experiences by offering novel products that are often considered “authentic.” The experience of purchasing and eating from food street vendors is part of people’s delight in frequenting such public spaces and makes the vendors a piece of social activity for the general public and tourism populations. Customers who patronize food street-vendors do so because of the vendors’ convenient locations, well-priced menu items, as well as the ability to enjoy comfort food, and the opportunity to learn about other cultures’ cuisines. Despite, the positive experiences that street food vendors may stimulate they are traditionally stereotyped as being part of a market with low market barriers, low skills of operation, little opportunity for advancement, low paying, and low hygiene food operators. This research looks beyond the common stereotype of food street vendors and explores who these food street vendors actually are and investigates their business motivations as well as their perceptions of themselves as food service professionals, business owners, and their overall perception of the industry. The study is set in San Juan, Puerto Rico’s tourist district. A majority population of street food vendors with occupational licenses were surveyed (n=57). The results from an exploratory factor analysis (EFA) suggest that street vendors might face pressures that are similar to the ones faced by brick and mortar food operators. The only difference is the operational challenges related to regulation and governments permits. It seems that this is one of the most difficult tasks faced by this group. The EFA identified a total of four factors that explained 72\% of the variance. The most dominant factor was financial performance and regulations, followed by daily operations, business logistics, and strategic planning. The results from this study may provide helpful information for tourism policy and planning purposes that pertains to street vendors, as well as the results may be used for educational purposes with regards to explaining the underground tourism economy in some destinations. The most important implication from the research is that it provides meaning to the occupation of street vendors and validates an underground industry.

Keywords: street vendors, operational challenges, Puerto Rico
The Potential Appeal of Music and Generation Y: The Case of the Aruba Electric Festival

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Abstract

The purpose of this study is to assess Generation Y tourists experience at an electric music festival, thereby capturing emotional and cognitive aspects of choice and behavior from a relatively new emerging market segment. The study integrates the “experience economy” framework in order to assess attendees’ involvement at an electric music festival. The premise of this framework is that experience is more important than the pure content of the electric music festival. Therefore, the study integrated the concept of experience as the main construct in order to reveal respondents’ behavioral intentions towards the festival. The study applied a survey design to gauge festival attendees’ perceptions of the experience at the event, behavioral intentions, and demographic information. A total of 325 surveys (18% of the population) were collected during the three day event. The study applied structural equation modeling in order to assess the results. The findings revealed that the fit indices were an acceptable fit in the festival context ($X^2 (340) =1636.805, p < 0.001, CFI=0.922, NFI=0.933, RMSEA=0.098$). The results further revealed that the higher the attendees’ perceived their spontaneous and ultimate experience at the festival, the more likely attendees were to spread positive comments about Aruba (electronic word of mouth) and increase the attitudinal loyalty toward the electronic festival. In addition, electronic word of mouth positively leads to attitudinal loyalty as 79% of the variance of attitudinal loyalty is explained by the festival experience constructs and electronic word of mouth. In other words, experience at the festival spawns a highly significant opportunity for Aruba as a destination to welcome these attendees back to Aruba and convert these attendees to future tourists. An interesting finding for destination managers is that the overall destination seems to have more of an impact on the attendees to return to the destination than the music festival itself. The festival is therefore a compelling venue for targeting a specific generation cohort and converting them to future tourists.

Keywords: Aruba, generation Y, electric music festival, experience economy
The Economic & Internationalization Benefits of a Music Festival in a Small Island Destination

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Abstract

Over the last two decades, it has become nearly impossible to index the different types and amounts of festivals that occur on a global scale. Destinations abroad frequently promote festivals due to the economic contribution that may be realized through a destination’s experiential product offerings which significantly increases international tourist arrivals resulting in increased foreign earnings, increased competition, and increased economic activity in other industry sectors observed by direct, indirect, and induced effects. Past research has documented that festivals (in general) may serve as a catalyst for job creation, economic stimulation, and regeneration for destinations. Based on the continued growth of festival production, it seems necessary to refine the general body of festival literature to that of contextual application in market structures that have been overlooked in the general festival literature. One contextual application and market structure is that of music festivals in small island destinations (SIDs). A review of literature reveals that only one technical report has assessed the economic impact of music festivals in SIDs. Yet, there are an abundance of music festivals that occur in SIDs each year. The purpose of this study is twofold. First, the study measures the economic impact of a music festival that occurs within a small economy (i.e. Curacao). Second, the study examines the potential internationalization benefits that may be incurred within a small island destination that hosts a music festival. A longitudinal research design (2010-2014) that applies an economic Input-Output Model is used to assess the economic impact and internationalization benefits of the Curacao North Sea Jazz Festival (CNSJF). The study adopts the process of internationalization and the OLI paradigm in order to provide insight regarding how a music festival (that occurs in a SID) could assist in supporting tourism, the economy, and reduce the likelihood of tourism profits from leaking to areas outside of the host destination. The I-O model for Curacao consisted of 40 detailed products that were aggregated into 13 specific sectors based on the National Industrial Classification (NIC) Statistical Standards. The results reveal that the economic impact of the music festival stimulated the effective use of network linkages to counter economic leakage. This was mostly observed in the total expenditures that tourists spent per day, which included spending in other industry sectors (e.g. telecommunications, banking, utilities). The increased amount of tourists’ spending in other industry sectors provided evidence that the music festival was stimulating inward internationalization. Of great benefit to Curacao in this process, is that the CNSJF seemed to attract a different market segment that was more apt and more willing to spend money for a quality exchange in the form of a music festival. Based on the results, it seems that a SID hosting a quality level music festival may present...
favorable conditions that could result in internationalization opportunities as well as a strong economic impact that effectively uses both government owned linkages (utilities, telecommunications) as well as locally owned (banking).

**Keywords:** small island destinations, economic impact, internationalization, music festival, OLI paradigm

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Abstract

This Study utilizes Data Envelopment Analysis (DEA) approach to evaluate the relative operating efficiency of a group of hotels in the United States. It also sets the benchmark of performance standards in this progressively competitive service industry. Data Envelopment Analysis has been recognized as a valuable analytical research instrument and a practical decision support tool. The DEA model is a form of linear programming methodology to measure the efficiency of multiple decision-making units when the production or service process presents a structure of multiple inputs and outputs such as operating expenses, cost of sales, occupancy rate, and revenue. The study aims to identify the performance of several hotels. It also seeks to identify the hotels’ efficiency scores, ranks, weaknesses and reduced target input values. The results of the study may be useful to investors, creditors, international tour operators, and the management of the hotels themselves in assessing their performance according to the comparative efficiency scores.

Keywords: data envelopment analysis, hotel industry, linear programing, operating efficiency
The Challenges of Using Tourism as an Urban Regeneration Tool in a Developing Country

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Abstract

The purpose of this research is to investigate the impending challenges that may hamper the use of tourism as a developmental tool for urban regeneration in a developing country’s capital city. The study is framed within the collaborative theory paradigm where power relations (i.e. at the municipal level) may provide the most practical means to ensure stakeholders’ willingness to collaborate in efforts to develop the organizational infrastructure of the tourism industry as a developmental tool for urban regeneration. The research investigates three critical components pertaining to the potential contribution of the tourism market and its ability to provide or conform to a developing country’s market structure. The research design is an exploratory qualitative case study that takes place in Guayaquil, Ecuador. The research explores three primary research questions. First, if the tourism market could provide a secure and positive socioeconomic source for Guayaquil? Second, if investment in the organizational infrastructure of the tourism industry could lead to a sustainable and viable industry that could act as a catalyst for further development in Guayaquil? And, lastly, the research explores if the existing tourism stakeholders demonstrate the ability to organize central efforts in order for tourism to serve as a catalyst for economic development in Guayaquil? The findings from this exploratory investigation reveal that while the participants felt that tourism business’ economies of scale could be improved if all locally owned businesses purchased within the tourism supply chain they themselves were purchasing outside of the supply chain. This behavior was characterized as a result of a non-cooperative market. The major implication from the study is a trend that emerged from the data that seems to detect a tragedy of the commons and coordination problem scenarios that are rooted within game theory.

Keywords: non-cooperative market, game theory, tragedy of the commons, developing Country

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Abstract

We attempt to make a comparative evaluation of modern macroeconomic schools: Monetarism and New Classical School based on the Classical System that envisage automatic full employment or natural rate of unemployment (NRU) equilibrium (AFNE or ANRUE) vs. New Keynesian and Post-Keynesian Economics based on the Keynesian System which gives unemployment equilibrium (UNE) or non-automatic NRU equilibrium (NANRUE) due to insufficiency of aggregate demand. In order to determine which school is relevant, first the basic assumptions of these systems are compared: i) rational vs. adjusted vs. heterogeneous expectations, ii) existence of perfect competition in all markets leading to flexibility of prices and wages vs. imperfect competition giving rise to rigidities, and iii) presence or lack of coordination between markets. In the final phase of our evaluations the performance of the developed economies are surveyed to establish whether we meet with AFNE or ANRUE or else UNE or NANRUE; and whether policy prescriptions devised by respective schools solve or alleviate the problem at hand when implemented. Our investigations point out that New Keynesian and Post-Keynesian schools are more relevant compared to Monetarism and New Classical School. The choice between New Keynesian and Post-Keynesian Economics, however, is more difficult to make although New Keynesian Economics seems more widespread than Post-Keynesian Economics. Objectively, Post-Keynesian assumptions seem more realistic; normatively, however, New Keynesian stands seems more fit to the present day move towards globalization.

Keywords: modern macroeconomic schools, (Neo-) classical system, Keynesian system, new Keynesian economics, post-Keynesian school, monetarism, new classical school

Introduction

An attempt will be made in this survey to compare and evaluate modern macroeconomic schools with respect to their methodology, major assumptions, the conclusions they reach concerning automatic full employment vs. unemployment, their consequent policy recommendations and, finally, with respect to their validity and relevance. We will cover Monetarism, New Classical School, New Keynesian and Post-Keynesian Economics, the former two as having stemmed from the Classical System and the latter two from the Keynesian System. This acknowledges Blinder’s view [1988] that the dividing line between macroeconomic schools is whether they lead to automatic full-employment equilibrium (AFNE) following the Classical System, or to less-than-full employment or
simply unemployment equilibrium (UNE) due to lack of aggregate demand following the Keynesian System. Since modern schools work with “natural rate of unemployment” (NRU) first introduced by M. Friedman [1977], we have replaced full-employment point with “NRU” and therefore talk about “automatic natural rate of unemployment equilibrium” (ANRUE) for Monetarism and New Classical School and, for the sake of convenience, non-automatic NRU equilibrium (NANRUE) for New Keynesian and Post-Keynesian Economics.

The Laffer Curve and Supply Side Economics will not enter our survey because originally it was introduced within the context of Classical (Neo-Classical) Economics and does not qualify as a macroeconomic system on its own. Moreover, it soon became clear that supply side of the economy could be investigated within the context of Keynesian System as well, for instance, as had been done following the stagflation of 1970s [e.g. Gordon: 1977].

Evaluation of the above macroeconomic schools will be made on three planes. The first is “consistency” and “comprehensiveness”. This criterion is methodological and draws on criticisms advanced by New Classicals to the Keynesian System that it lacks microeconomic foundations and that its result, UNE is inconsistent with AFNE of traditional microeconomic theory. Traditional microeconomic theory works under the assumptions of perfectly competitive markets and full coordination between markets (Walrasian “auctioneer”) and reaches AFNE. This criticism led New Keynesians and also Post-Keynesians to lay the microeconomic foundations for Keynesian analysis and UNE (NANRUE). They worked, however, with imperfect markets that lead to price and wage rigidities, thereby to Keynesian insufficient aggregate demand. They also showed that under the absence of the Walrasian auctioneer similar Keynesian results would obtain. We tend to agree along with Post-Keynesians, however, that if it comes to choosing between consistency and comprehensiveness vs. relevance, the latter is the more crucial and useful criterion.

Secondly, we will investigate the “realism and validity” of the major assumptions and relationships accepted in the respective macroeconomic schools. For instance, whether statistical investigations confirm the New Classical “Rational Expectations Hypothesis” (REH) or the Monetarist “Adjusted Expectations Hypothesis” (AEH) or else the Keynesian and Post-Keynesian “Heterogeneous Expectations Hypothesis” (HEH) is valid; whether, in actual practice, conditions of perfect competition (PC) or imperfect competition (IC) prevail in markets, and whether there is coordination or lack of coordination between markets (presence or absence of the Walrasian auctioneer).

This would clear the way for the third and most important plane of our evaluations and investigations, namely the “validity and relevance” of macroeconomic schools depending on their conclusions and policy recommendations. This means, does the economy reach full employment (FN) or NRU automatically or else does it stop short due to Keynesian lack of demand. Since different schools reach different conclusions, ANRUE or NANRUE, they recommend different economic policies. These policies, in turn, are implemented. Hence the results of these different policy implementations also give us clues as to the validity and relevance of the different macroeconomic schools.
Again following Blinder [1988], we accept here that “the major test is whether a macroeconomic system or school analyses the working of the actual economy correctly, defines the reasons why, if any, an economic problem exists, and whether policies it prescribes to eradicate or alleviate the problem do bear positive results.” Thus, for instance, if according to the Keynesian System and hence to the New Keynesian and Post-Keynesian Economics a less-than-full employment situation is explained by lack of aggregate demand, whether we meet with UNE in case of non-intervention of government, and whether Keynesian monetary and/or fiscal policies, if actually implemented had alleviated the unemployment problem encountered. Or else, if according to Monetarism and New Classical School, the economy reaches FN or NRU automatically and we must gauge our monetary and fiscal policies only to prevent inflation, then whether an existing unemployment situation disappears of its own accord within a reasonably short period of time.

I would like to stress at this point that the “validity and relevance” of macroeconomic systems and schools is evaluated here exclusively for the developed countries (DCs). No attempt will be made with respect to their validity and relevance for the less developed countries (LDCs) and newly industrializing countries (NICs). Such an investigation could lead to another and different survey on its own.

First follows, however, some comments on why we have different macroeconomic schools with widely different conclusions and policy recommendations, taken up in the section below.

Differences in Objective and Normative Analysis
The very existence of radically different macroeconomic schools suggest that there are radical differences at the level of “objective” analysis, let alone “normative” differences. New Classical School and Monetarism, based on the Classical System have accepted such assumptions that lead them to ANRUE, hence fundamentally a hands-off policy for the government.

New Classicals prescribe a complete hands-off policy. Monetarists, on the other hand, advise only a pre-determined growth in money supply in tune with NNP growth. New Keynesians based on the Keynesian System and also influenced by the earlier “Neo-Keynesians” (e.g. Samuelson, Tobin, Solow, Modigliani, etc.) accept assumptions that lead them to conclude NANRUE or UNE due to Keynesian lack of aggregate demand for the Short-Run (SR) [Blinder: 1988, Mankiw: 1990, Gordon: 1990]. New Keynesians accept the New Classical REH but work with IC markets. They also note the absence of the Walrasian auctioneer. Again in line with Neo-Keynesians, the majority of New Keynesians, excluding those who adhere to the Efficiency Wage and Hysteresis models, conclude that in the Long-Run (LR) the economy will automatically tend towards NRU. Since it will take too long for unemployment to disappear on its own, however, it would necessitate a continuous implementation of Keynesian policies to alleviate it without giving rise to inflation. Post-Keynesians followed Keynes more strictly and were also influenced by the earlier “Orthodox Keynesians” (such as Joan Robinson, Harrod, Kaldor, Shackle, etc.). They accept Keynesian assumptions of uncertainty, HEH in addition to IC and
absence of Walrasian auctioneer that lead them to the conclusion of UNE or NANRUE both for the SR and the LR; hence to Keynesian policy prescriptions [Arestis: 1994, Davidson: 1991, 1994].

In the case of the Keynesian System, criticisms leveled against it led to its modification and hence, development. Thus, for instance, Phillips (1958) had challenged Keynes’ original belief that by raising aggregate demand we could reach the FN point without giving rise to price increases that are inflationary. But Lipsey (1960) incorporated this criticism into the Keynesian System and thus the Phillips Curve (PC) became a standard tool of the Keynesian System, signifying the choice or trade-off between unemployment and price rises.

Similarly, M. Friedman (1977) proposed that in addition to several SRPCs there was a long run and perpendicular PC. The Keynesians incorporated the LRPC into their analysis, not as a perpendicular but still a negatively sloped curve, albeit steeper than the SRPCs.

Still further, M. Friedman argued that in view of elasticities involved, monetary policy was effective (in Friedman’s case, for one period) and fiscal policy ineffective [Froyen: 1999]. Keynesians broadened their analysis to cover this point; arguing that in times of depression, as Keynes had pointed out, fiscal policy is effective, but at higher income levels, say in recession, monetary policy is the effective tool; and, of course, its effect was not short-lived.

The Efficiency Wage and Hysteresis models devised by some New Keynesians is another example in which we discern an attempt to reach the same conclusion of Keynesians and Post-Keynesians, namely NANRUE for both the SR and the LR. Both Keynes and Post-Keynesians, however, work with HEH and depend mainly on uncertainty and volatility of investments to reach this conclusion. In the above models the New Keynesian REH is retained. But, additional assumptions concerning the relation between labor productivity and wages for the case of former models, insider-outsider relations or the relation of labor unions towards its employed members vs. the unemployed in the case of the latter models lead them to the same conclusion of both SR and LR NANRUE [Akerlof: 1984; Yellen: 1984; Katz: 1986, Weiss 1999; Lindbeck and Snower: 1987]. Obviously, however, although the conclusions and policy recommendations of these models are the same as Keynesians, their assumptions and objective analysis is definitely different.

Still another major difference is witnessed in the explanation of business cycles particularly as between both New and Post-Keynesians as opposed to Monetarists and New Classical. The Keynesian schools attribute business cycles to Keynesian lack of effective demand and volatility of investments. They therefore prescribe Keynesian demand management policies to curb it. Monetarists explain business cycles with mismanaged monetary policies, an argument which may be traced back to Alfred Marshall (1923). This has led Monetarists to advise a non-discretionary monetary policy. New Classical, on the other hand, explain business cycles as optional responses of the economy to technological change [Barro: 1981; Barro and King: 1984, Lucas: 1987]. Hence, a hands-off policy should continue; nothing should be done to redress them.
Looking at it from another angle, the above indicates that despite the vast academic give-and-take and econometric analysis, wide differences in the objective analysis offered by different schools still exist and need an explanation. The different results reached at the stage of objective analysis basically stem from the fact that economics is a “social” science. Unlike natural sciences, controlled experiments in social and economic phenomena are impossible. But for a given country at a given time, so many factors affect actual outcome that despite powerful statistical and econometric tools, different people or schools may be led to different results and interpretations. Secondly, in observing and interpreting economic phenomena, a researcher may come under the influence of his/her pre-conceived philosophical and political preferences.

To quote one relatively recent example, investigating the data of 1970s, New Classicals, Lucas and Sargent [1978] concluded that the PC had collapsed; hence the Keynesian System was wildly incorrect. But New Keynesians, Gordon [1977, 1985], Ando and Kennickel [1985] and others showed that the PC had not collapsed. It was merely shifting upward because of stagflation and cost and price increases during the period studied.

In addition to the “objective” there are also “normative” differences between different individuals, groups or schools leading to different policy prescriptions based on the same objective analysis. This covers a host of value judgments such as: can governments devise and implement correct policies; how much weight do we attach to improvements in income distribution; what would be our choice between price rises vs. reducing unemployment; etc. For instance, a few New Keynesians, despite their objective analysis and conclusion of NANRUE, refrain from recommending that governments implement (Keynesian) policies because they fear that governments often make mistakes in implementing them, hence give rise to greater problems than those they set out to alleviate. As another example, Post-Keynesians, in their objective analysis, argue about “conflict of interests between social groups” rather than “harmony” as conceived by the Classicals. In their policy recommendations Post-Keynesians also normatively give greater weight to improving income distribution compared to even, the majority of New Keynesians, not to mention the Classicals. The choice between price increase and unemployment rate on the SRPC and LRPC is another well-known case where our value judgments come into play. Falling back to “coarse-tuning” from the more ambitious “fine-tuning” is a question concerned with objective analysis, and not normative.

Based on their objective and normative analyses, hence their policy recommendations, New Classicals and Monetarists, along with Classicals, take their place at the right side of the political spectrum. Keynesians spread from center to center left, some to the left. New Keynesians spread from center right to center left. Post-Keynesians, on the other hand, spread from center left to the left.

**Methodology: Consistency and Comprehensiveness**

The methodological question of consistency and comprehensiveness had been brought to our attention particularly with the criticisms of New Classicals directed at the Keynesian System that it lacked microeconomic foundations and its result, UNE was inconsistent with that of traditional microeconomic analysis, AFNE.
Certainly, a perfect macroeconomic system or paradigm will have to be consistent and comprehensive and New Classicals were right in their methodological criticism of Keynesian System [Coddington: 1976]. But, one must accept that Keynes published his General Theory in 1936, immediately after the 1929-34 Great Depression and the world was in dire need of finding a remedy to the depression, unemployment and business cycles. This was, among many others, one major area in which the Classical System and the Classical remedy of lowering the wage rate had failed miserably.

Keynes’ alternative macroeconomic system and its policy recommendation, raising public expenditures gave positive results. In fact, many economists before Keynes had advocated raising public expenditures to alleviate the depression and the unemployment problem. But Keynes had backed it with a viable macroeconomic system [Blaug: 1985]. It is unfair to criticize Keynes for not having dived into microeconomic foundations of all the macro concepts and relationships he introduced because, given the grave and pressing problems that needed immediate cure, he simply had no further time to spend. In fact, many of his concepts and relationships between macro variables were not tested econometrically. What is remarkable is that econometric researches carried out later confirmed the accuracy of such concepts and relationships as the consumption function, liquidity preference, marginal efficiency of investment, and low interest elasticity of the investment function [Ackley: 1963].

We definitely witnessed a Keynesian Revolution [Klein: 1961]. We had a macro system completely different from the Classical, that gave UNE and not AFNE, and Keynesian recipes worked positively up until the stagflation of the 1970s. During the 1970s, however, Keynesian System came under attack both by Monetarists and New Classicals. The New Classicals, while arguing ANRUE will prevail and not Keynesian UNE, also charged that Keynes’ macro analysis lacked micro foundations and its conclusion, UNE, was, in fact, inconsistent with the AFNE conclusion of (traditional) microeconomic analysis.

New Classical criticism is definitely a valid methodological point and New Keynesians, in trying to revalidate the Keynesian System and UNE (NANRUE), discarded the traditional microeconomic analysis that worked with PC in all markets, full-flexibility of Prices (Ps) and Wages (Ws) and perfect coordination between markets. Instead, they accepted IC, which gave rise to P and W rigidities, hence to Keynesian lack of aggregate demand leading to NANRUE. Thus, Keynesian macro analysis was supplied with microeconomic foundations and the system became consistent and comprehensive.

Similarly, Post-Keynesians also worked with IC markets and absence of Walrasian auctioneer. But they rejected REH, accepted Keynesian HEH and uncertainty and thus came to the Keynesian conclusion of UNE (NANRUE) both for the SR and the LR.

Though consistency and comprehensiveness is an important methodological point, the real test for choosing between alternative schools is in determining which is valid and relevant [Davidson: 1991]. This question is taken up in the following section.
Realism of the Basic Assumptions behind the Macroeconomic Schools

The decisive criterion in choosing a macroeconomic system, school or paradigm is whether it diagnoses the working of the economy and a given economic problem that has arisen correctly, giving the correct reasons why the economies work the way they do, or why a particular problem has arisen; and hence, whether its policy recommendations when implemented will eliminate or alleviate the problem at hand. We call this criterion “validity and relevance”, or else, a test whether the macroeconomic school at hand is “realistic”. In short, validity and relevance opens the way for the usefulness of the macroeconomic school for the society.

We will evaluate the validity and relevance of the four modern macroeconomic schools on two planes. In the first plane, we will investigate the various research carried out on the realism and validity of the basic assumptions accepted by the respective schools. It is hard to imagine a macroeconomic school to arrive at correct conclusions with regard to the working of the economy if the basic assumptions it works with are unrealistic and not confirmed by actual facts. On the second and final plane we will investigate whether the actual course the economies take and the problems encountered conform with the conclusions of respective schools, and if and when the policy recommendations of a particular macroeconomic school are actually implemented they have alleviated the problem at hand and altered the course of the economy for the better.

We will take up here three basic assumptions, the first concerning “expectations”, the second concerning “market structure”, hence “P and W rigidities” and the third “coordination between markets” or existence of a Walrasian auctioneer.

Validity of Assumptions concerning Expectations

On expectations in the two basic macroeconomic systems, the Classical and the Keynesian, the Classical had assumed that workers as well as entrepreneurs estimated future Ps correctly. Keynesians, however, accepted that only entrepreneurs’ price expectations were accurate; the workers generally under-estimated future price rises and demanded a lower nominal wage increase, giving rise to a fall in the real wage. This is a crucial assumption because in the Classical System when workers raise their Ws at the same ratio as Ps, the real wage will remain the same; an increase in Money Supply (Ms) or aggregate demand will have only raised Ps. Since according to Classicals the economy is already at the FN point, this merely means inflation. For the Keynesian System, an increase in Ms or aggregate demand would give rise to both an increase in output and employment as well as some increase in Ps since the economy is assumed to be at UNE.

Followingly, the New Classicals, taking heed from Muth [1960, 1961] have developed the Classical assumption into “Rational Expectations Hypothesis: REH” [Lucas and Rapping: 1969, Lucas: 1970, and others]. This means all economic agents are rational, optimizing and maximizing; they all have access to full information for the decisions they will take and they will predict future Ps correctly, hence make correct, i.e. optimizing and maximizing decisions. REH also entails that for future to be predicted accurately we should “not have uncertainty” and that “history should repeat itself”, i.e. the same set of conditions met in the past should produce the same set of results in the future [Davidson: 1991, 1994].
Surely, some agents may make mistakes in their expectations but it is important that these mistakes will not be systematic; hence they will cancel each other. Moreover, if the economic agents know beforehand that the government will implement a given monetary or fiscal policy when future Ps, employment, etc. take certain magnitudes, the agents when making their final decision will also take into account the effects of these government policies as well, since they will also know exactly how much these policies will affect the magnitudes of the parameters. This will nullify the effectiveness of any predictable government policy. Thus, in effect, in the New Classical School REH institutes “Neutrality of Money”, “Dichotomy” and “Say’s Law” immediately or in the same period.

Friedman [1970] and Monetarists came up with a novel assumption: “Adaptive Expectations Hypothesis: AEH” which assumes that the workers, when Ms is increased and future prices rise will err in the first period and keep their Ws the same; but in the next period they will realize the exact magnitude of the price rise and the fall in their real wage, hence will raise their Ws correspondingly. Thus, the effects of monetary policy (Ms increase) in reducing unemployment below NRU point will live only for one period; the economy will return to NRU and Ms increase will have only raised Ps and Ws; with the value of real parameters the same as one period ago [text book explanations: Branson: 1989, Froyen: 1990, Blaug: 1985]. Thus AEH institutes “Neutrality of Money”, “Dichotomy” and “Say’s Law” one period later. In effect, both New Classicals and Monetarists reach Classical conclusions, one working with REH, the other with AEH.

New Keynesians have also accepted “REH”, which is obviously contrary to the Keynesian assumptions in this regard, namely, systematic under-estimation of future Ps on the part of workers, as well as uncertainty and non-ergodicity. There were two reasons why New Keynesians accepted REH. One was they needed to enter into arguments and discussions with New Classicals in the 1970s when New Classicals and Monetarists had gained ground in the academic circles during the 1970s [Blinder: 1985; Klamer: 1984]. Secondly, Fischer [1977] and Taylor [1980] had already proved that P and W rigidities were more important in giving rise to UNE or NANRUE than REH because in the models they devised, REH plus P and W rigidities still gave rise to Keynesian lack of aggregate demand and unemployment which, in turn, could be remedied by implementing Keynesian demand management.

Post-Keynesians, on the other hand, were more faithful to the original Keynesian assumptions and scornful not only towards New Classicals but also towards New Keynesians for having accepted non-Keynesian assumptions [Arestis: 1994, Davidson: 1991, 1994; and others]. Therefore, Post-Keynesians presented their assumptions in this regard as “Heterogeneous Expectations Hypothesis: HEH” which is exactly the same as Keynes’ assumptions. According to Post-Keynesians, entrepreneurs are in a better position than workers to obtain full information and estimate future Ps correctly. The workers are less knowledgeable and generally end up under-estimating future Ps.

It is difficult to carry reliable research to determine directly which of the above assumptions is valid and correct. But the scanty research made in this field [e.g. Rotemberg: 1984,
Lowell: 1986] point out to the possibility that HEH may be more realistic compared to (AEH and) REH though the latter is theoretically a very tidy construct.

**Validity of Assumptions concerning Market Structure**

New Classical and Monetarists have accepted the traditional microeconomic analysis based on perfect competition (PC) in all markets, including the labor market. This again follows the Classical System and its assumptions. Since a PC market with “homogeneous products” and “many sellers and many buyers” is seldom encountered in many economies today, this assumption must be interpreted as follows: “competition” should be a very powerful factor in all markets such that it should lead to “full flexibility of Ps and Ws”. It is this full flexibility of Ps and Ws that is crucial for AFNE or ANRUE.

Both New Keynesians and Post-Keynesians, in contrast, have discarded traditional microeconomic analysis based on PC and instead have accepted that imperfect competition (IC) prevails in all markets of the economy. This means that the markets are either in “monopolistic competition” or are “oligopolistic” with competition prevailing and with absence of trusts and cartels.

It is easier to observe that IC is the more realistic assumption compared to PC. Firstly, we have generally differentiated products in all the manufacturing and services sectors. In addition, “concentration ratios” can be calculated to determine whether the market is in monopolistic competition or oligopolistic, or else oligopolistic with one or few price leaders. The telling point here is that IC will give rise to P and W rigidities, however temporary, and these, in turn, will give rise to Keynesian lack of aggregate demand leading to UNE or NANRUE.

Several models have been constructed by New Keynesians and Post-Keynesians in which IC markets will give rise to P and W rigidities and, in turn, to Keynesian insufficient aggregate demand. To name only a few, we may cite “Menu Costs Model” [Mankiw: 1985, Akerlof and Yellen: 1985], “The Staggering of Wages and Prices” [Fischer: 1977, Taylor: 1980], “Imperfect Information and Staggered Wages” Ball and Cecchetti: 1980], “Credit Rationing Under Imperfect Information” [Stiglitz and Weiss: 1981], “Price Level Inertia” [Blanchard: 1983], “Monopolistic Competition” [Blanchard and Kiyotaki: 1987], etc. The list is illustrative and not comprehensive and systematic. More information on New Keynesian models can be obtained from Mankiw and Romer Vol. 1 and Vol. 2 [1991], Blinder [1985] and Gordon [1990].

Most of these models are mutually inclusive; one may be operative at a given sector and a given time in a given country, the other at another sector at the same or a different time. Though, taken by itself, one single model may not cause P and W rigidities of enough magnitude to create a serious slack, all taken together with their combined effects spread over time would go a long way to explain and account for unemployment caused by Keynesian insufficient aggregate demand. Interpreted this way, New Keynesian and Post-Keynesian assumption of imperfectly competitive markets giving rise to P and W rigidities seems more realistic compared to the New Classical and Monetarist assumption of full flexibility of Ps and Ws.
Validity of Assumptions Concerning Coordination between Markets and Walrasian Auctioneer

The third assumption concerns coordination between markets. In the traditional microeconomic theory and following Walras’ general equilibrium analysis not only the markets should all be perfectly competitive with full flexibility of Ps and Ws but all the markets should adjust immediately not to leave any over or under supply or demand in any market. This is likened to the presence of an auctioneer, called the “Walrasian auctioneer” who organizes and arranges so that the Ps and Ws that will clear all the markets will be bid and arrived at immediately and simultaneously. New Classicals, working with traditional microeconomic analysis and Walrasian general equilibrium, have accordingly also accepted the presence of the Walrasian auctioneer.

Leijonhufvud [1973] was the first to argue that we did not have full coordination of all the markets, such that even if all markets were PC, there would still be lags in the adjustment of Ps and Ws to clear all the markets. Hence some would remain uncleared; there would be spillovers, giving rise to Keynesian insufficient aggregate demand and UNE. Though Leijonhufvud erred by placing too much weight on lack of coordination between markets in interpreting Keynes [Blaug: 1985], this certainly is still one important reason why we may not have AFNE at least immediately but face UNE in the SR.

Both New Keynesians and Post-Keynesians who have accepted IC in most markets, hence P and W rigidities stemming from IC conditions, have also rejected the assumption of Walrasian auctioneer. Therefore, according to them, we may meet with Keynesian UNE (NANRUE) due to lack of coordination between markets as well as due to P and W rigidities because of IC markets.

Empirical observations suggest that the assumption of lack of coordination between markets, that is, absence of Walrasian auctioneer is a more realistic assumption than that of immediate and simultaneous coordination.

Conclusion: Validity and Relevance of Modern Macroeconomic Schools

Although modern macroeconomic schools start with the years 1970s, in order to assess their validity and relevance we need to take as long span of time as possible, hence we should go as far back as the Industrial Revolution, the emergence of economics and the Classical System (in the 3rd quarter of 18. Century). The acid test is whether DCs display AFNE or ANRUE as argued by the Monetarists and New Classical based on the Classical System; or else UNE or NANRUE as argued by the New Keynesians and Post-Keynesians based on the Keynesian System. And consequently whether the hands-off policy recommendation of the former works, with the economy having reached AFNE (ANRUE) and price stability is attained; or else we have UNE or NANRUE and Keynesian demand management works, unemployment problem is alleviated, going up to the point at which price rises are inflationary. We are neglecting at this stage of our evaluations whether UNE (NANRUE) is witnessed only in the SR as is argued by New Keynesians in general, or both in the SR and in the LR as is argued by the Keynesians as well as Post-Keynesians and those New Keynesians who accept the Hysteresis and Efficiency Wage models.
Viewed in this light, historical observations suggest that Keynesian UNE or New Keynesian and Post-Keynesian NANRUE are definitely more valid and relevant. This is because since the Industrial Revolution up to the 1929-34 Great Depression and the 2.W.W 1939-44, the world continuously witnessed unemployment and business cycles; hands-off policy advocated by the Classicals was of no avail. Similarly, of no avail was the Classical policy suggestion that wages should be lowered and the influence of labor unions or government intervention on wages should be removed. In contrast, when Keynesian monetary and fiscal policies were implemented all throughout the period starting with the 2.W.W, its aftermath and till the 1970s, the world witnessed rapid and steady economic growth, curbing of business cycles, alleviation of the unemployment problem, and relative price stability.

Surely there were other factors that contributed very significantly to rapid and steady growth, such as free international trade policies, international aid and credit followed after the 2.W.W.; but the implementation of Keynesian policies was also definitely instrumental. The problems that were faced during this period emanated from balance of payments deficits, the peculiarities of the international monetary system implemented during the period, and the reluctance of governments towards devaluation. Therefore, these problems had nothing to do with the validity and relevance of the Keynesian System. On the contrary, they could be explained within the context of the Keynesian System.

Thus, since 1936 and up until 1970s we witnessed a “Keynesian Revolution” as Klein had noted. Keynesian System was “mainstream” both in the academic circles and also in the field of implementation, bearing positive results. Keynesian System as mainstream needs, however, to be dissected more deeply. “Orthodox Keynesians” in the UK adhered more strictly to the Keynesian assumptions and conclusions. “Neo Keynesians” in the USA tended to accept the long run tendency of the economy towards automatic FN. Hence, in their arguments with Neo-Classicals (Pigou, Patinkin) they were ready to arrive at the Neo-Classical Synthesis (NCS). We have overlooked here this important theoretical difference because according to the interpretation of NCS by Neo-Keynesians, the economy would frequently fall to Keynesian unemployment in the SR and this necessitated de facto continual implementation of Keynesian policies.

Again, since the 1950s M. Friedman was trying to reinstitute the Classical Quantity Theory [Friedman: 1956; Friedman and Meiselman: 1959; Friedman and Schwartz: 1965]. But he had remained a dissenting and minority opinion during this period up until the 1970s.

What is important from our perspective here is that the diagnosis, conclusions and policy implementation of the Classical System since the Industrial Revolution up till the Great Depression failed. In contrast, implementation of the Keynesian policies bore positive results from the time of Great Depression up to the 1970s.

The years 1970s, on the other hand, witnessed a severe stagflation. Although Keynesian policies continued to be implemented at low-key, it was obvious that Keynesian policies alone could in no way negate the stagflation at hand. This is because the root of the problem had nothing to do with the behavior of the aggregate demand; it stemmed from the
monopolistic practice of raising the prices and reducing the production of petroleum by OPEC. Although it may be hard to prove econometrically, we could say that a Classical “hands-off” policy at the time could have worsened the situation. But, we are disinclined to make a definitive judgment of the years 1970s concerning the relevance of macroeconomic schools because of ambiguities involved concerning the evaluation of alternative policy recommendations.

Nonetheless, during the years 1970s, the Keynesian System fell precipitously from favor in the academic circles. Amongst the younger, the New Classical Economics was widely spread, called the “Counter Revolution” [Blinder: 1985; Klamer: 1984]. Monetarism also became fashionable and Monetarists called it the “Monetarist Counter Revolution” [Froyen: 1990].

Thus, during 1980s economic policies implemented were in line with Monetarism and New Classical School. Government intervention was reduced, including demand management, and Monetarist tight money was implemented in the face of recession. The purpose of the latter policy was to attain price stability while, it was believed, the economy would come to NRU automatically within a short period of time. This, however, did not come to happen; the recession and unemployment was prolonged both in Europe and the USA. Therefore, the years 1980s can be cited as another evidence which has indicated that Monetarism and New Classical economics was not relevant and implementation of policies in line with the above schools did not give positive results [Blinder: 1985].

During the years 1980s, in view of the perceived failures of Monetarist and New Classical policies, Keynesian economics became once more mainstream in the academic circles (Counter-Counter Revolution). In the early years of the decade in the USA, endeavors to meet the methodological criticisms of the New Classicals and also to open up discussion channels with them, Keynesianism took the form labelled New Keynesian Economics, with assumptions and conclusions dwelt before. Basically in the UK, but with participation of some notable American economists, by mid 1980s Post-Keynesian Economics took shape, with assumptions and conclusions much more in line with Keynes.

During the 1990s up to the present, there was a return to basically Keynesian discretionary monetary policies, with lesser recourse to the implementation of fiscal policies on account of several drawbacks involved. During the same period up to the most recent years, the world and, in particular, the USA witnessed this time relative economic growth, alleviation of the unemployment problem accompanied with relative price stability. Thus, the years 1990s can be taken as still another indication that Keynesian economics and not the Classical System and modern schools based on the Classical System were valid and relevant.

One qualification, however, needs to be made at this point. Since 1990s the world entered a milieu or a process of globalization and international competition. This necessitated “conservative policies”; maintaining price stability became important, hence government budget deficits were reduced or eliminated. Similarly, international competition forced European countries as well as Japan to curb excessive social benefits, to cut labor costs and
to introduce greater flexibility to labor markets and unemployment. These measures or efforts should in no way be considered as un-Keynesian; they emanated from the need to face international competition and not from any negative aspect of the Keynesian System. Indeed, they too could be explained within the context of the Keynesian System. We may, however, acclaim that the present globalization trend is basically an outgrowth of Ricardo’s “comparative advantage” and his case for free trade.

The most recent recessionary tendency in the USA, following a long period of steady growth is tried to be brought under control, again in major part by Keynesian discretionary monetary policy.

Institutional arrangements and rules set by the Maastricht Treaty and the Euro, on the other hand, make it much harder for the euro members of the European Union to implement Keynesian monetary as well as Keynesian fiscal policies. Thus, there is fear that recession in the Euro area would be more prolonged. This also implies that in prolonged recessions, Keynesian monetary policy may not be adequate and should be supplemented with fiscal policies.

The above bird’s eye view survey of the results obtained from the policy implementations of various macroeconomic schools during a very long span of time since the Industrial Revolution up to the present definitely proves that the Keynesian System, that is, New Keynesian and Post-Keynesian Economics is valid and relevant compared to Monetarism and the New Classical Schools based on the Classical System.

It is harder to decide, however, between the New Keynesian and Post-Keynesian Economics if we simply focus our attention on observations of UNE or NANRUE only for the SR or both for the SR and the LR. The first is the general belief of New Keynesians excepting those who adhere to Hysteresis and Efficiency Wage models. They assert that in the LR the economy would tend toward ANRUE. Post-Keynesians and Super-Keynesian models, on the other hand, believe that the economy would give NANRUE both in the SR and in the LR. But many New Keynesians (e.g. Blinder) assert that this is more of a theoretical point because in actual practice we would continually face NANRUE in the SRs and continually implement Keynesian demand management policies. This would not allow us to witness whether the economy tends towards ANRUE in the LR. All we can say definitively is that even if the economy tends towards ANRUE in the LR, as recent experience in 1980s show, it simply takes too much time to bear unemployment for such a long period of time. But this is the time-honored proposition put forth during the arguments on NCS between Neo-Classicals and Neo-Keynesians.

There is one interesting point, however, that seems to work in favor of the New Keynesian Economics and against the Post-Keynesian Economics during the more recent times. The milieu of globalization requires that “conservative” policies should be implemented, price stability maintained and excessive social benefits curbed. One needs to make the distinction in this regard, however, between “objective” and “normative” aspects of Post-Keynesian economics. Though direct observation whether the economies tend toward ANRUE in the LR is hard to come by, as a substitute we may evaluate the validity of assumptions behind
the Post-Keynesian vs. New Keynesian Economics. In doing so, we may come to the
collection that assumptions behind Post-Keynesian Economics are more realistic
compared to those behind New Keynesian Economics. For instance, we may agree in our
objective analysis, that HEH is more realistic than REH, that future is uncertain and cannot
be predicted with accuracy, that both national and international institutions, hence politics
play an important role in defining economic decisions, and that conflict of interest and not
harmony dominates the area of income distribution. But, what is also at stake here is the
normative value judgments of most of the Post-Keynesians who assign a greater
importance to income distribution and to the goal of improving of income distribution. The
present conditions of the world economy do not seem fit for such a value judgment in
defining economic and social policies. In fact, in the present milieu of globalization many
European countries and Japan found themselves with excessive social benefits and labor
costs carried up until today from their historical past. This necessitates policies of curbing
these excessive social benefits and injecting greater flexibility to the labor market and
employment, and not the other way round, in order to attain higher growth and increased
employment. This fact should lead us, at least normatively, in favor of the New Keynesian
Economics compared to the Post-Keynesian Economics. Or else, on the objective plane we
may still choose to be Post-Keynesian but normatively make due allowance in the weight
that we assign to improving income distribution via welfare measures for the special case
we face presently in Europe and Japan. We may conclude here by observing that both in
the USA and much of the European countries New Keynesian Economics seems to have
taken greater hold compared to Post-Keynesian Economics, while Post-Keynesian
Economics seems to be on the demise [Dunn: 2000].

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An Ethical Implication of Fund Management as a Factor for Enhancing Entrepreneurial Development among Retailers in Lagos Secondary Schools

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Abstract

The major concern of governments all over the world be they developed nations or third world countries, is the desire to build up the engine room of development i.e. the work force. A whole lot of efforts are geared towards motivating the interest in man, to develop the entrepreneurial drive in him and provide a conducive environment for a well-focused industrial growth. The most problem facing Small-Scale enterprises in Lagos state is funding. Fund plays major roles in achieving the stated objectives, hence; greater efforts must be applied in managing it so as to achieve industrial growth and enhance entrepreneurial development. The objective of this study is to examine the impact of fund management on entrepreneurial development in Lagos state. For the purpose of carrying out the research work effectively and sufficiently, data were collected from selected entrepreneurs in the Small and Medium Scale Enterprises [SME's] in Lagos state as well as lending and financial institutions, and chi-square was used as the statistical instrument for hypothesis. A general survey of the study reveals that the impact of proper fund management practice on entrepreneurial development cannot be over-estimated. This paper also proffers some workable recommendations for proper fund management practices and other useful information.

Keywords: fund, fund management, entrepreneurs, small and medium scale enterprises [SMCE]
Framework for Development of ICT Cottage Industry: A learner Centric Socio Economic Education Model

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Abstract

There had been rapid progresses ICT in Pakistan. The enhanced communication infrastructure, low cost services, outreach to many rural localities are among few visible developments. IT education and training and IT businesses sectors have also been given due attention. This has created opportunities for many business growth activities. There is a need to introduce models in which new economic development opportunities are created and the developments in IT and telecommunication are utilized at mass scale. This will be necessary for the sustainable growth of commercial business, ICT infrastructure and IT services in a developing country like Pakistan. This paper reviews various developments taking place in Information and Communication Technologies (ICT) and presents a model of developing IT cottage industry based on ICT services and applications. The model also focuses on the reduction of unemployment among youth and female population. The model which makes productive use of young and educated youths and “Girls at home” by creating IT Skill based economic activities within typical socio-economic cultural settings. The model once operational could support both business as well as IT services and can help spread more robust ICT infrastructure in the country. A LEAD model application for socio-economic development is used for ICT based cottage industry in the Country. In the second part of this paper the actions which could be taken to make the model sustainable even in rural/remote areas of Pakistan are discussed along with a generic LEAD model organization.

Keywords: ICT, IT cottage industry, human resources development, LEAD model for socio economic development

Introduction

Recently the Government has identified HRD as main development area and IT manpower has been identified as key player in future economic development of Pakistan. For this purpose, billions of rupees are being spent on IT and Telecommunication sector development. Especially communication infrastructure is being enhanced, and its outreach is being extended to many remote towns. Now the people in rural/semi urban areas are also benefiting from the availability of Internet. Similarly education of IT is being given boost and number of graduates have increased throughout the country. Sizable developments projects are being implemented for improvements in commercial and Government services.

One of the main agenda items of each government had been poverty alleviation. The

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15 Localize, Enhance, Activate and Demonstrate-LEAD Model
population of youth aged between 18-25 years is sizable in the country. Quite a number of these youth (male/females) are educated and have joined IT skill based courses to get some advantage in employment. There is a need to focus such youth and provide them fair economic development opportunity. This could bring better economic prosperity in those communities in long term.

In this paper we will review various IT and Telecom related developments and propose a model which helps in deployment of educated and skilled youth and females to participate in economic development activity. This model is based on the use of ICT and participatory development process in the communities. The individuals could initiate the economic activity and progressively it could convert into ICT based cottage industry.

**Literature Review**

Pakistan is a nation with manpower intelligent enough to work in many countries as skilled and unskilled employees. For this purpose, they migrate to different countries and join their work force (Labor Report, 2012-13). Most often such people work in IT sector. The difference between IT sector and other labor force is that ICT person can work from home using technology (Sweeney & Geer, 2010, Bhrommalee, 2012).

**IT Education in Pakistan**

Over last two decades Governments have launched several projects in IT education and ICT infrastructure development (Higher Education Commission, Pakistan Annual Report, 2012-13). These projects are being undertaken by public and private sector organizations and universities.

All such and many other developments in private sector have influenced the youth and especially female population in the country to take IT courses. Thus a huge number of IT students between ages of 18-30 years are enrolled in IT education programs (Higher Education Commission, Pakistan Annual Report, 2012-13). Increased student and course high offer ratios at many institutions has shown a clear exponential increase. All public and many private universities have also shown similar patterns in IT /CS education.

**IT Education Cost**

With exception of few institutions, IT education cost has also reduced. Two years ago a few private educational Institutes were imparting quality IT education. These institutes used to charge between US$ 800 to US$ 2000 per year. Now many moderate institutes offer IT courses for less than US$ 300 per year. This has increased number of enrollments in IT courses and more parents are now able to afford it. Besides this many diploma and programming courses are often available free of cost through Benazir Income Support Programme (Benazir Income Support Program, Report, 2013).

**Education Outreach**

These developments have also paved way for increased outreach of IT education. For example, now IT/CS education is offered in almost all small cities of Pakistan. With launching of VU and extending operations of FAST, NUST, Comsats and other universities in multiple cities has enhanced the outreach of quality formal IT education to many
localities of Pakistan. Many of AIOU centers are in traditionally functioning in poor and remote areas (Allama Iqbal Open University, Islamabad, Pakistan, Vice Chancellor’s Annual Report 2013). In short outreach of IT education has touched the nation almost at mass scale.

**Availability of Internet**

Internet speed and nationwide availability has also increased. Now Internet users in Pakistan have reached to millions (Pakistan Telecom Authority, Annual Report, 2013). The concept of global village is smoothly taking its shape and young generation specially youth and females are getting attached to Internet and mobile devices (Ahmed, 2015). The cost of Internet to end user is less than US$ 0.25 per hour at many places.

**Telecommunication Technology**

With the focused vision, all previous governments have also developed Telecommunication infrastructure nationwide. The high end data communication links are available at district level. This infrastructure is being rapidly developed with following focal points.

a. High-speed International Connectivity
b. Multiple High end national back bone/ fiber optics links
c. Reduced cost of data/communication services
d. Increased out reach to remote and rural places
e. Telephone line/mobile availability at mass scale

Above and many other development helped to reduce the communication cost (PTA Annual Report, 2013), where as increased availability of data/telecommunication at National scale is providing basic infrastructure for the model being presented in this paper. This provides a fertile ground for E-business and E-services. This will serve as back bone to the IT Cottage industry in the country.

**Micro Financing Facility**

Another related development is the re-establishment of SMEDA Micro Finance through various banks which provide necessary local financial support to educated youth and females. The important thing is that capital investment is minimal in ICT and easily recoverable when IT Skill based cottage industry is developed.

**ICT based Cottage Industry**

Information and Communication Technology (ICT) has played a very crucial role in the development of HRD among many developing countries. The economic activity improvement depends upon the use of ICT (Fong, 2009).

The hypothesis used in the model developed revolves around the idea that educated youth (male and female) having IT skills and communication link. They could strive to perform many simple IT tasks and become more productive and can increase their earnings with or without much technical and financial support.
Many IT related jobs could be performed while working on home PC and could be delivered via Internet. Following type of IT based jobs are quoted as example many more could be identified when project is implemented.

a. Screen designs
b. Web graphics, web designs and web maintenance
c. General programming in C++, Java
d. Call Center/off-share IT support
e. Data entry, medical transcripts
f. Computer Aided Drafting
g. Advertising banners and similar activities

**LEAD Model**
The model is based on above hypothesis and the developments in ICT infrastructure as outlined above. The overall model is named “LEAD through ICT”. The LEAD is an acronym which stands for “Localize, Enhance, Activate and Demonstrate”. By activation of local (even cyber based) community enterprise, IT skilled youths could be provided basic mechanism where they could be productive and earn their living. The model for ICT cottage industry is illustrated in Figure-1 and its components are discussed in detail in preceding paragraphs.

LEAD is a general development model which could be applied to small IT team or an individual person (male/female) based on the expertise, service or specialty. The teams could be formed of local as well as cyber based experts using ICT. The ICT enabled business support services will be provided via Local LEAD Centers or through LEAD head office. Following paragraphs explain each component in detail.

![Figure-1: Basic LEAD model for IT Cottage Industry Development](image-url)
**LEAD Head Office**

LEAD head office performs main activity of managing and coordination of work assigned to each local LEAD Center. It performs head office activities including marketing, project management, resource allocation, quality assurance and necessary financial assistance etc.

In essence the head office will develop a resource database of IT service teams, which can be presented to International clientele. It will bid and acquire the work and assign to local LEAD Centers based upon their ability, capacity, specialization and performance.

The head office will perform the front end client dealing services and Project Management tasks once project has been sub contracted to local LEAD Centers/IT Teams.

**Local LEAD Center**

The local LEAD Center plays very important part in development of local IT Cottage Industry. It may provide/support in provision of; essential IT facilities, hire and manage local manpower and organize/manage work schedules and payment to workers etc.

![Proposed Local LEAD Center Organization Chart](image)

**Figure 2:** Proposed Local LEAD Center Organization Chart

In short the local LEAD Centers may serve as catalysts for development of local IT Cottage Industry. The center could provide facilities to youth and female if they do not have work place environment at their home.

**Individuals and Teams**

Individuals or teams of IT skilled youth may consist of IT skilled male/female youths in the communities or even relative/friends in cyberspace. These youth would be skilled in programming, graphic designs, software maintenance and installation as well as data entry persons such as required for medical transcripts, CAD draftsmen, typists and writers and even cartoonists. This persons/team will be guided to perform small groups and will be assisted in development of both skills and tools to perform the set of high demand tasks.

The experts local or in nearby communities/ e-consultants will be identified to help youths...
in quality and design aspects of the jobs. The teams could easily perform tasks of; web graphics, animation and other similar tasks. Payment rates could be negotiated for each task or hourly rates may be decided.

**Expert Pool**
This is a crucial component for quality maintenance and development of the useful skills. The LEAD head Center will identify and enlist various expert who exist in cyber space anywhere. They will be pooled to provide following services:

- a. Analysis of current markets requirements and identification of unit skills needed for such jobs.
- b. Providing leadership and management support to IT youth on specified job requirements.
- c. Provide training and development of local LEAD Center staff and youth/teams in new IT skills.
- d. Additionally they can identify and assist in getting job from open market.
- e. Expert will provide Web based-E-support on problems.

**Business**
Many business as well as organizational concerns have requirements for different IT related programming, Web design, maintenance related tasks. Some organizations have larger jobs. The head office could provide various services to business and especially to government concern.

**Operational Essentials of the LEAD Model**
For each model there are operational needs without which the model may not work properly or become ineffective. In following paragraphs these are discussed in general, specific details could be provided by the author to interacted parties.

**Project Management**
Each large job requires professional project management skills. The project manager ensures and maintains three basic aspects of any job for successful completion. These are quality, delivery on time and within cost. In the beginning it may be difficult to maintain cost and delivery schedule, but this aspect is crucial in future success of projects and satisfied clients would add to marketing of future jobs. The Project Manager should be a professional to divide the job into unit tasks which are deliverable with quality and within cost.

**Technical Quality**
The individual and even teams in many cases will not have skills to either apply design concepts or measure quality. Therefore strong technical bases of individuals need to be build for each local LEAD Center, who will assist teams in such activities. With time, these activities could be performed by individuals within teams. The technical quality support person should be able to communicate well with individuals and with head office Project Managers.
Financial Fairness
It is essential that the financial gain shall be fairly passed to individuals and teams. In essence timely and fair payments system is essential for success and creation of confidence of IT skill workers in the system. On the other hand fair amount of quality work must be generated to the client. It is suggested that no more than 20% administrative and marketing commission shall be deducted. An amount of 10% shall be set aside for development activities.

Availability of work
The availability of work is another essential component for the success of the model. In this respect, the government local offices may be instructed to sub contract their local IT development tasks. A lot of budget will be available to all local governments and individuals. Following tasks could be locally created for essentially bringing this model into a business stream:

a. Web site development of each district.
b. Maintenance of office equipment.
c. Networking and Software installation.
d. Development of software for Public sector funding control and progress.
e. Personal systems for local Governments.
f. Wealth, education, poverty etc performance MIS.
g. Local broad/web-casting of local commodity rates, news, announcements, campaign posters, leaflets etc.

Local work shall be considered as lifeline for such activity. However, international work must be searched to make individuals and the LEAD organization a self-sustainable or profit making organization. International work could be solicited through overseas experts and individuals.

The Organizational Infrastructure for LEAD
As suggested above, IT Cottage Industry model is presented with its proposed organizational chart. In this section we shall propose the facilities that should be made available at each office.

Communication and Computing Infrastructure
The local LEAD Centers can provide essential communication and computing infrastructure. In many communities this would be available to many individuals or teams. In other communities, local school, IT training centers or even cyber cafés could provide the needed infrastructure at an hourly/weekly fee.

Financing of Projects
In some cases, Micro Finance may be required. This facility could be available through local scheduled banks. Therefore capital expenses at local LEAD Centers will be minimum. Operational costs however, could be supported for a few years till local LEAD centers become operationally self-supporting and technically sustainable.
Manpower
Essential IT skilled manpower is available through many public/private sector IT development programs. Only secondary level project managers or quality assurance professional will be required. Such manpower could easily be developed through professional training programs. The expert pool could be created in a little time, through part time specialists identified. Many overseas and local IT professionals will be willing to serve and could provide support on day to day basis. Payment mechanisms however need to be developed for “work at home” type unit tasks.

The experts could maintain User/Business groups so that their effective utilization could be achieved. With time and consistency, the performing teams could be developed who communicate through Internet and carryout more complex projects.

Benefits of the Model
In general, there are several benefits if we employ this model in Pakistan. The developments in IT are creating opportunities, if we do not organize ourselves these opportunities will be lost and IT unemployment may be created. Secondly, with this model, the youth and female population could be brought in to main stream economic activity. Very small local infrastructure will be required to implement this model. In many cases, the basic infrastructure is locally available and there is no need to invest in development of this infrastructure locally. Only, careful selection of team players at local and Head office LEAD Center will be required and could if be easily funded by the Ministry of Science and Technology under IT action plan.

The essential benefits of this model will be conversion and utilization of educated unemployed, but skilled youth within local, national and International business scene. Each of this youth will represent a future family and income of this family will help to reduce, government future spending on education and employment.

The model could easily be adopted for urban as well as rural communities. It could also provide necessary catalyst activity to other business. Since ICT use in those areas will help them to increase their business, handicrafts, agriculture, and productivity.

Conclusion
In this paper, the development in ICT at national level was reviewed. The infrastructure and opportunities developing in various communities provided essential mechanism to develop:
   a. IT skill based Cottage Industry.
   b. Use of ICT to improve income of educated, skilled youth (males and females).
   c. Catalyst support to local small business to use ICT and improve productivity.

The model was discussed with its components and basic organization infrastructure. The LEAD model is workable in local communities and rural areas. If implemented this model could bring essential mechanism to support youth and female population within participant’s communities. Essential financial and business rules need to be developed. We hope the project catches the interest of key players in IT. Necessary additional details can
be provided to interested parties.

References
The Demand for Emerging Market Bonds

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The last decade has witnessed a renewed interest of researchers in portfolio choice theory, with a particular emphasis on the portfolio choice problem of a multi-period investor (e.g., Kim and Omberg, 1996; Campbell and Viceira, 1999; Balduzzi and Lynch, 1999; Barberis, 2000; Lynch, 2001; Bekar
t and Ang, 2002; Chapados, 2011; Campbell and Viceira, 2002; Campbell et al., 2003). The variability of expected asset returns over time is one of main distinctions that sets apart the multi-period portfolio choice problem from its single-period counterpart. The distinctive characteristics of the multi-period portfolio choice have been known at least since Samuelson (1969) and Merton (1969, 1971, 1973). However, the recent empirical evidence that asset returns contain a predictable component has motivated researchers to revisit the multi-period portfolio choice problem (e.g., Keim and Stambaugh, 1986; Campbell, 1987, 1991; Brennan et al., 1997; Fama and French, 1988, 1989; Harvey, 1994; Barberis, 2000; Lynch, 2001; Ang and Bekar
t, 2007).

A multi-period investor’s asset demand can be decomposed into the myopic demand and the intertemporal hedging demand. The myopic demand for an asset is the demand in a single-period context, when the investment opportunity set is assumed to be constant. The myopic demand is static in nature and similar to the demand derived in the classical mean-variance framework. Intertemporal hedging demand arises when an investor seeks to hedge against adverse changes in future investment opportunities. Campbell and Viceira (1999) analyse the influence of the hedging motive on the total demand for stocks in a multi-period setting. They propose an approximate analytical solution to the Merton model for an infinitely-lived investor with one risky asset and a single state variable. Campbell et al. (2003) go one step further and extend Campbell and Viceira (1999) model to include more assets and state variables, by applying a simple numerical procedure in conjunction with an approximate analytical solution. They consider the multi-period asset allocation problem of an infinitely lived investor with Epstein-Zin utility and derive this investor’s myopic and intertemporal hedging demand for stocks, bonds, and T-bills. They use a vector autoregressive (VAR) model to specify the behavior of asset returns and state variables. The authors show that there is a sizable demand for US stocks and bonds. In particular, the hedging motive explains a substantial part of a conservative’s investors demand for stocks. In Campbell et al. (2003), the intertemporal hedging demand for US stocks stems from the predictability of stock returns from the dividend yield, due to which negative stock returns in the present are associated with positive expected returns in the future. In this way, stocks can be used to hedge the variation in their own future returns.

Rapach and Wohar (2009) apply the approach of Campbell et al. (2003) to the US and six other developed countries (Australia, Canada, France, Germany, Italy, and the UK). They find that in all countries the myopic demand for bonds is the main component of the total

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demand for fixed-income securities. In addition to the point estimates of the mean optimal demand for assets, Rapach and Wohar (2009) provide confidence intervals quantifying the amount of parameter uncertainty associated with the estimates. These confidence intervals turn out to be wide, reflecting a considerable amount of parameter uncertainty. The goal of this study is to shed more light on the short-run and long-run risk-return properties of emerging-market bonds. Historically, international investors used to invest in emerging-market bonds denominated in US dollars. Recently, local-currency fixed-income securities in emerging markets have become more widely available (Miyajima et al., 2012). Due to limited data availability, bond markets have received relatively little attention in the emerging markets literature (Bekaert and Harvey, 2003). Some basic stylized facts derived from one-period returns are reported by Burger and Warnock (2007), but little remains know about the risk-return profile of particularly local-currency bonds in emerging markets. Because bond returns are negatively correlated with short-term interest rate levels, they may hedge against fluctuations in investment opportunities over the business cycle. On the other hand, bonds are exposed to inflation risk, which is particularly relevant for long-term investors. Inflation-hedging is important for all long-term investors, but especially for those investing in high-inflation countries.

Our study extends the analyses of De Vries et al. (2011) and Umar and Spierdijk (2013) by considering more countries and by adding bonds to the emerging-market investor’s asset menu. We first consider domestic investors in 7 emerging market economies (Brazil, India, Malaysia, Mexico, Poland, South Africa, Thailand) and the US, with returns in the local currency. The domestic investor’s asset menu consists of domestic stocks and bonds, as well as a domestic short-term money market instrument (the benchmark asset). We analyse this investor’s demand for assets during the period February 2002 – July 2012. Subsequently, we move on to an international investor with returns in US dollars, who can invest in local stocks and bonds in Argentina, Brazil, Chile, China, Colombia, Malaysia, Mexico, Peru, Philippines, Poland, Russia, South Africa, or Turkey. The other options on the international investor’s asset menu are US stocks, bonds, and T-bills (where the latter is the referred to as the benchmark asset). We study the international investor’s optimal demand for assets during the period June 1999 – July 2012. We calculate the optimal demand for assets for international and domestic investors, assuming different levels of risk aversion. Furthermore, we decompose the total demand for stocks and bonds in the myopic and intertemporal hedging demand using the approach of Campbell et al. (2003). An asset with a relatively high intertemporal hedging demand is attractive for an investor in the long run due to its ability to perform well in the event of adverse future circumstances, whereas an asset with a high myopic demand is attractive due to favourable immediate single-period expected returns. In addition to the point estimates of the mean demand for assets, we provide confidence intervals to quantify the amount of parameter uncertainty. Accounting for estimation uncertainty is particularly relevant in emerging markets, where data availability is often limited. We also analyse the demand for assets over time.

The present paper makes use of different bond indices for international and domestic investors. The data for US dollar bond prices are available over a longer period and for more countries. Data availability constraints explain why our sample of emerging markets
is geographically diverse, covering countries in Asia, the Far-East, Latin America and Eastern Europe. We find that emerging-market bonds can be attractive for both domestic and international investors with different degrees of risk aversion. Some countries have bond markets that are particularly attractive for short-term investors, whereas the bond markets in other countries are interesting for long-term investors only (or for both long-term and short-term investors). In the former group of countries, bonds provide favorable immediate single-period expected returns. In the latter group of countries, bond returns perform well in the event of adverse future circumstances. For both domestic and international investors, emerging-market stocks can also provide attractive long-term and short-run investment opportunities. Also US bonds can be a favorable short-run investment option for international investors, but it is hardly ever optimal to invest in US stocks.

Whenever we establish a substantial and significant hedging demand for bonds or stocks, two conditions are met. First, their excess returns are predictable (from the term spread and the book-price ratio, respectively), due to which these assets can be used to hedge the variation in their own future returns. Second, parameter uncertainty is sufficiently limited to make the hedging demand significant. We generally establish relatively wide confidence intervals for the estimated myopic and hedging demands, which indicates that there tends to be a high degree of parameter uncertainty involved with the approach.
Country of Origin and Sales of Consumer Goods in Nigeria

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Abstract

The study empirically investigated the impact of country of origin on the sales of consumers’ goods in Nigeria. Specifically, it examined the aspect of product characteristics that Nigerians use in assessing foreign and locally made shoes in Nigerian markets and found out if the choice of shoe by Nigerians is a function of social class, occupation and income. To achieve the objectives of the study, the research instrument (questionnaire) was administered on a total of two hundred (200) randomly selected shoe customers in Abuja (Nigeria FCT) and Ado- Ekiti, the capital of Ekiti State, Nigeria. Data obtained were coded and analyzed using descriptive and inferential statistics such as the frequency counts, mean and One Way Analysis of Variance (ANOVA). All the tests were carried out at 5% level of significance. The findings of the study revealed that Nigerian consumers prefer foreign shoes to locally made shoes. It also showed that consumers’ preference for foreign shoes is not a function of social class, occupation and income. The paper is optimistic that with better value embedded in locally manufactured goods, the country will not only develop a substitute for foreign goods but in addition will mitigate youth unemployment and equally promote sustainability of Nigeria development.

Keywords: country of origin, consumers’ goods, foreign goods, sales

Introduction

The growing population of Nigeria has brought significant advantage to both manufacturers and traders who deal on consumers’ goods. With about 180 million people, Nigeria has one of the strongest economy in Africa where both local and foreign investors jostle to do business. This coupled with the current liberalization, the globalization of markets, advances in communications and transportation technologies have further exposed Nigerians to a wide variety of imported goods (Dadzie et al, 2002). Meanwhile, several researches, including the one carried out by Iyer and Kalita (1997) revealed that consumers’ display various degrees of preference for various products. The study by Knight (1999) holds firmly that consumers tend to stereotype products manufactured in countries, and that, owing to negative stereotypes about some made in home country, consumers are likely to prefer domestically made goods.

Consequent upon the foregoing, it would seem that Nigerians have preference for foreign products as the quest for it has reached an embarrassing state. Presently products such as shoes, tooth pick, handkerchiefs and other insignificant items which Nigeria has one of the best resources to produce are imported into the Nigeria market. This development led to the introduction of structural Adjustment programme (SAP) by the government in 1986 to disabuse the mind of Nigerians from foreign goods. To make the vision of SAP realizable,
the government established indigenous enterprises majority of which were cited in Aba and Onitsha, Nigeria. Though most of the products of these establishments are of good quality but Nigerians are not satisfied with them because of their perception that imported products are better. The attitude of Nigerians toward locally made goods is so negative that an average Nigerian will show preference for imported fairly-used shoe rather than buying a new one produced in Nigeria.

The aim of this study is to empirically investigate the impact of country of origin on sales of consumers’ goods. Our focus shall be on shoe products manufactured in Italy (otherwise known as Italian shoe) and those locally made in Nigeria popularly called ‘Aba’ shoe.

**Objectives of the study**

The two key objectives of the study include:

1. To examine aspects of product characteristics that Nigerians use in assessing foreign and locally made shoes available in the Nigerian market.
2. To investigate if the choice of shoe by Nigerians is a function of social class, occupation and income.

In view of the above research objectives, the following hypotheses are stated in their null form which will be tested in this study.

1. Nigerians do not prefer foreign shoes because of its perceived superior quality
2. The preference for foreign shoes by Nigerians is not a function of social class, occupation and income.

**Conceptual Clarification and Theoretical Framework**

**Country of Origin and Developing Countries**

Country of origin refers to the country where a product is made. According to Ahmed, et al (2001), marketing intermediaries attached significant importance to the perceived image accorded to the country where products are made. As asserted by Iyer and Kalita (1997), consumers have significantly different perceptions about products made in different countries and that these general perceptions have important effects on consumers’ assessment of the product manufactured in a particular country. The image that consumers associate with the country of origin is also very important. Image can be created through representative products, national characteristics, economic and political background, history and other tradition (Ogenyi, 2012). Similarly, the country image can be viewed from the perspective of consumers’ overall perceptions about the quality of products made in a particular country and the nature of people from that country (Johansson et al, 1994). Kaynak and Cavusgil (1983) studied consumers’ perceptions of different classes of products from 25 countries. They found that respondents held positive attitude towards products made in their own country but the same respondents could be swayed to choose foreign products if quality and price considerations are sufficiently favourable. Specifically, they observed that consumers might not accept a domestic product that is inferior in quality at the expense of a foreign product that is available. They concluded that consumers’ attitudes toward products of foreign origin vary significantly across product
classes. In line with this view, the researchers are interested in studying consumers’ attitudes toward shoes made in Italy and those made in Nigeria.

In developing country such as Nigeria, attempts have been made by several authors to investigate the effect of country of origin on consumers’ perceptions of quality. A study carried out by Agbonifoh and Elimimian (1999) showed that products from technologically more advanced countries were viewed more positively by nationals of developing countries, than those from technologically less advanced countries.

Ferguson, et al. (2008) studied the effect of country of origin on service evaluation in 5 West African countries and found out that situational personal characteristics, such as motivation and ability to process information, may influence use of country if origin attributes in evaluating a service. Besides, individual characteristics, such as ethnocentrism and culture orientation, may influence country of origin preference in service evaluation. Against this backdrop, this study was therefore designed to investigate the effect of country of origin on sales of shoe products in Nigeria market.

**Theoretical Framework**

To establish a theoretical foundation for a study of this nature, a number of researchers have proposed scales for measuring the country of origin image construct (Parameswaran and Pisharodi, 1994; Roth and Rao, 1992; Nebenzahl, Jaffe and Lampert, 1997).

Parameswaran and Pisharodi, 1994) and Janda and Rao (1997) proposed multi-dimensional measures of country of origin image while Roth and Romeo developed a uni-dimensional measure based on the innovativeness, design, prestige and workmanship of a country’s products. In this study, country of origin was measured following the Roth and Romeo approach, except it innovativeness and ‘design’ were replaced with price ‘value’ and ‘quality’. This is because ‘price value’ and quality are comparable, but design and quality are not.

**Methodology**

The study adopted a survey approach to empirically examine the impact of country of origin on sales of consumers’ goods in Nigeria. The product and the countries selected for this study are shoe, Nigeria and Italy respectively. Convenience sampling and simple random sampling approach was used to select 200 respondents from two (2) out of the thirty six (36) states in Nigeria. The research data were analyzed using descriptive and inferential statistics such as frequency counts, means and one way Analysis of Variance (ANOVA).

The study was carried out in Abuja, the capital of Nigeria and Ado – Ekiti, the capital of Ekiti State. While it is assumed that the majority of people residing in Abuja comprise of affluent Nigerians, people residing in Ado – Ekiti are generally poor with very low income. The inclusion of both the rich and the poor in the study is to be able to generalize the findings that will emerge from this research on the attitude of Nigerians.
It employed convenience sampling and simple random sampling approach to select 200 respondents. The data were collected at some selected shoe shops in ‘Wutse’ zone 12, ‘Garki’ and ‘Gwagwalada’ in Abuja. Data collection areas in Ado – Ekiti include: ‘Oja Oba’, Adebayo road and Secretariat road.

The selected data collection areas constitute part of the major business districts in both Abuja and Ado – Ekiti. Participants in the study were majorly consumers found to be patronizing shoe shops at the time of the investigation. To select the sample size for the study, 20 shoe shops were used: 10 in Abuja and 10 in Ado – Ekiti. Questionnaire was given to every 2nd entrant in each shop until 10 respondents were got to complete the questionnaire. This process was repeated in all the 20 shops to get the 200 sample size used for this study. Respondents in this study reacted to Likert–scale questions whose answers ranges from strongly agree (1), agree (2), undecided (3), disagree (4) and strongly disagree (5). The research data were analyzed using descriptive and inferential statistics such as frequency counts, means and One Way Analysis of Variance (ANOVA).

**Pre – Testing Assumption**

In addition to the empirical investigation of this study, the researchers carried out a field study. They bought 20 identical pairs of locally made shoe from Aba, Nigeria, removed the ‘made in Nigeria’ labels from 10 out of it and replaced it with ‘made in Italy’ labels. Thereafter they took 10 pairs of shoe each (5 with made in Italy label and 5 with made in Nigeria labels) to two (2) shoe shops in Abuja and Ado- Ekiti respectively. A price of ₦7500 was placed on the 5 pairs of shoe with Italian labels while the other 5 pairs of shoe with Nigeria labels went for ₦3,500. To the amazement of the researchers, Nigerian shoe consumers, within the space of 2 weeks have purchased all the 10 pairs of shoe with Italian labels on them not minding the price disparity. At the same time, 2 out of the 10 pairs of shoe were made in Nigeria with same quality, the researchers found that country of origin played a significant role in the demand for shoe product, in Nigeria.

It is subsequent upon this finding that we embarked on this research to empirically find out the impact of country of origin on sale of shoe products in Nigeria. The countries of interest are Nigeria and Italy.

Italy was selected because it is the largest exporter of shoe products to Nigeria.

**Results and findings**

The results in table 1 below shows that 75 (37.56) of the respondents were males, while the remaining 125(62.5%) of them were females. The occupation distribution of the respondents show that the majority, 68(34%) were Civil Servants, followed by Students 55(27.5%) Business Owners 41(20.5%) and Traders 36 (18%). The income of the respondents ranges between 4% for those within the income brackets of ₦151,000 and above, 21% for those within the income brackets of ₦101,000 – ₦150,000, 45.5% for the income earners within the income brackets of ₦51,000 – ₦100,000 and 29.5% for the respondents who earn between ₦10,000 – ₦50,000 monthly.
**Table 1:** Demographic Variables of the Respondent (N 200)

<table>
<thead>
<tr>
<th>Variables</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GENDER</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>75</td>
<td>37.5</td>
</tr>
<tr>
<td>Female</td>
<td>125</td>
<td>62.5</td>
</tr>
<tr>
<td><strong>OCCUPATION</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Civil servants</td>
<td>68</td>
<td>34</td>
</tr>
<tr>
<td>Business Owners</td>
<td>41</td>
<td>20.5</td>
</tr>
<tr>
<td>Traders / Artisans</td>
<td>36</td>
<td>18</td>
</tr>
<tr>
<td>Students</td>
<td>55</td>
<td>27.5</td>
</tr>
<tr>
<td><strong>INCOME</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>₦ 10,000 – ₦ 50,000 Monthly</td>
<td>59</td>
<td>29.5</td>
</tr>
<tr>
<td>₦ 51,000 – ₦ 100,000 Monthly</td>
<td>91</td>
<td>45.5</td>
</tr>
<tr>
<td>₦ 101,000 – ₦ 150,000 Monthly</td>
<td>42</td>
<td>21</td>
</tr>
<tr>
<td>₦ 151,000 and Above Monthly</td>
<td>8</td>
<td>04</td>
</tr>
</tbody>
</table>

**Table 2:** Factors that stimulate demand for shoe

<table>
<thead>
<tr>
<th>Questionnaire Item</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>S/N</td>
<td>SA</td>
</tr>
<tr>
<td>1. Foreign shoes are preferred because of the perceived higher quality</td>
<td>66</td>
</tr>
<tr>
<td>2. Higher cost of foreign shoes is a pointer to superior quality</td>
<td>68</td>
</tr>
<tr>
<td>3. Locally made shoes do not befit my social status</td>
<td>64</td>
</tr>
<tr>
<td>4. Foreign shoes are usually more beautiful and more attractive than those made in Nigeria</td>
<td>64</td>
</tr>
<tr>
<td>5. My occupational dressing code influences my preference for foreign shoe</td>
<td>48</td>
</tr>
<tr>
<td>6. My income influences my demand for foreign shoes</td>
<td>68</td>
</tr>
</tbody>
</table>

**Results**

**Table 3:** Preference for foreign Shoes

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Undecided</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Civil Servants</td>
<td>15</td>
<td>13</td>
<td>4</td>
<td>8</td>
<td>2</td>
<td>42</td>
</tr>
<tr>
<td>Business Owners</td>
<td>10</td>
<td>8</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>25</td>
</tr>
<tr>
<td>Traders/artisans</td>
<td>1</td>
<td>2</td>
<td>6</td>
<td>5</td>
<td>7</td>
<td>21</td>
</tr>
<tr>
<td>Students</td>
<td>4</td>
<td>4</td>
<td>10</td>
<td>10</td>
<td>6</td>
<td>34</td>
</tr>
<tr>
<td>Total</td>
<td>30</td>
<td>27</td>
<td>23</td>
<td>25</td>
<td>17</td>
<td>122</td>
</tr>
</tbody>
</table>

**Table 4:** Preference for foreign Shoes Vs Occupation

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Undecided</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Civil Servants</td>
<td>15</td>
<td>13</td>
<td>4</td>
<td>8</td>
<td>2</td>
<td>42</td>
</tr>
<tr>
<td>Business Owners</td>
<td>10</td>
<td>8</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>25</td>
</tr>
<tr>
<td>Traders/artisans</td>
<td>1</td>
<td>2</td>
<td>6</td>
<td>5</td>
<td>7</td>
<td>21</td>
</tr>
<tr>
<td>Students</td>
<td>4</td>
<td>4</td>
<td>10</td>
<td>10</td>
<td>6</td>
<td>34</td>
</tr>
<tr>
<td>Total</td>
<td>30</td>
<td>27</td>
<td>23</td>
<td>25</td>
<td>17</td>
<td>122</td>
</tr>
</tbody>
</table>
Table 5: Preference for foreign Shoes Vs Income

<table>
<thead>
<tr>
<th>Income (£)</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Undecided</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>10000-50000</td>
<td>4</td>
<td>1</td>
<td>4</td>
<td>5</td>
<td>5</td>
<td>26</td>
</tr>
<tr>
<td>51000-100000</td>
<td>27</td>
<td>9</td>
<td>8</td>
<td>6</td>
<td>3</td>
<td>53</td>
</tr>
<tr>
<td>101000-150000</td>
<td>31</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>36</td>
</tr>
<tr>
<td>151000 and above</td>
<td>6</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>7</td>
</tr>
<tr>
<td>Total</td>
<td>68</td>
<td>15</td>
<td>13</td>
<td>12</td>
<td>8</td>
<td>122</td>
</tr>
</tbody>
</table>

Table 6: Consumers’ preference for foreign shoes

<table>
<thead>
<tr>
<th>Group Statistics</th>
<th>Respondents’ Perception</th>
<th>N</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Standard Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Agree</td>
<td>122</td>
<td>1.62</td>
<td>0.49</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Disagree</td>
<td>66</td>
<td>1.44</td>
<td>0.50</td>
</tr>
</tbody>
</table>

Table 7: Independent Samples Test

H01: Nigerians do not prefer foreign shoes because of its perceived superior qualities.

Results

Levene’s Test for Equality of variances

<table>
<thead>
<tr>
<th>t</th>
<th>df</th>
<th>Sig (2-tailed)</th>
<th>Mean Difference</th>
<th>F</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equal variances Assumed</td>
<td>2.45</td>
<td>186</td>
<td>0.015</td>
<td>0.1836</td>
<td>2.117</td>
</tr>
<tr>
<td>Equal variances not assumed</td>
<td>2.43</td>
<td>130.3</td>
<td>0.017</td>
<td>0.1836</td>
<td></td>
</tr>
</tbody>
</table>

95% Confidence Interval of the Difference

<table>
<thead>
<tr>
<th>Std. Error Mean</th>
<th>Lower</th>
<th>Upper</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equal variances assumed</td>
<td>0.0751</td>
<td>0.0354</td>
</tr>
<tr>
<td>Equal variances not assumed</td>
<td>0.0757</td>
<td>0.0338</td>
</tr>
</tbody>
</table>

The results in table 7 show that the significant probability associated with the t test is 0.015. This value is less than 0.05, the assumed level of significance, thus indicating that the test is significant. Consequently, the null hypothesis is rejected. The implication is that Nigerian consumers prefer foreign shoes to locally made shoes.

H02: The preference for foreign shoes by Nigerian is not a function of social class, occupation and income

Results

Table 8: Consumers’ preference for foreign shoes vs Occupation

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>1216.2</td>
<td>3</td>
<td>405.4</td>
<td>1.085</td>
<td>0.384</td>
</tr>
<tr>
<td>Within Groups</td>
<td>5978.8</td>
<td>16</td>
<td>373.375</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>7195.00</td>
<td>19</td>
<td>373.375</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The results in tables 8 indicate that the asymptotic significant probability associated with the test is 0.384 for consumers’ preference for foreign shoes versus occupation, thus indicating that consumers’ preference for foreign shoes is not a function of their occupation since the asymptotic significant probability associated with the test is not less than 0.05,
the assumed level of significance. The implication is that consumers’ preference for foreign shoes is not related to their occupation.

Table 9: Consumers’ preference for foreign shoes vs Income level

<table>
<thead>
<tr>
<th></th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>4486.95</td>
<td>3</td>
<td>1495.65</td>
<td>0.786</td>
<td>0.519</td>
</tr>
<tr>
<td>Within Groups</td>
<td>30443.6</td>
<td>16</td>
<td>1902.725</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>34930.55</td>
<td>19</td>
<td>1902.725</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The results in table 9 indicate that the asymptotic significant probability associated with the test is 0.519 for consumers’ preference for foreign shoes versus Income level, thus indicating that the test is not significant since the asymptotic significant probability associated with the test is not less than 0.05, the assumed level of significance. The implication is that consumers’ preference for foreign shoes is not related to their income level.

Conclusion
In view of the findings, the research conclusions are as follows:

- Nigerian consumers prefer foreign shoes to locally made shoes.
- Consumer’s preference for foreign shoes is not a function of their occupation.
- Consumers’ preference for foreign shoes is not related to their income level.
- Nigerian consumers are willing to buy foreign shoes at a higher rate due to their perceived superior quality.

Recommendations
The manufacturing industry plays a significant role in employment creation, income generation and national development. Rejection of products from this sector by Nigerians could lead to its extinction. In view of this, the following recommendations are suggested:

- The paper is optimistic that with better value embedded in locally manufactured goods, the country will not only develop a substitute for foreign goods but in addition will mitigate youth unemployment and equally promote sustainability of Nigeria development.
- It was observed that the preference of Nigerians for foreign shoes is neither a function of social class, occupation nor income but a mere display of attitude that locally made goods are inferior to their foreign counterparts. Consequent upon this, government should take a bold step to sensitizize the entire Nigerians to buy and use locally made shoes. Such sensitization programmes should focus specifically on the quality embedded in these shoes as well as the cost benefits. This will stimulate consumers’ interest in the purchase and usage of made in Nigeria shoes.
- Policy makers in government can also help by regulating the activities of shoe manufacturers through the provision of minimum standard and insistence on compliance.

References


Real Option Approach to Evaluate Strategic Flexibility for Startup Projects

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Abstract

This article is devoted to investigation and evaluation of a startup project strategic flexibility depending on its available development options using real option approach. This approach combines ideas of corporate finance, real options and game theory and concludes to the Risk-Neutral Probability measure and the value of a Call Option that comes from Black-Scholes-Merton model. The findings enable us to estimate the value of managerial decisions, project flexibility and help entrepreneurs and investors to select the best choice of project strategic development.

Keywords: strategic real options, binomial method, strategic planning, strategic development, strategy valuation, venture capital, startup project

Introduction

A state of having limited knowledge where it is impossible to exactly estimate a future outcome is commonly called uncertainty and is measured as a set of possible states or outcomes where probabilities are assigned to each possible state or outcome. A measured state of uncertainty is called risk that can be both negative and positive, though it tends to be the negative side that companies commonly focus on. Sometimes, a company may have uncertainty without risk, but not risk without uncertainty. Generally, uncertainty is allied to scientific term “information” and emerges mostly in its incompleteness. Meanwhile, incompleteness of information is an integral part of any business process and project whether it is launching or developing.

Venture capital, that deals with the highest level of risk and uncertainty, is financial capital provided to early-stage, high-potential, growth startup companies or startups that are generally newly created and are in a phase of development and research for markets. A critical task in setting up a startup is to conduct research in order to validate, assess and develop the ideas or business concepts in addition to opportunities to establish further and deeper understanding on the ideas or business concepts as well as their commercial potential. Venture capitalists, startup entrepreneurs and executives struggle every day in making decisions under conditions of incomplete information and uncertainty. The decision may be whether to invest in a new project now or wait a while, or it may be whether to contract, expand, or abandon an ongoing project. Therefore, the dilemma of better choice between available options exists.

A particular decision has a consequent effect on the project eventual cash flow or the project payoff and thus can be valued and compared. In traditional corporate finance
discounted cash flow (DCF) method is used to be applied to this end. Although, the universal use of it has certain limitations. First, DCF analysis accounts for only the downside of the risk without considering the rewards. Second, DCF is based on a set of fixed assumptions related to the project payoff, whereas the payoff is uncertain and probabilistic. Such a deterministic approach does not take into consideration the contingent decisions available and the managerial flexibility to act on those decisions. Though, the latter is solved using decision tree analysis (DTA) that is an extension of the DCF method and is a more sophisticated tool which offers value when a project is multistage and contingent decisions are involved. DTA differs from DCF in the sense that it uses probabilities of outcomes rather than risk-adjusted discount rates.

Corporate or strategic real option models synthesize the newest developments in corporate finance and real options and game theory to help bridge the gap between traditional corporate finance and strategic planning. Based on real option models a real option analysis (ROA) is a supplement to DCF and DTA and fills the gaps that both cannot address. ROA enables to estimate the value of managerial decisions, timing it depending on key variables and market conditions and thus is suitable to valuing strategy and its flexibility.

Theory

**DCF Analysis**

DCF analysis is a commonly used method which accounts for the market uncertainty with a risk-adjusted discount rate (the higher the uncertainty, the higher the discount rate) to calculate the present value (1) of the project payoff.

\[
PV = \frac{FV}{(1 + r)^n}
\]

where \(PV\) is the present value of a future cash flow, \(FV\) is the value of a future cash flow or simply the future value, \(r\) is a risk-adjusted interest rate or a discount rate, and \(n\) is a number of the time period.

There are many DCF models exist, whereas they are all based on the same foundation that involves calculation of the net present value (NPV) (2) of a project over its life cycle, accounting for free cash flows (FCF) and the investment costs.

\[
NPV = \sum \frac{FCF - InvestmentCosts}{(1 + r)^n}
\]

In other words \(NPV\) of a project is simply \(PV\) of its free cash flows less \(PV\) of all investments done.

While DCF approach focuses on the downside, the reward side is ignored. DCF approach also assumes a fixed path or one set of conditions in calculating the project payoff, therefore management is constrained to make the investment decision based on the analysis of these fixed conditions. This inherent bias leads to rejection of highly promising projects because of their uncertainty, whereas in today's constantly changing environment managers have
the flexibility to alter the project outcome in order to maximize the payoff or minimize the loss.

Decision Tree Analysis

DTA is considered effective tool in valuation of projects that involve contingent decisions. A decision tree (Fig.1) shows a strategic road map, in the form of a branching tree, depicting alternative decisions, their costs, their possible outcomes and probability and the payoff of the outcomes. In DTA the project NPV is calculated by using the expected value (EV) approach. The EV of an event is simply the product of its probability of occurrence and its outcome commonly expressed in terms of its cash flow value.

DTA is an extension of the DCF method as the payoffs for different outcomes used in the DTA are derived based on the DCF analysis. The final project expected NPV (ENPV) is calculated based on this payoff by incorporating contingent decisions at various decision nodes in the future. This is where DTA adds value, because DCF assumes a fixed path and does not account for management's contingent decisions. The major drawbacks of decision trees lie in estimating the probabilities of the decision outcomes and selecting an appropriate discount rate inside the decision tree when the tree is extended for more than a year or so.

**Fig. 1. Decision tree**

Black-Scholes Equation

Several methods are available to calculate option values, and within each method there are alternative computational techniques to deal with the mathematics. The choice depends on simplicity desired, available input data, and the validity of the method for a given application. The Black-Scholes and binomial method are the most common ones.

Based on real option models developed by the Nobel Prize winners Fischer Black, Robert Merton, and Myron Scholes for pricing financial options real option approach concludes to the risk-neutral probability measure and the value of a call option that comes from Black-Scholes equation

\[ C = N(d_1)S_0 - N(d_2)X \exp(-r_f T) \]  

(3)
where \( C \) is value of the call option, \( S_0 \) is current value of the underlying asset or project payoff, \( X \) is the cost of investment or strike price, \( r_f \) is a risk-free interest rate, \( T \) is a time to expiration of the option, \( N(d_1) \) and \( N(d_2) \) are the values of the standard normal distribution at \( d_1 \) and \( d_2 \),
\[
\begin{align*}
  d_1 &= \left[\ln\left(\frac{S_0}{X}\right) + (r_f + \frac{1}{2}\sigma^2)T\right]/\sigma\sqrt{T} \quad (4) \\
  d_2 &= d_1 - \sigma\sqrt{T} \quad (5)
\end{align*}
\]
where \( \sigma \) is annual volatility of future cash flows of the underlying asset.

The Black-Scholes and binomial models use continuously compounded discount rates as opposed to discretely compounded rates. The continuous discount rate can be calculated from the discretely compounded rate as follows
\[
r_f = \ln(1 + r_d) \quad (6)
\]
where \( r_f \) and \( r_d \) are the continuously and discretely compounded risk-free rates, respectively.

The risk-neutral probability is the most important principle in derivative valuation and thus in pricing both financial and real options. It states that the value of a derivative is its expected future value discounted at the risk-free interest rate. This is exactly the same result that we would obtain if we assumed that the world was risk-neutral. In such a world, investors would require no compensation for risk. This means that the expected return on all securities would be the risk-free interest rate.

**Methods**

In this paper we apply the binomial method as it offers the most flexibility compared to Black-Scholes. First, input parameters such as the strike price and volatility can be changed easily over the option life, jump factors can be accommodated without any complex changes. Second, the binomial method offers to a practitioner transparent underlying framework, making the results easy to understand by showing the project values in the future for given expected payoffs and the rational decisions one would make.

Binomial method is based on both the risk-neutral probability and binomial lattice. The basic methodology of the risk-neutral probabilities approach involves risk adjusting the cash flows throughout the lattice with risk-neutral probabilities and discounting them at the risk-free rate.

Lattices look like decision trees and basically lay out the evolution of possible values of the underlying asset during the life of the option. An optimal solution to the entire problem is obtained by optimizing the future decisions at various decision points and folding them back in a backward recursive fashion into the current decision.

The most commonly used lattices are binomial trees. The binomial model can be represented by the binomial tree shown in Fig. 2, where \( S_0 \) is the initial value of the asset. In the first time increment, it either goes up or down and from there continues to go either up or down in the following time increments.
The first time step of the binomial tree (Fig. 2) has two nodes, showing the possible asset values \((S_u, S_d)\) at the end of that time period. The second time step results in three nodes and asset values \((S_{u^2}, S_{ud}, S_{d^2})\), and so on. The last nodes at the end of the binomial tree represent the range of possible asset values at the end of the option life.

The up and down movements are represented by \(u\) and \(d\) factors which are a function of the volatility of the underlying asset and are defined as follows

\[
\begin{align*}
  u &= \exp(\sigma \sqrt{\delta t}) \\
  d &= \exp(-\sigma \sqrt{\delta t}) \quad \text{or} \quad d = 1/u
\end{align*}
\]  

where \(\sigma\) is standard deviation of the underlying asset or annual volatility of future cash flows, and \(\delta t\) is the incremental time step of the binomial tree over the option life.

The risk-neutral probability, \(p\), is a mathematical intermediate that enable to discount the cash flows using a risk-free interest rate and is defined as follows

\[
p = \frac{\exp(r \delta t) - d}{u - d}
\]  

Using \(u\) and \(d\) factors and \(p\) we can calculate value of the call option, \(C\), as follows
\[ C = \frac{p \times C_u + (1-p) \times C_d}{1 + r_f} \]

or
\[ C = \left[ p \times C_u + (1-p) \times C_d \right] \times \exp(-r_f \delta t) \] 

where \( C_u \) and \( C_d \) are the potential future up and down option values respectively.

While Black-Scholes gives you the most accurate option value, the binomial method is a close approximation to it. Because of the underlying mathematical framework of the binomial method, it always is an approximation of the Black-Scholes equation. The higher the time increments used in the binomial method, the closer you get to this value.

**Results**

Let us assume there is a venture capitalist who considers a possibility to launch a start-up project that has the option to expand in the future. The DCF valuation of the project free cash flows using a risk-adjusted discount rate indicates a present value of \( S_0 = \$500 \) thousand over the project life, \( T = 4 \). The volatility of the cash flows is \( \sigma = 0.5 \) and is expected to result in a twofold expansion of current operations, \( E = 2.0 \), at a cost of expansion of \( X = \$250 \) thousand. The continuous risk-free interest rate is \( r_f = 0.09 \) and the incremental time step of the binomial tree over the option life is \( \delta t = 1 \).

Using equations (7)-(9) moving factors and the risk-neutral probability are calculated in Fig. 3.

\[ u = \exp(\sigma \sqrt{\delta t}) = \exp(0.5 \sqrt{1}) = 1.649 \]
\[ d = 1/u = 1/1.65 = 0.607 \]
\[ p = \frac{\exp(r_f \delta t) - d}{u - d} = \frac{\exp(0.09 \times 1) - 0.607}{1.649 - 0.607} = 0.468 \]

**Fig. 3. Option parameters calculation**

Based on calculated parameters in Fig. 3 we can build a binomial tree (Fig.4), using one-period time intervals for four years and calculate the asset values over the life of the option. Start with \( S_0 \) at the very first node on the left and multiply it by the \( u \) and \( d \) factors to obtain \( S_{0,u} \) and \( S_{0,d} \) respectively. Moving to the right, continue in a similar fashion for every node of the binomial tree until the last time step.
Fig. 4 shows the option values at each node of the binomial tree calculated by backward induction. Each node represents the value maximization of continuation versus expansion. At every node, you have an option to either continue the operation and keep the option open for the future or expand it by two times by committing the investment for expansion.

First, start with the terminal nodes that represent the last time step. At node $S_0u^4$ the expected asset value is $3695$ thousand, whereas if you invest $X$ and expand the operation by $E$ the asset value would be $7139$ thousand. Evidently, to maximize return you would expand rather than continue and the option value at node $S_0u^4$ would become $7139$ thousand. In contrast to $S_0u^4$, $S_0u^3d$ and $S_0u^2d^2$, at nodes $S_0ud^3$ and $S_0d^4$ the asset value with no expansion would be bigger than with it, therefore you would continue your operations without expansion.

Second, move on to the intermediate nodes starting at node $S_0u^3$ and calculate the expected asset value for keeping the option open and accounting for the downstream optimal decisions. Using equation (10) that value at node $S_0u^3$ is $4253$ thousands. Meantime, if the option is exercised to expand the expected asset value would be $2241 \times E - X = 4232$ thousands. Hence, you would not exercise the expand option, and the option value at this node would be $4253$ thousands. Completing the option valuation binomial tree all the way to node $S_0$ we get the option value of $839$ thousands.

Conclusions
Let us first compare the value of the expansion option based on DCF versus ROA. The present value of the project cash flows based on the risk-adjusted DCF method is \( S_0 = \$500 \) thousand. If the operation were to be expand today by twofold, the additional value created would be \( \$500 \) thousand. Since the investment is \( X = \$250 \) thousand, the NPV of the expansion project would be \( NPV_I = \$250 \) thousand. Whereas, real option analysis using binomial method suggests that the present value of the project cash flows due to the investment cost \( X \) is \( \$839 \) thousand, that means the NPV of the expansion project is \( NPV_{II} = \$339 \) thousand after subtracting the present value of the cash flows associated with \( S_0 \).

Comparing \( NPV_{II} \) with the baseline \( NPV_I \), the additional value provided by the expansion option is \( NPV_{II} - NPV_I = 89 \) thousand. The difference is substantial and is the value added to the project because of the real options approach which management can take into consideration in decision making. Management may decide to keep the option of expansion open at this time and exercise it when the uncertainty clears and conditions become favourable. Although the option to expand is implicit in most operations, the ROA calculation helps to quantify the value of the option. If the expansion option is indeed valuable, then management can take the necessary steps to keep the option alive.

The option to expand is common in high-growth companies and startups in particular. For some projects, the initial NPV can be marginal or even negative, but when growth opportunities with high uncertainty exist, the option to expand can provide significant value. You may accept a negative or low NPV in the short term because of the high potential for growth in the future. Without considering an expansion option, great opportunities may be ignored due to a short-term outlook.

By and large, startup companies are the best candidates to be considered for expansion options as long as they have extremely high uncertainty and hence start out on a small scale, but as uncertainty clears, they can be expanded if conditions are favourable.

References


The Economy of Turkey over the Period from 2002 through 2014 and the Effect of Euro/Dollar Parity and Oil Prices to Turkish Economy In 2015

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Abstract

In this paper, the economy of Turkey is analysed over the period from 2002 through 2014. The gross national income, economic growth and inflation rate values of Turkish economy are presented as annual. Tourism revenues, export, import and (export/import) rate values, trade balance deficit are evaluated by graphs. For this period, unemployment and employment rates are explained and the progress of employment is described. Oil prices and Dollar/Turkish Lira exchange rate and Euro / dollar Parity which have an important effect on Turkish economy are analysed.

Keywords: Turkey economy, national income of Turkish economy, economic growth of Turkish economy, inflation rate values of Turkish economy, Tourism revenues of Turkish economy

National Income

In Turkey, government was changed in 2002 and the same government has been in charge until today. As you see below, national income has always been increasing between 2002-2014 period except for the years 2009 and 2014. (Turkish Statistical Institute, News Bulletin, Number 37, 08 March 2008 and Number 16194, 10 December 2014).

There are only two years that national income does not increase in all total 13 years. Due to the world economic crises of 2009, national income decreased from 741.8 billion Dollars to 616.8 billion dollars in 2009. (Turkish Statistical Institute, News Bulletin, Number 8471, 31 March 2011).

What is the reason of decreasing of the national income in 2014? National income decreased from 820 billion dollars to 800 billion dollars in 2014 year. Reason of the decrease is because of the decreasing of yearly growth rate. Growth rate of 2014 is 2.8 %, although the growth rate of 2013 is 4.1 %. (Turkish Statistical Institute, News Bulletin, Number 16194, 10 December 2014).
Gross Domestic Product of 2002-2014 Period
(AT CURRENT PRICES - BILLION $)

Figure 1. National Income of 2002-2014 Period

Growth Rates
In Turkey Between 2002-2014, the growth rate of each year is every year growth rate is positive except one year (2009) in Turkey. Due to the world economic crises of 2009, the growth of Turkish economy decreased to -4.7% in 2009. Turkish Economy growed every year with the ratio changing between 0.9% and 9.4%. The highest economic growth ratio is 9.4% of the year 2004. (Turkish Statistical Institute, 1923-2011 statistical indicators, Number 3890, December 2011)

But if we look at the last three years (2012, 2013 and 2014), it is quite evident that the growth of economy is not sufficient as the growth ratios are (respectively) 2.2%, 4.1%, and 2.8%. The average ratio of the period of these last three years is 3.03% while the average ratio of the last 13 years is 4.8%. (Turkish Statistical Institute, 1923-2011 statistical indicators, Number 3890, December 2011 and Statistical economics indicators, Number 4125, October 2013 and News Bulletin, Number 16193, 10 September 2014).
Inflation Rates

Before the year 2002, inflation rates were generally high as they changed between 30% and 80% in Turkey. Also, inflation rate was 29.7% in 2002. Inflation rate rapidly decreased from 29.7% to 9.3% only in a 2 years period (2002 and 2003).
During the 2004 and 2014 period, inflation rates changed between 6.2% and 10.5%. The highest inflation rate is 10.5% in 2011. Lowest inflation rate is 6.2% in 2012. (Turkish Statistical Institute, News Bulletin, Number 16125, 03 January 2014).

**Figure 4.** Inflation Rates of 2002-2014 Period

**Source:** www.tuik.gov.tr, Turkish Statistical Institute, News Bulletin, Number 16125, 03 January 2014.

**International Trade Rates**

In Turkey, there is a positive correlation between economic growth and import-export volume. During the 2002-2014 period, international trade rates also developed. But import volume has increased more than export volume, so balance of trade developed negatively. As you see below, balance of trade was 15.49 billion dollars in 2002 while it is 84.5 billion dollars in 2014. (Turkish Statistical Institute, News Bulletin, Number 18578, 30 April 2015).

There is a strong correlation between balance of trade and USD/TL exchange rate. As the USD/TL rate increases, import volume decreases rapidly in Turkey. And also balance of trade decreases too.
Export / Import Ratios

As you may see below the ratio of export / import rates generally are 60 %. Between 2002 and 2014, minimum value is 56% (2011) while the maximum value is 72.5% (2009). It is 72.5% in 2009, as a result of the world economic crises. (Turkish Statistical Institute, News Bulletin, Number 18578, 30 April 2015).

Figure 5. International Trade Rates of 2002-2014 Period

Figure 6. Export / Import Ratio of 2002-2014 Period
Tourism revenue

The number of inbound tourists was 15.2 million in 2002. From 2002 to 2014, the number of inbound tourists increased each year except for the year 2006. In economic crises of 2009, it also increased from 31.0 million to 32.0 million. As you see in the figure given below, the number of inbound tourists was 33.0 million in 2010, 36.2 million in 2011, 36.5 million in 2012 and 39.2 million in 2013 and 41.4 million in 2014. (Turkish Statistical Institute, News Bulletin, Number 15845, 14 February 2013 & News Bulletin, Number 15888, 30 October 2014).

Below you may also see the tourism revenues of Turkey of 2002-2014 period. Tourism revenue of Turkey is increases as the number of tourist increase. Except for the years 2006, 2009 and 2010, tourism revenues increased in each year. Tourism revenue decreased in 2009 and 2010, due to the world economic crises.

Import volume of Turkish economy has always been higher than the export volume. Therefore, tourism revenue is really very important for the Turkish Economy in the means of current deficit.
The Turkish Economy During 2002 – 2014 Period

Figure 8. Tourism Revenue of 2002-2014 Period

Current Deficit
Main problem of Turkish Economy is current deficit. Always there is a high current deficit in Turkish Economy. During the economic growth periods, current deficit increases. And during the economic crises, current deficit decreases. (T.C. Central Bank, Report, 24 November 2014).

Figure 9. Current Deficit of 2002-2014 Period
Unemployment Ratios
There is always a positive correlation between economic growth and employment ratios. When economic growth is high, unemployment rates decrease. You see in the table given below, due to the economic crises in 2009, unemployment rate was very high 14%. Generally, between 2002 and 2014, the average of unemployment rates is 10%. (Turkish Statistical Institute, Labour, Employment, Unemployment Statistical indicators, Number 3095, November 2007 and News Bulletin, Number 18636, 15 April 2015).

After the 2009 economic crises, unemployment rate decreased to 9.9% in 2014. When new government was established in 2002, unemployment rate was 10.3%. Turkish government is not successful in the unemployment issue as the unemployment rate is 9.9% in 2014. And also the last available unemployment rate which announced in December of 2014 is 10.9% and there are 3 million 145 thousand people unemployed.

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**Figure 10. Unemployment Ratios of 2002-2014 Period**


The Structure of Employment
You may see the distribution of employment according to sectors – agriculture, industry, and service sectors- in the table given below.
When a country’s economy grows, the number of people employed in the agriculture sector decreases. In 2002 employment rate of agriculture sector was 34.9%. From 2002 to 2014, it decreased consistently and became 20.0% in 2014 year. The employment at the industry sector increases slowly. Employment rate of industry sector was % 18.5 in 2002 year while it is 20.4% in 2014. We see that the only years that employment rates of industry sector did not increase are the years of 2009 and 2010 (Turkish Statistical Institute, News Bulletin, Number 16014, 15 December 2014).

The other sector –the services sector- has a different pattern. Between 2002 and 2007, employment rate increased from 46.6 % to 53.8% but just after 2007, the employment rate started to decrease until 2012. It was 48.1% in 2011. Later, employment rate of industry sector began to increase again and it was 52.0% in 2014.

![The Sectoral Distribution of Employment During 2002-2014 Period](image)

**Figure 11.** The Structure Of Employment of 2002-2014 Period


We also search for the employment types of 2002-2014 period. There are three types of employment: paid, self-employed and unpaid-family workers. Paid workers has consistently increased accordingly to the economic growth; yet, the ratio was 49.7% in 2002 while it was 67.2% in 2014. (Turkish Statistical Institute, Hausehold statistical indicators, September 2014 & News Bulletin, Number 16014, 15 December 2014).

The ratios of self employed and unpaid family workers have consistently decreased. In 2002, the ratio of self-employed workers was 29.4 % while it was 17.2 % in 2014. You
may see in the table given below that the ratio of unpaid family worker has also decreased. It was 20.9% in 2002 and as a result of the consistent decrease it became 11.3% in 2014.

**Figure 12. The Structure of Employment of 2002-2014 Period**


**Euro/Dollar Parity**

At the date of 8 May 2014, Euro/Dollar parity was 1.3911. From 2014 May 8 until today, it is in tendency of decreasing. Today, it is about 1.090. Decreasing of Euro/Dollar parity has negative effects for Turkish economy. As the export of Turkey Economy is mostly (60 %) to European Countries, the trade currency is Euro. Decreasing of Euro/Dollar Parity was the reason for decreasing of export revenues of Turkey.
Oil Prices

Brent oil prices was 115 dollar/ons in 20 June 2014. From 20 June 2014 until today, it has decreased and it reached to the lowest price 46.4 dollar/ons at the date of 13 January 2015. Today Brent petrol is about 55 dollar/ons.

Turkey does not have oil resources and therefore imports oil at a volume of 40 billion dollars per year. Importing of oil, results in the increase of current deficit that is main reason of our economic problem. Decreasing of oil prices has positive effects for Turkish Economy. When oil prices decreases, inflation rate and current deficit decreases too.
References


The Dilemmas and Issues of Immigration to United States of America and Globalization

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Abstract

This paper deals with immigration to United States of America from all over the globe. The diversity of immigrants to this land of opportunity is a special feature and contributes substantially towards the economic, technological and social development of the country. The concentration of immigrants in some select States is discussed at length. The distribution of immigrants by their employment, wages, age, marital status and education is a special feature of this paper. The future trends of immigrants have been estimated and their distributions over various States worked out. The paper concludes with implications of immigration on the economy, employment, education and social benefits.

Keywords: Immigration, globalization, immigrants

Introduction

The most fascinating fact is that about 20 percent of all international migrants reside in the United States, which accounts for less than 5 percent of the world’s population. Irrespective of the rapid changing global economy, the United States continues to be the world’s leader by far as the most popular destination for immigrants generally known as the foreign born population. The country with the next largest number is Russia with 12.3 million. Known as the land of immigrants, diversity and opportunity, the United States of America has a total estimated population of about 320 million and 42 million foreign born population in 2015? The latest statistics of 2013 show that the total number of immigrants in this country was 41.3 million coming from all over the world. Nearly 41 million
immigrants lived in the United States in 2012—a historical numeric high for a country that has been a major destination for international migrants throughout its history. The U.S. total of 40.4 million immigrants including about 11.1 million illegal/ unauthorized immigrants represents 13% of the total U.S. population in 2011.

**Scope of Paper**

The scope of the paper is limited to published data available from various sources. The paper compiles some of the most frequently sought-after current and historical facts and figures about immigrants in the United States and its different States. It answers questions such as: which countries are the main sources for immigration to the United States? The Labor Force characterizes covering their employment, unemployment, wages and some demographic features are discussed. How many unauthorized immigrants are in the United States? The future trends of total immigration have been estimated and their implications examined.

The sources of data used *inter alia* include Migration Policy Institute (MPI), the Center for Immigration Studies, the Pew Research Center, the Center for American Progress, Mexico National Population Council, Mexico National Institute of Statistics and Geography, the US Census Bureau, The American Community survey – 2012, and the US Department of Homeland Security.

**Some Statistical Facts on Immigration: 2001-2013**

Data on immigration as collected from various sources for the period 2001-2013 is shown below. The same has subsequently been used for estimating future trends till 2020. The data shows clearly that the immigration population has grown from 31.5 to 41.3 million in 2013 – an increase of about 10 million over the period – an average of 0.75 million immigrants per year. The immigrants are, by and large, concentrated in four States, viz., California, New York, New Jersey and Florida but spread over 15 States out of a total of 50 States in the USA. The future trends indicate rising numbers obviously making the politicians and administrators think about it in terms of implications for various social benefits and infrastructure. The paper discusses these and other issues in details in the various sections to follow.

**Immigrants in United States of America: 2001 to 2013**

<table>
<thead>
<tr>
<th>Year</th>
<th>Population (million)</th>
<th>Size of Immigrant Population (million)</th>
<th>Immigrant Share of Total Population (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>285.0</td>
<td>31.5</td>
<td>11.05</td>
</tr>
<tr>
<td>2002</td>
<td>287.6</td>
<td>33.0</td>
<td>11.47</td>
</tr>
<tr>
<td>2003</td>
<td>290.1</td>
<td>33.5</td>
<td>11.54</td>
</tr>
<tr>
<td>2004</td>
<td>292.8</td>
<td>34.3</td>
<td>11.71</td>
</tr>
<tr>
<td>2005</td>
<td>295.5</td>
<td>35.7</td>
<td>12.08</td>
</tr>
<tr>
<td>2006</td>
<td>298.4</td>
<td>37.5</td>
<td>12.57</td>
</tr>
<tr>
<td>2007</td>
<td>301.2</td>
<td>38.1</td>
<td>12.65</td>
</tr>
<tr>
<td>2008</td>
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<td>38</td>
<td>12.50</td>
</tr>
<tr>
<td>2009</td>
<td>306.8</td>
<td>38.5</td>
<td>12.55</td>
</tr>
<tr>
<td>2010</td>
<td>309.3</td>
<td>40</td>
<td>12.93</td>
</tr>
<tr>
<td>2011</td>
<td>311.6</td>
<td>40.4</td>
<td>12.97</td>
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<tr>
<td>2012</td>
<td>313.9</td>
<td>40.8</td>
<td>13.00</td>
</tr>
</tbody>
</table>
Some Select Immigrant Population Characteristics: 2012

The data collected by the Center for American Progress shows that there were 40.7 million immigrants comprising of 18.6 naturalized US citizens and 22.1 million non-citizens. Out of non-citizens, approximately 13.3 million immigrants were legal permanent residents; 11.3 million as illegal and the remaining were on temporary visas. The past decade saw a significant increase in the immigrants – an increase of 31.2% during 2000-2012. During this period, the immigrants increased from 31.1 million to 40.8 million. Interestingly, the number of immigrants has doubled since 1960 although still below its all-time high. While the immigrants were 5.4% of the total U.S. population, their share in 2012 rose to 13% which is below their share in 1890 – 15% of the US population.

Diversity being an important factor of immigration, it has no doubt changed over time. For example, while 75% of the immigrants in US were from Europe, their percentage declined to about 12% in 2012. Out of about 11.6 million immigrants in 2012, approximately 28% were from Mexico; 2.3 million from China, 2 million from India, 1.9 million from Philippines, 1.3 million from Vietnam and El Salvador, and 1.1 million from Cuba and Korea. Available data supports that immigrants are putting down their roots across USA than they were before.

Interestingly the educational background of immigrants is quite diverse. About 11.6% had a Master/Professional/Doctorate Degree as compared to 10.8% for the Natives. On the other hand, 69.4% of the immigrants had High School or equivalent compared to about 90% of the Natives. From demographic angle, the average age of immigrants was 42 years as compared to Natives having 35 years as the average age.

Immigrant Population by State, 2013

The data collected by the Center for Immigration Studies shows that while the US immigrant population recorded 41.3 million in 2013, the Asian, Caribbean and Middle Eastern immigrant populations grew the most since 2010. The Census Bureau recently released some of the data from the 2013 American Community Survey (ACS). The data show that the nation’s immigrant population (legal and illegal) grew by 1.4 million from July 2010 to July 2013. The data also imply that 3.3 million new immigrants settled in the country in that same period. These new arrivals were offset by return migration and deaths among the existing population. Some interesting findings of the survey results show that:

1. The immigrants (including the illegal) hit a record 41.3 million in July 2013, an increase of 1.4 million and 10.2 million since July 2010 and 2000 respectively. The Immigrants in 2013 were nearly double the number in 1990, triple the number in 1980 and quadruple than in 1970 when their number stood at 9.6 million. .

2. The sending regions with the largest increases in immigration population from 2010 to 2013 were South Asia (up 373,000, 16 percent growth); East Asia (up 365,000, 5 percent growth); the Caribbean (up 223,000, 6 percent growth), the Middle East (up 208,000, 13 percent growth); and sub-Saharan Africa (up 177,000, 13 percent growth).
3. The sending countries with the largest increases in immigration population from 2010 to 2013 were India (up 254,000, 14 percent growth); China (up 217,000, 10 percent growth); the Dominican Republic (up 112,000, 13 percent growth); Guatemala (up 71,000, 9 percent growth); Jamaica (up 55,000, 8 percent growth); Bangladesh (up 49,000, 32 percent growth); Saudi Arabia (up 44,000, 97 percent growth); Pakistan (up 43,000, 14 percent growth); and Iraq (up 41,000, 26 percent growth).

4. Between 2010 and 2013, four million new immigrants settled in the United States. However, 7.5 million immigrants have settled in the country since 2007 when the Great Recession began.

5. As a share of the total US population, total immigrants comprised of 13.1 percent (about one out of every eight), the highest percentage in 93 years as compared to 6.2 percent in 1980. On the other hand Immigrants comprised 16 percent of the adult population (18-plus) in 2013, nearly one out of every six adults.

6. Mexicans accounted for the largest immigrant population in the United States by far, with 11.6 million legal and illegal immigrants living in the United States in 2013. However, the number of Mexican immigrants in the country declined 1 percent from 2010 to 2013.

7. The number of immigrants from Europe has also since declined.

8. Interestingly, States where the number of immigrants grew the most since 2010 were Texas (up 227,240); California (up 160,771); Florida (up 140,019); New York (up 85,699); New Jersey (up 81,192); Massachusetts (up 62,591); Washington (up 57,402); Pennsylvania (up 57,091); Illinois (up 47,609); Arizona (up 39,647); Maryland (up 38,555); Virginia (up 37,844); North Carolina (up 30,289); Michigan (up 29,039); and Georgia (up 28,020).

9. States with the largest percentage increase since 2010 were North Dakota (up 27 percent); West Virginia (up 17 percent); and Wyoming (up 14 percent). In South Dakota, Nebraska, and Idaho the immigrant population increased 10 percent. It grew 8 percent in New Hampshire, Wisconsin, and Pennsylvania and 7 percent in Iowa, Delaware, and Minnesota.

10. The 15 states where immigrants made up the biggest share of the population in 2012 account for about eight-in-ten (79%) of the nation’s The number of immigrants has risen so quickly in some parts of the country that states typically thought of as hubs of immigration, such as Arizona. While in 2000, immigrants made up 12.9% of Arizona’s population, ninth-highest in the nation that year. By 2012, Arizona had dropped to 12th-highest, even though immigrants made up a higher share—13.6%—of the state’s population. These 15 States with the highest share of immigrants in their respective populations may be seen in the following elaborate diagram/chart (BY JENS MANUEL KROGSTAD AND MICHAEL KEEGAN5 COMMENTS)
Immigrants by Labor Force Characteristics, 2013

Based on the data released by the Bureau of Labor Statistics, the labor force characters are discussed. These are collected as a part of the Current Population Survey (CPS) for the period 2013 covering about 60,000 households. The foreign born are those who reside in...
the United States but were born outside the country or one of its outlying areas to parents who were not U.S. citizens. The foreign born include legally-admitted immigrants, refugees, temporary residents such as students and temporary workers, and undocumented immigrants. The survey data, however, do not separately identify the numbers of persons in these categories. Some of the highlights from this data are:

1. In 2013, there were 25.3 million foreign-born persons in the U.S. labor force, comprising 16.3 percent of the total. (See Table 1 Statistical Appendix)
2. Hispanics accounted for 47.8 percent of the foreign-born labor force in 2013 and Asians accounted for 24.3 percent. (See Table 1) (Data in this news release for persons who are white, black, or Asian do not include those of Hispanic or Latino ethnicity. Data on persons of Hispanic or Latino ethnicity are presented separately.)
3. Foreign-born workers were more likely than native-born workers to be employed in service occupations and less likely to be employed in management, professional, and related occupations and in sales and office occupations. (See Table 4)
4. The median usual weekly earnings of foreign-born full-time wage and salary workers were $643 in 2013, compared with $805 for their native-born counterparts. (See Table 5) (Differences in earnings reflect a variety of factors, including variations in the distributions of foreign-born and Native-born workers by educational attainment, occupation, industry, and geographic region.)

**The Demographic Characteristics** the immigrant’s labor force differs from that of the Natives. In 2013, men accounted for 57.7 percent of the immigrants, compared with 52.3 percent of the native labor force. By age, the proportion of the immigrant labor force made up of 25- to 54-year-olds (74.6 percent) was higher than for the native labor force (63.0 percent). Labor force participation is typically highest among persons in that age bracket. (See Table 1). In 2013, nearly half (47.8 percent) of the immigrant labor force was Hispanic, and almost one-quarter (24.3 percent) was Asian, compared with 9.7 percent and 1.7 percent, respectively, of the native labor force. About 17.7 percent of the immigrant labor force was white and 9.0 percent was black, compared with 74.4 percent and 11.7 percent, respectively, of the native labor force. In 2013, 24.3 percent of the immigrants labor force age 25 and over had not completed high school, compared with 4.8 percent of the native labor force. The immigrants were less likely than the natives who had some college or an associate degree—17.1 percent versus 30.1 percent. The proportions for immigrants and natives having a bachelor’s degree or higher were more similar, at 33.8 percent and 37.5 percent, respectively.

**The Labor Force show that the** share of the U.S. civilian immigrant labor force was 16.3 percent in 2013, about the same as in 2012 but up from 13.3 percent in 2000. (See Table 1) In 2013, the labor force participation rate of the immigrants was 66.4 percent, compared with 62.7 percent for the natives. The participation rate for the immigrants was about the same as in 2012, while that for the natives continued to trend down. By gender, the participation rate of immigrant men was 78.8 percent in 2013, higher than the rate of 68.0 percent for native men. In contrast, 54.6 percent of immigrant women were labor force participants, compared with 57.7 percent of natives. Among the major race and ethnicity groups, the 2013 labor force participation rates for immigrant was: whites (60.0 percent),
blacks (71.8 percent), Asians (65.1 percent), and Hispanics (68.6 percent) were little different from the prior year. In comparison, the participation rate for natives: whites (63.1 percent) declined in 2013, while the rates for blacks (59.5 percent), Asians (62.4 percent), and Hispanics (63.7 percent) showed little change. In 2013, immigrant mothers with children under 18 years old were less likely to be labor force participants than were natives mothers—59.7 percent versus 72.7 percent.

Labor force participation differences between foreign-born and native mothers were greater among those with younger children than among those with older children. The labor force participation rate of immigrant mothers with children under age 6 was 51.2 percent in 2013, much lower than that for native mothers with children under age 6, at 67.4 percent. Among women with children under age 3, the participation rate for the foreign born (46.7 percent) was 18.2 percentage points below that for native born mothers (64.9 percent). The labor force participation rates of immigrants and native-born fathers with children under age 18 were similar, at 93.6 percent and 92.6 percent, respectively. (See Table 2)

By region, the immigrants made up a larger share of the labor force in the West (23.8 percent) and in the Northeast (19.1 percent) than for the nation as a whole (16.3 percent) in 2013. In contrast, the immigrants made up a smaller share of the labor force than for the nation as a whole in the South (14.9 percent) and Midwest (8.4 percent See Table 6)

The Unemployment Rate of immigrants declined from 8.1 percent in 2012 to 6.9 percent in 2013, and the jobless rate for the natives fell from 8.1 percent to 7.5 percent. The over-the-year decrease in the unemployment rate of immigrants and natives reflected decreases in the rates for both men and women. The unemployment rate for immigrant men fell from 7.5 percent to 6.4 percent, and the rate for immigrant women was down from 8.9 percent to 7.5 percent. Among the natives, the rate for men fell from 8.4 percent to 7.9 percent, while the rate for women was down from 7.7 percent to 7.0 percent. (See Table 1) For both the immigrants and the natives, jobless rates vary considerably by race and ethnicity. Among the immigrant born, blacks had the highest unemployment rate (10.5 percent) in 2013, while Asians had the lowest (4.7 percent). The unemployment rates were 6.6 percent for whites and 7.5 percent for Hispanics. Among the natives, blacks also had the highest jobless rate (13.5 percent), followed by Hispanics (10.7 percent). The unemployment rates were 6.0 percent for whites and 6.5 percent for Asians.

The Occupational distribution of immigrants was more likely than natives to be employed in service occupations (24.8 percent versus 16.7 percent). Within service occupations, about one-third of the immigrants were employed in building and grounds cleaning and maintenance occupations, about twice the proportion for the natives. Immigrants were more likely than the natives to be employed in production, transportation, and material moving occupations (15.4 percent versus 11.1 percent) and in natural resources, construction, and maintenance occupations (12.9 percent versus 8.3 percent). (See Table 4)

Natives were more likely than immigrants to be employed in management, professional, and related occupations (39.5 percent versus 30.3 percent) and in sales and office
occupations (24.4 percent versus 16.5 percent). Immigrant men were more likely than the native men to work in natural resources, construction, and maintenance occupations and in service occupations. Compared with native-born women, foreign-born women were more likely to be in service occupations and in production, transportation, and material moving occupations. Among women, the disparity was especially great in service occupations: 32.9 percent of foreign-born women worked in service occupations in 2013, compared with 19.8 percent of the native women. Native women were more likely than the immigrant women to be in sales and office occupations, 31.8 percent versus 22.4 percent.

**The Earnings** show that the median usual weekly earnings of immigrants, full-time wage and salary workers ($643) were 79.9 percent of the earnings of their native counterparts ($805). Among men, median weekly earnings for the immigrant men ($671) were 74.6 percent of the earnings of their native counterparts ($899). Among women, median earnings for immigrant-born women ($610) were 84.8 percent of the earnings of their native counterparts ($719). Differences in earnings reflect a variety of factors, including variations in the distributions of immigrants and natives by educational attainment, occupation, industry, and geographic region. (See Table 5) Among the major race and ethnicity groups, Hispanic immigrants with full-time wage and salary workers earned 78.2 percent as much as their native counterparts in 2013. For white, black, and Asian workers, earnings for the immigrants and the natives were relatively close within each group. The earnings of both immigrants and natives increase with education. In 2013, immigrants with age 25 and over with less than a high school education earned $428 per week, while those with a bachelor’s degree and higher earned about 2.9 times as much—$1,235 per week. Among the natives with a bachelor’s degree and higher earned about 2.3 times as much as those with less than a high school education—$1,187 versus $511 per week. Natives earn more than the immigrants’ at most educational attainment levels. The gap between the earnings of immigrants and natives closes at higher levels of education. For example, among high school dropouts and graduates in 2013, full-time immigrants earned 83.8 percent as much as their native counterparts among those with a bachelor’s degree.

**Illegal Immigrants to United States of America**

The Center for American Progress shows that the number of illegal immigrants has relatively stayed stable after declining slightly during the great recession. While their estimated number was 8.4 million in 2000, it rose to 12 million in 2017. Again their estimated number was 11.7 million towards 2012 end, their number was estimated as 11.2 in 2012 and it has marginally increased to 11.3 million in 2013.

Although Mexicans constitute the largest number of immigrants in the US, their number has somehow declined from 6.9 million (57% of total immigrants) to 6 million (52% of total immigrants).

As of 2012, the concentration of immigrants in six US States, viz., California (22%), Texas (15%), Florida (8%), New York (7%), Illinois (4%) and New Jersey (4%). These numbers may differ from estimates from other sources, but the fact remains that majority of the immigrants are located in the States mentioned here.
Majority of the illegal immigrants have stayed for a long time thus having committed themselves to living in the US. Their median length of stay was 13 years in 2013. Currently, 62% have been living in the US for 10 years or longer. A full 88% have been living in the US for five years or longer. These illegal immigrants continue to be undocumented as they cannot adjust their status towards green card sponsorship. The illegal immigrants constitute disproportionately large percentage of the labor force relative to the overall size of the population. Interestingly, 84% of the illegal immigrants were employed in the US in 2010 constituting about 5.2% of the total labor force against 3.7% share in the US population. Not only are these, almost half of the settled illegal immigrants homeowners. As per the Pew Research Center, 52% of the illegal immigrants have completed high school or even higher and 15% have a Bachelor or higher Degree.

Apart from the number of illegal immigrants in the US, quite often, the everyday, real-life effects of illegal status are overlooked in debates about abstract numbers or policies. The fact remains that with more than 11 million illegal immigrants living in the US, with majority of them living for more than a decade, takes a real toll and puts pressure on American families. Parents—mostly mothers—have to deal with providing for their children when a spouse is deported, while children face a range of negative psychological and emotional consequences from the fear of having a loved one taken from the

**Future Trends of Immigrants: 2014-2020**

By using the available data on immigrants for 2001 to 2013, the number of immigrants has been estimated for 2014-2020. Simple linear regression has been used as shown along with the scatter diagram.

**Estimated Immigrants: 2001-2060**

<table>
<thead>
<tr>
<th>Year</th>
<th>Immigrants (Millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>31.50</td>
</tr>
<tr>
<td>2002</td>
<td>33.00</td>
</tr>
<tr>
<td>2003</td>
<td>33.50</td>
</tr>
<tr>
<td>2004</td>
<td>34.30</td>
</tr>
<tr>
<td>2005</td>
<td>35.70</td>
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<tr>
<td>2006</td>
<td>37.50</td>
</tr>
<tr>
<td>2007</td>
<td>38.10</td>
</tr>
<tr>
<td>2008</td>
<td>38.00</td>
</tr>
<tr>
<td>2009</td>
<td>38.50</td>
</tr>
<tr>
<td>2010</td>
<td>40.00</td>
</tr>
<tr>
<td>2011</td>
<td>40.40</td>
</tr>
<tr>
<td>2012</td>
<td>40.80</td>
</tr>
<tr>
<td>2013</td>
<td>41.30</td>
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<tr>
<td>2014</td>
<td>42.83</td>
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<tr>
<td>2015</td>
<td>43.65</td>
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<tr>
<td>2016</td>
<td>44.46</td>
</tr>
<tr>
<td>2017</td>
<td>45.28</td>
</tr>
<tr>
<td>2018</td>
<td>46.09</td>
</tr>
<tr>
<td>2019</td>
<td>46.91</td>
</tr>
<tr>
<td>2020</td>
<td>47.73</td>
</tr>
</tbody>
</table>
Based on the above estimation, it seems that about 4 million immigrants are likely to be added in the coming five years. This is a quite high number obviously having lot of implications on the economic and social system of the country. This also includes illegal immigrants for which special provision is required. The Government is still debating on how to accommodate such a large number of existing illegal immigrants.

Further, the US immigrant population projected to rise, even as share falls among Hispanics and Asians (Anna Browni comment). The nation’s immigrants are projected to reach 78 million by 2060, making up 18.8% of the total U.S. population, according to new Census Bureau population projections. That would be a new record for the foreign-born share, with the bureau projecting that the previous record high of 14.8% in 1890 will be passed as soon as 2025.
Conclusion
A sharp rise in the number of immigrants in the U.S.A. in recent decades and as projected for future serves as a basis for any policy formulation. While immigration is considered to be a great and constant source of economic vitality and demographic dynamism, it is equally well a great source of taxpayers, job creators and consumers. Paradoxically, on the other hand the immigration system is paralyzed and needs complete overhaul. Even though the US border is relatively more secure than ever before but the existing laws need review. The immigration reforms do address these issues including the pathway for illegal immigrants and working in the USA against the American wraths. There seems to be a strong need to restore public faith in the system rather than supercharging the economic benefits from the immigrant population. On the contrary the immigration populations think otherwise while the Government is still debating on how to accommodate such a large number of illegal immigrants in the country. The next Presidential elections in 2016 may bring in a new wave of thinking towards immigration especially when the new face of American immigrants is likely to be Asians with a different profile, better educated, economically more successful and doing amazingly well in this country as compared to the than the Hispanic immigrants of the recent decades.

References

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Interdisciplinary Applications of Reliability, Risk Analysis and Optimization

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Abstract

Reliability, Risk Analysis and Optimization are mathematical tools to enhance performance of component of a structure or the structure as a whole. The structure could be a building, airplane, automobile or chemical plant pertaining to Civil Engineering, Aerospace, Mechanical Engineering or chemical engineering respectively. In fact, it doesn’t have to be a structure at all. For example, one may be interested in establishing the priority of recipients in need of kidney or liver from among few available donors. In other words, there are only few donors available while many people are in need of kidney or liver. Who gets the kidney or liver as it will save the life of the recipient is the question here. The problem is quite complex because the objective function to be developed has to be a function of the quality of life of the recipient (an abstract quantity), the number of people in the family if the recipient were not to receive the kidney or liver and were to die. This problem can be solved using the principles of optimization. Another problem of interest could be establishing priority of sending number of limited number of qualified physicians to needy countries in the world. Such a problem could arise in United Nations. Again, this problem could be solved using principles of dynamic programming which is a subset of general area of optimization. Similarly, one may be interested in finding what combination of abnormal levels of cholesterol, blood sugar, triglycerol levels etc. (which are routinely taken in blood tests of humans) result in fatal strokes in human beings. This problem can be solved using the principles of Reliability and Risk Analysis. In any case, before these mathematical tools can be applied to a physical system, a mathematical model representing the physical system has to be developed first. One has be careful in doing this. If too many assumptions are made, the mathematical model developed will be far from the physical model even though simple to solve. So, the solution to the mathematical model will not be really the solution of actual physical system and will be meaningless. On the other hand, if very few assumptions are made, the mathematical model developed will be too complicated to solve. This means that the concepts of mathematical modeling are also embedded with Reliability, Risk Analysis and optimization study of any physical system. This paper will illustrate the basic concepts of Mathematical modeling, Reliability, Risk Analysis, and Optimization first, followed by application of these principles to various disciplines such as Engineering, Business/Economics, Kinesiology, Political Science and Sociology.
Introduction

Mathematical Modeling
A mathematical model essentially represents as an equation representing relation between the dependent variables and independent variables connected with physical system (Chapra and Canale, 2015).

Dependent variable = f(independent variable, parameters, forcing function)  (1)

In the above equation, the dependent variable is a characteristic that essentially reflects the behavior of the system. The independent variables effect the dependent variable. They can be obtained based on an experiment or from literature wherein some other researcher essentially reported those values. Forcing functions are the cause of the things happening in the system. In other words, if one is representing an accident involving cars, then the forcing function will be the acceleration of the car(s) when the accident occurred. The challenge for a researcher working in any area is to identify the dependent variables and independent variables in the physical problem.

Optimization
It can be described as a tool when applied to a physical model gives the best value of some objective (Revelle et al., 2004). The objective function could be cost, weight or any other physical attribute. The aim of an optimization problem may be to maximize or minimize an objective function subject to certain physical constraints. It can be stated as:

Max or Min.  \[ Z = f(x_1, x_2, x_3, \ldots, x_n) \]  (2)

s. t. \[ x_1 < x_{1u} \]
\[ x_1 > x_{1l} \]
\[ x_1, x_2, x_3, \ldots, x_n \geq 0 \]

In the above formulation Z is called the objective function consisting of variables \[ x_1, x_2, x_3, \ldots, x_n \] which are called the decision variables. s.t. represents subject to. All the \[ < = 0 \], and \[ > = 0 \] are called constraints representing less than or greater than a certain pre-assigned value. \[ x_1, x_2, x_3, \ldots, x_n \geq 0 \] constraints are called non-negativity constraints. The constraints can also be equal to \[ = \] constraints. For any researcher trying to solve a physical problem in his/her area, the main task and the challenge is to formulate an objective function consisting of predefined dependent and independent variables and properly formulate the physical constraints so as to accurately represent the physical model.

Reliability
Reliability is basically probability of survival of a system. It can be defined as a probability that a component of a system or the system as a whole will function over period of a given time. It can be defined as (Ebeling, 1997):

\[ R(t) = P(T \geq t) \]  (3)
When the reliability of a system is of interest, the component reliability is calculated first. Then a mathematical equation is developed between the dependent and independent variables. The final step is to calculate the reliability of the system.

**Risk**

Risk is defined in terms of probability of occurrence and the consequences of the occurrence. This is because the consequences of a catastrophic event vary depending on the actual event. For example, fire and earthquake will have different consequences. Mathematically, Risk can be defined as (Ayyub, 1997):

$$\text{Risk} = \text{Occurrence probability} \times \text{occurrence consequence} \quad (4)$$

**Applications in various disciplines**

**Engineering**

**Application of Principles of Reliability Analysis to Optimization Problem in Transportation Industry**

A typical optimization problem emanating from the actual optimization that is conducted on a routine basis at a leading retail store, Staples, Inc. is used to illustrate the concepts of Simulation-optimization. This is done by solving a transportation problem of 10 cities (a subset of the actual 40-city problem) using optimization principles. The same problem is then solved using probabilistic principles using the total traveled distance between two cities as a random variable (depending upon the route taken). In a typical Simulation-optimization problem, Monte Carlo simulation is used for simulation of random paths. In this paper, an alternate but efficient method is proposed and used based on the probability principles. This is based on the concept of capturing uncertainties ranging from 68.3% to 99.7% in the physical system based on \((\mu +\sigma, \mu -3\sigma)\) concept. The results from probabilistic optimization and the corresponding deterministic optimization are compared. It is found that simulation-optimization results in savings of cost as compared to traditional optimization.

This paper deals with application of principles of simulation-optimization to problems related to transportation industry. In transportation industry, the main aim is to minimize the cost of transporting various commodities from several sources to several destinations with an with some practical constraints and associated cost for each of the path chosen. This is a typical LPP (Linear Programming problem) associated with transportation industry. The industry chosen for this study is Staples, Inc., a well known retail store with a good reputation. All this is related to deterministic optimization in which all the possible paths and the associated costs are fixed quantities. In a probabilistic analysis, each path is considered as a Random variable (RV) as the outcome is uncertain. The solution of a probabilistic analysis problem typically involves use of simulation principles such as Monte Carlo simulation. When these two principles (optimization and probability are combined, it leads to what is known as Simulation-Optimization. This paper considers a typical transportation industry problem (a subset of the actual problem used at Staples, Inc.) and solves it as a traditional deterministic optimization problem as well as simulation-
optimization problem (it’s probabilistic conterpart) and the results are compared. Essentially, this paper applies the concepts of reliability analysis to optimization problem with specific application to transportation industry.

**Business and Finance**

**Financial Aspects of Determining Optimal Occupancy Factor (Rate) for Hotels Based on Probabilistic Analysis**

This paper is based on the application of principles of probability theory to economic data as related to hotel industry. It is well known that the hotels want to make profit. Hence, hotels would like to achieve the highest occupancy factor (rate) as possible. The study done till now used variables such as hotels in operation, room nights available, room nights sold, hotel occupancy rate, hotel room price, actual revenue per room, and total revenues. In this paper, a different approach is used to address the same problem. The new model uses only 3 independent variables. These variables are total number of rooms in the hotel, the rooms sold on a particular night and the actual month sold. The data is used has been collected for two hotels. In one hotel, the daily data is available (for the entire 365 days) while only the average monthly data is available for the second hotel. The data collected is used in two ways. One is to fit an appropriate probabilistic density function and then calculate the probabilities of various levels of occupancy factors. The second is to establish a functional relationship between the occupancy factor and the temperature. Conclusions are then drawn.

As stated earlier, the study done till now used variables such as hotels in operation, room nights available, room nights sold, hotel occupancy rate, hotel room price, average revenue per room, and total revenues (Fullerton et al; 2013) wherein data is taken primarily from Source Strategies, 2012)to address this problem.

**Scope of the Work**

In this paper, a different methodology is used to address the same problem. A mathematical model is developed as part of this study to calculate the occupancy factors for couple of hotels for various threshold values based on the room data collected for hotels. The study is done in two phases. In phase I, an appropriate density function is derived based on the room data for hotels. The adequacy of this density function is checked for both hotels using chi-square test. Then, the probability of occupancy rate reaching various threshold values is then calculated, again for both hotels. In phase II, a functional relationship is established between occupancy rate and temperatures. This is done to study the effect of various seasons on the occupancy rate. The adequacy of this equation is then checked using the correlation coefficient and standard error of estimate. The correlation coefficient should be at least equal to 0.8, while the standard error of estimate ($s_{y/x}$) should be less than the standard deviation of the dependent variable $y$ ($s_y$) where $y$ is the occupancy factor. The adequacy of the chosen probability distribution is decided based goodness-of-fit tests available in literature. One of these tests is the chi-square test (Ang and Tang, 2007). A significance level of 5% is chosen to start with. Probabilities of various occupancy rates are then calculated for on acceptable threshold values of 0.8, 0.85 and 0.9 because while 100% occupancy factor is desirable from the point of view of the hotel, it is almost
impossible to achieve in practice. In addition, a regression analysis is estimated to get a function relation between the dependent variable - occupancy factor and the independent variables - the total rooms, rooms sold, and the price of each room. This equation is then used to find the optimum values of independent variables that will give the highest occupancy rate.

This research is done in two phases, Phase I and Phase II and the details are given below:

**Phase I**
1. Collect the data for rooms from various hotels. (Fullerton Marriott at California State University and Willow Tree Lodge Hotels.)
2. Calculate the occupancy rate of rooms.
3. Derive the chosen probability density function from visual observation and check the adequacy for the occupancy rate using chi-square test (Ang & Tang, 2007; Kreyszig, 2011). The steps are stated below:
   a. Get the minimum and maximum value of the occupancy rate.
   b. Divide the room data into appropriate number of divisions.
   c. Get the theoretical relative and cumulative frequency and plot the histogram and density function.
   d. Divide the data into appropriate number of divisions and get number of samples falling in that range. This gives $n_i$ values for each range.
   e. Calculate corresponding theoretical frequency for the assumed distribution (based on visual observation) from standard expressions available in literature (Ang & Tang, 2007; Kreyszig, 2011). This gives $e_i$ values for each range.
   f. Get the sum of $(n_i - e_i)^2 / e_i$ values for each range using the following expression

   $$\chi^2 = \sum (n_i - e_i)^2 / e_i$$

   (1)

   Where $i$ goes up to $N$, where $N$ represents number of divisions into which the collected room data has been divided.
   h. Determine the solution of the following equation

   $$P (\chi^2 \leq c) = 1 - \alpha$$

   (2)

   where $\alpha$ is the significance level. If $\chi^2$ obtained is less than $c$, then, the chosen distribution from visual observation is correct. $c$ is the value of the appropriate $\chi^2$ distribution at the cumulative probability.
   i. check the validity based on the using chi-square test.

**Phase II**
In this phase, a functional relation is derived between occupancy rate and the average temperature for that month using the concepts of regression analysis (Chapra and Canale, 2015). A linear equation is fitted as follows:

$$OR = a + b \cdot (T)$$

in which OR is Occupancy rate and T is temperature

The values of $a$ and $b$ are obtained from

$$a = \frac{\bar{OR} - b(T)}{\bar{T}}$$

(4)

where $\bar{OR}$ and $\bar{T}$ are the mean values of OR and T

$$b = \frac{n\Sigma OR_iT_i - \Sigma OR_i \Sigma T_i}{n\Sigma T_i^2 - (\Sigma T_i)^2}$$

(5)
(\text{OR}_i, T_i) is a set of paired observations and \( n \) is number of total observations. The adequacy of this fit is checked from the correlation coefficient \((r)\) and the standard error of estimate \((s_{OR/T})\). The correlation coefficient is given as
\[
r = \frac{n\sum OR_i T_i - (\sum OR_i)(\sum T_i)}{\sqrt{[n\sum T_i^2 - (\sum T_i)^2][n\sum OR_i^2 - (\sum OR_i)^2]}}
\]  
(6)

The standard error of the estimate is given as,
\[
s_{OR/T} = \frac{s_r}{\sqrt{n-2}}
\]  
(7)

where
\[
s_r = \sum_{i=1}^{n} (OR_i - a - bT_i)^2
\]  
(8)

In this study instead of OR, a derived parameter called ANORM (Average number of occupied rooms per month) which is similar to OR is used that has larger probability values when plotting the pdf (probability distribution function).

Kinesiology

Estimation of Forces in lumbar spine and associated guy wires

This paper deals with calculation of forces in the lumbar spine and the connected guy wires. McGill (2002) suggests this model of the lumbar spine connected to guy wires (Fig. 1). In this model the lumbar spine is assumed to have the flexibility of bending in any direction with a large amount of muscle coactivation. The spine is likened to a flexible rod that buckles under compressive loading. It is also assumed that the lumbar spine has guy wires connected to it. These guy wires constitute complex interaction of stiffening structures along the spine and those forming the torso wall. These guy wires and the lumbar spine are assumed to connect at the base to the pelvis. In actuality, each of the guy wires can be considered like a combination of tendon and muscle. The load \( P \) in Fig. 1 is shown to be acting on the free joint downwards. This can be considered to be an equivalent reactive force of the actual forces exerted on each foot from the ground.

Methodology

The forces in the members of the equivalent truss are calculated using the Direct stiffness method (Weaver and Gere, 1990). It mainly consists of two steps:

1. Calculation of displacements at the free joint where the load is applied. The basic equation used is:

\[
[ \text{A}_D ] = [ \text{A}_{DL} ] + [ \ S ] [ \text{D} ]
\]

Where,
\[
[ \text{D} ] \text{ represents the displacement vector.}
\]
\[
[ \text{A}_D ] \text{, represents the action vector corresponding to the unknown displacements in the actual structure}
\]
\([ A_{DL} ]\) represents the action vector corresponding to the unknown displacements in the restrained structure.

\([ S]\) is the structure stiffness matrix.

2. The member forces are then calculated using the following equation:

\[
\begin{bmatrix}
A_M \\
A_{ML} \\
A_{MD}
\end{bmatrix} = \begin{bmatrix}
A_{ML} + [ A_{MD} ]
\end{bmatrix} [D] \\
\text{Where,}
\]

\([ A_M ] = \text{member forces in the actual structure}
\]

\([ A_{ML} ] = \text{member forces due to applied loads in the restrained structure}
\]

\([ A_{MD} ] = \text{member forces due to unit displacements}
\]

The elements of the stiffness matrix, the corresponding unknown displacements \([ D]\), and finally the member forces in the actual structure \([ A_M ]\) will depend on the geometric and material properties of the four members of the equivalent truss.

This procedure is developed in subsequent steps for two cases, namely, all members have same material and geometric properties and members having different material and geometric properties. The details are given below:

All members have same properties

In this case the following geometric properties are assumed (See Fig. 2):

\[L_2 = L\]

\[L_4 = 2 \times L\]

\[L_1 = L_3 = \sqrt{2} \times L\] (assuming the base angles as 45 degrees - see Fig. 2)

All four members are supposed to have same modulus of elasticity (E) and same cross sectional area (A).

For these assumptions, the displacement \([ D]\) is given as,

\[
\{ D \} = \frac{P \times L \times (2 - \sqrt{2})}{E \times A}
\]

Where, \(E = \text{modulus of elasticity of each of the member}
\]

\(A = \text{cross sectional area of each member}
\]

\(L = \text{length of the lumber spine}
\]

Using the calculated displacement, the member forces are calculated from eq. 2. They are expressed as follows:

\[A_{M1} = A_{M3} = (2 - \sqrt{2}) \times P / 2.0 = 0.292 \times P\] (4)

\[A_{M2} = 2(2 - \sqrt{2}) \times P / 2.0 = 0.585 \times P\] (5)

\[A_{M4} = P (2 - \sqrt{2}) / (2 \times \sqrt{2}) = 0.207 \times P\] (6)

This implies the force in the lumbar spine is 58.5% of the applied load in the case of lumbar spine being connected to the guy wires. The force in lumbar spine would have been \(P\) without connecting guy wires. This indicates a reduction of 41.5% load in the lumbar spine thus reducing the vulnerability of fracture of lumbar spine.
Conclusions
A mathematical model present in the literature (McGill, 2002) has been used to calculate the forces in the lumber spine for two specific cases of all members (guy wires, lumber spine and pelvis) having same geometric and material properties. It has been shown that for the case of all members having same geometric and material properties the reduction in the force in the lumber spine for the spine-guy wire model is as much as 41.5% thus reducing the vulnerability of the spine.

A Mathematical model used for predicting correctly the winner in 2012 American Presidential elections
This paper develops a method and uses it for predicting the 2012 American Presidential elections. This prediction is based on the principles of probability and statistics. The data used is essentially the polling data from various well-known sources which is supposed to be sufficient for prediction purposes. The assumption is based on the premise that the polls will capture the pulse of the people as to how they are planning to vote in the actual Presidential election and hence if the polling is correct, the mathematical model that uses this information should predict correctly the outcome of the Presidential elections. To that extent, a mathematical dynamic model as the result of polls vary depending upon the timing of the poll and the political events occurring in the country at that time. As is well known, American elections consists of two parts – ELECTORAL COLLEGE and popularity vote. The winner of the American Presidential elections (presumably to be declared as the President of USA) is supposed to definitely get majority in the electoral college and if possible win the popularity vote. The mathematical model developed herein predicts both the winner of the electoral college as well as popularity vote. The developed model predicted with a probability of 80.54% that President Obama would win with 286 electoral votes to Romney’s 252. The actual results while proving the model correctly showed that President Obama received 332 electoral votes to Romney’s 206. The mathematical model developed as part of this study also correctly predicted that President Obama will receive 51.81% of the national 2-party popular vote to Romney’s 48.19%.