GAI International Academic Conferences Proceedings

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GAI International Academic Conferences Proceedings

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Supporting Emergent Literacy Via Infusion of Social and Emotional Learning Strategies

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Abstract

Fostering social-emotional skill learning [SEL] is critical for young children as direct evidence points out this skill development is necessary for school readiness, literacy and language development, and numeracy in school. SEL also provides the language and skills needed for managing, coping, and communicating one’s emotions. Direct instruction in SEL provides a sound emotional infrastructure that facilitates solid relationships between young children, their peers and adults. SEL development has lifelong consequences in terms of emotional intelligence, relationship building and career trajectories. These are only some of reasons to learn more about SEL: the foundation for school based success that has lifelong consequences. Research has found that social and emotional factors were among the most influential factors on student learning plus it is an effective way of changing how much and how well students learn. Research warrants a new perspective of blending these skills and highlights a range of approaches and support strategies that are designed to be time-efficient, low-cost, and integrated with academic curricula. This presentation will explore the underlying pragmatic questions related to teaching SEL competencies framed in an ongoing study with primary teachers and parent communities, including: When do we teach/model these skills or competencies? How do we teach/model these skills or competencies? What are the fundamental skills necessary for young learners? Preliminary data involving this 3-year research project will be highlighted. The presentation will provide concrete empirical evidence of the benefits of SEL and an overview of the researcher’s SEL course that was designed for adults to deliver to emergent learners.
Teaching “The Real World”: Building Student Leadership Opportunities

Anna Brichko, West Valley College, United States
Leigh Burrill, West Valley College, United States
Vicky Kalivitis, West Valley College, United States

Community colleges across the U.S. offer students a higher education via an alternative route, and serve students whose circumstances and/or academic achievement have, for one reason or another, interfered with their ability to receive a college education after high school. The community college system in California (CCC/California Community College system) is the United States’ largest system of higher education and serves over 2.1 million students at 113 colleges in the state (California Community Colleges Chancellor’s Office, 2017). Tuition in the CCC system is comparatively low alongside most other American institutions of higher learning, and community colleges admit everyone. Students pursue Associate of Arts (AA) degrees in arts and sciences, receive career training, and/or earn certification in a variety of fields, and many transfer to four-year, BA/BS degree-granting universities and colleges across the U.S.

West Valley College (WVC) is a California Community College located just to the west of Silicon Valley, in Saratoga, California, and serves over 12,000 students annually. WVC grants Associate of Arts and Sciences degrees in more than 60 degree programs, and grants certificates in over 90 career and technology programs. In the mission statement, WVC commits to supporting students “along their pathways to reach transfer and career goals in an environment of academic excellence” (“Fast Facts about WVC,” 2016).

Dr. Anna Brichko, Leigh Burrill, and Vicky Kalivitis have worked with students at West Valley College to enhance global awareness and scholarship through student participation in two ongoing global citizenship conferences: the biannual Global Citizenship and Entrepreneurship Student Conference (fall 2012 through spring 2016) and the annual F-word Global Gender Symposium (spring 2013 through spring 2017). Students who participated in these conferences have demonstrated increased involvement in their academic communities, elevated personal self-awareness and self-motivation, and enhanced leadership and organizational skills. These experiences profoundly developed their commitment to global social responsibility, manifesting in their academic pursuits and personal civic engagement.

Collected over the course of five years, the data reveals that an increased awareness of broader global issues, such as human rights and global sustainability, provides the students with ambitions and skills to become world citizens and effective advocates for social justice. Through active participation in the conferences, the students developed and enriched such skills, including self-motivation, facility in interpersonal and intercultural communication, and confidence to pursue a multitude of career pathways. By speaking with a world scope in mind, students not only learned to appreciate varied perspectives, but also became empowered as scholars and global activists. As the student-led conference discussions exhibited the participants’ respect for differing perspectives, stronger knowledge of local and international issues, and commitment to diverse communities, these scholars demonstrated progress toward global social justice.

The student participants exhibited a more mature awareness of global responsibility and a pledge to social activism. To take concrete steps towards advancing these lifelong objectives, the scholars demonstrated a dedication to their academic, extracurricular, and lifelong learning pursuits and more effective leadership skills. Not only did students report that the conferences encouraged them to “be a leader and speak up” while “listening to others and hearing them out,” but also 80% of the participants disclosed that active participation improved their organizational skills, particularly in time management, problem solving, and being able to delegate tasks. The conferences resulted in a direct
positive impact to the students’ academic careers. Students claimed that they gained the tools to succeed in their current studies and research, and felt encouraged to pursue Bachelor and Master’s programs. These gains set the students on track for successful futures in academia and diverse career fields, as well as global social justice advocates.

The challenges of working towards local and global social justice are in part due to the difficulties of communicating in complex situations. Such circumstances demand not to simply listen to another individual’s perspective, but rather to actively empathize with it in order to build a stronger connections and relationships. Through active participation at the conferences, the students asserted that they learned that “no issue is one sided,” and that the most effective solutions are multifaceted and take into account differing points of view. Furthermore, the students recognized the value of collective efforts and collaboration on a task to maintain organization, and comprehended that these skills and strategies are necessary to build rapport with their peers, present and future through active engagement outside the classroom in student conferences. By adopting these methods and advancing their communication skills, the participants felt empowered because they developed the tools to become leaders in diverse local and global communities.

As the conferences allowed students to develop greater agency in their academic studies, they also gained strides in their personal and professional development. Approximately 90% of students who actively participated or who shared their independent research by presenting in the conference forums experienced increased self-efficacy, an enhanced ability to inspire others, and an upsurge in their creativity. The following statement by one student invariably represents a universal sentiment by all participants: “this project gave me confidence, hope, and encouraged me to walk with kindness, love, and intentionality every single day.” Through active participation at the conferences, students fostered beneficial short-term and long-term professional skills, helping “to interact with managing partners in the firm, “during [the student’s] interviews,” and “to provide respectful and tailored care to [the student’s] patients.” These marks of academic, career, and personal progress undoubtedly allow the participants to be more effective citizens in local and global communities, and as advocates for social justice.

The students experienced an increased sense of self-motivation, inspired to pursue newfound interests in their education, research, and careers. While the activities in the conferences fostered teamwork among the participants, each student’s self-drive and confidence in their burgeoning skills allowed them to think independently and critically. As an essential skill for any academic and professional field, the students’ self-motivation also encourages them to be more enthusiastically open to diverse points of view and more engaged as global citizens. This sense of ambition and confidence serves as a call to direct service, dialogue, and respect within the workplace, in local institutions, and throughout global cultures.
Experiences of Bullying among Students from Refugee Backgrounds in American Urban Schools: Resistance and Coping Strategies

Shirley Sommers, Nazareth College, United States
Otieno Kisiara, Nazareth College, United States

Abstract
This paper will examine how students from refugee backgrounds resist and cope with bullying in urban high schools in the United States. Students from refugee backgrounds are often victims of both verbal and physical bullying due to their nationality, race, religion, and different cultural norms. For refugee youth, schools are important arenas for their acculturation and integration into the American society, and thus it is vital that their school experiences be understood. The paper emanates from a qualitative study conducted with twelve high school students attending urban high schools. Focus group interviews served as a data source. Students in this study reported a wide range of bullying experiences as well as multiple ways of resisting and coping with bullying. New theories of resistance and coping with bullying emerged from data. Situating the study within the context of social justice education theory which values psychological and physical safety and health of all students, the authors will delineate implications of new theories and what schools can do to combat rampant bullying of students from refugee backgrounds.

Keywords: students from refugee backgrounds, urban high schools, bullying, resistance and coping strategies
Exploring the Dynamics of the Cancer-Environment Nexus – Implications for Policy Analysis

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Abstract

Recently, health researchers have embraced the idea that exposures to hazardous chemicals are implicated in cancer and other diseases. Previously, their conclusions were more circumspect and tentative, but now several professional organizations have acknowledged associations between exposure and disease processes as legitimate concerns worthy of attention. Still, policies lag behind the professional judgement and science, and many hazardous chemicals (such as carcinogens, estrogen disruptors, etc.) continue to be present in people's environments (through consumer products and emissions), despite their implications for human health. This is without violating any laws or policies. People are now exhorted to consider their exposures and decrease them whenever possible. The web provides a tsunami of information, with sources that are both legitimate and otherwise, frustrating health care professionals who now find themselves reconciling risk (mis)perceptions on the part of patients. Interrogating the multiple disconnects in the cancer-environment nexus from a philosophical perspective reveals that underlying differences in epistemology and ontology help explain the gaps and silences observed. Analyzing the dynamics from a policy perspective shows that, in order to help maximize environmental health, policies should embrace full disclosure and labelling on all products, as well as a precautionary approach to toxicity. To foster fair and efficient risk management, regulators should examine gaps in communication and help practitioners clarify resources and responsibilities. In order to enhance ethical practice, health care practitioners should acknowledge and support people's efforts to become more informed, drawing more fully on the work of activist organizations.
Breaking the Stereotypes—Exploration of Changing Gender Roles in Australian Advertisements

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Abstract

The portrayal of gender roles in advertising across the globe is changing. According to Matthes, Prieler & Adam (2016), despite general desire of creating equality in gender roles, popular media such as television seems insistent on exhibiting gender in a very traditional way. Australian masculinity index represents well over half of the Australians driven by achievements, competition and success categorised as more masculine traits as compare to attributes such as caring and quality of life categorised as feminine (Geert-Hofstede 2017). In this paper, the author will showcases an analysis and findings of working role of the primary character of the advertisements against the stereotypical role of the same gender in general. Other factors were also considered during the analysis including an age of the character, marital status, product category, home or work settings demonstrated and interaction of the main character with others in the advert. The samples were taken from across three Australian free to air television channels on Thursday during primetime (7.30 to 9.30 pm) in the month of March 2017.

Key words: gender role reversal, gender stereotypes, advertising, television, Australian context.

An important segment used by the majority of the advertisers is gender, may it be the same they want to position their product on or the opposite. This has led many researchers to explore various gender roles in society and portray them in various forms of advertising such as television, print, outdoors and radio. In many cases, researchers have found a very stereo typical approach by advertisers to portray the roles of different gender. These roles can be very influential in society as they represent many behavioural norms. Previously, female roles were portrayed in advertising limited to house hold work, looking after children and other domestic duties whereas male roles were predominantly demonstrated more authoritative with career(Paek, Nelson, & Vilela, 2011) however, the changing role structures in family across the globe has led to break these stereotypes for many marketers in order to better position their marketing mix. Stereotyping of genders in advertising in a global context has shown downward trend recently, mainly in high masculinity countries (Eisend 2009).

Gender roles have been an implicit part of the society. Although these roles may differ among different cultures, there are consistencies in regards to how men and women are conceived to behave. Stereotyping and generalisation can be an outcome of selectivity in social recognition. The tendency to manipulate the characteristics of others until it fits one’s generalisation of that specific group of gender leads to stereotyping (Merskin, 2008)Researchers have suggested that four different components needs to be analysed in order to determine the degree of stereotype in advertising, these are personalities, physiognomies, role behaviours and occupational status displayed in the advertisement (Eisend, 2010). Stereotypes also is a reflection of an individual’s perception of specific gender in daily life, and stereotypes serve as a cognitive shortcut for efficient communication and comprehension. Research on gender role stereotyping is increasingly studied and is considered a significant subject in social psychology because it affects society by shaping and mirroring typical beliefs and values in daily life (Knoll, Eisend, and Steinhagen 2011). Many advertisers intentionally create a gender image for a specific brand by incorporating the targeted gender in an advertising as the ‘typical’ user to position and reposition products. Stereotypes become essential signalling through which advertisers can communicate a product category to the target market (Lindner 2004). Advertising is being considered as one of the most influential tools in order to portray...
stereotypical ideas that may create perceptions, gender role stereotypes in advertising influence and reinforce the stereotypical values of society (Eisend, Plagemann, and Sollwedel 2014).

Gender stereotyping, particularly for female can lead to many negative outcomes for example reduced self-dignity, restriction to self-development, reduced self-efficacy and manipulated and restricted career vision. The inclination to depict males as an authority with expertise while relegating women to the role of users and models appeared to be sustained across time in advertising. Increasing number of males in the “user” role thereby suggesting that the media may be slowly acknowledging changes in the status quo and reflecting it in their advertising (Furnham & Paltzer, 2010). As cited in Hatzithomas, Boutsocki & Puschalina (2016) during a number of occasions, the importance of cultural aspect is highlighted and the shifts in gender portrayals is the key to understanding potential shifts in power, in status quo and in socially accepted gender roles and trends (Gulas, McKeage, and Weinberger 2010).

According to Lysonski (1985; cited in Hatziyhomos ET. AL. 2016), there are a number of components that would demonstrate female stereotype such as dependency in regards to receiving protection from a male figure, needing reassurance and making some minor decisions. In some cases, a stereotypical role of a woman is being considered as a house wife, predominantly in a home setting, being a ‘good wife’ conducting all the household chores. A female stereotype is also being portrayed by their physical attractiveness, career and voice of authority. In regards to a male stereotype, Lyonski (1985; cited in Hatziyhomos ET. AL. 2016) describes the first stereotype being demonstrated by masculinity, control and as an authoritative figure. Many a times, the male stereotype is also portrayed by showing a male figure in frustration, womanizer and a professional context. Most of these variables can be grouped along with these components such as age, occupational status, background environment etc. Knoll, Eisend, and Steinhagen (2011) suggests that the ideal of gender equity primarily serves as a basis for comparison when it comes to occupational status and role behaviour due to the influence of these factors in social and cultural environment.

Stereotyping, in general sense can be perceived in a negative way however, these stereotypes allow marketers to evaluate a subject of a social category in their target market. Stereotyping, in general, has found decreasing in many western high masculinity countries (Eisend 2010). Gender stereotyping is commonly utilized within media to upgrade character characteristics and make funny circumstances. At the point when generalizations are overwhelmingly exhibit in mainstream TV programs. By utilizing women's activist hypothesis as a lens for discriminating dissection and treatment, media portrayals can be understood and separated as learning material for helping youngsters comprehend and acknowledge themselves as people instead of offering into the societal weight of similarity.

The media including television and others is the most efficient way for products to reach the public but has been criticized for rendering gender stereotypes in a negative way towards women hence shaping peoples attitude and beliefs. However, researchers have been concerned about the portrayal of gender in the different forms of media and their studies are focused on gender and occupation, their portrayal at home, their physical appearance as well as the products they represent.

Many researchers argue that gender roles and stereotyping exist due to acceptance by the society and the same is portrayed in the media however, Chaudhary (2001) advocates the depiction of stereotypical gender role in media leads to generalisation and creation of stereotypical schemas for gender roles. According to Kim & Lowry (2005) consumers of a certain product are usually exposed to a social reward hence, if an advertisement draws heavily upon stereotypes, it is likely to be pursued in the same manner in the society. Many marketers believe to focus on specific gender in order to target their customer. In some cases women are considered as primary decision makers as they are believed to have higher power (Orth, &. Holancova, 2004). Many argue that portrayal of men and women differently can be traced back to our societies where such discrimination can be noticed easily, and finally transferred to the advertisement scene. Browne (1998) analysed gender stereotyping in television commercials in Australia and in the United States and the findings of the study were similar to previous studies done by Macklin & Kolbe (1984); McArthur & Eisen (1976); Sternglanz & Serbin (1974). According to Jung and Lee (2006) there is a favourcable effect of using cross-gender approach in order to achieve higher level of targeting for both parent brand and additional the cross-gender brand. Ulrich (2013) investigates the effect of gender role attitudes on the
evaluation of the cross-gender brand extension. The author shows that the attitudes of consumers who uphold more traditional gender roles are less favourable than the attitudes of consumers who uphold more liberal gender roles suggesting a reluctance to accept the extension of the cross-gender brands.

**Methodology**

A $1 million world-first study involving advertisers such as Unilever, Pfizer and Kimberly-Clark shows that TV creates by far the best return on investment for fast moving consumer goods (FMCG) brands in Australia.(Think TV n.d.). Roy Morgan Research (cited in Screen Australia 2016) identifies, the vast majority of people – regardless of segment – watched some commercial free-to-air TV on a normal weekday. According to the same data, 33.5% viewers in weekdays were identified as high viewers (More than 4 hours). According to Screen Australia (2016), women spent more time viewing free-to-air television in the evenings (6pm-midnight) than men in both metropolitan and regional markets. OzTAM reports (cited in Screen Australia 2016) in 2016, average number of hours spent by men viewing television in primetime are 1.28(hr) compared to 1.41 by females as compare to 111 minutes by men and 136 minutes by the female in 2009 (Australian Bureau of Statistics 2009 ). According to Free TV Australia report (2016) 94.2% Australians access free to air television channels as one of their major media for entertainment. The report further elaborates that 13.2 million Australians watch free to air TV every day. This clearly indicates the popularity of free to air television in Australia. In order to maintain validity and reliability, the author randomly selected five different Television Commercials (TVC).

This study is an exploratory study to establish a base line of gender role portrayals in Australian Free-to-air TVCs. According to The Inspiration Room (2017), Australian male stereotype portrayal include, Beers, cars, sports, surfing and irresponsible home maker or care taker whereas, female stereotypes include caregiver, honest, inclusive and home maker. The analysis of selected samples will be conducted in an interpretive content analysis method. This method can also serves theory development when a theoretical perspective drives the data collection without the intention of generalising to a larger population (Ford ET.AL. 1998). The samples were taken from across three Australian free to air television channels on Thursday during primetime (7.30 to 9.30 pm) in the month of March 2017. Freeview is the free digital television service in Australia launched in 2008. Freeview represents and promotes more than 25 free-to-air television channels across the nation (Freeview reference). This means most advertisers like to promote their products and services on Freeview in order to reach the broader audience. After the samples were selected, they were re-visited by the author via internet in regards to analyse them in depth. The samples were compared on the following basis.

**Age:** This variable displays an age of the primary character. According to Knoll & Eisend (2011), marketers usually use older men and younger female which leads to a stereotypical portrayal.

**Product type:** This variable refers to the actual offering by the advertiser. This variable would assist to determine the target market and possible user of the product. It also helps to analyse the primary decision maker in the setting.

**Gender of primary character:** This describes the gender- male, female or other in the primary role of the sample TVCs.

**Stereotypical role of the gender:** This is a description of socially accepted and expected role of the central figure in everyday settings. Here, stereotypical role of a female is described by engagement in household activities, looking after children and being dependent on a masculine character. Male stereotype is usually engaged in career, occupation and authoritative figure.

**Actual role:** This refers to the portrayal of a specific gender which is of a lead character in the TVC.

**Findings and Analysis**

According to Geert-Hofstede (2017), the score of Australian in Hofstede’s model is 61 on the dimension of masculinity, this means that majority of the society is considered a “Masculine” society. Behaviour in school, work, and play are based on the shared values that people should “strive to be the best they can be” and that “the winner takes all”. Australians are proud of their successes and achievements in life, and it offers a basis for hiring and promotion decisions in the workplace.
Conflicts are resolved at the individual level and the goal is to win. The same theme is visible through all the TVC chose for this analysis. Following is a comprehensive table discussing major components of analysis. In regards to the age of the primary character, there is a common trend visible in all chosen advertisement of an age range of 28-40 years. The common settings displayed in three out of five TVCs are of a house hold settings such as family home, kitchen, front yard etc. where as in other two TVCs, the settings are predominantly outdoors- motor vehicles and on roads are the results of specific product offering by the company. Supportive characters in all the samples are of varied gender including male and female.

<table>
<thead>
<tr>
<th>Brand</th>
<th>Type of Product/service</th>
<th>Gender of Primary character</th>
<th>Gender Stereotypical role</th>
<th>Actual role</th>
</tr>
</thead>
<tbody>
<tr>
<td>Latina fresh</td>
<td>Ready to cook meals</td>
<td>Male</td>
<td>Working</td>
<td>Staying home father looking after two girls</td>
</tr>
<tr>
<td>Motor Accident Commission of South Australia</td>
<td>Road Safety Awareness</td>
<td>Male</td>
<td>Driver</td>
<td>Fairy</td>
</tr>
<tr>
<td>Ryobi Appendix-3</td>
<td>Trade tools</td>
<td>Female</td>
<td>Mother/domestic duties</td>
<td>Engaged in DIY tea table.</td>
</tr>
<tr>
<td>Vax vacuum Cleaners Appendix-4</td>
<td>Appliances</td>
<td>Female</td>
<td>Mother/domestic</td>
<td>Domestic role of cleaning</td>
</tr>
<tr>
<td>AAMI Insurance Appendix-5</td>
<td>Road side assist</td>
<td>Male/transgender</td>
<td>Masculine</td>
<td>Queer</td>
</tr>
</tbody>
</table>

In regards to dialogues and voice overs, MAC of SA TVC and AAMI insurance are the samples where the main characters are actively involved in a dialogue, others have used voice over. Despite of the fact that the primary character in Ryobi TVC is a female and decision making authority is also the same, the voice over still represents the male voice. Contrary to that, VAX TVC which displays a stereotypical gender role of a female is using the same gender-female voice over. The analysis of voice over comparing with the gender of lead character is given below. The author identifies in both of the above discussed products, there is an equality baseline in sharing of power in decision making for such product categories.

<table>
<thead>
<tr>
<th>Brand</th>
<th>Type of Product/service</th>
<th>Gender of Primary character</th>
<th>Dialogues/voice over(VO)</th>
<th>Gender for VO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Latina fresh</td>
<td>Ready to cook meals</td>
<td>Male</td>
<td>Voice Over</td>
<td>Male</td>
</tr>
<tr>
<td>Motor Accident Commission of South Australia</td>
<td>Road Safety Awareness</td>
<td>Male</td>
<td>Dialogue</td>
<td>Male</td>
</tr>
<tr>
<td>Ryobi</td>
<td>Trade tools</td>
<td>Female</td>
<td>Voice Over</td>
<td>Male</td>
</tr>
<tr>
<td>Vax vacuum Cleaners</td>
<td>Appliances</td>
<td>Female</td>
<td>Voice Over</td>
<td>Female</td>
</tr>
<tr>
<td>AAMI Insurance</td>
<td>Road side assist</td>
<td>Male/transgender</td>
<td>Dialogue</td>
<td>Male/female</td>
</tr>
</tbody>
</table>

In the sample advertisement chosen, three out of five shows male primary characters and two TVCs are showing female primary roles. All the primary characters where shown in to a household setting except AAMI insurance where due to nature of the product- road side assist, primary characters were shown in outdoor settings. According to Matthes, Prieler & Adam (2016) general assumption for the female primary characters are to be more likely engaged in feminine products such as personal hygiene, beauty products and cleaning products whereas the male primary characters are associated with telecommunication, electronics etc. This clearly relates to the stereotypical nature of
advertisement (Hatzithomas, Boutsouki & Paschalina, 2016). This stereotype is visible in VAX vacuum cleaners TVC where the father (Masculine supportive character) is leaving house with kids while the mother (Feminine lead character) returns to home and starts cleaning- mess made by rest of the family. Contrarily, in Latina fresh TVC, the primary character of the male is exhibiting stayed home Dad whereas the supportive character of the female is portraying traveling/career oriented female which clearly breaks the stereotypes of gender roles in contemporary families in Australia. This is supported by Zotos & Garu (2016) advocating the use of masculinity theories in order to evaluate gender stereotypes.

Zotos and Tsichla (2014) suggests that the images of women have changed very modestly over time. Advertisers have been largely portraying women in traditional roles (Klassen, Jasper, and Schwartz 1993), in non-working roles and as having limited purchasing power. Women are portrayed mainly in decorative non-functional capacities and are predominantly shown as housewives or concerned with their physical attractiveness. Sexism is prevailing not only in traditional media (Theodoridis et al. 2013; Zimmerman and Dahlberg 2008) but also in the context of online. Previous research suggests that products with a feminine image include dishwashing liquid, wine, and hairspray, whereas masculine-perceived products include lawnmowers, paint, and beer (Lien, Chou, and Chang 2012). However, as women’s social status has evolved, increasing research has studied the diversity of the portrayal of women’s roles in media and advertising. This is clearly evident in the Ryobi TVC where the lead character is predominantly breaking such stereotype by engaging in a DIY trade project and successfully completing it.

Specifically, in the case of AAMI insurance, primary characters are portrayed as Drag Queens or “Queer”. There are a number of TVCs in the western world covering a range of non-stereotypical gender (NSTG) representation (Chu, Lee & Kim, 2015). This TVC fits in to a very positive portrayal of NSTG in advertising. Drag queens are portrayed as men with exaggerated effeminate mannerisms who impersonate women. This TVC incorporates transgender people in everyday situations, not as a punch line, but with acceptance as a twist. However, this some marketers fear that using the lesbian/Gay/Bisexual/Transgender/Queer (LGBTQ) may result in to alienating other heterosexual consumers (Greenlee 2004 cited in Zotos & Garu 2016). Comparing the same with MAC of SA TVC of ‘the hairy fairy’, are male-to-females, who are typically depicted as "deceptive" if they pass as women, or "frightening” if they do not. "Bad drag" refers to intentionally unconvincing straight men half-dressed as women, such as a man wearing wigs and moustache simultaneously. This type of person is often used as a joke or with a mock-subversive motive like spying (Human Rights Campaign 2017). In MAC of SA TVC, the representation of a ‘Hairy Fairy’ is by a heavily masculine men with beared wearing a feminine clothes warning different drivers of speed limits and consequences of over-speeding. Despite completely opposite portrayal of the NSTG in both the advertisement, it successfully conveys the message for MAC of SA, road safety and for AAMI insurance, road side assists for every customer despite their gender or sexual preferences.

Limitations

The study has several limitations, one being seasonal bias. The observations of TVC were conducted in the month of March which is closer to Mothers’ Day. This may have impacted in regards to comparability of the central character of the TVC in regards to age, domestic role and settings. Further limitation can be prevail in regards to perpetuate stereotypical/non-stereotypical portrayals of women in terms of age as more and more advertisers are focusing on young/middle age women in general (Milner & Higgs 2004)

Another limitation of this study is the chosen method of analysis- content analysis. This is more of a qualitative analysis and does not provide any statistical outcomes. It also is restricted while providing rationales for the data (Urney & Burnaz, 2003). Furthermore, important variables such as cultural context, and disposable income of the target segment were not considered in the analysis.
Conclusion

The above analysis of five free to air television commercials reveals that the trend of breaking stereotypes in gender roles is visible by Australian marketers. This is an outcome of the analysis which indicates that the marketers are strongly engaged in using non-stereotypical genders in commercials including ‘Drag Queens’, use of non-stereotypical voice overs and display of primary character in a non-stereotypical social and cultural role including decision making, occupation and profession, acceptance of domestic and social roles by opposite and non-conventional gender and financial independence.

The objective behind studying gender stereotyping in advertisements was to identify the perceptions of marketers of varied gender roles and how they display their perception in order to target their existing and potential consumers. The study also explored the co-relation between these pursued gender roles and manifestation of gender development in the Australian context. The analysis has revealed that the masculine traits such as independence, responsibility energy, ambition and ruggedness are visible in female lead characters in Australian advertisement and the feminie traits such as care, compassion, modesty devotion and worrying are also visible in the male lead characters in Australian TVC. This may be a contribution of broader environmental factors such as multiculturism, government legislations such as Equal Employment Opportunities and Anti-discrimination act or micro factors such as dynamism visible in modern family structures and roles of different gender within family (Zotos & Garu, 2016)

It can be concluded that advertising is either a reflection of changing beliefs and values in a society or the change is in a society are shaped and influenced by advertising. (Knoll & Steinhagen 2011) Which of these perspectives applies, or whether the relationship follows a two-way path, cannot be answered by single source data from cross-sectional content analysis and remains an issue for further research.
References


Appendix- 1

Latina fresh meals <https://www.youtube.com/watch?v=d1ypH1uWDU>
Appendix-2
Motor Accident Commission (MAC) of South Australia
<https://www.youtube.com/watch?v=ZgjIgLgKNqMc>
Appendix-3
Ryobi < https://www.facebook.com/RyobiANZ/videos/1481156938621816/ >
Appendix-4

Vax vacuum cleaner <https://www.youtube.com/watch?v=YvzUb4NZ74U>
Appendix-5

AAMI < https://www.youtube.com/watch?v=mBZ9gYqPCsU >
The Politics of Persistence: Life Stories of Pakistani Women in Positions of Professional Authority

Rosetta Cohen, Smith College, United States
Julie Davis, Institute for Training & Development, United States

This study considers the lives of five professionally successful Pakistani women and the route they have taken to achieve their status within a culture that is often not hospitable to ambitious women. The five subjects, who represent a cross-section of ethnic and socio-economic backgrounds, and who come from both rural and urban regions of the country, reflect in their successes the range of barriers and opportunities available to contemporary women in Pakistan. The goal of our research is to describe the lives of these women, drawing largely on their own spoken experience, and then to note points of overlap and difference, and to raise questions that resonate more widely across cultures where female empowerment has been thwarted: How important is the role of parents in igniting and supporting the ambition of daughters? How are childrearing and household responsibilities allocated in families where women hold positions of authority and where women’s salaries help sustain the family lifestyle? As case studies, these five portraits preclude generalization, but we contend that the themes that emerge from their stories are suggestive of larger issues and trends, and that by considering the life experiences of individual women—by listening to their voices—policy-makers can achieve a better sense of where and how reforms might improve conditions for intelligent and ambitious women in all developing countries.

The subjects in this study are all women holding authoritative positions in the vocational/technical education field in Pakistan, and who have distinguished themselves sufficiently to win a fellowship sponsored by the U.S. Department of State for a program conducted by the Institute for Training and Development, a private nonprofit organization in Amherst, MA. The program, part of the U.S. practice of “soft diplomacy,” brought to the U.S. educational administrators from government agencies or technical/vocational institutions around Pakistan. Program Officers on the ground in Pakistan noted that female institutional leaders were rare within the sector of technical education, and that women selected were among a handful of female administrators, nationwide. While there has been considerable research and study of education in the developing world, and women’s access in particular, very few studies have considered the lives and work of Muslim women who have moved beyond graduate school and into the workplace (Amhad 2001; Kettley 2007; Rasheed and Bagheri 2009).

1 (Rahat Karim, Program Officer)
Work Meaningfulness – Have the Academics Lost It

Miranda J.C, Victoria University, Australia
Sillitoe J, Deakin University, Australia
Vu J, Victoria University, Australia

Abstract
Change is the only constant is an old beaten up phrase yet cannot be further than the reality in the education sector especially to the academic. Musselin (2007), highlights that the academic profession has always been responsive and adaptive to the external environment resulting in some writers making claims that there is a ‘crisis of the professoriate’ (p1). This is not a new claim, in fact Nixon (1996) has already highlighted that the higher education was facing a crisis of professional self-identity due to overlapping changes affecting how institutions and its employees are functioning. Though not new, writers now have highlighted a new urgency, citing Australia as a case in point. Coates and Goedegebure (2012) note that ‘making’ of academics takes almost a decade but many PhD holders now prefer to work outside the education sector or move abroad for overseas teaching assignments leaving the education sector with a large number of ageing workforce that are nearing retirement. This study aims to explore how changes have affected the academics, if they have lost the feeling of work meaningfulness. By bringing these issues to the forefront, this study will give university managements insights into academics’ plights which they can use to implement appropriate strategies in the running of their universities. The knowledge from this study will also add to the literature on impacts of change to the academia. Academics from universities in Melbourne, Australia were interviewed on a one on one interview sessions. The outcome of the interviews were analysed and the findings are presented.

Keywords: Academic profession, work meaningfulness, higher education, university management.
Creating Trust ICT Business Models by Three Types of Asymmetries: Based on Disruptive Innovation Theory

Song Minzheong, Hansei University, South Korea

Introduction

For creating ‘trust’ based Internet business market environment, this study is firstly interested in ‘trust information and communication technology (hereafter trust ICT)’. It refers to the ICT which has trustworthiness. Many firms already see and manage high volumes of security incidents, breaches, malware, and hackers and early security offerings tended to focus on the network (e.g. WAN and Internet service security) and such managed security services are expanding now into other areas like Internet data, mobile, web, and cloud-based ICT, Internet of things (hereafter IoT) services and business models.

Confronting fourth industrial revolution, people are connected to others and with things as well, and expect always-on connectivity. It is expected to see trust ICT solutions from whole value chain of the ICT ecosystem, not only devices and networks, but also applications and services. The European Union (EU)’s focus on trust & security in “Europe 2020 Strategy,” researches about the trust in projects of FP7’s UTrustIT, ABC4Trust, and USA’s application of trust & security on industry level (NIST & DARPA), research about trust technology in projects like “Smart America,” and HACMS are verifying the importance of the trust and security in the emerging business models in e-commerce, social network service (SNS), IoT services and so on.

In business area, some leading firms are pursuing the same way in financial technology (Fintech) area. Despite of such efforts of leading companies, recent big data business models are not trusted by consumers. There is ‘mistrust’ in e-commerce, cell phone, SNS, tele-health, and so on. Some companies launched permission-based business models to use personal data, a more sustainable strategy to put consumers in control of their personal data. It is a kind of disruptive innovation in the new market.

Therefore, trust ICT based business model is a good strategic positioning that builds trust with Internet consumers by enabling them to control and leverage their own personal data. In doing so, trust ICT based business model gives Internet service providers a sustainable business strategy for disrupting current big data business model, as well as delivering a permission-based personal data services. The trust ICT based business model is a game-changing disruptive strategy that enables firms using big data to provide incremental trust improvements to existing big data deployment. To exploit customer data more comprehensively, businesses must develop a much greater level of trust with their customers.

So, the primary concern of this study is to overcome the gap between the personal controllability of privacy and business benefits of information service in terms of human and information service related trust. In fact, before IoT world, people only think of the trust regarding human-human or human-service (information) relationship. In the 4th industrial revolution, trust issue is occurring not only in human-human, but also in machine-machine and human-machine and vice versa.

Therefore, the purpose of this study is to present trust ICT business models, not only to allow people to maintain control and receive the information and social network service benefit, but also to be connected safely with IoTs and physical networks. For this, it firstly will define trust and trust ICT and discuss the disruptive innovation as theoretical background. With this backdrop, it will formulate the analysis framework for creating the trust ICT business models by three types of asymmetries and analyze the business model characteristics and related use cases with new market disruption.
Acknowledgments
This work was supported by the ICT R&D program of MSIP/IITP. [R0190-15-2027, Development of TII (Trusted Information Infrastructure) S/W Framework for Realizing Trustworthy IoT Eco-system]
The analysis framework of this academic paper has been presented in SG 13 regular meeting of ITU-T on Oct. 17, and Dec. 3, 2015 in Geneva.

THE CONCEPT OF TRUST AND TRUST ICT

1. Concept of trust
According to Wikipedia retrieved on Aug. 28, 2016, trust is related to the emotion and in social contexts, trust has several connotations [McKnight & Chervany 1996]. Definitions of trust [Mayer et al. 1995] [Bamberger 2010] typically refer to a situation characterized by the following aspects: One party (trustor) is willing to rely on the actions of another party (trustee); the situation is directed to the future. In addition, the trustor (voluntarily or forcedly) abandons control over the actions performed by the trustee. The trustor is uncertain about the outcome of the other’s actions; they can only develop and evaluate expectations. The uncertainty involves the risk of failure to the trustor, if the trustee will not behave as desired.

2. Concept of trust ICT
According to Mayer et al. (1995), human/service-related trust is beliefs that the other party has suitable attributes for performing as expected in a specific situation irrespective of the ability to monitor or control that other party. This human/service-related trust has three components of integrity, ability and benevolence. The integrity refers to the beliefs that the trustee adheres to a set of principles that the trustor finds acceptable. The ability is the beliefs that the trustee has the group of ability, skills and characteristics that enable them to have influence within some specific domain [Mayer et al. 1995, McKnight et al. 2002]. Lastly, the benevolence is the beliefs that the trustee will want to do good to the trustor, aside from an egocentric profit motive.

Nine years later, McKnight et al. (2011) defined system/network-related trust. It is the beliefs that specific technology has the attributes necessary to perform as expected in given situation in which negative consequences are possible. It also has three components of reliability, functionality, and helpfulness. The reliability means beliefs that the specific technology will consistently operate properly. The functionality is beliefs that the specific technology has the capability, functionality, or features to do for one what one needs to be done. The helpfulness is beliefs that the specific technology provides adequate and responsive help for users.

During the last decade, the trust ICT has been extended from human/service to system/network relation as IoT world is emerging. The trust ICT before IoT world has been viewed as a subjective expectation that an entity predicts about other entity’s future behavior. However, the trust ICT in IoT world can be viewed as the expecting performances that a thing or a system will accomplish a given task in an expected manner to fulfill its intended purpose.

In the new ICT environment with IoT, “trust provisioning is an integral function for the physical, cyber, and social trust which provides a valuable method to minimize the risks through identifying trust characteristics of entities” by ‘New Recommendation ITU-T Y.3052’ (Apr. 2017). According to this ITU-T recommendation, using trust provisioning, it can develop trust ICT for better quality of services and experience by minimizing risks. The trust attributes of the trust worlds can be divided into the direct and indirect trust, because the trust can affect the preference of an entity to consume a specific information, solution, and network service offered by another entity. Those services can include security and privacy.

Coming from security perspective, the trust ICT is the expectation that a system or solution will faithfully behave in a specific manner to fulfill its intended purpose. It means, the physical and cyber trust is generally supported by software- and hardware-based solutions. The trustworthiness attributes categorized by Mayer et al. (1995) and by McKnight et al. (2011) are suitable for these: Ability, integrity, benevolence, reliability, functionality, and helpfulness. Those attributes represent trustworthiness, which can be applied to ICT infrastructures.
Many attributes have been clustered into three main attributes of ability, integrity, and benevolence by ‘New Recommendation ITU-T Y.3052’ as follows: The ability enables an entity to have influence within some specific contexts. It is specific because the trustee may be highly competent in some technical area, affording that person is trusted on tasks related to that specific area. The sub-attributes related to this are robustness, safety, stability, scalability, and reliability. The integrity is the quality of being honest and fair in the social world and the state of being complete in cyber and physical worlds. In terms of information, integrity means that information of an object is prevented from being modified. The sub-attributes related to this include completeness, consistency, accuracy, certainty, and recency. The benevolence is the desire to do well to others, working together for a common benefit when trustor has an interaction with trustee. It is also the extent to which a trustee is believed to do good to the trustor. The sub-attributes related to this are availability, assurance, relevance, and credibility.

On the other hand, coming from privacy perspective, the trust is a more subjective expectation that an entity has about another’s future behavior. This is indirect trust. It is formed from the judgment about the context and third party reputations or recommendations. It is derived from the experience gained through previous interactions with the trustee and the recommendation gained through the global reviews on the trustee. This is important in a circumstance where information to estimate trustworthiness attributes are not available at first-hand.

The experience is a personal observation considering only interactions from a trustor to a trustee. It is achieved by accumulating state of the interactions among entities over time. The reputation is a public assessment of the trustor regarding the trustee’s prior behavior and performance and it is evaluated based on accumulated experiences of trustors about the trustee. To acquire trust information based on the reputation of a trustee, two kinds of information are necessary to examine: The previous trust transactions from all entities to the trustee; and the relationship between a trustor to the trustee.

**THEORETICAL BACKGROUND AND RESEARCH QUESTIONS**

1. **Disruptive innovation**

The primary concern and motivation to take the disruptive innovation as theoretical background is to try to overcome the gap between the personal controllability of privacy and business benefits of Internet information service. However, the purpose of this study is to extend to present trust ICT based business models from allowing people to maintain control and receiving the information service benefit to being connected safely with IoTs.

For this study, it firstly chose the trust ICT attributes and now propose the new market disruption model to make minimize the imbalance of current Internet business environment. There are three innovation models to creating new-growth businesses: Sustaining innovation, low-end disruption, and new market disruption [Christensen & Raynor 2003]. The sustaining innovation does not create new markets or value networks but rather only evolves existing ones with better value, allowing the firms within to compete against each other's sustaining improvements.

However, disruptive innovation creates a new market by applying a different set of values, which ultimately (and unexpectedly) overtakes an existing market. There are two types: The low-end disruption targets customers who do not need the full performance valued by customers at the high end of the market. The new market disruption targets customers who have needs that were previously unserved by existing incumbents. The characteristics of each innovation models are presented in Table 1.
Table 1. Three approaches to creating new-growth businesses

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Sustaining innovations</th>
<th>Low-end disruption</th>
<th>New market disruption</th>
</tr>
</thead>
<tbody>
<tr>
<td>Targeted performance of the product or service</td>
<td>Performance improvement in attributes most valued by the industry’s most demanding customers. These improvements may be incremental or break-through in character.</td>
<td>Performance that is good enough along the traditional metrics of performance at the low end of the mainstream market.</td>
<td>Lower performance in “traditional” attributes, but improved performance in new attributes – typically simplicity and convenience.</td>
</tr>
<tr>
<td>Targeted customer or market application</td>
<td>The most attractive (i.e., profitable) customers in the mainstream markets who are willing to pay for improved performance.</td>
<td>Over-served customers in the low end of the mainstream market.</td>
<td>Targets non-consumption: customers who historically lacked the money or skill to buy and use the product.</td>
</tr>
<tr>
<td>Impact on the required business model (processes and cost structure)</td>
<td>Improves or maintains profit margins by exploiting the existing processes and cost structure, and making better use of current competitive advantages</td>
<td>Utilizes a new operating or financial approach or both, a different combination of lower gross profit margins and higher asset utilization that can earn attractive returns at the discount prices required to win business at the low end of the market.</td>
<td>Business model must make money at lower price per unit sold, and at unit production volumes that initially will be small. Gross margin dollars per unit sold will be significantly lower.</td>
</tr>
</tbody>
</table>

Source: Christensen & Raynor 2003: 51

2. Research questions

There are some mistrust drivers. The first driver is privacy infringements and errors. The endless supply of so-called big brother stories is slowly shifting people’s views on privacy and personal data, making them more open to tracking blockers and privacy products. Government agencies program used to collect Internet users’ material, including searches, the content of emails, file transfers, IMs, and live chats. This puts the “Safe Harbor” agreement with the EU at risk. In company level, corporate annexation of consumer rights can be as easy as a new sentence in a company’s privacy policy.

The second mistrust driver is security breaches. The growing regularity of news reports about online security breaches is likely to lead a higher proportion of the population to change their behavior. Consumers are now looking for improved security, providing richer opportunities for security and privacy player, and increasingly both combined.

The third mistrust driver is government mass surveillance. The Prism revelations provide users worldwide with tangible evidence that comprehensive, population-wide surveillance is systemic in many countries. The surveillance covers every medium, and has been almost totally outsourced to a dozen of the Internet majors.

In the middle of this mistrust, there is an imbalance of power online. For instance, in the corporation side, there are information overload, sophisticated analytics, contract control (manipulation), transaction clarity, vendor price reference, data control and so on. On the other hand, in the consumer side, there is information scarcity, no contract control, transaction obscurity, now consumer price reference, no data power, and so on. Such asymmetries of the Internet give the firms power over consumers. They put individuals at a natural disadvantage, and mistrust can result. These asymmetric foundations, while mostly invisible to the user at the moment, will be built on by applications and services that will increasingly reflect the significant imbalances of Internet power.
The result of ‘mistrust’ is the “asymmetric Internet.” In information asymmetries, firms have an overload of user information, but consumers suffer information scarcity in terms of their own data. In solution asymmetries, the firms have sophisticated analytics for optimizing customer lifetime value, but consumers have no analytics for minimizing vendor lifetime cost. In control asymmetries, consumers are comparatively powerless to control the collection and use of their personal data, firms and governments have all the control.

Table 2. Three types of asymmetries in big data business model

<table>
<thead>
<tr>
<th>Types</th>
<th>Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information &amp; Service</td>
<td>• Corporations have an overload of user information,</td>
</tr>
<tr>
<td>(Price/Transaction) Asymmetries</td>
<td>but consumers suffer information scarcity in terms of their own data and</td>
</tr>
<tr>
<td></td>
<td>that relating to corporations</td>
</tr>
<tr>
<td></td>
<td>• Corporations know the costs and decide the price in terms of personal data currency,</td>
</tr>
<tr>
<td></td>
<td>but consumers have no price reference point for or clear perceived value of</td>
</tr>
<tr>
<td></td>
<td>many online services.</td>
</tr>
<tr>
<td></td>
<td>• Corporations decide what services to offer and what data to take,</td>
</tr>
<tr>
<td></td>
<td>but consumers don’t know what amount of personal data is fair trade for</td>
</tr>
<tr>
<td></td>
<td>what amount of services.</td>
</tr>
<tr>
<td>Solution Asymmetries</td>
<td>• Corporations have sophisticated data analytics for optimizing customer lifetime value,</td>
</tr>
<tr>
<td></td>
<td>but consumers have no data analytics for minimizing vendor lifetime cost,</td>
</tr>
<tr>
<td></td>
<td>which is the flip side of customer lifetime value.</td>
</tr>
<tr>
<td>Control Asymmetries</td>
<td>• Corporations have all the control of devices, sensors, and related data collection and use,</td>
</tr>
<tr>
<td></td>
<td>but consumers are comparatively powerless to control of those.</td>
</tr>
</tbody>
</table>

Source: Little 2003; Recitation and reconstructed in this paper

Trust ICT business model is a positional building trust not only with consumers by defending their privacy economy and by enabling their control of their own devices and data, but also making ecosystem with business partners by defending their sharing economy and by enabling their creation of their products and services. In doing so, trust ICT gives related companies a new business strategy for disrupting the legacy economy and delivers a more high-quality, permission-based data ecosystem and profitable services with trust attributes such as integrity, ability, benevolence, experience and reputation.

The framework for analyzing trust ICT business model cases is proposed as table 3. This framework is focusing on industrial background of three major asymmetries like information asymmetries in product and service level, solution asymmetries in software level, and control asymmetries in hardware and network level.
Table 3. Analysis framework: New market disruption and three asymmetries

<table>
<thead>
<tr>
<th>Three Asymmetries of Internet</th>
<th>Representative Risks of Social, Cyber, and Physical world</th>
<th>Trust attributes of characteristics of new market disruption</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information</td>
<td>Risks in Social world</td>
<td>• Simplicity and convenience</td>
</tr>
<tr>
<td></td>
<td>- Private information on SNS is propagated to others.</td>
<td>- Experience</td>
</tr>
<tr>
<td></td>
<td>- AI (Artificial Intelligence) &amp; social IoT mimic human.</td>
<td>- Reputation</td>
</tr>
<tr>
<td></td>
<td>Solution</td>
<td>• Lack of the money or the skill</td>
</tr>
<tr>
<td></td>
<td>- Big data analytics can pose critical privacy issue.</td>
<td>- Experience</td>
</tr>
<tr>
<td></td>
<td>- Abused use of consumer data for data analytics</td>
<td>- Ability</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>• Making money at lower price per unit sold</td>
</tr>
<tr>
<td></td>
<td>- Components are resource-constrained, computation-limited.</td>
<td>- Ability</td>
</tr>
<tr>
<td></td>
<td>- Poor security mechanisms are attacked easily.</td>
<td>- Integrity</td>
</tr>
<tr>
<td></td>
<td>- Devices, sensors, data collection and use are not recognized by user.</td>
<td>- Benevolence</td>
</tr>
</tbody>
</table>

RESEARCH RESULT

In table 4, trust ICT business models by three asymmetries of Internet and examples are proposed. Table 4. Trust ICT business models by three asymmetries of Internet

<table>
<thead>
<tr>
<th>Asymmetries of Internet</th>
<th>New market disruption related trust ICT business models with use cases</th>
<th>Product &amp; Service</th>
<th>Customer &amp; Market</th>
<th>Process optimization(B2B)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information Asymmetries</td>
<td>1) Ephemeral messaging app: TigerText, Snapchat, Ansa, BBM, Burn Note, Periscope, Bolt(Instagram), Meerkat, Clipchat, CyberDust, Mirage, Silent Text, Stories(Facebook)</td>
<td>2) Consumer reputation Management: Reputation.com(former ReputationDefender), IntegrityDefender..</td>
<td>3) ID management(B2B): UnboundID, SecureKey.</td>
<td></td>
</tr>
<tr>
<td>Social trust</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cyber trust</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control Asymmetries</td>
<td>7) Device &amp; companion app: Door Lock (UniKey Door), Health &amp; Diet (Happy Fork), Hygiene (Zubo)...</td>
<td>8) Consumer cloud storage Management: Dropbox</td>
<td>9) Cloud management(B2B): OnApp, Orange Le Cloud, BT Assure Ethical Hacking for Finance, Here (Nokia)..</td>
<td></td>
</tr>
<tr>
<td>Physical trust</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

To solve the problem of information asymmetries, ephemeral messaging application, reputation related services and ID management solutions are recommended. In ephemeral messaging services,
messages are deleted and disappeared after recipients read them. As of July 2015, there have been lots of similar business models as it shows in table 5.

Table 5. Ephmeral messaging applications: Not necessarily mean ‘secure’

<table>
<thead>
<tr>
<th>Company/Feat</th>
<th>SMS/IM</th>
<th>Photos</th>
<th>Videos</th>
<th>Files</th>
<th>Stickers</th>
<th>Location</th>
<th>Live-streaming</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ansar</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>BBM</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Burn Note</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Bolt (Instagram)</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Clipchat</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Contody</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Cyber Dust</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Meerkat</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Mirage</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Pentscope</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Silent Text</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Slingchat</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
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<tr>
<td>Snapchat</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>TickerText</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>ViciR</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Yovo</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

Source: Clark-Dickson, P. (July 28, 2015). Ephmeral Messaging: Beyond Snapchat

The reputation services provide privacy and reputation management for private individuals, their families and their businesses. After the first business model ‘reputation.com’ in 2006, lots of the similar reputation management applications came to the market. There have been top 25 services in the world as of February 2013 as it shows in table 6.

Table 6. Top 25 free or cheap reputation management Web apps

Lastly, for optimization of business model process, the ID management solution is valid as software as a service and it provides simplified identification methods using various technologies such as simple PIN code, one time password, etc. Several large vendors are offering telco-specific identity management products and solutions. Trusted brokers of information between e-commerce providers and customers. UnboundID is one of them to offer a solution that addresses data privacy to help telecommunication companies monetize identity data and build new revenue models around this information, as it shows in Figure 1.

Figure 1. The service mechanism of UnboundID

Source: Bali, S. (2013. 5.5). Telcos: Leveraging trust through Privacy management, OVUM

To solve the problem of solution asymmetries, email data management, consumer IoT data management, and IoT management for companies are recommended. Email service provides security and privacy email exchange methods using cryptographic technologies. In terms of email management, a Swiss application service, MyKolab offers a lite (and less expensive) version of its services, starting around $5 per month. By early December 2013, it even began accepting Bitcoin as payment for user convenience. In Switzerland, abusing data is a criminal offence, no exceptions. Even if the CEO of a hosting business would learn of abuse among their staff and not report it to the proper authorities, they would likely look at jail time. Unlike in the US, all requests must go through a judge and be publicly documented in anonymized form and with proper attribution to the criminal code. Secret service has been explicitly stripped of all powers inside the country and there is no other legal way for foreign powers to obtain the data than through the international assistance treaties where requests for information must hold up under Swiss law.

The consumer IoT data management services and companies can be exemplified in connected home business model in the areas of automation, security, and energy efficiency as it shows in table 7. Nest Labs acquired by Google is a good use case as connected thermostat with remote control capabilities.
Table 7. Consumer IoT data management in the connected home industry

<table>
<thead>
<tr>
<th>Model</th>
<th>Category</th>
<th>Description</th>
<th>Illustrative companies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Home Automation</td>
<td></td>
<td>Multi-purpose home automation devices</td>
<td>Smart Things, INSTEON</td>
</tr>
<tr>
<td>Home Lighting</td>
<td></td>
<td>Smart bulbs with Bluetooth or WiFi based control</td>
<td>LIFX, Stack Lighting</td>
</tr>
<tr>
<td>Remote AC Mgmt.</td>
<td></td>
<td>Solutions for monitoring and remotely controlling ACs</td>
<td>Arbi Labs, ThinkEco</td>
</tr>
<tr>
<td>Devices Mgmt.</td>
<td></td>
<td>Hubs that acts as a control system for home devices</td>
<td>Revolv, Peel</td>
</tr>
<tr>
<td>Monitoring</td>
<td></td>
<td>Automated monitoring solutions for temperature, humidity, soil etc.</td>
<td>Loox, Nelixmo</td>
</tr>
<tr>
<td>Home Security</td>
<td></td>
<td>Solutions for monitoring various hazards such as fires and intruders</td>
<td>SimpliSafe, Thermal</td>
</tr>
<tr>
<td>Locks</td>
<td></td>
<td>Smart locks that require specific user identification</td>
<td>August, Lockitron</td>
</tr>
<tr>
<td>Video Monitoring &amp; Alerts</td>
<td></td>
<td>Video monitoring solutions with alarm systems</td>
<td>Dropbox, Canary</td>
</tr>
<tr>
<td>Energy Efficiency</td>
<td>Thermostat</td>
<td>Smart thermostat with remote control capabilities</td>
<td>Nest Labs, Ecobee, AerMe, Green Energy Optins</td>
</tr>
<tr>
<td>Monitoring</td>
<td></td>
<td>Devices with specific monitoring applications</td>
<td></td>
</tr>
</tbody>
</table>

Source: Tracxn, Smart home (2015.2); https://nest.com/privacy/data/

IoT platforms can be as platform as a service for the process of business model optimization. For example, Xively provides the possibility to analyze and visualize the Internet of Things. It can be used to interconnect different devices over the Internet and can store a history of measured values and can display it with graphs, etc.

To solve the problem of control asymmetries, device & companion app, consumer cloud storage, and cloud management for companies are recommended. In terms of personal cloud, cloud storage service provides additional security mechanisms for authentication to help ensure users are protected against data or credential breaches. Dropbox, as cloud storage provider invests in security again by adding security-key authentication to help ensure users are protected against data or credential breaches when they log in to their accounts.

For optimizing business model process, the personal cloud can be as software as a service. It provides personal cloud as SaaS to other companies for developing a solution to synchronize any data with any connected devices. Cloud as infrastructure as a service provides trusted cloud as IaaS to other companies which develop various applications on cloud. OnApp IaaS cloud management platform (CMP) for Small to mid-size hosting service providers (HSPs) is a good example. HSPs can sell their IaaS CMP-managed resources on the OnApp Market, starting with CDN in 2011. The 3rd parties can use OnApp’s available (under the open source GNU General Public License v2.0) interface to its OnApp Market to enable anybody, not just those using OnApp software, to access this market as it shows in figure 2.
Figure 2. OnApp IaaS CMP

Reference


Little, Mark (2014). Personal data and the big trust opportunity, OVUM, February, TE004-000756


Sandberg, Johan et al. (2014). Platform change: Theorizing the evolution of hybrid product platforms in process automation, working paper, Umea University, June.


Measurement and Evaluation Course: Face-to-Face Instruction Versus Web Based Distance Education

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*Emine Burcu Tunc, Marmara University, Turkey*

**Abstract**

One of the reflections of the developing technology on education is web based distance education. Literature review shows that there are many studies about web based distance education-WBDE- and the advantages and disadvantages of WBDE in the literature. None of the studies is about, either lecturing the measurement and evaluation course, which is one of the difficult and complex courses of education sciences, by using WBDE or the differences between WBDE and face to face education according to student opinions. The aim of this study is to determine the views of students who have taken the course of measurement and evaluation both with face-to-face instruction and WBDE and to determine learning difficulties and the course perceptions of both forms of education. In line with this purpose, the study was carried out with a sample of 8 students who took the course by face to face instruction in the previous year; 3 of them were successful in the previous year but taking the course again with WTUE in order to improve their grade and 5 of them failed the course in the previous year hence they take it again with WTUE. Interviews were conducted by using a semi-structured interview form developed by the researcher within the scope of the research. In this context, the data obtained from the interview will be reported and the results will be written.

**Key Words:** Web based distance education, face-to-face instruction, course of measurement and evaluation.
Factors Effect to Attitude Towards IT and IT Acceptance for Professional Accounting: A Perspective of Accounting Students from Srinakharinwirot University, Thailand

Kanyakit Keerati-Angkoon, Srinakharinwirot University, Thailand
Jitusa Khantong, Srinakharinwirot University, Thailand

Abstract
The main purposes of this research are; 1) to study the factors that influence the attitude towards information technology and information technology acceptance for accounting of 4th year accounting students. 2) To develop teaching methods that encourages accounting students to accept the importance of IT and Accounting Information Systems classes. Multiple Regression and Simple Linear Regression are used for hypothesis testing. Data collect with survey questionnaire that is developed on research objectives.

The results of this research are revealed that IT self-efficiency is influence to accounting student’s attitude towards IT. In addition, Attitude towards IT affects to IT acceptance for accounting significantly.

Keywords: IT Acceptance, Accounting Information Systems, Professional Accountancy, IT for Accounting

1. Introduction
In the modern era of globalization, Information Technology (IT) has been integrated into business process. It impacts to Accounting Information Systems in all enterprises. (Steve, et. al, 2007). Professional accountants have been affected by information technology (Elliot, 2002), in terms of scope of work, accounting process, auditing, also system design development. As these reasons, professional accountants need to have more knowledge of information technology along with accounting.

Although information technology affects to business process efficiency, but also causes to accountants’ role changed. They will be challenging, including taking more risks on their work (Scapens and Jazayeri 2003). For example, to integrate Enterprise Resource Planning (ERPs) and e-Business in the organization makes accountants’ role changed, from bookkeeper to monitoring person (Scapens and Jazayeri, 2003; Caglio 2003). Both of internal auditor and external auditor have to understand information technology that integrated with business process (Sayana, 2004). The failures of Enron, MCI-WorldCom, and Parmalat are shown that professional accountants in this era have to understand and aware of information technology (Winograd, et al, 2000). For auditors, they need to use technology knowledge to evaluate the reliability of information systems, such as financial and accounting information.

Because of influence of technology on business process, the role of professional accountant has changed. They are now expected to have both information technology and accounting knowledge. However, some accountants lack the knowledge and understanding that technology is essential for their works.

The mains purpose of this research are; 1) To study the factors that influence the attitude towards information technology and information technology acceptance for accounting of 4th year accounting students. 2) To develop teaching methods that encourages accounting students to accept the importance of IT and Accounting Information Systems classes.
The benefit of this study will provide guidance to improve teaching method to encourage accounting students to accept the important of IT for professional accounting.

2. Accounting Information Systems and Information Technology

Accounting Information Systems is a system that be developed for using in the organization, integrated human resources and information technology in order to perform the main function of recording data processing and accounting information for both internal and external users. Information Technology are both of hardware such as computers and other devices and software or mobile application, including telecommunication, and Internet.

Accounting information systems provides benefits to business process performance and employees both operating and managerial levels. It’s crucial for controlling and resolving problems in the organization.

Technological developments changed methods for carrying out tasks within the scope of accounting activities and transactions related to accounting was started to being carried out through electronic media. Growth and development growing rapidly in information technologies day by day have brought digital revolution in economic, social and cultural fields. Our era is information era and when we acknowledge that accounting is an information system, the way and processes of transacting businesses of enterprises have changed with usage of information technologies in enterprises and this influenced accounting closely. As a reason that quality of accounting education is a factor influencing success of employees of enterprises and hence enterprises directly. Re-structuring of accounting education and developing contents by considering present conditions are necessary with respect to train graduates having sufficient quality to respond needs of the era and

3. Role of Professional Accountants in the modern era

Professional Accounting are defined 3 types concerning with Accounting Information Systems and Technology; First, accountant who use the systems. Second, external and internal auditors who monitor and evaluate the systems. And the last, consultant and developer, who analyze and design the systems.

The accounting profession performs many roles where IT is used. First, as user of information systems, accountants must be able to clearly convey their needs to the IT professionals who design the system. Being information-oriented professionals, accountants should actively participate in systems development projects to ensure appropriate systems design. Second, as designer of information systems, accountants are responsible for the conceptual system which determines the nature of the information required, its sources, its destination and the accounting rules that must be applied. Third, as manager of information systems, accountants must be able to perform appropriate analyses of IT investments, understand IT related benefits and risks and stimulate and manage organizational change. Finally, as auditor of information systems, the role of accountants encompasses the function of internal audit, external audit and other evaluative roles.

The rapid growth of technology and the use of computers in business result in more IT auditing and internal control standards and guidelines to assist auditors in their roles and responsibilities. IT audit can be defined as the process of collecting and evaluating evidence to determine whether a computer system has been designed to maintain data integrity, safeguard assets, allows organizational goals to be achieved effectively and uses resources efficiently (Yang and Guan, 2004).

The IFAC first released guidelines for areas of IT knowledge and competency development for accounting professionals in their International Education Guidelines 11 (IEG 11) titled Information Technology for Accountants in 1995. Accountants are required to have knowledge of IT strategy, IT architecture, management of IT, general systems concepts, transaction processing systems, software, physical hardware components of a system, data organization and access methods, IT security management, networks, data transfer, IT communication, IT internal control, project management and systems acquisition, development life cycle and implementation phases (IFAC, 2007).
4. IT Acceptance for Professional Accounting

Employers’ Perceptions of Information Technology Competency Requirements for Management Accounting Graduates Management accountants work in a computerized workplace with information technology (IT) for producing financial ledgers and for reporting. Thus, the role of the management accountant has shifted from capturing and recording transactions to analyzing business issues. The result of this study reveals that Excel for analysis was the most important. The perceptions of employers regarding the IT competencies required of management accounting graduates.

Weli (2015) studied the influence of variables affecting the acceptance of learning accounting information systems and instructional methods, it was found that perceived importance and benefits of computer affect the acceptance of accounting information systems.

Ahmad A and Abu-Musa studied the perceived threats of Computerized Accounting Information Systems in Developing Countries to investigate the significant perceived security threats of computerized accounting information systems (CAIS) in Saudi organizations. The statistical results also revealed that accidental and intentional entry of bad data; accidental destruction of data by employees; employees’ sharing of passwords; introduction of computer viruses to CAIS; suppression and destruction of output; unauthorized document visibility; and directing prints and distributed information to people who are not entitled to receive are the most significant perceived security threats to CAIS in Saudi organizations. They recommended to strengthen the security controls over the above weaken security areas and to enhance the awareness of CAIS security issues among Saudi organizations to achieve better protection to their CAIS.

5. Methodology and data

5.1. Sampling and data collection

A quantitative design was used for this study. The target population totally are 74m, 4th year accounting students in the university, which all have a strong performance and will graduate soon. An empirical survey using a questionnaire has been carried out to achieve this objective. The questionnaire was distributed directly and identified by the received date. A period of 5 days was allowed to receive returned surveys. In total 59 surveys were returned from 74 for a 79.73 percent response rate, with 57 (77.03 percent response rate) usable.

5.2. Measurement of analytical approach and variables

This study applied a quantitative method using a four-page questionnaire with a cover page explaining the purpose of the study. It was divided into five parts.

The first part involved demographics; respondents were asked their sex (code 1 for female and 2 for male), educational background in high school (1 for Science - Maths, 2 for Art – Maths, and 3 for others), and grad in Business Information Systems subject.

In the second part, there were divided into 2 groups covering variables on the student’s knowledge of IT - hardware knowledge and software knowledge. A four-point Likert scale ranging from 1 (less knowledge) to 4 (most knowledge) was used to assess the knowledge level of each students.

The third and fourth part were ask for IT Self-efficacy scale and IT anxiety of each students. A four-point Likert scale ranging from 1 (less self-efficacy / anxiety) to 4 (most self-efficacy / anxiety) was used to assess the opinion of each students.

Attitude towards IT were concerned with positive or negative thinking about IT and life style. The last part is a set of questions about student’s acceptance in IT concerning with professional accounting. A four-point Likert scale ranging from 1 (strongly disagree) to 4 (strongly agree) was used to assess the opinion of each student.

Multiple Regression was used to study variables that affect student’s attitude towards IT. Independent variables were taken from student’s IT Knowledge (hardware and software knowledge), IT Self-efficiency, and IT anxiety. The hypotheses of the research questions were;
Research Question 1: Which factors are affect to Accounting student’s Attitude towards IT?

H1: IT Knowledge affects to Accounting student’s attitude towards IT
   H1.1: Hardware Knowledge affects to Accounting student’s attitude towards IT
   H1.2: Software Knowledge affects to Accounting student’s attitude towards IT

H2: IT Self-efficient affects to Accounting student’s attitude towards IT
H3: IT Anxiety affects to Accounting student’s attitude towards IT

Simple Linear Regression was used to analyze the factor that affects to student’s IT acceptance for accounting. A four-point Likert scales ranging from 1 (less) to 4 (most) was used to measure the level of each student’s acceptance.

H4: Accounting student’s attitude towards IT affects to Accounting IT Acceptance

Research hypothesis:

The responses are divided in 2 groups, 7 of male and 50 of female. The details are shown on Table 1.

Table 1: Population and Sampling

<table>
<thead>
<tr>
<th></th>
<th>Population</th>
<th>Sampling</th>
<th>% of Sampling</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>10</td>
<td>7</td>
<td>12.28</td>
</tr>
<tr>
<td>Female</td>
<td>64</td>
<td>50</td>
<td>87.72</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>74</strong></td>
<td><strong>57</strong></td>
<td><strong>77.03</strong></td>
</tr>
</tbody>
</table>

There are 4 independent Variables; IT Knowledge concise of hardware and software, IT Self-efficient, IT Anxiety, and Attitude towards IT. Accounting IT Acceptance is dependent variable. Questionnaires are designed for collecting interval level data of all variables. Using Rating Scale (Likert), a numeric answering scale (NS) in 4 levels (1 – 4) is balanced on both sides of a neutral option, creating a less biased measurement.

Mean and Standard Deviation are used for descriptive analysis. Multiple Regression and Simple Linear Regression are used for hypothesis testing.

6. Result

6.1. Demographic of Sampling

The demographics of the 57 accounting students; 40 (70.18 percent) were graduated in major of Science-Math, 15 (26.32 percent) students are Art-Math, only 2 (3.50 percent) were graduated in other program.

There are 4 groups divided by grade of Business Information Systems Subject. There are 21 (36.84 percent) Accounting students having grade in Excellent (A), 13 (31.58 percent) students getting very good (B+), 18 (22.81 percent) are good (B), and only 5 (8.77) students have below B.
6.2. Descriptive Analysis

Mean and Standard Deviation are used for descriptive analysis totally 5 variables in this study: IT Knowledge (Hardware Knowledge and Software Knowledge), IT Self-efficient, IT Anxiety, Attitude towards IT, and IT Acceptance for Accounting. The details are shown in Table 2.

From Table 2, we found that students have low IT knowledge. The overall mean value of hardware knowledge is 2.29 and software knowledge is 2.35. The respondents recognize and can use computers in daily life, such as gaming, Microsoft office, searching in internet. But they cannot understand about programming or fixing computer. However, the respondents are high IT Self-Efficient, Mean is 2.78. IT Anxiety is low level, mean is 2.20.

For Attitude towards IT, the respondents are good attitude, mean 3.16. Finally, the respondents accept IT for Accounting with high level (mean - 3.17)

6.3. Factors effect to Students’ attitude towards IT (Multiple Regression Analysis)

The effects of IT Knowledge (both of hardware and software), IT Self-efficient, and IT Anxiety on students’ attitude towards IT were studied by multiple regression analysis. Furthermore, the Durbin-Watson statistic value is 1.865 that was greater than 1.5. Thus, there was no multi-collinearity problem associated with the independents variables based on the regression analysis constraint. The
$F$-test value in ANOVA was 3.138 which was not significant (p-value > .022) indicating that at least one independent variable had an effect on students’ attitude towards IT.

The coefficients (table 3) clearly confirmed that only IT Self-Efficient ($t = 3.019$, p-value < 0.01) was significantly correlated with the students’ attitude towards IT. The standardised coefficient also identified that the beta value of IT Self-Efficient was 0.465. The results of the multiple regression analysis clearly support H2 that IT Self-Efficient has significantly positive effects on students’ attitude towards IT.

Table 3 Coefficients of Multiple Regression Analysis

<table>
<thead>
<tr>
<th>Model</th>
<th>B</th>
<th>S.E.</th>
<th>Beta</th>
<th>$T$-test</th>
<th>$P$-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 (Constant)</td>
<td>2.442</td>
<td>.438</td>
<td>5.579</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>Hardware Knowledge</td>
<td>-.086</td>
<td>.114</td>
<td>-.128</td>
<td>-.754</td>
<td>.454</td>
</tr>
<tr>
<td>Software Knowledge</td>
<td>-.026</td>
<td>.112</td>
<td>-.037</td>
<td>-.235</td>
<td>.815</td>
</tr>
<tr>
<td>IT Self-Efficient</td>
<td>.290</td>
<td>.096</td>
<td>.464</td>
<td>3.019</td>
<td>.004**</td>
</tr>
<tr>
<td>IT Anxiety</td>
<td>-.071</td>
<td>.100</td>
<td>-.101</td>
<td>-.713</td>
<td>.479</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Attitude towards IT

6.4. Student’s IT Acceptance for Accounting (Simple Linear Regression Analysis)

Table 4: Mean and Standard Deviation of Attitude towards IT

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>$F$</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Regression</td>
<td>1.336</td>
<td>1</td>
<td>1.336</td>
<td>11.902</td>
<td>.001a</td>
</tr>
<tr>
<td>Residual</td>
<td>6.172</td>
<td>55</td>
<td>.112</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>7.508</td>
<td>56</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Attitude towards IT
b. Dependent Variable: IT Acceptance for ACC

Simple Linear Regression Analysis was used to analyse the relation between Attitude towards IT and IT Acceptance for Accounting of Accounting students. The Durbin – Watson statistic value is 2.008 that was greater than 1.5. Thus, there was no multi-collinearity problem associated with the independents variables based on the regression analysis constraint. The $F$-test value in ANOVA was 11.902 which was significant (p-value < .001). The coefficients (table 4) clearly confirmed that attitude towards IT ($t = 3.450$, p-value < 0.01) was significantly correlated with the IT Acceptance for accounting. The standardised coefficient also identified that the beta value of Attitude towards IT was 0.422 (table5). The results of the regression analysis clearly support H4 that accounting student’s attitude towards IT affects to Accounting IT Acceptance.
Table 5 Coefficients of Regression Analysis

<table>
<thead>
<tr>
<th>Model</th>
<th>B</th>
<th>S.E.</th>
<th>Beta</th>
<th>T-test</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>1.758</td>
<td>.411</td>
<td></td>
<td>4.274</td>
<td>.000</td>
</tr>
<tr>
<td>Attitude towards IT</td>
<td>.498</td>
<td>.144</td>
<td>.422</td>
<td>3.450</td>
<td>.001**</td>
</tr>
</tbody>
</table>

a. Dependent Variable: IT Acceptance for ACC

7. Conclusions

This research aimed to study a model IT acceptance for professional accounting by investigating the relationship between factors that influence to attitude towards IT and its effects to IT acceptance for professional accounting. A questionnaire survey was used to collect data for a quantitative method of analysis. The target samples were selected from the last year accounting students in Srinakharinwirot University, Thailand.

Multiple Regression and Simple Linear Regression were used for analysis. It was concluded that IT Self-efficient had a significant effect on attitude towards IT. In addition, attitude towards IT increases IT acceptance for professional accounting. As this result, it should be concerned that how to stimulate accounting students awareness of beneficial of IT. For example, students should be confident and familiar with using computer.

The results of this study clearly revealed that IT acceptance for professional accounting initiates from attitude towards IT, proving by simple linear regression. When students have positive attitude towards IT, they will accept IT for professional accounting.

Fig 3: Research Framework

8. Limitations and further research

However, this research has two limitations. First, it can be argued that the measurement of the relationships for all variables was at a comparatively rough scale for statistical analysis. Thus, future
research should be carried out with a reconsideration of and improvements in these limitations. Finally, future research should involve students from other universities to avoid self-reported bias.

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Online Language Teacher Education: Education Without Borders

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Abstract

With the advancement of technology in the last decade, online master’s degree programs in all disciplines have increased profoundly in the United States and around the world. Yet online education potentially means anywhere/anytime learning, continued employment while studying, and not having to relocate for school (Nunan, 2012). There are still avenues that must be explored before we fully understand best practices for online instruction.

In this presentation two faculty who predominantly teach online graduate courses will share the reflections of 35 graduates who completed a fully online master’s degree program in education (M.Ed.) specializing in TESOL (Teaching English to Speakers of Other Languages) at a university in the south-central U.S as part of a research study. Through reflections of graduates who completed a fully online master’s degree program this presentation will offer recommendations for faculty on how to be successful effective instructors online. The audience will leave the session with important tips on online learning/teaching.
A Proposed Model of Psychodynamic Psychotherapy Linked to Erik Erikson’s Eight Stages of Psychosocial Development

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Abstract

Just as Freud used stages of psychosexual development to ground his model of psychoanalysis, it is possible to do the same with Erik Erikson’s stages of development with regards to a model of psychodynamic psychotherapy. This paper proposes an eight stage model of psychodynamic psychotherapy linked to Erik Erikson’s eight stages of psychosocial development. Various suggestions are offered. One such suggestion is that as each of Erikson’s developmental stages is triggered by a crisis, in therapy it is triggered by the client’s search. The resolution of the search often leads to the development of another search which implies that the therapy process comprises a series of searches. This idea of a series of searches and resolutions leads to the understanding that identity is developmental, and therapy is a space in which a new sense of identity may emerge. The notion of hope is linked to Erikson’s stage of Basic Trust and the proposed model of therapy views hope and trust as essential for the therapy process. Two clinical vignettes are offered to illustrate these ideas.
Where Failure Counts: Case Study of a School Where Failed and Those Expelled From School are Preferred

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Abstract

Schools are one of the most important institutions from the point of view of learning and socialization of children. However, in the current time, schooling is seen more as a stepping stone to higher level of education and possibly moving up in the economic ladder. In a country like India which is changing fast in terms of social structure, economic growth and technological advancement, schooling has acquired a very competitive dimension. In Most schools children who do well, particularly in terms of grades obtained in examination, are welcomed and eulogised. Whereas those who do not do so well or fail, are refused entry or at times, asked to leave. This is against the basic tenets of schooling and education and creates tension in society and has potential of increasing school dropout and increasing the number of individuals who may be viewed as ‘uneducable’ or ‘deviant’. The present paper will share the case of a school which gives priority to children who have failed or have been expelled on the ground of indiscipline or misbehavior. Half the children of more than 800 in the school come from such background. At the end of high school most children graduate, many with decent grades and accomplishment in co-curricular activities, irrespective of the background they came. The case study describes in detail various system and process which result in such a transformation. Importance of warm affectionate relationship between teachers and students, constant support in studies and providing support to children who may be first generation learner or coming from difficult families background is underscored. Additionally role of educational institutions like schools in contributing to the positivity in society are highlighted. Implications for school leaders, researchers and policy makers are discussed.
Contextualization of Self-Determination Theory: Teaching Strategies that Impact and Promote Students’ Intrinsic Motivation within a Studio Classroom

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Abstract

The concept of creativity seems to be acknowledged as a trend across multiple disciplines. Last two decades represent the time of a growth in a perceived value of creative disciplines and their impact on social and economic aspects of a society in general. Creativity equals pleasure. This is a notion one would hope to come across when talking about design education. But does this statement do anything else except suggest that in order to be creative one would have to feel pleasure. How is this relevant in learning and teaching creativity? In design education a common notion of learning or teaching is referred to as ‘learning by doing’. As the phrase suggests this type of learning does not rely on words, lectures or textbooks but more on an individual feedback and guidance as they relate to practical work. Self-Determination theory (Deci, Ryan 1985) focuses on intrinsic motivation as a need of an individual to feel empowered. The theory analyses different aspects of self-regulation that includes absence of motivation and different levels of extrinsic and intrinsic motivation. The role of the teacher is of a great importance in design education as small groups of students allow for a more intimate approach. The instructor and a student interact through the process of individual critique and feedback and this premise increases the responsibility on the faculty to directly influence student’s intrinsic motivation to learn through creating a stimulating and relaxing setting that will enable students to participate, become engaged, eager to learn, develop grit and develop self-determination.

Keywords: studio-based teaching, motivation in design education, self-determination theory.

Introduction

The relationship between individuals in a classroom is influenced by many factors. Personalities, ways of interacting and cultural backgrounds all combine to create a setting that can be vibrant and exciting or stressful and alienating, depending on how people cope with the challenges of working together. There has to be a collective effort made by all in order to develop positive professional relationship and this represents a vital element in establishing a positive environment. Wlodkowski (1986) argued that motivation is directly related to the practices that a) increase the desire to understand the behaviour, b) provide a sense of direction to the behaviour, c) continue with that specific behaviour and d) have a consequence of choosing that particular behaviour. Too often they are focused on the technical aspects of the activity and not supportive of creativity in projects that have technical flaws. The extrinsic motivational factors such as grades, recognition, financial compensation, evaluation and deadlines should be de-emphasized within environments. They are not to be completely excluded however the current overemphasis in homes and schools serves to diminish a person’s interest and creativity. It is an open and trustworthy relationship that serves as the grounds for motivation and encouragement and supports the initial discovery and development of intrinsic motivation. There have been numerous pedagogical frameworks that support creativity within fields of psychology, cognitive science and education. How is creativity nurtured in a classroom? As this area of studies usually represents a first choice of students who are naturally inclined or talented, one would assume that all of those students would always be motivated to excel in the chosen discipline. Do instructors teaching their main studio courses have any influence on the motivational processes and students’ intrinsic desire to learn, grow and become more motivated and more creative? According to Brewer and Marmon (2000) instructors are only able to use self-evaluation in the following areas of instruction, relationships and classroom management. These were the areas defined to be under teacher’s control.
Pedagogy in Creative Disciplines

There are different approaches in identifying what learning by doing means. The term is closely related to studio-based disciplines as it represents a cornerstone of pedagogical practices where the focus is on experiential learning. The role of the instructor changes in these types of constructed scenarios where a non-linear communication is required. There are a number of complexities related to teaching in studios and these apply to all disciplines that revolve around a creative model of teaching and learning such as:

a) Studio Model  
b) Design Thinking  
c) Practice-based Lab  
d) Design Studio  
e) Demonstration  
f) Creative Development  
g) Contextual learning

Students engaged in the studio-learning processes rely on the practice of independent learning. By engaging in experimentation, they develop their knowledge and skills independently and often through guidance and partnership with the instructor. This idea represents a deviation from general education pedagogy that has, for years, been based on a teaching model that alienated instructors and students. The studio-based environment provides a horizontal, rather than vertical teaching approach. This makes the role of the instructor that much more important as this amplified opportunity for communication carries increased responsibility in making sure that the right type of feedback is given to the students. This process is considered a very significant social responsibility. Studio classes, limited to fewer numbers of students rely on this individual review of projects and allow students, in ideal setting to receive constructive criticism of their work, which they use to investigate the problem or improve the overall standard. Studio classes are often assigned double the amount of time per class because of this required individual approach and the adequate time needed by instructor to review each of the students’ work carefully.

Feedback giving process is complex educational tool and it must be examined for its effectiveness and pedagogical capacity. Ineffective pedagogical approaches are demonstrated through limited feedback and summative assessment as opposed to formative assessment techniques that lead towards mastering goals and objectives. Instructor’s lack of ability to make a meaningful connection with the students, demonstrate care and interest in their aspirations seems to have an impact on defining learning tasks and creating opportunities that are individually tailored to students’ potential. Constructive feedback including praise, criticism and advice seems crucial to the learning process within creative education. This platform for direct and individually aimed communication has multiple advantages that are reflected in the instructor’s opportunity to learn more about each student, their strengths and weaknesses and engage in meaningful result-driven communication. However, this process also imposes additional responsibility on the instructor as the type of individual feedback, if not properly delivered, may have a negative impact on a student’s self-esteem and their level of engagement. Failed feedback represents a lost opportunity to improve students’ work but also has a potential to inflict damage on ego and relationships, influence their emotional stability, beliefs and motivation based on their perception of the motivator.

Feedback can, based on the theory of self-efficacy also suggest the types of behaviours that might lead to specific goals (Bandura 1997). Students who have a high sense of self-efficacy believe they can act the certain way to achieve a goal and will react positively to constructive feedback while the ones with low self-efficacy values will not be motivated to make an effort. Even the type of critique received for the design project will have a strong emotional impact and therefore the instructor should use it constructively by applying strategies of praise and criticism carefully. Emphasis has to be made on praising the effort while critiquing the work as the first impact of any type of feedback is usually assessed through an emotional response. In general, feedback that relies on the positive evaluation of
student’s work results in positive feelings such as content, gratitude, sense of relief and pride. On the contrary, negative feedback is usually associated with disappointment, anger and hurt. The type of constructive critique in studio-based classroom setting has additional implications. It influences the way the students are perceived and evaluated by others. Hareli and Hess have studied the ways in which people respond to feedback. They argue that one way to disassociate oneself from negative feedback is to attribute it to the external causes and specific circumstances (Hareli, Hess 2008). The same is true for the positive feedback in which case, students with low self-esteem attribute the positive feedback to the luck claiming that they had nothing to do with the success. Another way to handle negative feedback is to derogate the evaluator as being unfair or biased. If the previous attempts are unsuccessful, students can simply dismiss negative feedback rendering it unimportant and choose to neglect the comments failing to progress in the class and to take responsibility for their learning. Feedback always has an interpersonal component and much of its success depends on the approach of the instructor. Moreover, if used successfully it opens up many opportunities for instructor to gain students’ trust and become a mentor.

Motivating Creativity

Understanding motivation in the context of a studio-based learning environment is not only important for increasing students’ interest and involvement in a specific studio class but also equally important for educating teachers and advancing pedagogical practices that support learning, creativity, positive atmosphere and nurturing relationships within the studio classroom. A careful examination of the processes and the relationships within a classroom is necessary to evaluate the implementation of directional motivation – motivation aimed at someone else. Within the academic setting this theory refers to the quality of social environment and relationships as a main indicator of level of student’s motivation. With this in mind, behaviouristic theory has been overcome through the recognition of cognitive and constructivist theories in education. Understanding the importance of strong social and emotional support in increasing student intrinsic motivation has been a deciding factor in accepting the contemporary interpretations of motivation. The Self-Determination Theory (Ryan, Deci 2000; Deci, Ryan, 1985) suggests that autonomy, competence and belonging are basic psychological needs that are vital for one’s wellbeing. This theory proposes that the desire to learn is inborn to people and that this desire can be either encouraged or blocked through social factors. Most theories refer to motivation as the individual occurrence. Making sense of our world is directly influenced by our thoughts, information and imagination.

The development of individual motivation is closely linked to the life journey of the person. Motivation is closely related to emotion. The life events and their emotional impact on an individual create grounds for the relationship between people and environment. Those emotions are developed at a very early age. If the balance is achieved then the emotional impact is reflected in a sense of personal fulfilment. This represents a motivation that is found in young animals during their playtime. In humans, this natural occurring motivation is often reflected in activities that are performed without imposing and that represent an enjoyment that leads to a positive emotion. With this in mind, behaviouristic theory has been overcome through the recognition of cognitive and constructivist theories in education. Understanding the importance of strong social and emotional support in increasing student intrinsic motivation has been a deciding factor in accepting the contemporary interpretations of motivation. The first one reflects the external regulation, which is the least autonomous and suggests that the person engages in the activity solely to please others or gain an award.

Motivation through the bond between an instructor and a student

There are several polarities that are evident in theories of motivation. First reflects on the positive vs. negative motivational elements. People can be positively motivated towards the goal or negatively impacted so that they are driven from that negatively perceived outcome. Further to this, motivation can also be internal or external. The internal (intrinsic) motivation represents a natural state that pushes an individual towards achieving a goal. External (extrinsic) motivation is represented through the process of rewards or punishments. It is widely assumed that all instructors care about their students. When this notion is questioned it is clear that this is not true. Everyone has had an experience with an educator who has not been interested in going out of his or her way to help or was
simply not caring. Furthermore, even the ones who seem to care might actually care hypothetically, they do the job of teaching, fulfil their professional goals and make sure that the classes are scheduled and held as planned caring only that students complete their course. However, they never manage to establish a relation with and more importantly – trust with the student.

The bond between the educators and the student presents evidence that the educator cares and that the student is aware of that. The perception of the educator in the eyes of the students as the caring individual changes their behaviour. Many recent studies have revealed classrooms in which educators state that they do care however, the same is not perceived by their students. If the care is not genuine and projected through as toughness, high demands, heavy workload, students will comply and do the work however, they will not be emotionally invested in the process and will use every chance they get to avoid working. It is obvious that forming a caring relationship between an educator and the student is not as simple as it sounds. Nell Noddings, whose theory of care explores the instructor-student relationships and the ethic of care researched this phenomena. As a care theorist, she believed that educators must accept the responsibility of students’ behaviours in the classroom. In addition, she argued that the role partners have during the interaction is pivotal in the process of moral connection (Noddings 1984). Someone’s behaviour is partly the result of how they are being treated. The trust and caring relationships should be the cornerstone of pedagogical activity and the transfer of knowledge remains crucial and should happen once the students are engaged in the dialogue and the educators have had the opportunity to learn about themselves, their interests, talents and patterns of behaviour (Noddings 1992). Most importantly, the educator must learn about their needs and be ready to compensate for the areas that are not covered in the standard curriculum to respond to them. The caring relationship provides grounds for moral education. Students learn how to be attentive to others. On the other hand, it seems to be a truly rewarding experience for the educator – to be in tune with their students and be able to follow their development.

Foundational Theory of Caring argues that all people have the need to be cared for. The concept of care is developed around the idea of “morally approaching another” (Noddings 1984). As humans, we have an in-born need to connect and to care for someone else gives us a sense of pleasure and a purpose. The term ‘engrossment’ was endorsed by Noddings who stated that the caregiver is engrossed in the perspective of the one he cares for. In this case, the caregiver assumes the position of another person so that they can completely understand what that person is going through (Noddings 1998). Several studies have been done on this topic and they provide different theoretical arguments however, not many offer practical advice and instructions on how to actually practice caring. Educators must model self-affirmation in the classroom. They need to become a role model for their students being aware that students are always paying attention to their actions so caring must be clearly demonstrated. In addition, they must practice dialogue, which makes opportunities for exchange of perspectives. Through dialogue, trustworthy relationships are formed and both educators and students get the sense of each other. Dialogue it is not important only to talk but also to listen which develops respect for the other and “a mutual commitment to inform, learn and make decisions” (Noddings, 2006 p.80) Practice relates to practicing caring not only by the educator but by students as well. It is very important that students learn to support one another so they understand that the emphasis of education is not only on the final outcome but on the developed relationships as well. This prepares students for life experiences and teaches them the importance of practicing positive behaviours.

Finally, the confirmation is imposed as the practice in which the educator shapes the belief system of the student by taking part in their self-ideal (Noddings 1995). It implies that the educator sees the students for what they can be in terms of their potential and not for what they are. Educators in this case believe in the students even when students doubt themselves. The literature reviewed suggests that it is not simple to identify practices that define an instructor as caring. Wentzel (1997) argued that a feeling of being cared for leads to the ‘internalization of goals and values of caregivers’ (p.411). According to this theory, if students perceived that the instructor cared for them, their academic performance increased (Wentzel 1997). In addition, he believed that educators have more impact on the students’ work then their parents or their peers (Wentzel 1971). His research has further focused on studying the perceptions students have about educators they consider as caring. According to the findings, caring Instructors have been described as those who have exhibited equal type of interaction
with all students, ones who adjusted their expectations based on the students’ differences, gave students constructive and valuable feedback and have demonstrated that they care (Wentzel 1997).

The accent seems to be on mutual respect, proper and egalitarian interactions and engaging in dialogue. Similar to Noddings’ findings, dialogue provided a two-way communication and opportunities for speaking and listening about topics that are not strictly related to the class material. Instructors who were perceived as successful and caring were those who, besides focusing on the transfer of knowledge, put the relationship with the students as their priority taking their time to listen and engage in friendly conversation and use humour (Pomeroy 1999). They have dismissed the formal or distant student-Instructor relationship model and were able to form a connection with individual student (Pomeroy 1999). The literature suggests a lack of evidence about what exactly caring educators do. This proves that there is no understanding about the practices that can be applied towards becoming more nurturing educators. (Gutman, Midgley 2000). The research mostly focuses on the negative outcomes of the lack of nurture in the classroom and not on progressive approach with defined practices that could serve for increasing students’ success in university level education.

Motivating students to learn

Understanding motivation in the context of education is not only important for increasing students’ interest and involvement in class but also for educating Instructors on successful practices that can stimulate and increase student motivation and create positive and nurturing atmosphere in the classroom. Self-esteem represents the intrinsic type of motivation and suggest that people are motivated to participate in activities if during the process or at the end of the activity the will feel good about themselves. However this approach seems wrong according to many theories of psychological motivation (Baumeister et al. 2003). Motivating others is not an easy task and the role of the Instructor, parent, mentor or a coach is a difficult one because not all efforts are successful. A careful examination of the process and the relationship between a student and an instructor is necessary to evaluate the success of the directional motivation – motivation aimed at someone else. In order to do that, the most obvious task is to evaluate the emotional state of students that are being influenced by instructors – in a positive or negative context. When student is responding to a motivation in a positive way, they express the emotions of happiness, hope, interest and optimism. When the environment or the dominant person within it, in this case the Instructor is not encouraging the nurturing feel or stimulating students in the right way, the emotions such as hopelessness, sadness, frustration and anger surface.

The issue of motivation in education is of crucial importance. Social and cultural needs impose that the knowledge learned is of vital importance for social and cultural needs. Therefore, the connection to the primary or secondary types of motives in education in general is weak and needs to be re-enforced through extrinsic techniques that would put the learning in context of everyday life and make students aware of the importance of the knowledge acquisition and its application in real-life situation. It is not difficult to recognize a motivated student. They are interested in what they are doing, they have a strong sense of curiosity, they are actively engaged, thrilled by new discoveries, they are persistent and do not easily give up when faced with an obstacle but instead, they are able to focus on the goal in the future rather then concentrate on the immediate issue. Interest in the subject plays a very important role in the process of motivation. There are two observations when it comes to the interest in the subject. One comes from the understanding that the interest is imposed. The main effect of learning itself is to develop and spark interest through the exposure to the subject. The other observation is that the interest in the subject would have to lean on the existing and already developed interest, the one that each student comes to school with. According to these understandings, the choice and the schedule of courses and materials should be adjusted to the naturally occurring interests of students. Based on these findings, educators are able to act accordingly so that the motivation is developed for furthering already developed interests in students but also expanding their knowledge and interests within wider contexts.

Self-Determination Theory of Motivation

Drawing on Maslow’s research as well as on those who have opposed his theories Ryan and Deci (Deci, Ryan 2000) suggested three needs that are essential in achieving intrinsic motivation (1)
autonomy, (2) competence, and (3) relatedness. During early 1970’s several researchers have begun examining the theories of intrinsic motivation.

Deci and Ryan have integrated the theory of need into the theory of self-determination arguing that there are three basic physiological needs that have become evident during the research and they are (1) need for competency; (2) need for autonomy and (3) need for social interaction. When these needs are fulfilled they lead to self-motivation and when they are neglected lead to decreased motivation and question the wellbeing of an individual. (Ryan, Deci 2000). They further argue that that intrinsic motivation is the most positive human tendency that stimulates discovery and expansion of human experiences in order to learn new things. Developmental psychologists conclude that children from the very early age have an in-born capacity to be curious, active, playful and ask questions without the expectation of being rewarded (Harter, 1978). According to Csikszentmihalyi and Rathunde (1993 intrinsic motivation is a natural need of people to be assimilated, master a skill and develop spontaneous interest. These needs are vital for cognitive development and as such are a significant source of pleasure in life. Autonomy is promoted by providing opportunities for choice, acknowledging feelings, avoiding judgment and encouraging personal responsibility for actions. Rewards, punishments, deadlines, judgmental assessments and other controlling actions all undermine autonomy. Competence is supported by optimal challenge, and by feedback that promotes self-efficacy (as outlined above) and avoids negativity. Relatedness is promoted through environments exhibiting genuine caring, mutual respect and safety.

With this in mind, behaviourist theory has been suppressed through the recognition of cognitive and constructivist theories in education. Understanding the importance of strong social and emotional support in increasing student intrinsic motivation has been a deciding factor in accepting the contemporary interpretations of motivation. The development of the Self-Determination Theory suggests that autonomy, competence and belonging are basic psychological needs that are vital for one’s wellbeing (Ryan, Deci 1985, 2000). This theory proposes that the desire to learn is inborn to people and that this desire can be either encouraged or blocked through social factors (Vansteenkiste et al. 2006; Ryan, Deci 2000). Within the academic setting this theory refers to the quality of the social relationship in the teaching process. Contrary to other theories that consider motivation a construct, Self-Determination Theory perceives motivation as a range with demotivation depicted as learner helplessness, located on one side of the range and autonomous intrinsic motivation that depicts person’s interest and is based on the pleasurable activity on the other end of the range (Figure 4). When students are individually motivated, they identify themselves with the activities that they perform and gain understanding that the activity will influence their well being in a way. Contrary to that, when they are extrinsically motivated, their behaviour is only based on the external factors (Gagné, Deci 2005). The introjected regulation considers the activities performed by an individual to help avoid guilt, boost their ego and get social acceptance or support. When the identified regulation is performed, the student accepts and participates in proposed activities and is able to understand and recognize the personal gain. Integrated regulation addresses the fact that student has a strong autonomy and performs the activities only because they wish to.

Conclusion and Recommendations

Teaching design or any creative discipline involves work with small groups of students that enable individual communication and approach. This process implies a student-focused approach to teaching with limited lectures and information transmission but increased demonstration of design methods, process oriented work, analysis-synthesis organization and articulating design intention. Even though motivation is identified as a key element to enhance learning in university-level students, many instructors do not have the adequate approach or training in emotional intelligence or communication to approach students the right way and develop methodologies that directly increase student intrinsic motivation. Instructors, who are not naturally inclined or have no high levels of emotional intelligence, fail to pay attention to this crucial element for many reasons. Certain factors that have impact on teaching quality are evident through a number of pressures teachers face at the workplace – pressure to publish, acquire grants and involvement in a number of administrative duties. Many universities are research, rather then teaching institutions and employ faculty based on their research potential and not teaching methodologies. Understanding these types of motivation are of extreme
importance within the context of the academic setting because they simply provide grounds for better teaching. Each of the specific categories of motivation has its place in the process of learning, performance, individual experiences and wellbeing (Ryan, Deci 2000).

There seems to be a limited examination of what constitutes a successful studio environment, one in which students can take responsibility for their learning, become independent thinkers and grow their self-confidence. The nature of creative endeavours that occur in studio is not clearly identified along with the type of interaction between students and faculty that would enhance the learning of design. Absence of literature and discussion of the topic enables most instructors to argue that they refer to their own studio experience in order to develop specific pedagogical approaches to correspond to the studio setting. While the reputation of design school is almost always dependent on the perceived value of its faculty and students, it is important to analyse the lateral and iterative thinking discourses in studio-based pedagogy. It is recommended that an additional study is undertaken and that it examines the implementation of Self-Determination Theory (Deci & Ryan) as a tool for measuring students’ intrinsic motivation in a studio-based learning environment. The study will investigate the concepts of autonomy, competence and relatedness as they apply to the creative studio-learning environment and their impact on students’ intrinsic motivation. The role of the teacher will be examined along with their ability to create a simulative, creative learning environment within the studio and as a caring educator influence their students’ desire to learn and overcome obstacles. Intrinsic motivation is the only factor that suggests the engagement in an activity for its own sake is necessary for creative performance. The project would identify, assess and contextualize various behaviours, teaching methods and practices within the studio classroom and help academics and faculty improve their teaching of studio-based discipline and focus on identifying modalities used in studio that make students more intrinsically motivated to learn.
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Client Centered Solution Focused Therapy (SFT)

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SFT therapists are taught to look only at solutions and to elicit from the client ways to achieve them. Anything outside this focus is deliberately not touched upon by the therapist and even pushed aside. This can lead clients feeling they are not heard or regarded. Two modifications/additions to the basic model are suggested below. They have been found beneficial to clients in practice.

**Session 1**

Standard approach: Nearly regardless of anything else, clients are led to identifying solutions and amplifying them, thereby creating their preferred future.

Modification 1: “Peeping behind the curtain”. The therapist mainly listens to the client(s), letting them speak their minds. Counsellees thus feel heard and validated, and strong rapport and motivation can be established. For the therapist much information can be gleaned about the client, circumstances and (with couples) their manner of communication and the severity of their issues.

Modification 2: “Setting client(s) up for change”. Towards the end of the first session a respectful therapist initiated conversation develops around clients’ unsuccessful attempts at problem resolution. Client centered SFT psycho-education is explicitly introduced at this stage. This would include ideas such as: the past cannot be changed; if something does not work, dump it; a better future is imaginable and reachable; change comes from within.

Clients are requested to ponder upon these new ideas before the next session in order to see where they themselves could change/do something differently.

This first session thus contains two additional aspects: client problem talk countered by theoretical solution talk. These additions are important in that clients leave with hope and homework in exchange for hopelessness.

**Session 2**

Client(s) will now be ready to face, to understand and willingly go along with their goal setting agenda initiated by and co-constructed with the therapist as per customary SFT protocol. They will furthermore unpack their preferred futures in true SFT style and continue as per the standard SFT model.

**In summary**

The essence is to evoke understanding, motivation and cooperation with client(s) by firstly allowing clients the space and time to vent their problem but then also (and more importantly) to introduce principles of SFT (as well as CBT) at the beginning of the therapy process. This modified approach is empowering for clients.

These additional aspects work well in practice with clients as well as couples. A short case will be presented to illustrate.
To Be or Not to Be a Teacher? Factors Affecting Choosing the Teaching Profession as a Career

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Abstract

This study aims to identify the centers of attraction and rejection of the teaching profession and to outline ways of action that will make it attractive to suitable candidates.

The study consisted of two groups of subjects: (a) young people who reached "open days" in academic institutions, and most of them did not intend to apply for a teaching degree (n = 358); (B) Students who learn to be teachers after working in other professions (n = 186). The participants completed a questionnaire in which they were asked to assess the importance they attach to various considerations when choosing a profession in general, and to what extent these considerations exist in the teaching profession. Examination of the gap between the parallel estimates indicated characteristics that exist in the teaching alongside those perceived as deficient.

In the comparison between the two groups, it was found that the trainees are more attached to the characteristics of the teaching, and to the lesser importance of the characteristics lacking in the teaching than the young people who apply to the universities and colleges that are not based on these findings. In the respondents' assessments of the effect of possible changes in their tendency to turn to teaching, two levels of activity are apparent to make the profession more attractive: (a) highlighting the positive aspects of the profession and identifying suitable candidates for whom the teaching profession is attractive; (B) introducing changes, some in teachers working conditions, and some related to raising the quality of the teaching by setting criteria that must be met at the time of entering the profession and during the course of regular work.
The Relationship between Terrorist Attacks, Inflation and Growth: Turkey Case

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Ismail Caknak, Hacettepe University, Turkey

Abstract

It’s been a vital concern to understand the linkage between terrorism and its effects on the level of development of countries recently, or vice versa. In this context, Turkey as a both European and Middle Eastern country has countered numerous threats not only by politically but also economically based on terrorism. In this paper, we have tried to analyze the relationship between terrorist attacks, inflation and growth between the time period of 1970 and 2015 in Turkey. To do that, the number of terrorist attacks, inflation rate and GDP per capita has been taken as the variables which can be determined to be the proxies of the measurement for this sort of relationship. After finding the all variables to be stationary in their first differences, Vector Error Correction Model has been established to assess the long term and short term relationship between the variables. Although we have found a significant long term effect from GDP per capita to terrorist attacks, there is no significant effect inversely. When it comes to Granger causality, the same direction has been observed among the variables.

Key Words: Terrorist attacks, inflation, growth, VECM
Economic Policy Uncertainties and Their Impacts on Stock Returns of the United Kingdom: Application of SVAR and DCC Garch Models

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Abstract
In this study, Blanchard-Quah type Structural Vector Autoregression (SVAR) and Dynamic Conditional Correlation Multivariate Generalized Autoregressive Conditional Heteroscedasticity (DCC MGARCH) models are employed to explore the impacts of economic policy uncertainties (EPUs) on the stock market of the UK. This study indicates that there exists a high correlation between the EPUs and the stock returns in the UK; more specifically impulse response exercise from the SVAR model reveals that increases in EPU of the UK and US can be factor affecting the stock returns in the UK negatively. The results of the DCC MGARCH model are partly in line with the SVAR model because the coefficient of one lagged EPU of the US on stock returns is negative and statistically significant. However, findings of this study suggest the clarification of the channels through which the monetary and fiscal policy decisions and financial markets of the US affect the stock market of the UK. According to the findings, it can also be inferred that reducing EPUs in both in the UK and the US is a key factor to sustain macroeconomic stability which in turn help to decrease volatility in the stock market of the UK. It is also implied that Global VAR (GVAR) models can be used as a tool to identify the international transmission mechanism by the inclusion of EPUs along with the improvement of Dynamic Stochastic General Equilibrium (DSGE) models.

JEL Classification: E44, E52, F49.

Keywords: Economic policy uncertainty, stock returns, external factors, internal factors, Brexit.

1. Introduction
Economic agents are any individuals, institutions or groups of institutions that may influence the economic situation by their rational actions and decisions. Every agent in an economy face with a choice problem that may be solved by solved by a well or ill-defined optimization. In this respect, Dynamic Stochastic General Equilibrium (DSGE) models based on microfoundations classify households, firms, and governments or central banks as the main types of agents in the economy. However, decisions of economic agents have been generally related to their risk perception that is under the influence of psychological, sociological and economic factors. It has also been accepted that expectations related to the economic situation is an indispensable factor determining the economic performance of countries. More specifically, economic expectations are generally formed by economic policy uncertainty (EPU) that may cause to considerable amount of variation in goods, money and capital markets. Thus, researchers have begun to incorporate the role of perception of uncertainty related to macroeconomic and financial variables into their models.

In the era of the economic and financial liberalization process, financial variables are given a crucial role particularly in formulation of monetary stability despite there may be trade-offs between the objectives of macroeconomic stability and financial stability (Agénor and Pereira da Silva, 2012). Macroeconomic policy makers focus on the increase of financial deepening that may help to enhance resilience and capacity to cope with shocks, improve macroeconomic policy effectiveness, and support economic growth. Herein, it may be asserted that EPU may have relatively larger impacts on low-depth financial markets and lead to deepen the effects of the economic crisis. Nevertheless, an increase EPU of countries may also lead to fluctuations in financial markets of developed that
monetary policy authorities should consider. In this respect, there have been a growing amount of contributions into the literature examining the relationship between EPU and financial variables (Ko and Lee, 2015; Li et al., 2015; Liu and Zhang, 2015; Ferguson and Lam, 2016; Han et al., 2016; Bonciani and van Roye, 2017; Kang et al., 2017; Tsai, 2017).

In this study, we examine the possible impacts of the EPU on the stock returns by employing Structural Vector Autoregression (SVAR) and Dynamic Conditional Correlation Multivariate Generalized Autoregressive Conditional Heteroscedasticity (DCC MGARCH) models to draw implications concerning economic policy conduction in the United Kingdom (UK). Countries incorporated in this empirical exercise (the UK and the United States [US]) have both floating currency regimes and the capital control regimes that are not classified as “Wall” by the IMF. The other feature pertaining to these countries in the study is their monetary policy regime, namely the inflation targeting. The main contribution of our study is that we use both external and internal economic factors in our empirical analysis as changes in stock returns may be sourced from these factors. Within this context, we aim to show the effects of EPU in the UK and the US on stock returns in the UK and discuss how EPUs may transmit to stock markets in the UK. Therefore, the research question of this study is formulated as follows: whether relationship between the variables under investigation leads to further moderations in the monetary policy of countries under investigation.

The article proceeds as follows. Section 2 reviews relevant theoretical and empirical studies. Section 3 presents the methodological means proposed here to investigate the impacts of EPUs on stock returns in the UK. Section 4 sets out the empirical models and empirical results. Finally, Section 5 concludes the paper and highlights some issues for further research.

2. Literature Review

Stock markets are well acknowledged as having a major role in economic growth by raising capital, providing improved returns, directing savings into investments and improving corporate governance. Therefore, the variations in stock exchanges are highly important for the development of economy, which are monitored particularly by monetary policy authorities for safety of the overall economic activity. Most recently, Lazarov et al. (2016) examined the effects of stock market development on economic growth for a group of 14 transition economies from the Central and South-East European (CSEE) region for the period from in the period 2002-2012 with dynamic panel model (Generalized Method of Moments – GMM). It was found by Lazarov et al. (2016) that capital market regional integration and the harmonization of legal and institutional frameworks and a more liberalized trade regime may be key factors for sustaining the positive relationship between stock market development and economic growth. Conversely, Owusu (2016) indicated that stock markets have no positive and at best mixed effect on economic growth in the long run by employing Auto-Regressive Distributed Lag (ARDL)-bounds testing approach for Nigeria. Accordingly, Owusu (2016) suggested that financial deepening should be increased and bottlenecks in the financial sectors should be eliminated by providing further public and institutional education on the value of stock markets for economic development. Additionally, financial development related to the increase of the stock markets may also be crucial for the sustaining the economic growth for developing countries in the era of the recent global economic crisis. Ahmad et al. (2016) used the pooled mean group estimation technique to empirically re-investigate the relationship between financial market development, global financial crisis, and economic growth in selected African economies. They indicated that stock market and banking sector development triggered economic growth in African countries, while the recent financial crisis limited the positive impacts of both the stock market and banking sector developments on economic growth in Africa. On the other hand, Deysapriya (2016) stated that stock market development may cause to an increase in the real economic of developed countries. By using Panel GMM and Panel Granger non-causality for in developed and emerging markets, Deysapriya (2016) found that only the finance-led growth hypothesis was valid for emerging markets, while developed markets support the existence of both the finance-led growth hypothesis and the growth-led finance hypothesis.

Due to the importance of financial stability for attaining the targets of monetary policy, the interaction between stock prices with macroeconomic and financial variables is a crucial issue to be analyzed. Determination of the interactions between stock markets of different countries may also be critically
important in the era of financial globalization process. Boubaker and Raza (2016) considered the role of recent global financial crisis by examining the time-varying and asymmetric co-movement of CEE equity markets with the US stock markets. They employed the derivation of time-varying copulas allowing for the dynamic co-movement through time, any extreme interaction, nonlinearity and asymmetry in the co-movement patterns. Boubaker and Raza (2016) obtained empirical results providing strong evidence of comovement between the US and CEE equity markets and it as suggested the co-movement exhibited large time-variations and asymmetry in the tails of the return distributions. Fluctuations in stock markets may be associated with the changes in exchange rates as a result of the interactions between stock markets and foreign exchange market. Koukakiotis et al. (2015) stated that movements in the exchange rates were important to balance the demand and supply of domestic and foreign financial assets in the rapid integration process of capital and currency markets. Koukakiotis et al. (2015) also suggested that the relationship between stock and foreign exchange markets was sensitive to short-term good or bad news and short-term small or large news by estimating asymmetric threshold model for the USA, Canada and the UK. The results of Liang et al. (2015) that verified the importance of exchange rate and stock markets on each other were also in line with Koukakiotis et al. (2015). More precisely, Liang et al. (2015) analyzed the Granger causal nexus between the equity and foreign exchange markets by employing the bootstrap panel Granger causality approach for the ASEAN-5 countries over the January 2000–August 2013 period. According to Liang et al. (2015), there existed a unidirectional causality from stock prices to exchange rates in Malaysia, the Philippines and Thailand and from exchange rates to stock prices in Indonesia. Furthermore, variations in oil prices may have consequences on the financial markets related to the increase in the trade volume of oil-based financial instruments despite the impacts of the changes on oil price may differ across the macroeconomic conditions of the oil-importing and exporting countries. Ftiti et al. (2016) investigated the links oil and stock markets in G7 countries by distinguishing between interactions based on long-term interdependence and short-term interaction with evolutionary co-spectral analysis and the wavelet approach. It was implied that there existed relationship between oil price and the stock market is more pronounced in the short and medium-term, while oil demand shocks could be the main factors of the variations in stock returns. Similarly, Huang et al. (2016) studied the determination of the oil–stock interaction market interaction and the dynamic evolution of decisive time scale over time. For this purpose, they employed the wavelet transform, the gray correlation, and network analyses for the Brent spot oil price and the Morgan Stanley Capital International world stock index. Huang et al. (2016) found that the effects of oil price shocks on the oil–stock nexus differed in the short and long-term, while long-term changes caused to structure changes in trend of original market interactions.

On the other hand, monetary and fiscal policy changes are factors influencing the stock prices and they even may cause to high volatility in stock markets. Due to the borrowing requirement of public and private sector and the effect of monetary policy interest rate on bond interest rates, the influences of the changes in fiscal and monetary policy may highly been reflected in the changes of bond yields. Most recently, Scholz et al. (2016) studied the role of bonds on the prediction of the variation of stock prices for the case of Denmark. By implementing simulation based on two stage regression model, they found that the risk and return of bonds was easier to predict than the risk and return of stocks. Moreover, Scholz et al. (2016) stressed that predicted bond returns helped to improve stock prediction significantly. In a similar effort, Li et al. (2016) considered the time-varying interaction between stock-bond return comovements by constructing an asset pricing model with heterogeneous agent’s allocating capital to stock and bond markets. Moreover, Li et al. (2016) examined the relationship between US stock and bond data using the VAR model with threshold and Markov switching mechanisms. Li et al. (2016) found empirical evidence that technical traders sell stocks and buy bonds during the periods high market uncertainty. Therefore, we can infer that uncertainties arising from economic policy may eventually have consequences on stock price movements both in developed and developing economies. In this respect, Ko and Lee (2015) employed wavelet analysis to expose the relationship between EPU and stock price in both a time and frequency domain for the US. It was found that there existed a negative link from policy uncertainty to stock prices that was changing from low to high frequency cycles. Ko and Lee (2015) also emphasized that the relationship between these variables were overlapping when US policy uncertainty commoved with other countries’ policy uncertainty. Additionally, it can be asserted that EPU may be helpful to estimate the volatility in stock

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returns. Liu and Zhang (2015) analyzed the role of EPU in explaining the volatility of stock returns for the case of US. By using volatility models with the data of S&P500 index, Liu and Zhang (2015) implied that that higher EPU led to an increase in the stock market volatility, while the inclusion of EPU as a variable was also a factor of the improvement in forecasting ability of alternative models. Uncertainties related to fiscal policy may also be effective on stock markets through money markets due to the role of government on economy. Ferguson and Lam (2016) examined the relationship between government policy uncertainty on stock prices in terms of the tension between private interest and public interest arguments over uranium mining by estimating biweekly time-series regression for Australia. Their results indicated that uranium stocks reacted positively to key uranium-related policy events in Australia.

The relationship between stock return and other financial variables may be influenced by the changes in economic policy uncertainty. In this respect, Li et al. (2015) used volatility modeling that distinguishes a positive shock from a negative one to study examines the effects of EPU shocks on stock–bond correlations for the US market. Li et al. (2015) obtained results that were robust after controlling the structural break triggered by the introduction of the Euro and the asymmetric effects of non-EPU shocks. More precisely, Li et al. (2015) found that reactions of the correlations between stock and bond markets were asymmetric to positive and negative EPU shocks. Most recently, Kang et al. (2017) extended the analysis for the relationship between stock prices and EPU by the inclusion of oil price shocks sourced from supply and demand. By estimating VAR and SVAR models for the US, they found that an oil demand-side shock influenced the return of oil and gas companies. Kang et al. (2017) also showed that shocks to policy uncertainty that might be attributable to an increase in uncertainty, led to a negative impact on stock returns. More specifically, Kang et al. (2017) revealed that the effects of oil shocks on stock returns were amplified by the endogenous policy uncertainty responses according to the historical decompositions. Furthermore, Kang et al. (2017) found that the news coverage shocks and the CPI forecaster disagreement shocks accounted for 10% and 5.6% of the variations in real stock return of oil and gas industry.

In terms of the analysis of the international transmission mechanism, the role of macroeconomic risks arising from EPU may become a crucial issue. Due to the existence of international transmissions of policy uncertainty, it can be asserted that macroeconomic conditions of economies may be under the influence of EPU in the US and other global shocks such as changes in oil prices and the diffusion of technological progress. Sum (2013) explored that whether the changes of EPU in the US may account for the stock returns in Indonesia, Malaysia, Philippines, Singapore and Thailand using Ordinary Least Squares (OLS) and VAR models. The estimations of Sum (2013) verified the negative link between EPU in the US and the returns on the five ASEAN stock markets. More precisely, Sum (2013) indicated that the five ASEAN stock markets had an immediate negative reaction to the changes in EPU. Han et al. (2016) used an enhanced specification to study in international transmissions of EPU on export, industrial production, equity price and exchange rate of China. According to the Global VAR (GVAR) model estimations of Han et al. (2016); it was found that the US EPU was the major cause of the fall of export, industrial production, equity price and exchange rate in China, whereas the Euro area EPU led to the depreciation of RMB. The results of Han et al. (2016) implied the importance of international trade and investments and financial markets, while it was also suggested that China had to pay more attention to the policy uncertainty of the US rather than other developed countries. Most recently, Tsai (2017) examined the impacts of EPU in China, Japan, Europe, and the US on the contagion risk of investments in the global stock market. By using estimations for stock market volatilities, Tsai (2017) considered the role of regional systematic risk and the contagion risk effect of economic policy uncertainty. It was found that EPU in China was the most influential, and its contagion risk spreads to different regional markets, except for Europe. Tsai (2017) also indicated that the impacts of EPU could be accepted as close to the effects of EPU in China, whereas Japan merely had impact on contagion risk in emerging markets. However, Tsai (2017) revealed that the EPU in Europe and China respectively influenced Asian countries and European countries the most according to the volatility risk in each market.
3. Research Methodology

As for the empirical exercise, I address the relationship between economic policy uncertainty and stock returns based on the estimation of SVAR and DCC MGARCH models for the UK over the period 1999:Q1 to 2017:M1. Thus, I include the stock returns (\(st\)) computed as the percentage of change in the stock market index (base year 2010=100) from the previous month. Our models also incorporate the role of economic policy uncertainty in the UK and the US, assuming that the economic developments in the USA transmit to other economies through various economic channels.

Economic policy uncertainty indices of the UK and the US\( (epu_{uk}^{P}, epu_{us}^{P}) \) are expressed as percentage of changes in the related index (base year 2010=100) over the previous period. The ordering of variables in PVAR models are; \(epu_{us}^{P}, epu_{uk}^{P}, sto_{uk}^{P}\), respectively. In order to carry out the empirical exercise, the plausible tools of J-MuLTi and Stata software are used. Stock price index series are extracted from the statistical database of OECD, while EPU series are obtained from the policy uncertainty website, http://www.policyuncertainty.com/.

3.1. SVAR Model

The specification of the SVAR model is based on a \(K\)-dimensional stationary VAR\((p)\) process as in (1).

\[
y_t = A_1 y_{t-1} + \ldots + A_p y_{t-p} + D_t + u_t
\]

In the VAR model representation above, \(y_t = (y_{t1}, \ldots, y_{tk})\) refers to a vector of observable endogenous variables with \(K\) elements. The \((K \times K)\) coefficient matrices are denoted as \(A_i\), whereas \(D_t\) has all deterministic variables such as a constant term, a linear trend term and dummy variables. It can be expressed that, \(u_t = (u_{t1}, \ldots, u_{tk})\) is a \(K\)-dimensional unobservable zero-mean white noise process with positive definite covariance matrix \(E(\mu_t, \mu_t') = \Sigma_u\) (Lütkepohl, 2005, p.13).

In order to determine the ordering of the variables in VAR type of models, Cholesky decomposition can be employed. More specifically, a Cholesky decomposition of the covariance matrix \(\Sigma_u\) can be employed to the innovations of the VAR. Denoting by \(B\) a lower triangular matrix such that \(\Sigma_u = BB'\), the orthogonalized shocks that based on an one standard deviation shock \(\varepsilon_t = B^{-1}u_t\), is obtained (JMulti Help System, 2008). For the stationary case, the form below can be specified;

\[
y_t = \Psi_0 \varepsilon_t + \Psi_1 \varepsilon_{t-1} + \ldots
\]

where \(\Psi_i = \Phi_i P\) \((i = 0, 1, 2, \ldots)\). \(\Psi_0 = P\) is lower triangular meaning that an \(\varepsilon\) or one standard deviation shock in the first variable have an instantaneous effect on all the variables, whereas a shock in the second variable do not influence \(y_{t1}\) but only on the other variables of the VAR model. On the other hand, Cholesky is not been recognized as robust strategy since theoretical considerations cannot be reflected in the estimation process. Another reason leading the development of SVAR model is that different ordering of the variables in the vector \(y_t\) may produce different impulse response results (JMulti Help System, 2008). Herein, the shocks in an impulse response analysis are defined by placing restrictions on the matrices \(A\) and \(B\) in the SVAR model form below;

\[
A y_t = A^1 y_{t-1} + \ldots + A^p y_{t-p} + B \varepsilon_t
\]

where \(\varepsilon_t\) refers to a \((K \times 1)\) vector of structural shocks with covariance matrix \(E(\varepsilon_t, \varepsilon_t') = \Sigma_e\). The residuals are expressed by \(B \varepsilon_t\), and structural shocks are instantaneously uncorrelated. Accordingly, there are three types of SVAR; an A model where \(B = I_k\), a B model where \(A = I_k\) and a general AB model where restrictions can be imposed on both matrices. It can be expressed that SVAR
model’s Impulse Response Functions (IRFs) can be estimated from process (2) by \( \Psi_j = \Phi_j A^{-1} B \) (Breitung et al., 2007: p.167). In Blanchard-Quah type SVAR models; it can be written that (A=I_k) and thus the matrix of long-run effects \( (I_k - A_1 - \ldots - A_p)^{-1} B \) is assumed to be lower-triangular (JMulti Help System, 2008). Since there are there variables in our SVAR model, it is exposed that the second residual has no long-run impact on the first variable, whereas the third residual cannot have a long-run effect on the other variables.

### 3.2. DCC MGARCH Model

Autoregressive Conditional Heteroskedasticity (ARCH) modeling is recognized as a useful tool when a time series investigated by Autoregressive Integrated Moving Average (ARIMA) models has time-varying volatility clustering. Within this framework, Generalized Autoregressive Conditional Heteroscedasticity (GARCH) can be specified if an ARIMA model is assumed for the error variance. GARCH models constitute a base for the specification of Multivariate GARCH (MGARCH) models in which the errors of the model has an autoregressive-moving-average structure. DCC MGARCH Model has a nonlinear combination of univariate GARCH models with time-varying cross-equation weights to model the conditional covariance matrix of the errors (Stata 13 Help System, 2008). DCC-GARCH model can be written as below;

\[ r_t = \mu_t + \alpha_t \]

where \( r_t \) refers to \((e \times 1)\) vector of log returns of assets \( e \) at time \( t \). \( \alpha_t \) represents \((e \times 1)\) vector of mean-corrected returns of \( e_t \), while the expected value of the conditional \( r_t \) is contained in \( \mu_t \) vector with the same dimension and \( R_t \) is the \((e \times e)\) conditional correlation matrix of \( \alpha_t \) (Orskaug, 2009: 25). The information on the return rate of assets \( (e_t) \) is identically distributed and it can be generated by a white noise process and \( \Omega_{t-1} \) refers to the information set of \( e_t \). The covariance matrix of \( e_t \) is denoted by \( H_t \) and it has a multivariate normal distribution that is \( e_t \mid \Omega_{t-1} N(0, H_t) \). The dynamic correlation structure can be summarized as follows;

\[ e_t \mid \Omega_{t-1} N(0, H_t), \Omega_{t-1} \]

\[ H_t = D_t R_t D_t \]

\[ Q_t = (1 - \sum_{m=1}^{M} \alpha_m - \sum_{n=1}^{N} \beta_n) \bar{Q} + \sum_{m=1}^{M} (\alpha_m (e_{t-m} e_{t-m}) + \sum_{n=1}^{N} \beta_n Q_{t-m}) \]

where \( D_t \) refers to a \((e \times e)\) diagonal matrix of conditional standard deviations of \( \alpha_t \) and \( \bar{Q} = T^{-1} \sum_{t=1}^{T} e_t e_t^\top \) denotes the unconditional covariance matrix of the standard residuals and \( R_t = (Q_t^*)^{-1} Q_t (Q_t^*)^{-1} \) (Yang and Jiang, 2016: 94). \( Q_t^* \) is the diagonal of \( Q_t \) and it can be written as below;

\[ Q_t^* = \begin{pmatrix} \sqrt{q_{11}} & 0 & \ldots & 0 \\ 0 & \sqrt{q_{22}} & \ldots & 0 \\ \vdots & \vdots & \ddots & \vdots \\ 0 & 0 & \ldots & \sqrt{q_{kk}} \end{pmatrix} \]

In equation (8), \( R_t \) is a dynamic correlation matrix and the expression \( D_t = \text{diag}(\sqrt{h_{t}}) h_{t} = \sum_{p=1}^{p} \alpha_p e_{t-p}^2 + \sum_{q=1}^{q} \beta_p h_{t-p} + \omega_t \) indicates that the returns on each asset are
subject to the GARCH \( p, q \) process. \( \varepsilon_t = D_t^{-1} \varepsilon_t \) is a vector of the normalized residuals and \( Q \) refers to the unconditional covariance matrix of the standard residuals. \( \rho_{t,i} = q_{t,i} / \sqrt{q_{t,i} q_{t,i}} \) is the element in matrix and \( Q_t \) refers to a diagonal matrix with the elements \( \sqrt{q_{t,i} \alpha_m} \) and \( \beta_n \) are the coefficients of DCC model, where \( m \) and \( n \) are lags (Yang and Jiang, 2016: 94).

4. Results and Discussion

4.1. Unit Root Analysis

In order to derive the appropriate type of the econometric model and thus obtain significant estimation results, unit root properties of the time series should be determined. In this study, the Pantula principle proposed by Pantula (1989) is followed to determine type of the ADF test based on the estimation of the three different regression models. According to this principle, if a linear trend term is needed in the test for \( y_t \), then only a constant term should be included in the test for \( \Delta y_t \). Similarly, if just a constant is necessary in the test for \( y_t \), the test for \( \Delta y_t \) is to be carried with no deterministic term. More precisely, it can be inferred that series are to be differenced a maximum number of times necessary for inducing stationary (Lütkepohl, 2004: 55).

Table 1: Augmented Dickey–Fuller Test Results

<table>
<thead>
<tr>
<th>Variables</th>
<th>ADF Test Statistic</th>
<th>Number of Lagged Differences</th>
</tr>
</thead>
<tbody>
<tr>
<td>sto(<em>t)(</em>{uk}) (c)</td>
<td>-13.31</td>
<td>0</td>
</tr>
<tr>
<td>epu(<em>t)(</em>{ak}) (c)</td>
<td>-7.77</td>
<td>3</td>
</tr>
<tr>
<td>epu(<em>t)(</em>{usa}) (c)</td>
<td>-7.76</td>
<td>8</td>
</tr>
</tbody>
</table>

Notes: The 1\% critical values for the ADF test with constant (c) and no terms are -3.43 and -2.56, respectively. The critical values of the ADF test are from Davidson and McKinnon (1993). The number of lagged differences in the regression models of the ADF tests was selected by Akaike Information Criterion (AIC) and Schwarz Criterions (SC).

Source: Authors’ calculations

As shown in Table 1, ADF test results indicated that \( sto\(_t\)\(_{uk}\) \), \( epu\(_t\)\(_{ak}\) \) and \( epu\(_t\)\(_{usa}\) \) series are stationary and thus cointegration relationship between these variables cannot be studied using appropriate models. I also employed unit root tests with structural shifts and they both suggested that there exist no cointegration relationship between these series since all series are found as \( I(0) \) at levels.

Table 2: Results of Unit Root Test with Structural Break

<table>
<thead>
<tr>
<th>Variables</th>
<th>Test Statistic</th>
<th>Number of Lagged Differences</th>
<th>Suggested Break Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>sto(<em>t)(</em>{uk}) (c)</td>
<td>-6.34</td>
<td>1</td>
<td>2009 M04</td>
</tr>
<tr>
<td>epu(<em>t)(</em>{ak}) (c)</td>
<td>-5.07</td>
<td>3</td>
<td>2016 M08</td>
</tr>
<tr>
<td>epu(<em>t)(</em>{usa}) (c)</td>
<td>-8.09</td>
<td>8</td>
<td>2002 M10</td>
</tr>
</tbody>
</table>

Notes: The 1\%, 5\% and 10\% critical values for the unit root tests with structural breaks with constant terms are -3.48, -2.88 and -2.58, respectively. The lag lengths of the tests for the series are selected by AIC and SC.
On the other hand, it can be assumed that the macroeconomic developments for the period from 2000:M01 to 2017:M01 may lead to more than one structural break in the macroeconomic and financial variables. Thus, I used the methodologies of Bai (1997) and Bai and Perron (1998, 2003), allowing for possible multiple unknown breakpoints in \( sto_{it}^{uk} \), \( epu_{it}^{uk} \) and \( epu_{it}^{usa} \).

Table 3: Estimated Break Dates for the Variables

<table>
<thead>
<tr>
<th>Variables</th>
<th>Schwarz Criterion Selected Breaks</th>
<th>Modified Schwarz Criterion (LWZ) Selected Breaks</th>
</tr>
</thead>
<tbody>
<tr>
<td>( sto_{it}^{uk} )</td>
<td>0</td>
<td>2003 M03 M04 2003 M04 2003 M04 2003 M04 2003 M04</td>
</tr>
<tr>
<td>( epu_{it}^{uk} )</td>
<td>0</td>
<td>2014 M07 M07 2014 M07 M07 2014 M07 M07 M07</td>
</tr>
<tr>
<td>( epu_{it}^{usa} )</td>
<td>0</td>
<td>2003 M04 2003 M04 2003 M04 2003 M04 2003 M04</td>
</tr>
</tbody>
</table>

More specifically, it can be inferred that structural breaks in the series may influence the relationship between stock returns and economic policy uncertainty. Moreover, these breaks can have a crucial role on the analysis of volatility of \( sto_{it}^{uk} \), \( epu_{it}^{uk} \) and \( epu_{it}^{usa} \). For the period from 2000:M 01 to 2017:M 01, I searched for multiple break dates for the series under investigation. However, no break dates are imposed for \( sto_{it}^{uk} \), \( epu_{it}^{uk} \) and \( epu_{it}^{usa} \) by the Schwarz and the LWZ criterions. Thus, I ignored the inclusion of structural breaks as dummy variable into this empirical exercise and estimated SVAR and DCC MGARCH models with variables in levels.

4.2. Empirical Analysis

SVAR models can be used for macroeconomic policy research as they are suitable for the analysis of macroeconomic variables due to the availability of imposing restrictions deriving from economic theory into the estimation process. In this study, I firstly estimate a Blanchard-Quah type SVAR model with a lag length of 1 suggested by AIC and SC and thus impulse response and Forecast Error Variance Decomposition (FEVD) analysis is performed on this basis. The ordering of the variables in the vector of SVAR model is \( (epu_{it}^{usa}, epu_{it}^{uk}, sto_{it}^{uk}) \), thus I assumed that EPU in the US can be under the influence of its own dynamics. More specifically, the residual of EPU in the UK has no long-run impact on the EPU in the US, whereas the residual of stock returns of the UK cannot have a long-run impact on the formulation of economic policy in the UK and the US in the long-run. The ordering of
the variables in the model also identifies that EPU shocks in the US transmit to the economic variables of the UK. In this respect, the matrix of long-run restrictions can be specified as below;

\[
\begin{bmatrix}
    0 & 0 \\
    0 & 0 \\
    0 & 0
\end{bmatrix}
\]

\( (9) \)

Because there may be the presence of heteroscedasticity in the residuals of the SVAR model, I implemented Multivariate ARCH-Lagrange Multiplier test and it was implied that ARCH/GARCH type of models may be employed since ARCH-LM has chi-squared test with 5 lags has a value of 480.45 (p-value of 0.000). The presence of autoregressive conditional heteroscedasticity was also tested based on AR(1) model for stot, epu, and epus. The order of autoregressive and moving average parts \( p \) and \( q \) of the models are determined by partial autocorrelation function (PACF) and autocorrelation function (ACF). It was found by ARCH-Lagrange Multiplier test with 4 lags that there were ARCH effects in the series under investigation. Thus, I secondly used DCC MGARCH model for the analysis of effects of EPU in the UK and US on stock returns in the UK.

### 4.2.1. Impulse response analysis based on the SVAR model

According to the Figure 1, as a result of a positive shock in the EPU of the UK and the US, a statistically significant impact on the stock price returns is detected for the following periods. The reaction of the stock returns in the UK to a positive shock in EPU of the UK is long-lived and statistically significant, whereas the stock returns in the US decreased up to the following 12th month as a result of an increase in EPU of the US. In line with the theoretical expectations in terms of the negative effects of EPU, impulse response exercise based on Blanchard-Quah type SVAR model implied that an increase in EPU may prompt investors to move away their money from stock markets in the UK and US and thus lead to a decline in firm values. Thus, it can be inferred that a deteriorating impact on the real economic activity of the UK can exhibit related to an increase in EPU of the UK and the US. More specifically, impulse response exercise exposes that the negative effects of increase in EPU of the US may well transmit to the stock market of the UK due to the tight trade and financial relations between the UK and the US. Thus, IRFs highlights that EPU of the US can be regarded as the driving force of the expectations related to financial markets of other countries and global economy.

![Figure 1: Response of stock returns to an EPU shock](image)

When the financial development phenomenon over the last decade is considered, changes in stock returns can also have an influence on expectations about the situation of the economy. More specifically, stock returns can be regarded as a determinative of consumer confidence which in turn influences consumer expenditures. According to the results of the IRFs, I can assert that an increase in EPU and a decrease in stock returns in the UK and the US may affect the utility function of representative households. In this respect, it can be interpreted that decrease in stock returns can be regarded as a factor having impacts on consumption opposite to habit formation of consumers. On the
other hand, it can be implied that changes in EPU can influence the investments in financial markets and the gross fixed capital formation in an economy. IRFs estimated from the SVAR models indicated that gross fixed capital formation in the UK and the US may be influenced negatively because the capability of firms to fund from the stock markets is reduced. In this respect, I can infer that increase in EPU may not only lead to a fall in the stock returns but also affect the expectations related to money markets of the UK and US and cause to capital outflows from these countries. Because changes in EPU in a country may lead to volatility in stock markets, it is also a crucial issue to determine contribution of EPU shocks in the UK and the US to the variations in the stock returns of the UK.

4.2.2. FEVD analysis based on the SVAR model

As shown in Table 4, variations in the stock returns are mainly driven by its own shocks up to the following thirty-sixth month in the UK explaining nearly 30% of the 36-step forecast error variance of itself in SVAR Model. In this respect, I can suggest that the dynamics of stock markets influencing investment decisions in the stock market should be considered by policy makers and market players to forecast a stock price index. More specifically, technical analysis can be useful tool to detect the dynamics of stock prices in the UK. Additionally, FEVDs of the SVAR model stresses that the role of economic and political expectations influencing investment decisions in the stock market should be considered by policy makers and market players. FEVDs expose that shocks to EPU in the UK account for the 20% of the 36-step forecast error variance of stock returns of the UK. Accordingly, EPU shocks in the UK can be regarded as the second important of the variations in stock returns in the UK. More precisely, it can be asserted that Brexit can be important source of the EPU of the UK because the conduction of monetary, fiscal and exchange rate policies may be affected in the following periods. On the other hand, monetary policy implementation of the Bank of England and fiscal policy framework of the government can be regarded as crucial factors that may cause opposite effects in terms of attaining the targets of economic policy.

Table 4: FEVDs of the stock returns

<table>
<thead>
<tr>
<th>Forecast Horizon</th>
<th>$e_{t}^{usa}$</th>
<th>$e_{t}^{uk}$</th>
<th>$sto_{t}^{uk}$</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.01</td>
<td>0.21</td>
<td>0.79</td>
</tr>
<tr>
<td>6</td>
<td>0.12</td>
<td>0.18</td>
<td>0.70</td>
</tr>
<tr>
<td>12</td>
<td>0.26</td>
<td>0.22</td>
<td>0.52</td>
</tr>
<tr>
<td>18</td>
<td>0.37</td>
<td>0.23</td>
<td>0.41</td>
</tr>
<tr>
<td>24</td>
<td>0.44</td>
<td>0.22</td>
<td>0.34</td>
</tr>
<tr>
<td>30</td>
<td>0.49</td>
<td>0.21</td>
<td>0.30</td>
</tr>
<tr>
<td>36</td>
<td>0.53</td>
<td>0.20</td>
<td>0.27</td>
</tr>
</tbody>
</table>

According to FEVDs, I can suggest that the possible consequences of the Brexit on economic policy conduction should also be explored by other countries’ central banks due to role of the UK on global economy. I also obtained results similar to the IRFs implying that the EPU in the US may transmit to stock returns in the UK. More specifically, FEVDs show that EPU of the US explains nearly 50% of the variation in stocks returns in the UK. The impacts of monetary and fiscal policy changes in the US may also have opposite effects on each other, while they can have influence on the UK through different channels. More specifically, I can infer that Trump’s fiscal policy framework and FED’s monetary policy implementation may not be coordinated with each other that can be recognized as factor increasing EPU of the US in the following periods. Thus, I suggest that the economic policy
makers in the UK and researches should clarify the channels through which international transmission mechanism operates on the basis of the financial linkages between the US and the UK. In this respect, Global VAR (GVAR) modeling can be an optimal tool to identify the impacts of the changes in the economic policy stance of the US on the macroeconomic and financial variables of the UK since trade and financial relations can be weighed in this type of modeling.

4.2.3. Analysis based on the DCC MGARCH model

Along with the past values of the stock prices and other financial and macroeconomic variables, EPU can be highly recognized as a factor that may lead to volatility in the UK’s stock prices. In this respect, various variables can be included in the DCC MGARCH model as independent variables explaining the changes in stock returns of the UK. Hereby, the role of time-varying impacts is incorporated in the analysis of the factors leading to variations in stock returns. Because it is been generally recognized that the UK economy experienced important changes over the last decades and thus most macroeconomic variables showed considerable time-variation, it may be useful to employ DCC MGARCH modeling for the UK and US into this empirical exercise since the macroeconomic policy changes in the US may highly transmit to the stock market of the UK. I also intended to consider the EPUs of the Euro area, Japan China, Russian Federation into the DCC MGARCH model, however the inclusion of these countries EPU deteriorated the statistical significance of the model. As a result of the estimation of the DCC MGARCH model, Table 5 shows a Wald test against the null hypothesis that all the coefficients on the independent variables in the mean equations are zero, while the null hypothesis is rejected at the 5% level since Wald chi-squared test (9) has a value of 33.81 with a p-value of 0.001.

As shown in Table 5, the coefficient of one lagged value of $epu_{uk}$ is negative and statistically significant at the 10% level. An increase of the EPU in the UK negatively influences the stock returns, implying the importance of maintaining the coordination between monetary and fiscal policy. Herein, it can be asserted that Brexit may become a crucial factor having consequences on the determination of the exchange rate policy and trade and finance regimes in the UK. Thus, I suggest that the possible negative effects of Brexit on stock returns may transmit through various channels. The impacts of Brexit may be reflected in the balance sheets of the firms quoted in the FTSE index since these firms may be opposed to interest rate and exchange rate risk. More specifically, firms with dollar-denominated debt may deeply be affected negatively due to the depreciation of pound against dollar after the Brexit. Additionally, Brexit may become a factor leading to capital outflows from the UK which in turn may increase the cost of borrowing for the firms and affecting their balance sheets negatively. Possible capital outflows from the UK can also be regarded as a factor decreasing the trading volume in the stock market and thus reducing the stock returns in the UK. However, it is exposed that an increase in the EPU of the US can positively affect the stock returns in the UK according to the estimation of the DCC MGARCH model. This finding is contrast to the IRFs of the SVAR model, however it can be inferred that the inability to coordinate fiscal and monetary policy implementation in the US may lower the confidence to the economic situation in the US and negatively affect the expectations. Therefore, the existence of a kind of phenomenon may cause to flow of funds from the US to financial markets of the UK. According to the estimation results of the DCC MGARCH model, I can also interpret that the financial markets of the US and the UK may be alternative to each other in terms of the investments to stock market markets. On the other hand, it can be asserted that an increase in the EPU of the US can negatively affect the flow of funds to all developed financial markets along with the UK’s. Herein, it is critically important to clarify the impacts of EPU in US on global economy by the inclusion of other macroeconomic variables.
Table 5: DCC MGARCH Model 1’s Estimation Results

<table>
<thead>
<tr>
<th>Equation</th>
<th>Coef.</th>
<th>Std. Err.</th>
<th>p-value</th>
<th>[95% Conf. Interval]</th>
</tr>
</thead>
<tbody>
<tr>
<td>$sto_{it}^{ak}$ lag 1.</td>
<td>0.2433922</td>
<td>0.0877333</td>
<td>0.006</td>
<td>0.0714381, 0.4153462</td>
</tr>
<tr>
<td>$epu_{it}^{ak}$ lag 1.</td>
<td>-0.2657376</td>
<td>0.1494893</td>
<td>0.075</td>
<td>-0.5587313, 0.27256</td>
</tr>
<tr>
<td>$epu_{it}^{au}$ lag 1</td>
<td>0.2080525</td>
<td>0.1221885</td>
<td>0.089</td>
<td>-0.0314327, 0.4475376</td>
</tr>
<tr>
<td>ARCH $sto_{it}^{ak}$</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>arch lag 1</td>
<td>0.0687355</td>
<td>0.0277613</td>
<td>0.013</td>
<td>0.0143242, 0.1231467</td>
</tr>
<tr>
<td>garch lag 1</td>
<td>0.9258651</td>
<td>0.0301636</td>
<td>0.000</td>
<td>0.8667456, 0.9849846</td>
</tr>
<tr>
<td>constant</td>
<td>0.0000133</td>
<td>0.0000233</td>
<td>0.568</td>
<td>-0.0000324, 0.000059</td>
</tr>
<tr>
<td>$epu_{it}^{ak}$ equation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$sto_{it}^{ak}$ lag 1.</td>
<td>-0.0474897</td>
<td>0.054817</td>
<td>0.386</td>
<td>-0.1549291, 0.0599498</td>
</tr>
<tr>
<td>$epu_{it}^{ak}$ lag 1.</td>
<td>-0.0437002</td>
<td>0.1342185</td>
<td>0.745</td>
<td>-0.3067636, 0.2193632</td>
</tr>
<tr>
<td>$epu_{it}^{au}$ lag 1</td>
<td>0.2490976</td>
<td>0.1044439</td>
<td>0.017</td>
<td>0.0443913, 0.4538039</td>
</tr>
<tr>
<td>ARCH $epu_{it}^{ak}$</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>arch lag 1</td>
<td>0.3584438</td>
<td>0.1013969</td>
<td>0.000</td>
<td>0.1597095, 0.5571781</td>
</tr>
<tr>
<td>garch lag 1</td>
<td>0.5524059</td>
<td>0.0944469</td>
<td>0.000</td>
<td>0.3672934, 0.7375185</td>
</tr>
<tr>
<td>constant</td>
<td>0.0000303</td>
<td>0.0001097</td>
<td>0.006</td>
<td>-0.0000879, 0.0005181</td>
</tr>
<tr>
<td>$epu_{it}^{au}$ equation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$sto_{it}^{ak}$ lag 1.</td>
<td>-0.0745405</td>
<td>0.0710768</td>
<td>0.299</td>
<td>-0.2150831, 0.0660022</td>
</tr>
<tr>
<td>$epu_{it}^{ak}$ lag 1.</td>
<td>-0.2160309</td>
<td>0.1545793</td>
<td>0.162</td>
<td>-0.5190008, 0.086939</td>
</tr>
<tr>
<td>$epu_{it}^{au}$ lag 1</td>
<td>0.4244981</td>
<td>0.1340413</td>
<td>0.002</td>
<td>0.161782, 0.6872143</td>
</tr>
<tr>
<td>ARCH $epu_{it}^{au}$</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>arch lag 1</td>
<td>0.1576117</td>
<td>0.0650067</td>
<td>0.015</td>
<td>0.0302009, 0.2850226</td>
</tr>
<tr>
<td>garch lag 1</td>
<td>0.7063362</td>
<td>0.1012777</td>
<td>0.000</td>
<td>0.5079532, 0.9047192</td>
</tr>
<tr>
<td>constant</td>
<td>0.0003802</td>
<td>0.0001775</td>
<td>0.032</td>
<td>0.0000323, 0.0007281</td>
</tr>
<tr>
<td>Correlation ($sto_{it}^{ak}$, $epu_{it}^{ak}$)</td>
<td>0.7976188</td>
<td>0.0419206</td>
<td>0.000</td>
<td>0.715456, 0.8797816</td>
</tr>
</tbody>
</table>
Table 5 also implies that the stock market of the UK can be under the influence of its own dynamics because I found that the coefficient of one lagged value of \( stot \) is positive and statistically significant. More precisely, the past values of the FTSE 100 Index may have impact on the future dynamics of the changes in that index. In this respect, I can infer that technical analysis techniques and ARMA type of models can be employed to detect the future price movements in the stock market of the UK. On the other hand, I explored the possible effects of stock returns on the EPUs of the UK and the US in the DCC MGARCH model. It was revealed that the EPU of the US can be recognized as the major source of the EPU in the UK and US for the following periods. Accordingly, it can be asserted that economic policy changes in the US can be the focus of the economic policy conduction in the UK. The uncertainties in the US can also lead to economic instability in the UK because the fiscal and monetary policy of the UK can be uncoordinated.

ARCH and GARCH coefficients of the equations of \( stot \), \( epuk \) and \( epuu \) are also presented in Table 5. Hereby, the possible effects of time varying impacts are considered in the DCC MGARCH framework. The coefficients for all the parameters in \( stot \), \( epuk \) and \( epuu \) equations are positive and statistically significant, implying that there exists high persistence in the conditional variances of the equations. More specifically, I obtained the sum of the ARCH and GARCH coefficients are closest to 1 in \( stot \), indicating the importance of conditional variances in explaining the stock returns in the UK when EPUs are included in the model. Additionally, the sum of the ARCH and GARCH coefficients in \( stot \), \( epuk \) and \( epuu \) equations are less than 1, exposing that conditional variance is finite and the series are strictly stationary. I also found that the correlations between stock returns in the UK and the EPUs are approximately 80% as a result of the DCC MGARCH estimations. In this respect, I can infer that stock returns in the UK and the EPUs are not independent based on time, moreover the relationship between the stock market movements and EPU in the UK and the UK may be strong in the following periods. There may be strong volatility spillover effects arising from the EPUs in the UK and the US to the volatility of stock returns in the UK. It can also be interpreted that means the volatility of EPUs may well increase the volatility of the FTSE 100 Index.

On the other hand, DCC MGARCH model may be reduced to the CCC MGARCH if \( \lambda_1 = \lambda_2 = 0 \). Thus, I performed a Wald test rejecting the null hypothesis that \( \lambda_1 = \lambda_2 = 0 \) at all conventional levels. The chi-squared test (2) has a value of 1184.26 with a p-value of 0.000, implying that the assumption of time-invariant conditional correlations maintained in the Constant Conditional Correlation (CCC) MGARCH model may be too restrictive for these data and thus verifying the employment of DCC MGARCH model.
5. Conclusions

According to the IRFs of the SVAR model, it was found that positive shocks in the EPU of the UK and the US negatively influenced the stock returns in the UK. Herein, it is critically important for the researchers and the policy makers to determine the source of the EPU in these countries. For the case of the UK, it is recognized that Brexit may be the major factor increasing EPU which in turn have a decreasing impact on stock returns in the UK. Leaving the European Union (EU) is a political choice made by the people of the UK and the competent authorities, however it can be suggested that economic policy makers of the UK should formulate coordinated economic policy in terms of fiscal and monetary frameworks. More specifically, I can assert that the economic policies that are implemented in the UK should also aim to minimize the possible negative outcome of Brexit on different sectors. The IRFs of SVAR model also indicated that positive shocks in the EPU of the US transmit to the stock markets of the UK in the following periods. In this respect, it can be inferred that contradictions in the application of economic policy may well a destabilizing impact on the stock markets which in turn make it difficult to reach the price stability target in the UK. Furthermore, possible contradictions in terms of the aims of economic policy can lead to the incoordination of the fiscal and monetary policy in the UK because the economic policy stance in the US may be misunderstood by the policy makers and other economic agents in the UK.

The FEVDs of SVAR model also obtained outcomes in line with the IRFs; more precisely, it is indicated that shocks in the EPU of the US may have a major role on the variations in stock prices in the UK. Thus, I can interpret that the channels through which EPU of the US transmit to the stock returns should be clarified by the monetary policy makers of the UK. According to the FEVDs of SVAR model, EPU of the UK have the second important role to explain the variations in the stock returns for the future periods. It can be suggested that the possible negative outcomes of the Brexit on the stock market of the UK should identified by the policy makers in order to minimize volatility. Herein, volatility models incorporating the role of time varying impacts was employed in this study because DCC MGARCH model cannot be reduced to CCC MGARCH model in this study. According to the estimations of DCC MGARCH model, it is found that an increase in the EPU of the UK may negatively affect the stock returns of the UK, whereas stock returns in the UK may increase possible due to the flow of funds from the financial markets of the US to the stock markets of the UK. In contrast to the general view that increase in the EPU of US influences the global financial markets negatively and impulse response exercise in this study, the DCC MGARCH model estimations implies that financial markets of UK is another major alternate to the US’s that may attract flow of funds into the UK. Herein, I suggest that the impacts of EPU in the US on the stock market of the UK should be clarified by more enhanced quantitative models. In this respect, I can also infer that the development of financial markets in the UK can be sustained by eliminating the uncertainties arising from Brexit. Due to the high correlations between the stock returns of the UK and the EPU of the UK and the US found by the DCC MGARCH model, it may be useful for the researchers and policymakers to specify more enhanced specified quantitative models that help to clarify the role of international transmission mechanism.
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Stata Data Analysis and Statistical Software Help System, Version.13.0.


A Survey of the Effect of Celebrities Playing in Tv Commercials on Purchasing Behaviours of the Consumers

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Abstract
Publicising the news about a product or a service through the media such as television, newspaper, radio, magazine and/or social media is called advertising. In the study, the aim is to present the thoughts about how the consumers are affected by advertisements, what kind of advertisements have an attraction, particularly the effects of using a well-known celebrity in commercials on the purchasing behaviours of consumers and the effects of these celebrities on consumers. Within this context, surveys have been conducted to 400 consumers in Antalya and the order of importance of the statements and the scores have been identified by applying five point likert scale to the data gathered. In the study, how the consumers are attracted by commercials according to their demographics has also been presented through chi-square analysis.

Key word: Celebrities, Tv Commercials, Behaviour, Consumer

1. Introduction
With the rapid progress of technology and increasing product diversity, businesses need to implement creative mass communication strategies in order to be able to stand on the market and come to the forefront. The most prominent of these strategies is advertising. Advertising is an important factor in consumers’ product and service preferences. In addition to this, advertising is facing the audience as a means of persuasion and information that can be controlled through mass media (Yaylacı, 1999:7).

One of the best ways to draw attention to ads is to play well-known celebrities in television commercials. The use of celebrities in advertising increases awareness and ensures product retention. As the target identifies himself/herself with the famous person in the promotion of the product, the sales rate of the product is also increasing. For example, this person can become a famous dentist in a toothpaste advertisement, a family-loving housewife in a detergent ad, a famous athlete in a sports shoe ad (Şimşek et al.2003).

In the study, the aim is to reveal how consumers are influenced by advertisements, what types of advertisements are favoured, in particular the influence of the use of a media person recognized by everyone on advertising while buying a product, and the thoughts about the effects of these people on consumers.

2. The Concept of Advertisement and Television Advertising
The capitalist system is nourished from a market economy based on consumption, advertising plays an intermediary role in determining the demand in the consumption field, and advertising strategies are actively involved in determining the consumption culture that the capitalist ideology requires (Taşkaya, 2009:119). Advertising, according to the definition of American Marketing Association, is a paid promotional activity of any goods, services or intellectual property carried out in a non-personal way (Akbulut and Balkaş, 2006). Advertising, one of the marketing communication tools, can make effective changes in consumer buying behaviours with well-defined strategies, intriguing, creative, original and quality productions (Yağcı and İlarslan, 2010:139).
According to Batra, Myers and Aaker, the message of an advertisement can have several effects on planned listeners or receivers. The message of an ad includes: (Yıldız et al.)

- Creating awareness
- Exchanging information about qualities and benefits
- Changing or enhancing identity or image.
- Integrating brand with consumer emotions and thoughts.
- Creating sample groups.

In advertising, the most important thing is television commercials. Television can provide information about products and services in the context of stunning images; thus can create a desired image of the product / service (Taş and Şahım, 1996: 53).

Television is described as the most frequently preferred advertising tool by advertisers in terms of the facilities it provides when compared to other advertising media. (Avşar and Elden, 2004: 57). Television is heavily favoured by advertisers in reaching broad masses and being able to communicate individually with specific target groups (Avşar and Elden, 2004: 56).

For advertisers, television has six important characteristics. These are that (Elden, 2003):

- Even on a regional basis, TV ads reach a large percentage of your total potential customers.
- A TV ad that is effectively created can use a combination of image, sound, motion and colour to create a truly memorable impact.
- Television has an unbeatable strength in addressing emotions and giving visual messages.
- For some businesses, satellite television channels may offer some facilities in terms of geo-targeting.
- Television may also offer some limited demographic targeting opportunities to advertisers. For example, an insurance and financial services agency can program its ads between news commentaries, especially broadcast on Sunday mornings; because such programs attract more people with higher income.
- Finally, advertising on TV is a prestige factor.

For advertisers, television has weaknesses at the same time. These can be listed as follows:

- Television can create an effect called the "backfire effect" as a negative aspect of reaching large masses.
- It is very easy for an ad to disappear in the confusion of other ads.
- Audiences can find the way to escape from your ads.

The use of famous people in advertising is very important for the marketing of products. Reliability is very important in terms of target groups as well as all positive characteristics such as fame, talent, charisma of the celebrity in the ad (Kocabâş-Elden, 1997: 136). If a famous person is to be used, it must be ensured that this person will be beneficial for the product in terms of image. It is not enough to take a famous person and play it in the commercial. There is nothing worse than a borrowed fame (Sullivan, 2001: 157). While people are identified with the advertising character, consumers who replace themselves with someone else start to feel that they are partakers of the character's experiences. In other words, consumers imagine that the events in the story live with the perspective of the character they identify with. Consumers begin to perceive the similarities between their self-identities and the characteristics defined by the character (Elden, 2003). Many companies in Turkey include celebrity figures in television commercials. These companies, which use well-known people in their advertisements, aim to influence consumers through these famous people in short, to increase the demand for their products and services (Karafakioğlu, 1988: 15). The famous person is perceived as "superior" in the society and many individuals are endeavouring to colour their ordinary and boring lives and maybe try to be a bit like them that is to say, resemble the hero they have idolized. In other
words, individuals perform the celebrity’s imitation by putting themselves in his/her place, dressing like him/her, watching his/her game or film, wearing similar clothes like him/her or hanging his/her posters on the wall (Yüksel, 2001: 62). The consumers identify themselves with the celebrity that they see and admire on television. In the celebrity they idolized, female consumers see the ideal woman who they want to be in the place of and who fits into the patterns of the society well and they try to resemble her (Yüksel, 2000: 62).

With the concept of "well-known person", a reference group that will have a positive effect on consumer purchasing decisions is mentioned. Within this group there are people from successful businessmen to cinema and theatre actors, from athletes to journalists and many others who have succeeded in many different fields. Approximately, 20% of television commercials use famous and well-known people from the business world of television, sports, music, cinema and so on. Approximately, 10% of the millions of dollars spent on television advertising is used for these famous people in advertising (Agrawal, 1993: 563).

Working with a famous spokesperson or supporter can be a great idea, even a better investment - a way to borrow the celebrity's personality and awareness to add meaning to the brand perhaps the company do not have - for some companies. However, a big name spokesperson is not a guarantee that the customer will enter the queue on your door (Brott and Zyman, 2003: 145). In the interest of bringing a strong image to their product or service, marketing communication providers are either seeking to place their own products, company names into the movie scenarios, or demand such scenarios to be written into the existing scenarios, by providing financial support for making movies. In this case, the product or service is the subject of talking among the characters in the movie, and even the hero of the movie himself/herself uses the product or service (Kapferer, 1991: 83).

3. Methodology

3.1. The Sample and Measuring Instruments

The main material of the research is the questionnaire forms made in 2016, in Antalya which is one of the biggest provinces of Turkey. The population of Antalya in 2015 is 2 288 456 (Tuik, 2016).

The formula used to obtain the sample volume after the specified main mass is as follows (Arıkan, 2007);

\[
n = \frac{N \cdot p \cdot q}{(N - 1) \cdot D + p \cdot q}
\]

\[N= \text{Population (2 288 456)}\]
\[p=0.5\]
\[q=0.5\]
\[D=(e/z)^2 \quad (0. 0490/1, 96)^2\]
\[z=\text{statistics value (1.96, } 95\text{ confidence interval)}\]
\[n=400\]

\[
n = \frac{N \cdot t^2 \cdot p \cdot q}{d^2 \cdot (N - 1) + t^2 \cdot p \cdot q}
\]

- n; Number of the individuals that are to take part in the sample, N; 2 288 456,
- p; Probability of occurrence (0, 50),
- q; Probability of non-occurrence (0, 50),
- t; Standard normal distribution value (1, 96),
- d; Sampling error (0, 0490)
As a result of calculation, the sample volume was found as 400 with 0.0490 error margin in 95% confidence interval. The survey, which was made to 400 people in 2016, was randomly distributed to consumers.

3.2. Analyses of the Data

Data analysis in the study was carried out using the SPSS 21 package program. In this context, frequency distribution of demographic characteristics of 400 consumers participating in the survey was done first. It has been pointed out how consumers are influenced by advertisements, what types of advertisements are favoured, in particular the impact of a famous person, who is recognized by everyone, on the buying behaviour when purchasing a product and the effects these people have on consumers. Chi-square analysis was then applied to determine how consumers were affected by advertising according to their demographic characteristics.

3.2.1. Chi-square Test

A Chi-square ($\chi^2$) analysis was applied to determine the degree of relationship between two discontinuous variables (nonparametric, nominal). Chi-square test is a commonly used test to determine whether there is a systematic relationship between variables based on cross-tabulated frequency (Malhotra, 2004).

The formula of chi-square is as follows: (Gujarati, 1995; Mirer, 1995)

$$\chi^2 = \sum_{i=1}^{k} \frac{(Q_i - E_i)^2}{E_i}$$

$\chi^2$: Chi-square value, $Q_i$: Observed frequency value, $E_i$: Expected frequency value

4. Research Findings

Table 1. Demographic and Socio-Economic Characteristics of Consumers

<table>
<thead>
<tr>
<th>Gender</th>
<th>Frequency</th>
<th>Percent</th>
<th>Age</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>189</td>
<td>47.2</td>
<td>18-25</td>
<td>64</td>
<td>16.0</td>
</tr>
<tr>
<td>Female</td>
<td>211</td>
<td>52.8</td>
<td>26-30</td>
<td>73</td>
<td>18.2</td>
</tr>
<tr>
<td>Total</td>
<td>400</td>
<td>100</td>
<td>31-40</td>
<td>117</td>
<td>29.2</td>
</tr>
<tr>
<td>Profession</td>
<td>Frequency</td>
<td>Percent</td>
<td>41-50</td>
<td>74</td>
<td>18.5</td>
</tr>
<tr>
<td>Civil servant</td>
<td>92</td>
<td>29.5</td>
<td>51-60</td>
<td>42</td>
<td>10.5</td>
</tr>
<tr>
<td>Housewife</td>
<td>44</td>
<td>14.1</td>
<td>60 and over</td>
<td>30</td>
<td>7.5</td>
</tr>
<tr>
<td>Self-Employment</td>
<td>40</td>
<td>12.8</td>
<td>Total</td>
<td>400</td>
<td>100</td>
</tr>
<tr>
<td>Worker</td>
<td>64</td>
<td>20.5</td>
<td>Marital status</td>
<td>Frequency</td>
<td>Percent</td>
</tr>
<tr>
<td>Student</td>
<td>39</td>
<td>12.5</td>
<td>Married</td>
<td>187</td>
<td>46.8</td>
</tr>
<tr>
<td>Retired</td>
<td>33</td>
<td>10.6</td>
<td>Single</td>
<td>176</td>
<td>44.0</td>
</tr>
<tr>
<td>Total</td>
<td>400</td>
<td>100</td>
<td>Divorced</td>
<td>37</td>
<td>9.2</td>
</tr>
<tr>
<td>Status of Monthly Revenue(TL)</td>
<td>Frequency</td>
<td>Percent</td>
<td>Educational status</td>
<td>Frequency</td>
<td>Percent</td>
</tr>
<tr>
<td>1000 and below</td>
<td>22</td>
<td>5.5</td>
<td>Primary school</td>
<td>83</td>
<td>20.8</td>
</tr>
<tr>
<td>1001-2000</td>
<td>104</td>
<td>26.0</td>
<td>Secondary school</td>
<td>88</td>
<td>22.0</td>
</tr>
<tr>
<td>2001-3500</td>
<td>127</td>
<td>31.8</td>
<td>Bachelor’s degree</td>
<td>207</td>
<td>51.8</td>
</tr>
<tr>
<td>3501-5000</td>
<td>81</td>
<td>20.2</td>
<td>Master’s degree</td>
<td>13</td>
<td>3.2</td>
</tr>
<tr>
<td>5001-7000</td>
<td>38</td>
<td>9.5</td>
<td>Doctorate’s degree</td>
<td>9</td>
<td>2.2</td>
</tr>
<tr>
<td>7001 and over</td>
<td>28</td>
<td>7.0</td>
<td>Total</td>
<td>400</td>
<td>100</td>
</tr>
<tr>
<td>Total</td>
<td>400</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
As shown in Table 1, 52.8% of the respondents were female, 47.2% were male. When the distributions according to age groups are examined, it is seen that 29, 2% are aged between 31-40, 7, 5% of them are 60 and over. It was determined that 46.8% of the consumers were married, 44.0% were single and 9.2% were divorced.

According to the results of education data, it is seen that 20.8% of the respondents are primary school graduates, 22.0% are secondary school graduates, 51.8% have undergraduate degrees, 3.2% have graduate degrees, 2.2% have graduated from doctorate.

When the monthly average incomes of the families are examined, it is seen that 5, 5% of them earn 1000 TL or less, 26, 0% earn between 1001-2000TL, 31, 8% earn between 2001-3500TL, 20, 2% earn between 3501-5000TL, 9, 5% earn between 5001-7000TL, 7.0% earn 7001TL and above. When the professions of those who participated in the survey are examined; it is determined that 29, 5% are civil servants, 14, 1% are housewives, 12, 8% are self-employed, 20, 5% are workers, 12, 5% are students and 10, 6% are retired.

Table 2. Expressions for the use of celebrities in television commercials

<table>
<thead>
<tr>
<th>Expressions</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Undecided</th>
<th>Agree</th>
<th>Strongly Agree</th>
<th>Score</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>The use of celebrities in TV commercials increases attention.</td>
<td>1, 0</td>
<td>2, 0</td>
<td>3, 8</td>
<td>30, 5</td>
<td>62, 7</td>
<td>4, 52</td>
<td>1</td>
</tr>
<tr>
<td>The role of the celebrities in TV commercials allows consumers to be</td>
<td>1, 0</td>
<td>0, 3</td>
<td>6, 5</td>
<td>41, 0</td>
<td>51, 2</td>
<td>4, 41</td>
<td>4</td>
</tr>
<tr>
<td>interested in the product.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TV commercials where celebrities are involved are being watched by more</td>
<td>3, 5</td>
<td>1, 8</td>
<td>10, 8</td>
<td>30, 5</td>
<td>53, 4</td>
<td>4, 30</td>
<td>7</td>
</tr>
<tr>
<td>people than other advertisements.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The use of celebrities in commercials provides the product's retention.</td>
<td>2, 0</td>
<td>1, 0</td>
<td>6, 0</td>
<td>34, 8</td>
<td>56, 2</td>
<td>4, 42</td>
<td>3</td>
</tr>
<tr>
<td>The use of celebrities in commercials provides a positive reflection on the</td>
<td>1, 2</td>
<td>7, 2</td>
<td>24, 1</td>
<td>33, 0</td>
<td>34, 5</td>
<td>3, 92</td>
<td>12</td>
</tr>
<tr>
<td>advertised product or brand.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The use of celebrities in advertisements increases the credibility of the</td>
<td>1, 5</td>
<td>2, 2</td>
<td>8, 8</td>
<td>40, 0</td>
<td>47, 5</td>
<td>4, 29</td>
<td>8</td>
</tr>
<tr>
<td>advertisement in terms of product promotion.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ads using celebrities make remembering the ad easier.</td>
<td>2, 5</td>
<td>1, 7</td>
<td>9, 0</td>
<td>40, 0</td>
<td>46, 8</td>
<td>4, 27</td>
<td>9</td>
</tr>
<tr>
<td>The consumer, who imitates and embraces the image of the celebrities,</td>
<td>2, 8</td>
<td>2, 2</td>
<td>7, 0</td>
<td>34, 2</td>
<td>53, 8</td>
<td>4, 34</td>
<td>5</td>
</tr>
<tr>
<td>identifies the product in advertising with the celebrity used in advertising</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>and consumes the product.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Celebrities are used in advertising to make consumers want to buy a product.</td>
<td>2, 5</td>
<td>1, 2</td>
<td>11, 2</td>
<td>40, 0</td>
<td>45, 1</td>
<td>4, 24</td>
<td>10</td>
</tr>
<tr>
<td>The fact that a celebrity used in TV commercials plays in the advertisement</td>
<td>1, 5</td>
<td>3, 5</td>
<td>18, 0</td>
<td>36, 5</td>
<td>40, 5</td>
<td>4, 11</td>
<td>11</td>
</tr>
</tbody>
</table>
of more than one brand is influential in the decision of purchasing the products and services of all brands that are advertised.

The use of celebrities in commercials prevents channel switching.

I do not get bored when I watch commercials of celebrities

When consumers’ expressions about the use of celebrities in television commercials are examined, it is seen that the expression “the use of celebrities in TV commercials increases attention” comes first and the expression “the use of celebrities in commercials provides a positive reflection on the advertised product or brand” comes at the end.

Table 3. Being Influenced by TV Commercials Played by a Celebrity According to Socio-Demographic Characteristics

<table>
<thead>
<tr>
<th></th>
<th>No</th>
<th>%</th>
<th>Yes</th>
<th>%</th>
<th>The Results of Chi-Square Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Frequency</td>
<td>Percent</td>
<td>Frequency</td>
<td>Percent</td>
<td></td>
</tr>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>117</td>
<td>61.9%</td>
<td>72</td>
<td>38.1%</td>
<td>$\chi^2 = 31, 322$, df=1</td>
</tr>
<tr>
<td>Female</td>
<td>182</td>
<td>86.3%</td>
<td>29</td>
<td>13.7%</td>
<td>$P = 0.00$, $p &lt; 0.05$ significant</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18-25</td>
<td>64</td>
<td>100.0%</td>
<td>0</td>
<td>0.0%</td>
<td></td>
</tr>
<tr>
<td>26-30</td>
<td>67</td>
<td>91.8%</td>
<td>6</td>
<td>8.2%</td>
<td></td>
</tr>
<tr>
<td>31-40</td>
<td>102</td>
<td>87.2%</td>
<td>15</td>
<td>12.8%</td>
<td></td>
</tr>
<tr>
<td>41-50</td>
<td>50</td>
<td>67.6%</td>
<td>24</td>
<td>32.4%</td>
<td></td>
</tr>
<tr>
<td>51-60</td>
<td>11</td>
<td>26.2%</td>
<td>31</td>
<td>73.8%</td>
<td></td>
</tr>
<tr>
<td>60 and over</td>
<td>5</td>
<td>16.7%</td>
<td>25</td>
<td>83.3%</td>
<td></td>
</tr>
<tr>
<td><strong>Marital status</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Married</td>
<td>129</td>
<td>69.0%</td>
<td>58</td>
<td>31.0%</td>
<td>$\chi^2 = 11, 487$, df=2</td>
</tr>
<tr>
<td>Single</td>
<td>146</td>
<td>83.0%</td>
<td>30</td>
<td>17.0%</td>
<td>$P = 0.003$, $p &lt; 0.05$ significant</td>
</tr>
<tr>
<td>Divorced</td>
<td>24</td>
<td>64.9%</td>
<td>13</td>
<td>35.1%</td>
<td></td>
</tr>
<tr>
<td><strong>Status of Monthly Revenue(TL)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1000 ve alti</td>
<td>15</td>
<td>68.2%</td>
<td>7</td>
<td>31.8%</td>
<td></td>
</tr>
<tr>
<td>1001-2000</td>
<td>69</td>
<td>66.3%</td>
<td>35</td>
<td>33.7%</td>
<td></td>
</tr>
<tr>
<td>2001-3500</td>
<td>94</td>
<td>74.0%</td>
<td>33</td>
<td>26.0%</td>
<td></td>
</tr>
<tr>
<td>3501-5000</td>
<td>68</td>
<td>84.0%</td>
<td>13</td>
<td>16.0%</td>
<td></td>
</tr>
<tr>
<td>5001-7000</td>
<td>30</td>
<td>78.9%</td>
<td>8</td>
<td>21.1%</td>
<td></td>
</tr>
<tr>
<td>7001 and over</td>
<td>23</td>
<td>82.1%</td>
<td>5</td>
<td>17.9%</td>
<td></td>
</tr>
<tr>
<td><strong>Educational status</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ilköğretim</td>
<td>51</td>
<td>61.4%</td>
<td>32</td>
<td>38.6%</td>
<td>$\chi^2 = 14, 332$, df=4</td>
</tr>
<tr>
<td>ortaöğretim</td>
<td>70</td>
<td>79.5%</td>
<td>18</td>
<td>20.5%</td>
<td>$P = 0.006$, $p &lt; 0.05$ significant</td>
</tr>
<tr>
<td>lisans</td>
<td>157</td>
<td>75.8%</td>
<td>50</td>
<td>24.2%</td>
<td></td>
</tr>
<tr>
<td>yüksek lisans</td>
<td>13</td>
<td>100.0%</td>
<td>0</td>
<td>0.0%</td>
<td></td>
</tr>
<tr>
<td>doktora</td>
<td>8</td>
<td>88.9%</td>
<td>1</td>
<td>11.1%</td>
<td></td>
</tr>
<tr>
<td><strong>Profession</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Civil servant</td>
<td>72</td>
<td>78.3%</td>
<td>20</td>
<td>21.7%</td>
<td>$\chi^2 = 58.561$, df= 5</td>
</tr>
<tr>
<td>Housewife</td>
<td>38</td>
<td>86.4%</td>
<td>6</td>
<td>13.6%</td>
<td>$P=0.000$, $p &lt; 0.05$ significant</td>
</tr>
</tbody>
</table>
According to the Chi-square analysis, there was no significant relationship between monthly income and the influence of TV commercials played by a celebrity, while there was a significant relationship between the influence of TV commercials played by a celebrity and gender, age, marital status, education and occupation.

5. Conclusion

With the development of the media and the popular culture, the state of celebrities having a voice in only a small society has disappeared and the state of having a voice in larger societies which allow large masses to follow these celebrity figures have become widespread. Advertisers who realized this have used celebrity commercials to make it easier for themselves to promote their products and for consumers to trust the product. Also, instead of creating a character from scratch using a person who has never been seen in television commercials, it is easier for advertisers to overcome these difficulties and use a famous person. Today, many brands try to achieve success by using celebrities in marketing.

In the study, when consumers’ expressions about the use of celebrities in television commercials are examined, it is seen that the expression “the use of celebrities in TV commercials increases attention” comes first, the idea “I do not get bored when I watch commercials of celebrities” comes second and the expression “the use of celebrities in commercials provides a positive reflection on the advertised product or brand” comes at the end.

According to the Chi-square analysis, there was a significant relationship between the influence of the commercials and gender, age, marital status, education and occupation. It was determined that females were more affected by commercials than males, younger people were more affected than older ones, single people were more affected than the married and the people with higher education levels were more affected than the people with lower education levels. Also, when examined by occupation, it was found that the students and housewives were influenced by the celebrity use in advertisements the most.

Celebrities are influencing the desires that the people want to have. Our hair, make-up, clothes, weight, beauty, appearance, style, everything we eat and we drink are under the influence of famous people. For this reason, celebrities are priceless marketing tools that let the brands reach the peak in a short term. In this study, the aim is to show the effects of the use of celebrities on TV commercials to the brands by presenting the consumers’ expressions about the use of celebrities on TV commercials.

The study also leads the businesses the way that which part of the society will be more affected by these TV commercials by showing them the variations in the demographics of consumers when a celebrity is played on TV commercials.
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Linkages in Integrating Enterprise Ressource Planning (ERP) and Bank Systems

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Emmanuel Innocents Edoun, University of Johannesburg, South Africa

Abstract

Banks play a vital role in the economic and growth of each and every country through transactions between individuals and organisations. The overall economic survival depends on the ability of the bank in managing payment transactions between people, between organisations and between organisation and people. Globalisation promotes constant change of market conditions and continuous upgrade on information, communication and technology (ICT) infrastructures. Such realities are supposed to be a wake-up signal for banks to develop a preventive approach in resisting to the change. But it appears that banks are not always well managed in aligning their architecture and operating business process to be customer orientated in order to improve business growth. Moreover, they don’t foreseeing customer needs in this ongoing environmental change as great source of opportunities, innovation and market positioning. Regarding multitude of enterprise resource planning (ERP) systems use around the world in different institutions, application used at company level are not always compatible with the one used at bank level as set by bank regulation on integration point of view. That is why banks need new solutions to create a communication channel between the two systems. Payment transactions between organisations and banks face the challenge of unmatchable payment solution used in both structures. Observations showed that many companies use ERP management software to run their businesses. But the process stopped at entering Business partner payments transactions in a specific module in the using system. Then start a manual and complex process of exporting and importing big data from banks for reconciliation.

Keywords: Banks, Organisations, Enterprise Resources Planning, Information and communication technology

Background And Introduction

Banks play a vital role in the economic and growth of each and every country through transactions between individuals and organisations. The overall economic survival depends on the ability of the bank in managing payment transactions between people, between organisations and between organisation and people. Globalisation promotes constant change of market conditions and continuous upgrade on information, communication and technology (ICT) infrastructures. Such realities are supposed to be a wake-up signal for banks to develop a preventive approach in resisting to the change. But it appears that banks are not always well managed in aligning their architecture and operating business process to be customer orientated in order to improve business growth. Moreover, they don’t foreseeing customer needs in this ongoing environmental change as great source of opportunities, innovation and market positioning. Regarding multitude of enterprise resource planning (ERP) systems use around the world in different institutions, application used at company level are not always compatible with the one used at bank level as set by bank regulation on integration point of view. That is why banks need new solutions to create a communication channel between the two systems. Payment transactions between organisation and banks face the challenge of unmatchable payment solution used in both structures. Observations showed that many companies use ERP management software to run their businesses. But the process stopped at entering Business partner payments transactions in a specific module in the using system. Then start a manual and complex process of exporting and importing big data from banks for reconciliation. Furthermore, company
need to wait for a specific banker at the bank to release the payments. Such long process is stressful, time consuming and not efficient neither for the company nor for the banks.

In the current global market, business process integration with stakeholders are done at a vertical or horizontal level to optimize productivity. But it appears that enterprise applications for cross-functional processes and a limit of extensibility to other partners remain a huge problem and therefore constitute a source of mismatch between software capacities and business requirements (Johannesson and Perjons, 2001). Some software are neither compatibles nor efficient for payment transactions integration. They then require additional applications as a bridge to interface banking system through upload of EFT file. This causes issues like time consuming, EFT file license authorisation, dependence on bankers to release the payment that negatively impact both financial institutions performance and companies’ growth. That is why it is imperative to find an appropriate solution through effective business processing model as a channel that can easily match with bank payment interface.

Improvement of institutions’ performance requires new business process model in line with the ongoing environmental change on the current global world. As confirmed by (Aslam et al. (2016), Kaisha (2017)) business process modelling is a tool for better productivity of an organisation while business process re-engineering is the process of thinking, conceiving, innovating and deploying accurate business process that take into account exact business constraints, environmental requirements and internal enterprise resources. Business to business integration requires changes at every functional level in the organisation. Hence new strategic planning to be put into place. Integration of business process and knowledge management as a strategic approach is recommended in order to efficiently control process implementation as confirmed by Vesna (2006).

A business process summarises understanding of process flow from input to output between all related business functions and roles per department within of the company. An efficient and suitable business process is built so that all resources of the organisation are well-used in fulfilling company’ goals. Ruth (2003) defined business process modelling as a setup of activities in a company describing their logical order and interconnexion for better business analysis and business integration. She also highlighted the fact that business process model constitute building blocks for new software development and for existing business process restructuration. This study focused on the business model reengineering as tool for software development with improved functionalities for inter-organisational business process.

In the process of business integration between organisation and his stakeholders, company has a choice between vertical, horizontal integration or both types at the same time (Soritis, 2000). He confirmed that ERP systems are the vehicle of business re-engineering applied to horizontal organisational structure. Although data transmission between systems expose parties to some risks that can compromise internal and multi-level system securities, globlisation brought everyone to the notion of integration whereby all systems communicate through direct interface to improve productivity. Direct link and direct exchange between organisations and corporates reduce time consuming and dependence from a specific banker to release uploaded payments as currently observed.

Process need to be reengineered because old practices are no more effective. Business process reengineering (BPR) enables performance improvement through changes on re-design processes, retooling of networks and architectures and re-orchestration of functional units also called the 3R of re-engineering as stipulated by Sotiris (2000). According to him, BPR is also based on customer service oriented, innovation, flexibility, quality and speed. Although business process improvement causes roles changes, focus must be made on reducing costs and increase of competitive advantage that increase performance of the organisation.

Business integration requires information exchange between systems. This can be done only through E-business (Business-business, business-customer, business administration) using network and worldwide telecommunications technologies as explained by Sara et al. (1999).

Leyer and Hollmann (2013) showed that business process has been use to simulate effect of the introduction of electronic documents on financial services compared to using paper documents. Other studies used business process to show integration between many applications used the same company.
and business process among functional units of the same organisation (Johannesson and Perjons, 2001). Regarding the success of using BPR in many industries such as banking (Karibu et al., 2013), (Rungporn et al., 2014) telecom and foods, it is possible that implementation of BPR will promote new process of straight integration between ERP systems and banks.

**Literature Review**

The new ICT brought financial and non-financial institutions to review their strategical approach to benefit related advantages. In this regard, banks developed mobile payments which is a payment done using mobile and not card to facilitate transactions with customers. Although accessibility on ICT remains a challenge for many people and organisations, the so-called M-payment is a business opportunity for banks around the world and especially in South Africa because most of the people have mobile phones compared to bank account. Mobile payment can be done between persons or between business and persons.

Just like mobile payment transactions, bank system integration with business payment software required support from the telecommunications companies.

As observed in some countries in Africa, some banks and companies use the same software interface for payments transactions. This means that for other countries in the world, bank integration with other business software should be sustainable if the banks use the same system as his customers or if they use system that easily matches with their customers’ software due to the increasing need for Enterprise Application Integration (EAI) as confirmed by Johannesson and Perjons (2001). Using strategical approach, banks should foresee and prevent any new technological approach in the existing or emerging markets in order to adapt with the continuous environment change.

Leyer and Hollmann (2014) as well as Karibu et al., (2013) argued that for better efficiency and developing solid competitive advantage, bank should simplify their IT architecture to easily meet customer’s needs whatever functionalities required and the market conditions. They also found that bank should consider customer’ expectations in doing business through digital system in correlation with the banking domain.

Even though there is an important need for banks to adapt their architectures to the existing digital environment, risk management linked to such innovation is another issue to take into consideration. Data integration between systems involves both companies network’s communication. Sometimes, integration brings issues such as bug that can damage data managed in the servers in one or both systems.

System integration also brings challenge of both system upgrade because new functionality in one side need to have a matching on the other side.

Bank architecture on BP payment level must be the same in the systems to facilitate communication interface (Sandy, 2017)

The study conducted by Lixia and Drama (2012) about ongoing business process improvement in a banking industry showed that a specific model design implemented at bank level is capital in improving bank performance. They found that processing bank system (PBS) is the most powerful management model used by many international banks that need a continuous upgrading because it is customer-centered and market oriented. Furthermore they showed that this model easily integrates bank transactions at marketing, distribution and finances and human resource management level.

Integration between two modules from different systems required integration of business model of the two entities. New business process model is an enterprise resource planning tool to promote productivity of any company in this global world. Lixia and Drama (2012) deployed an hybrid system model about planning and implementation process between continuous improvement and processing bank system to meet bank optimal achievement. According to them, continuous process improvement (CPI) model allow to continuously adapt to any sudden change in the global environment while process banking system (PBS) model manage internal bank transaction in compliance with the regulation. They also develop an hybrid model coming from the correlation between enterprise business model and bank processing model.
Business process integration aims to eliminate shortcomings on business profitability and therefore improve service quality between organisations and banks.

Samsul and Daud (2012) studied business process improvement of credit card department through redesign of process flow of multinational bank in Bangladesh. By comparing the AS-IS or current process and the TO-BE or proposed process, they found that the old process was time consuming compared to the proposed process that has simplified processing time and use company resources efficiently to meet customer’s needs. Besides the above, they argued that moving from one process to another, unnecessary field or low important data do not need to be taken over into the other system.

**Proposed Solutions**

Designing and implementing new business process need to take associated risk into consideration in order to develop appropriate plans to mitigate them so that it doesn’t affect customer service delivery and the overall organisation’ profitability.

Business process improvement requires new process modelling to manage new process implementation through integration between legacy systems, database and the ERP system as shown in the below model.

![Diagram of Process Integration](source.png)


That is why Aslam et al. (2016) analysed the existing value chain of fundraising on Islamic banks in Indonesia in order to propose re-engineered business process to increase their performance. They used process activity mapping and value stream mapping to determine whether each bank action in the process flow is adding value or not and to eliminated or minimized them. In the case of bank integration with a payment solution, such mapping shows action related to customer needs versus bank needs.

While many studies conducted research on process of funding (Aslam et al. (2016), on credit card department (Samsul and Daud (2012) all related to internal bank transactions.

Research done on Islamic banks in Asia showed that there is a lack of information technology infrastructure such as online banking, self-service banking machine and cash deposit machine that enable customers of the banks to do their transactions without urgent need to physically go to the banks (Aslam et al. (2016); Aslam et al. (2016). Such banking facilities are already present and fully used in South Africa but the problem remains on the complete online communication between bank system and ERP system used in the company.
There are many business process modelling techniques such as flow chart for flow of actions, DFD for data flow, gantt chart flow for activities and duration, workflow for flow of information, tasks and procedural rules and so forth with different attributes and characteristics as developed by Ruth (2004). Workflow techniques that are useful for notifications purpose because it is a flow of chart between computer applications and users within organisation or between different structures. She argued that data flow diagram techniques can be used to describe flow of data for communication interface between the two systems.

Draheim (2010) in his research about business process excellence showed that efficient and effective business processing model need to be supported directly or indirectly by information technology solutions and architectures through workflows. He highlighted that business process reengineering can go beyond company’ limits to explore inter-organisation process integration for best optimization purposes. This is about business process correlation between company and its stakeholders done through electronic data interchange (EDI). From a financial point of view, periodic reconciliation statement is important to preserve good business relationship as a continuous source of opportunities.

Regarding our ongoing changes environment, the six sigma method has been develop to improve business process quality through minimization of process variation (Lixia et al., 2012). Six sigma approach follows the DMAIC business lifecycle that consist of defining, measuring analysing, improving and controlling business process.

Some studies focused on integration between banks themselves. Matei and Silvestru (2008) stated that it is imperative for banks to align their informatics system according to the customer’s needs and therefore develop the so-called service-oriented architecture to promote integration of internet banking and other customized systems.

**Conclusion Implications of the study**

Conversely to the previous studies focusing only on presenting business model framework and integration process between internal company functional units or departments, the present study focuses on the horizontal integration for the improvement of information flow between main processes of the organisation and the bank. The study also uses BPR to show importance of straight integration between ERP payment system and bank system. The present study will also use data flow diagram for designing business integration model and workflow techniques for notifications between entities and individuals because it is a convenient flow of chart between computer applications and users within organisation or between different structures.
References


http://www.activemodeler.com/download/Documents/AvantageProcessImprovementExamples


The Roles of Social Network for Livelihood of Thai Student-Labourers in Australia\textsuperscript{1}

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\section*{Abstract}
Labour migration is one of the major issues of this century. Nowadays around 194 million people work outside their country of birth, about four percent of the world's population. In this study, I provide insight into the non-mainstream issue of the migration study by investigating the role of social network of specific migrant labourers as Thai student-labourers in the name of “Thai-Aus” who are studying and working in Australia. I aim to contribute to the understanding of the role of social networks on the livelihoods of Thai student-labourers in Sydney, Australia. Data were collected via in-depth interviews as well as by participatory and non-participatory observations with 18 key informants as Thai student-labourers who are studying and working in urban area of Sydney. Data analysis was contents analysis by the program of ATLAS.ti. The results of the study indicated that the role of social networks on the livelihoods of Thai-Aus Labourer can be divided into three major types: (1) the role of adaptation in daily living, (2) the role to support the work of the network members, and (3) the role of the consultation on academic study.

\textbf{Keywords}: Thai-Aus Labourer, Role of Social Network, Migrant Labour Network, Working Abroad of Thai Labourers, Thailand

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References


Foreign Direct Investment and Productivity of Local Firms: Empirical Evidence from South Africa

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Abstract

South Africa is eager to attract more foreign Direct Investment (FDI) inflows to offset its deficit in domestic savings and accelerate its economic growth. Success in attracting higher FDI inflows may be associated with negative spillovers effects to local firms. To the extent that the growth of local firms is an important development objective for the South African government, this paper presents an in depth firm level cross sectional analysis of the possible effects of FDI to local manufacturing firms in South Africa. Results show that FDI firms are more productive than their local counterparts. Furthermore, evidence of negative intra-industry spillovers effects as well as positive inter-industry spillovers effects is found but insignificant. As such, the paper recommends to policymakers to adopt investment policies that encourage strong backward linkages between MNCs affiliates and local suppliers in all manufacturing sectors.

Keywords: Foreign Direct Investment, spillovers, productivity

1. Introduction

Foreign Direct Investment (FDI) is commonly defined as a long lasting investment by a foreign investor of at least 10 per cent of ordinary shares or voting powers in the management of a company that is resident in the host country (IMF 1993; OECD, 1996). Hence, FDI may be viewed as an important strategy that developing countries like South Africa may use to reduce their technology gap with developed countries, to reduce its deficit in domestic savings and promote their economic development (Findlay 1978, Strydom, 2007). FDI has also been reported to be an important source of external financing which does not only boost domestic capital formation of recipient countries but also enables the transfer of technology between the home and host countries (Gruben and Mcleod, 1998; Carkovic and Levine, 2002). Multinational corporations (MNCs) are enterprises that control and manage production entities in at least two countries (Teece, 1985). Because of their characteristics, they are regarded as “the chief conduit for foreign direct investment” (Caves, 1971:1).

Agosin and Machado (2005) define FDI as capital inflows that MNCs bring to the host country in the form of sophisticated new technology, managerial skills and product design. By transferring technology, FDI may affect the productivity of local firms. In this regard, Cuyvers (2008) argues that technology transfer from MNCs to local firms, which occurs through the indirect effect of FDI, raises labour productivity of local firms and, thus, it is the most significant spillover effect. In the same breath, Giroud (2013) also points out that through the establishment of linkages in the host country, MNCs may diffuse technology to local firms. Linkages may be defined as “the direct relationships established by firms in complementary activities which are external to ‘pure’ market transactions” (Lall, 1980: 204). Linkages may be seen as direct relationship between MNCs´ affiliates and local suppliers or MNCs affiliates and local customers.

Following on these successive arguments, it can be discussed that the success in attracting higher level of FDI inflows may be associated with some spillover effects and linkages from which local firms may benefit in order to raise their productivities. Productivity spillovers occur when local firms improve their productivities through the use of MNCs affiliate’s technological advantages without incurring any cost that would offset this improvement (Blomström, Kokko and Zejan, 2000). They further define spillover as a situation in which MNCs affiliates are not able to reap all the benefits due
to their internalisation advantage in the host country. With a view to reaping all these spillovers benefits, developing countries in general have put in place investment policies, through for instance fiscal and financial incentives such as holiday tax and; reduction in import tax, that are favourable to attract more FDI in recipient countries (Oman 2000).

In the last two decades, the amount of FDI inflows has considerably increased in South Africa. For example, it has been recorded an increase in FDI inflows from ZAR 81 million in 1997 to 1,016 million in 2010 (Sandrey 2013:3, Arvanitis 2006:66).

1.1. Rationale of the study

A number of studies have been carried out in developed, developing and emerging economies to determine the extent to which local firms may benefit from the presence of MNCs (FDI) through various spillovers channels, affecting their productivity (Caves, 1974; Globerman, 1975; Haskel et.al, 2002; Barrios and Strobl, 2002; Haddad and Harrison, 1993; Blomström and Wolff, 1994; Blomström and Sjöholm, 1999; Hale and Long, 2006; Aitken and Harrison, 1999; Kinoshita, 2000; Javorcik, 2004; Alfaro and Rodríguez, 2004; Buckley, Clegg and Wang, 2007; Javorick and Spateneanu, 2008; Blalock and Gertler, 2008, Belderbos, 2010, Nharno, 2011).

However, the findings of these studies have been found to be mixed and inconclusive. This suggests that the extent to which local firms benefit from FDI spillovers may depend on country specific requirements and conditions. Thus, it is important to assess the possible indirect effects of FDI on the productivity of local manufacturing firms in South Africa.

The rationale of this paper is based on the idea that the growth of local firms through the improvement in productivity is an important national development objective for the South African government since these firms are regarded as key drivers of job creation in the country. Hence, the results of this study should assist policymakers to evaluate existing investment policies and to formulate policies that are most likely to attract FDI inflows in South African manufacturing sectors with potential of strong positive spillover effects.

1.2. Problem investigated

Following the above discussion, the main problem raised is that the success in attracting higher level of FDI inflows (or the presence of MNCs) in the host country (South Africa) may be associated with positive or negative spillovers effects that may affect the productivity of local firms. Positive spillovers may occur through technology transfer, for instance when local firms imitate the technologies and production processes of MNCs, or through the improvement in the allocation of resources or efficiency improvement by local firms due to competition pressure. Negative spillovers may occur for example when MNCs take demand away from local competitors and drive less efficient local firms out of the market.

1.3. Research objective of the study

The primary purpose of this study is to examine whether there is any productivity difference between MNCs and local manufacturing firms in South Africa. In addition, the paper aims to investigate whether there are any horizontal (intra-industry) and vertical (inter-industry) spillover effects from MNCs to local firms.

1.4. Research Hypothesis

In this paper, we hypothesize that because of technology ownership, MNCs will be more productive than local firms. Furthermore, we expect that on one hand, there will be positive inter-industry spillover effects from MNCs to local firms in South Africa whereas on the other hand, there will be negative intra-industry spillover effect from MNCs to local manufacturing firms. The reason is that with MNCs linkages (backward and forward linkages), MNCs are more willing to share technology with local firms in downstream and upstream industries. Nonetheless, for horizontal industry, it is expected that MNCs will be reluctant to share technology with local firms given that these latter are considered as local competitors.

The rest of this paper proceeds as follows: section (2) reviews the literature review (both theoretical and empirical) on FDI and productivity spillovers channels (both intraindustry and inter-industry),
section (3) explains the methodology. In section (4), the econometric analysis is carried out and finally, section (5) summarises the conclusions, recommendations and policy implications.

2. Literature review

2.1. Theoretical literature

The theoretical literature postulates that local firms may benefit from FDI technology spillovers, thus improving their productivities through a number of channels. However, it emphasises that the extent to which local firms may reap all these technology benefits depends on whether both MNEs affiliates and local firms operate in the same industry (intra-industry) or in a different industry (inter-industry). Distinguishing between interindustry and intra-industry gives rise to the concepts of vertical (inter-industry) and horizontal (intra-industry) spillovers. Horizontal spillovers occur when MNCs transfer technology or knowledge to local firms within the same industry, vertical spillovers when MNCs transfer technology to local firms (suppliers and clients) through backward and forward linkages (Gerschenewski, 2013:68). Both forward and backward linkages are defined and discussed later in this paper. Below both the intra-industry and interindustry spillover channels are explained.

2.1.1. Horizontal or intra-industry spillovers

The literature identifies four channels that allow technology transfer from MNCs affiliates to local firms within the same industry. These channels are (1) demonstration effects, (2) labour turnover, (3) competition effects, and (4) geographical proximity or regional dimension.

The demonstration effects are defined as effects on local firms by observing MNCs. These effects may occur through imitation, innovation and reverse engineering (Suyanto and Bloch, 2009). Imitation occurs when local firms repeat the same technology used by MNCs in their production of output while innovation occurs when a local firm adopts the technology of a foreign firm as a starting point in order to develop improved technologies to be used for its production of goods, e.g. by reverse engineering to discover the processes behind their products (Blankesmit, 2012). Thus, the demonstration effect channel emphasises that local firms may benefit from technology spillovers from MNCs by imitating their production techniques, knowledge, and new technologies so that they will raise their output and decrease their cost of productions (Blomström and Kokko, 1998; Görg and Greenaway, 2004; Alfaro et al., 2004; Aitken and Harrison, 1999). However, Görg and Greenaway (2004:173) argue that the degree of imitiation of MNCs technologies by local firms depends on the level of complexity of their products and processes.

The labour mobility (turnover) channel explains that local firms may benefit from technology spillovers from MNCs by hiring workers and managers who were previously employed (and trained) by MNCs affiliates (Gerschenewski, 2013:69). These MNCs former employees enable local firms to produce goods more efficiently, hence improving their productivities (Gerschenberg, 1987; Alfaro et al., 2004; Aitken and Harrison, 1999; Meyer, 2004). As an example, Blomström (1989) reports that in Mexico, most managers of local firms start their career in MNCs affiliates. Thus, through the use of management practices acquired at MNCs, these managers may substantially improve the productivity of local Mexican firms.

In addition, Hale and Long (2006) also points out that through learning and interaction activities between local firms employees (managers and engineers) and their MNCs colleagues, local firms may increase their productivities. Hale tries to explain that by interacting with people who are working for MNCs through for instance attending seminars, shows and conferences, local firm’s employees are exposed to advanced technologies and management practices used by MNCs affiliates. Thus, they may adopt these new technologies, processes and practices in their own firms and improve their productivity (“network externality effect”). Nevertheless, Glass and Saggi (2002) discuss that MNCs affiliates may limit technology transfer to local firms via the labour turnover channel by paying higher wages to their workers relative to their local competitors.

With regard to the competition effect channel, according to Caves (1974), the presence of MNCs assists local firms in improving their efficiency in resource allocation in the recipient country. He argues that by entering into a the local market with higher entry barriers, MNCs reduce the market
power of local firms, compete for factor inputs with local firms and force local firms to improve the use of their existing resources in the host country. In the same breath, some authors argue that the presence of MNCs helps to improve the technical and allocative efficiency of local firms through competitive pressures (Blomström and Kokko, 1998; Görg and Strobl, 2001; Glass and Saggi, 2002). They stress that the entry of MNCs in monopolistic market is expected to raise competition in the host country, force local firms to protect their market share and profits, hence becoming more efficient. The explanation could be that competition enhances the pace of imitation of new technologies by local firms (Görg and Strobl, 2004:174).

However, the competition effect may also have adverse effects on the productivity of local firms in the host country. This effect is referred to as “the market stealing effect” by Aitken and Harrison (1999). It is argued that because MNCs have ownership of specific advantages over local firms, they are able to reduce their marginal and average costs and take demand away from local firms. MNCs may also take demand away from their local competitors by introducing differentiated products and adopting new process innovation system (as one could see with the introduction of the Just in Time production system in the 20th century), which may lead to a fall in the price of products in the host country (Buckley et al., 2006). It is further stressed that the presence of MNCs forces local firms to increase their average and overall cost of production which force them to cut their production. Thus, through this effect, MNCs reduce the growth opportunities of local firms and obtain their economies of scale which cause, less efficient local firms to drive out of the market (Aitken and Harrison, 1999; Konings, 2001; De Backer and Sleuwaegen, 2003; Belderbos and Van Roy, 2010:5-6). Finally, apart from outcompeting local firms, MNCs are also reported to create monopolies that assist them in repatriating profits and avoiding taxes in the host country through transfer pricing practice (Blomström and Kokko, 1998).

The geographical proximity or regional dimension channel highlights that the dissemination of technology from MNCs to local firms requires intense contact between MNCs and local firms. Hence, local firms that locate closer to MNCs benefit more from the technology spillovers (Arrow, 1971; Ponomareva, 2000), because it is cheaper for them to imitate the technologies of MNCs, visit and communicate with MNCs workers and organise special training for local workers in collaboration with MNCs affiliates (Liang, 2008:11-12). The geographical proximity channel is reported to be an important prerequisite for the demonstration effect, especially imitation, to be effective (Saggi, 2002).

It has also been discussed that the extent to which local firms may benefit from FDI spillovers effects depend on the minimum absorptive capacity of local firms (Lall, 1996; Crespo and Fontoura, 2007). For instance, the necessary human capital, physical infrastructure, research and development activities (R&D) and distribution networks to sustain inward FDI (Glass and Saggi, 1998). Thus, this argument suggests that the lack of minimum absorptive capacity, through higher technology gap, implies the lower quality of technology or knowledge to be diffused to local firms and the lower the potential for spillovers in the host country (Görg and Greenway, 2004)

2.1.2. Vertical or inter-industry spillovers

In contrast to horizontal spillovers, vertical spillovers are argued to occur through linkages. We distinguish two types of linkages: backward and forward linkages. Backward linkages occur when there is a contact between domestic suppliers of intermediate inputs and their MNCs customers in downstream sectors in the recipient country, forward linkages when there is a contact between MNCs suppliers of intermediate inputs and their clients in upstream sectors in the host country while (UNCTAD, 2001).

Backward linkage

This occurs when MNEs establish direct relationship with local suppliers of intermediates inputs (UNCTAD, 2001). Earlier models called “love of variety” and “positive development effect theorem” by Rodríguez-Clare (1996) and Markusen and Venables (1999) respectively help to critically understand backward linkage. In his model, Rodríguez-Clare discusses that MNCs produce sophisticated products and thus, they require complex and diverse inputs. As a result, through the establishment of local suppliers, the demand for these sophisticated inputs will provide opportunities for local production of inputs and employment of local workers, hence leading to an increase in the
demand for factor inputs in the host country (Giroud, 2003). Markusen and Venables (1999) further support that backward linkage will induce managers of local firms to work efficiently and make rational decisions on investments. It is also discussed that through backward linkage, MNCs may transfer knowledge to local suppliers which will help them improve their management as well as technology capacities and thus, become more efficient (Gerschewski, 2013). This transfer may occur by (1) providing them with management training and technical assistance throughout the entire production process, (2) helping them buy raw materials and monitoring quality control and (3) By imposing higher requirement for product quality and on time delivery of inputs. Finally, Katz, (1969:154) and Javorcik (2004) argue that the presence of MNCs may force local firms to modernise their production techniques which may lead to economies of scale. This may occur for example by upgrading their production management and quality standards, or by introducing on time delivery.

As an example of backward linkage in the US automotive sector, Chung (2003) mentions Japanese transplants in the USA that encourage their local suppliers of automotive components inputs to adopt and implement new operating practices similar to those used in Japan.

Another example is provided by Javorcik (2004:608). He explains that it is accustomed that every time a Czech automotive supplier of aluminium alloy castings signs its first agreement with its MNCs client, the MNCs workers would visit the Czech firm’s site for two days each month over a long period of time. They (both MNCs and local firms’ employees) work on improving the quality control system. After the training, the Czech firm applies these improvements to its other production lines.

Furthermore, it is also discussed that strong backward spillovers are most likely to come from local firms that have mixed ownership (UNCTC, 2001; Javorcik, 2004). In this regard, UNCTC (2001) reports that strong spillover linkages effects are most likely to occur from local firms with some form of partial ownership, i.e. when MNCs enter the host country through joint venture or mergers and acquisitions (M&A), rather than from those with full foreign ownership such as Greenfield projects. The argument is that with the former, MNCs are most likely to source locally right at the beginning of their operations, i.e. they may take over the existing supplier of the acquired firm, whereas with the latter, they must put more effort into developing new local linkages (Javorcik, 2004). However, this view is not shared by Blomström and Sjöholm (1999) who points out that it is very difficult to talk about full foreign ownership in the host country because host governments do not often accept full foreign ownership firms in their countries. For instance, they may only allow M&A as a form of MNCs entry (Gerschewski, 2013:71).

Forward linkage

Blomström (1991) supports the idea of forward linkage and thus of the increasing role of MNCs-customer contacts in host countries. He explains that compared to local firms, MNCs are the only ones who have the necessary fund to invest in research and development (R&D) that enable them to develop and produce complex inputs and products of higher quality. Hence, this may suggest that MNCs should be suppliers of intermediate inputs. The use of sophisticated applications in production such as computer based automation, information technologies in the production of output, would require the expertise from the manufacturers. Thus, the relationship between MNCs suppliers and local clients is very important. In the same breath, Liang (2008:6) argues that through forward linkage, foreign suppliers provide their local customers with the necessary technology support and training when they buy these intermediate inputs. As a result, local firms may increase their productivities by using high quality inputs from foreign suppliers.

Similarly, Javorcik (2004) discusses that by buying new, superior and less costly intermediate inputs manufactured by MNCs, local firms may increase their productivities because the sales of intermediate inputs by MNCs is often accompanied with the provision of supplementary services that may not be available through the import of these inputs.
2.2. Empirical review

2.2.1. Empirical evidence for intra-industry spillovers

A number of empirical studies on FDI and productivity of local firms in horizontal industry have been carried out in developing and emerging countries. These studies sought to investigate the existence of horizontal spillovers in these countries, but their findings have been mixed and inconclusive.

These studies used different methodologies. For instance some of them used the cross sectional method (Haddad and Harrison, 1993; Kokko, 1994; Blomström and Wolff, 1994; Kokko et al., 1996; Blomström and Sjöholm, 1999; Chuang and Lin, 1999; Dimelis and Louris, 2004) while others used the panel data estimation method (Aitken and Harrison, 1999; Konings, 2000; Djankov and Hoekman, 2000; Flores et al., 2000; Kathuria, 2000; Kinoshita, 2000;). Furthermore, they also differed in using either industry data or firm level data. Table 1 reports these studies based on their methodologies. This is followed a brief discussion of their findings.

Table 1: Summary of some horizontal spillovers studies

<table>
<thead>
<tr>
<th>Authors</th>
<th>Countries</th>
<th>Period</th>
<th>Method</th>
<th>Aggregation level</th>
<th>Result</th>
</tr>
</thead>
</table>

1 Negative spillovers.
2 Positive spillovers.
3 Positive but conditional on technology gap, ownership structure, absorptive capacity.
As it can be seen, earlier studies used cross-sectional methods and found mixed results. For example, in their seminal work, Haddad and Harrison (1993) examined the effects of FDI on the Moroccan manufacturing industry. They found that FDI had an adverse effect on the productivity of local firms, hence, evidence of negative FDI spillovers on local firms. However, starting from one year later, Blomström and Wolff (1994) examined the effects of the presence of MNCs on the productivity of local firms in Mexico, Chuang and Lin (1999) on the productivity of local firms in the Taiwanese manufacturing industry and Chuang and Hsu (2004) on the relationship between FDI, trade and spillover efficiency in the Chinese manufacturing industry. They discovered positive, the latter additionally even and significant FDI spillovers to local firms which have a low technology gap from MNCs affiliates.

Other studies used the panel data method, but also found inconclusive results. For example, Aitken and Harrison (1999) investigated whether local firms in Venezuela benefited from the presence of MNCs, Konings (2000) on the effects of FDI on the productivity of local firms in three emerging European countries (Romania, Bulgaria and Poland), and Kathuria (2000) on the effects of FDI on the productivity of local firms in India. They all found in general that the success in attracting a higher level of FDI had negative spillover effects on local firms in these countries. The only exception is Poland where Konings found no evidence of such spillovers.

In contrast, Djankov and Hoekman (2000), Ponomareva (2000), Lutz and Tavalera (2003), and Chudnovsky et al. (2008) studied the effects of foreign investment on the productivity of local firms in the Russian manufacturing industry, in Ukraine and the Argentinian manufacturing industry respectively. They all discovered that this effect was positive and that there were positive spillovers effects from MNCs to these local firms. The only exception is Argentina where Chudnovsky et al. (2008) found that positive effects were dependent on local firms’ absorptive capacities.

2.2.2. Empirical evidence on Inter-Industry spillovers

The majority of productivity spillovers studies have sought to examine the existence of horizontal spillovers. As a result, few studies have been carried out to investigate the existence of vertical spillovers through forward and backward linkages. Of those few, recent studies have found evidence of backward and forward linkages. For instance, Javorcik (2004) studied the effects of FDI on the productivity of local firms in upstream sectors in Lithuania, Tomohara and Yokoto (2006) the effects of FDI on the productivity of local firms in Thailand; Buckley; Clegg and Wang (2007) on the relationship between inward FDI and host country productivity in the Chinese electronic industry, and Javorick and Spateneanu (2008) on FDI and productivity of local Romanian firms. They all found the existence of positive vertical spillovers effects from MNCs to these local firms. The only exception is Argentina where Chudnovsky et al. (2008) found that positive effects were dependent on local firms’ absorptive capacities.

3. Methodology

This paper uses cross-sectional firm-level data collected from the World Bank enterprise survey (WEBS). The WBES is a survey conducted by some private contractors on behalf of the World Bank in order to obtain data that inform about business perspectives in connection with obstacles to growth, constraints to productivity and the effects of business environment to a country’s business and international competitiveness (World Bank Enterprise Survey, 2009). The survey was done in South Africa in 2007 and the total number of firms covered is 1056. These data have been collected using the stratified random sampling methodology and they are grouped according to the International Standard Industrial Classification (ISIC, revision 3.1). In the next sub section, some descriptive statistics of our data are shown.

Further details on this methodology can be found at http://www.enterprisesurveys.com. Information on data collection can be checked using the WBES sampling note and the implementation note for South Africa.
### 3.1. Descriptive statistics

Table 2: Productivity means (MNCs versus Local firms)

<table>
<thead>
<tr>
<th>Nature of Firm</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local Firms</td>
<td>1.5855</td>
<td>0.6664</td>
<td>920</td>
</tr>
<tr>
<td>MNCs</td>
<td>1.6985</td>
<td>0.6468</td>
<td>136</td>
</tr>
<tr>
<td>Grand Mean Productivity</td>
<td>1.6000</td>
<td>0.6647</td>
<td>1056</td>
</tr>
</tbody>
</table>

Source: Author’s own analysis

From the Productivity Means table, it appears that firms with FDI inflows tend to have higher rate of productivity (1.6985) than local firms (1.5855). The productivity of MNCs is even higher than the average productivity of all manufacturing firms included in the survey. In addition, the values of the standard deviations, which are statistically the same for MNCs and local firms, suggest that indeed the productivity means are significantly different from each other.

Table 3: Distribution of firms according to size

<table>
<thead>
<tr>
<th>Size of firms</th>
<th>Nature of Firm</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medium and Large Firms</td>
<td>Local Firms</td>
<td>471</td>
<td>83.96</td>
<td>83.96</td>
</tr>
<tr>
<td></td>
<td>MNCs</td>
<td>90</td>
<td>16.04</td>
<td>100</td>
</tr>
<tr>
<td>Small Firms</td>
<td>Local Firms</td>
<td>449</td>
<td>90.71</td>
<td>90.71</td>
</tr>
<tr>
<td></td>
<td>MNCs</td>
<td>46</td>
<td>9.29</td>
<td>100</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>1056</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Author’s own analysis

The distribution of firms according to size shows that MNCs prefer to invest their money in medium and large firms. There are ninety (90) FDI firms under medium to large scale firms as compared to only forty-six (46) FDI firms under the small firms’ category. The interpretation could be that there is a tendency for MNCs to invest in large scale operations in order to enjoy economies of scale.

Table 4: Regional distribution of firms

<table>
<thead>
<tr>
<th>Region</th>
<th>Nature of Firm</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Johannesburg</td>
<td>Local Firms</td>
<td>611</td>
<td>85.10</td>
<td>85.10</td>
</tr>
<tr>
<td></td>
<td>MNCs</td>
<td>107</td>
<td>14.90</td>
<td>100</td>
</tr>
<tr>
<td>Cape Town, Port Elizabeth and Durban</td>
<td>Local Firms</td>
<td>309</td>
<td>91.42</td>
<td>90.71</td>
</tr>
<tr>
<td></td>
<td>MNCs</td>
<td>29</td>
<td>8.58</td>
<td>100</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>1056</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Author’s own analysis

The above table shows that that out of a sample of 1056 firms, about 107 or 15% of them are MNCs and are located in Johannesburg. In contrast, only about 29 or 9% of them are MNCs and are based in the other three regions (Cape Town, Port Elizabeth and Durban). This may imply that MNCs tend to
invest in regions with higher economic activities and better developed infrastructure. Johannesburg is the engine of economic activities in South Africa and as such, it presents better opportunities for foreign investors than any other region.

Figure 1: Sectoral distribution of MNCs in SA Manufacturing industry
Source: Author’s own plot

The above figure shows that the majority of MNCs are mainly concentrated in the following manufacturing sectors: the fabricated metals products sector (21 per cent), the other manufacturing sector (20 per cent), the food sector (19 per cent), the chemical sector (16 per cent), and the garment sector (11 per cent). However, the presence of MNCs in the remaining sectors (machinery and equipment, non metallic mineral products, Electronics and Plastics and rubber) is only about 14 per cent.

Table 5: The correlation matrix

<table>
<thead>
<tr>
<th></th>
<th>Inprod</th>
<th>Incapint</th>
<th>Inlabour</th>
<th>Inmatint</th>
<th>FDI</th>
<th>Size</th>
<th>Abscap</th>
<th>Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inprod</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Incapint</td>
<td>0.0621</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inlabour</td>
<td>-0.0780</td>
<td>0.0677</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inmatint</td>
<td>0.5679</td>
<td>0.1558</td>
<td>0.1348</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FDI</td>
<td>0.0570</td>
<td>0.0141</td>
<td>0.2035</td>
<td>0.0707</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Size</td>
<td>-0.0511</td>
<td>0.0701</td>
<td>0.7106</td>
<td>0.1239</td>
<td>0.1006</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Abscap</td>
<td>-0.2083</td>
<td>0.2489</td>
<td>0.2699</td>
<td>0.0934</td>
<td>0.0304</td>
<td>0.1421</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>0.0903</td>
<td>0.0046</td>
<td>0.0736</td>
<td>0.1030</td>
<td>0.0335</td>
<td>0.0820</td>
<td>-0.0041</td>
<td>1</td>
</tr>
</tbody>
</table>

Source: Author’s own analysis
The bivariate correlation matrix shows the linear relationship between variables. The correlation coefficients give us informal clues on possible presence of multicollinearity among variables which in turn compromises the regression analysis results. Table 5 exhibits the correlation coefficients between the variables.

From the above table, it can be seen that most of the variables have expected signs in their correlation coefficients with productivity except for the case of absorptive capacity and size. Most variables are weakly correlated with one another and this indicates the possibility of having no multicollinearity problem. Nevertheless, the formal multicollinearity test is done through the use of the Variance Inflation Factor Analysis (VIF) which is discussed below as part of post-regression diagnostics.

3.2. Econometric model

This choice of our model has been guided by the empirical review. Based on this, an augmented Cobb Douglas production function has been chosen (Buckley et al., 2006; Tomohara and Yokoto, 2006, Nhamo, 2011, Negara and Latif, 2012). The model is augmented by the presence of FDI and a set of explanatory variables identified in the empirical literature. The econometric model has been constructed from the typical Cobb Douglas production function below:

\[ Y_i = A^\alpha K_i^{\beta} L_i^{\lambda} M_i^{\phi} e^{i}, \quad i = 1, 2, \ldots, n \]  

Where \( Y_i \) is the output of firm \( i \), \( K_i \) is the fixed capital stock of firm \( i \), \( L_i \) is the number of workers or labour of firm \( i \), \( M_i \) is the amount of material inputs used by firm \( i \), \( \beta, \lambda, \phi \), are the output elasticities with respect to capital, labour and material inputs respectively, \( \omega_0 \) is the constant, \( X_i \) is a vector of observed explanatory variables affecting the output of firm \( i \) such as FDI and \( \varepsilon_i \) is the error term representing all the unobserved explanatory variables that may affect output of each firm.

In order to obtain labour productivity (LP), we divide both sides of equation (1) by \( L_i \) and get equation (2) below:

\[ \frac{Y_i}{L_i} = \frac{A^\alpha K_i^{\beta} L_i^{\lambda} M_i^{\phi} e^{i}}{L_i}, \quad i = 1, 2, \ldots, n \]  

After further mathematical mechanisms, the function below has been obtained
\[
\ln \left( \frac{Y_i}{L_i} \right) = \gamma_0 + \beta \ln \left( \frac{K_i}{L_i} \right) + \phi \ln \left( \frac{M_i}{L_i} \right) + (\beta + \phi + \lambda - 1) \ln L_i \\
= + \sum_{i=1}^{n} \alpha_i X_i + \epsilon_i
\]  

Rewriting equation 3 with all observed explanatory variables affecting productivity results in equation 4

\[
\ln LP = \beta_0 + \beta_1 \ln Capint + \beta_2 \ln Matint + \beta_3 \ln L \\
+ \beta_4 FDI + \beta_5 Size + \beta_6 Abscap + \beta_7 Age + \beta_8 Region \\
+ \beta_9 Horspil + \beta_{10} Forward + \beta_{11} Backward
\]

Where:

- \( \ln LP \): Log of labour productivity (the ratio of sales to labour), \( \ln Capint \): Log of capital intensity (ratio of replacement value of fixed assets to labour), \( \ln Matint \): Log of material intensity (ratio of total cost of raw material and intermediate goods used in production is divided by labour), \( \ln L \): Log of total labour cost; \( FDI \): Dummy of foreign ownership where 1 means presence of FDI inflows and 0 if otherwise

- \( Horspil \): Horizontal or intra industry FDI spillover effect given by

\[
Horspil_j = FDI \cdot Y_i / \sum Y_j
\]
Where

\[ FDI Y^*_i \]: Foreign firms’ output

\[ \sum Y_j \]: Total output

**Backward** : Backward spillover effect given by

\[
\text{Backward} = \sum_k \alpha_{jk} \text{HorSpil}_k
\]

Where:

\[ \alpha_{jk} \]: stands for the proportion of sector j’s output supplied to sector k. This excludes any intermediate inputs within the same sector as these are captured in the horizontal spillover effect. Thus, the proportion is the product of the technical coefficient and the horizontal spillover. The technical coefficient is constructed from the 2005 Input Output (I-O) table of South Africa collected from the OECD website following Lenaerts and Merlevede (2011:6-8) approach. It is a matrix where each cell of the IO table is divided by its row total.

**Forward** : Forward spillover effect given by

\[
\text{Forward} = \sum_k \beta_{jk} \text{HorSpil}_k
\]

Where:

\[ \beta_{jk} \]: stands for the proportion of intermediate output bought by sector j from sector k out of total input bought by sector j. Similarly, this excludes intermediate inputs with the same sector (Javorcik, 2004). This is the product of the technical coefficient and the horizontal spillover. Following Lenaerts and Merlevede (2011:68) approach, it is a matrix where each cell of the I-O table is divided by its column.

**Age**: stands for the number of years in operation, the difference between the year the firm started operations and the year the survey was conducted. **Size**: is the dummy variable for the firm ‘size. It takes on the value of 1 for medium and large firms and 0 for small firms. **Region**: Regional dummy variable where Reg1, Reg2, Reg3 take on the value of 1 if firms are respectively based in Johannesburg, Cape Town, Port Elizabeth and 0 if otherwise. The omitted region is the benchmark region.
4. Econometric Analysis

Before running our linear regression model, a number of cross sectional econometric tests, such as the multicollinearity test via the Variance Inflation Factor analysis and the heteroscedasticity test, have been carried out. Given the nature of our data, these tests are important in order to avoid misleading econometric results (Cuyvers et al., 2008:28). These tests are reported as part of our post-regression diagnostics. Table 6 summarizes the findings of our regression.

Table 6: Linear Regression Results

<table>
<thead>
<tr>
<th>lnprod</th>
<th>coefficient</th>
<th>Standard error</th>
<th>t value</th>
<th>P value</th>
<th>Beta</th>
</tr>
</thead>
<tbody>
<tr>
<td>lnincapint</td>
<td>0.0189</td>
<td>0.0080</td>
<td>2.37*</td>
<td>0.018</td>
<td>0.0367</td>
</tr>
<tr>
<td>lnlabour</td>
<td>-0.0235</td>
<td>0.0108</td>
<td>-2.17*</td>
<td>0.030</td>
<td>-0.0806</td>
</tr>
<tr>
<td>lnmatint</td>
<td>0.5223</td>
<td>0.0246</td>
<td>21.26*</td>
<td>0.000</td>
<td>0.5852</td>
</tr>
<tr>
<td>FDI</td>
<td>0.0554</td>
<td>0.0493</td>
<td>1.12</td>
<td>0.261</td>
<td>0.0279</td>
</tr>
<tr>
<td>size</td>
<td>-0.0514</td>
<td>0.4970</td>
<td>-1.03</td>
<td>0.301</td>
<td>-0.0386</td>
</tr>
<tr>
<td>abscap</td>
<td>-0.5084</td>
<td>0.0499</td>
<td>-10.17*</td>
<td>0.000</td>
<td>-0.2424</td>
</tr>
<tr>
<td>age</td>
<td>0.0003</td>
<td>0.0001</td>
<td>3.50*</td>
<td>0.000</td>
<td>0.0347</td>
</tr>
<tr>
<td>Reg1</td>
<td>0.1088</td>
<td>0.0488</td>
<td>2.23*</td>
<td>0.026</td>
<td>0.0764</td>
</tr>
<tr>
<td>Reg2</td>
<td>0.0974</td>
<td>0.0552</td>
<td>1.76</td>
<td>0.078</td>
<td>0.0505</td>
</tr>
<tr>
<td>Reg3</td>
<td>0.0891</td>
<td>0.0556</td>
<td>1.60</td>
<td>0.109</td>
<td>0.0325</td>
</tr>
<tr>
<td>horizman</td>
<td>-0.5706</td>
<td>18.3346</td>
<td>-0.03</td>
<td>0.975</td>
<td>-0.0024</td>
</tr>
<tr>
<td>backward</td>
<td>117.6245</td>
<td>183.6436</td>
<td>0.64</td>
<td>0.522</td>
<td>0.0463</td>
</tr>
<tr>
<td>cons</td>
<td>1.7779</td>
<td>0.1353</td>
<td>13.14</td>
<td>0.000</td>
<td>0.000</td>
</tr>
</tbody>
</table>

Source: Author’s own analysis

R^2 = 0.4095, F (12, 1043) = 87.99
Prob > F = 0.0000

The estimated model is written below:

\[
\text{lnprod} = 1.779 + 0.0189 \times \text{lnincapint} - 0.0235 \times \text{lnlabour} + 0.5223 \times \text{lnmatint} + 0.0554 \times \text{FDI} - 0.0514 \times \text{size} - 0.5084 \times \text{abscap} + 0.0003 \times \text{age} + 0.1088 \times \text{reg1} + 0.0974 \times \text{reg2} + 0.0891 \times \text{reg3} + 117.6245 \times \text{backward} - 0.5706 \times \text{horizman}
\]

4.1. Discussion of findings

The regression results show positive effects that capital intensity (lnincapint), material intensity (lnmatint) and backward spillover effect have on productivity of local firms in South Africa. In addition, the age of firms and the regional dummies for Johannesburg, Cape Town and Port Elizabeth also show to have positive effects on productivity of local firms in South Africa. All these variables are found significant in explaining productivity of local firms. However, for the regional dummies, only Johannesburg shows to have much higher positive and significant effects on productivity of local firms in South Africa. This may imply that local firms that are based in Johannesburg have intense
contact with MNCs and as such, they are more exposed to new technologies and production processes than local firms in other regions. As a result, they have higher productivity.

The coefficients of \( \text{lncapital} \) and \( \text{lnmaterial} \) are positive and significant which means that an increase in capital and material intensity raises productivity of local firms in South Africa. The coefficient of age is positive and significant. Hence, it may imply that experienced firms (firms with many years in operations) tend to have higher productivity due to knowledge accumulation over time than new firms. The coefficient of FDI is positive which means that MNCs are more productive than local firms. However, it is found insignificant in explaining productivity of local firms. This may perhaps suggest that local firms do not benefit much from FDI spillovers in South Africa.

The positive but insignificant backward spillover effect (backward) on productivity of local firms in South Africa has implications. This may imply that MNCs have established local suppliers of intermediate inputs (downstream sectors) in South Africa. Furthermore, it may also mean that local suppliers have been able to produce and supply high quality intermediate inputs for MNCs. However, its insignificance may somehow mean that MNCs have not been successful in establishing local suppliers in all sectors within the manufacturing industry.

Due to high multicollinearity between backward and forward spillover, the forward spillover variable was deliberately removed from our regression analysis. By association, it can indeed be concluded that local firms in upstream industries also experience higher productivity. This may suggest that local firms (customers) have been able to increase productivity by buying intermediate inputs from MNCs.

On the other hand, the findings show negative effects of labour (\( \text{lnlabour} \)), firm’s size (\( \text{size} \)), horizontal spillover effect and absorptive capacity of local firms (\( \text{abscapacity} \)) on productivity of local firms in South Africa. The coefficient of firm’s size suggests that firm’s size may not be a determining factor in explaining productivity of local firms. The coefficient of labour has the expected sign as it is expected that an increase in labour cost will, ceteris paribus, lead to fall in productivity of local firms. The negative coefficient of absorptive capacity could mean that South African local firms did not have the minimum prerequisites (e.g. the necessary human capital, physical infrastructure, research and development activities (R&D) and distribution networks to sustain inward FDI) that allow them to take advantage of FDI spillovers.

Finally, the findings suggest that there are negative intra-industry spillover effects from FDI to local firms in South Africa. This is expected in the theoretical literature since MNCs are expected to be reluctant to share technology with local firms given that these latter are seen as local competitors. However, only the coefficients of labour and absorptive capacity are found significant in explaining productivity of local firms in South Africa while those of firm’s size and horizontal spillover effect are insignificant.

4.2. Post regression diagnostics

As explained in the beginning of our econometric analysis, we conducted a number of cross sectional econometric tests to ensure that our findings are credible. This section summarizes the main econometric tests (the multicollinearity and heteroscedasticity tests) that were carried out before running our regression.

4.2.1. Variance Inflation Factor (VIF) test

We use the “rule of thumb” that uses a threshold of 10 to make a judgment on multicollinearity. If the VIF \( \geq 10 \), then we suspect the presence of multicollinearity in the variables. Alternatively, the tolerance index (the reciprocal of the VIF) can also be used.

If the tolerance index is close to one (1), then we may not suspect any multicollinearity. From the results, Backward and Horizontal Spillover variables have VIF of above 10, thus they are highly correlated. However, this should be expected from the variable construction point of view. The rest of the variables have VIFs well below the threshold of 10. Most importantly, the overall VFI mean (4.25) is also below the threshold. Thus, we can confirm that there is no multicollinearity among our variables. Therefore, our regression results can be relied upon. Table 7 summarizes the results of the formal multicollinearity test through the Variance Inflation Factor analysis (VIF).
Table 7: Variance Inflation Factor (VIF) Table

<table>
<thead>
<tr>
<th>Variables</th>
<th>VIF</th>
<th>Tolerance index(1/VIF)</th>
</tr>
</thead>
<tbody>
<tr>
<td>horizman</td>
<td>17.97</td>
<td>0.0556</td>
</tr>
<tr>
<td>backward</td>
<td>17.41</td>
<td>0.0574</td>
</tr>
<tr>
<td>lnlabour</td>
<td>2.34</td>
<td>0.4276</td>
</tr>
<tr>
<td>Reg1</td>
<td>2.22</td>
<td>0.4501</td>
</tr>
<tr>
<td>Size</td>
<td>2.09</td>
<td>0.4776</td>
</tr>
<tr>
<td>Reg 2</td>
<td>1.88</td>
<td>0.5324</td>
</tr>
<tr>
<td>Reg 3</td>
<td>1.48</td>
<td>0.6754</td>
</tr>
<tr>
<td>Abscap</td>
<td>1.28</td>
<td>0.7807</td>
</tr>
<tr>
<td>FDI</td>
<td>1.15</td>
<td>0.8677</td>
</tr>
<tr>
<td>Incapint</td>
<td>1.10</td>
<td>0.9119</td>
</tr>
<tr>
<td>lnmatint</td>
<td>1.08</td>
<td>0.9297</td>
</tr>
<tr>
<td>Age</td>
<td>1.02</td>
<td>0.9818</td>
</tr>
<tr>
<td>Mean VIF</td>
<td></td>
<td>4.25</td>
</tr>
</tbody>
</table>

Source: Author’s own analysis

### 4.2.2. Heteroscedasticity

Cross-sectional data are usually associated with the problem of Heteroscedasticity. Hence, before running our regression, we needed to test for Heteroscedasticity. This has been done via the Breusch-Pagan test. The results show that the residuals were found to be heteroschedastic. As a result, we had to re-estimate the regression with robust residuals as a means to correct for the heteroschedastic problem.

### 5. Conclusions, Recommendations and Policy implications

The purpose of this paper was to examine whether they are productivity difference between MNCs affiliates and local manufacturing firms in South Africa. In addition, the paper purports to investigate the existence of intra-industry or inter-industry spillover effects from FDI to local firms. In the introduction of this paper, we have hypothesized that because of technology, MNCs would be more productive than local firms. However, on one hand, we expected positive spillover effect from FDI to local firms in downstream and upstream industries (backward and forward linkages) while on the other hand, negative intra-industry spillover effects were expected from FDI to local firms. In this study, our empirical findings have shown that MNCs are more productive than local manufacturing firms in South Africa. Nevertheless, this productivity difference has been found insignificant to explain productivity of local firms. Furthermore, although insignificant, our results support on one hand that there are positive inter-industry spillover effect from FDI to local firms while on the other hand, there are negative intraindustry spillover effect from FDI to local firms in South Africa(most likely from the competition effect channel). Hence, based on this, we can conclude that our empirical findings support our hypothesis. In this study, we have also discovered that the coefficient of absorptive capacity is negative. This could mean that South African local firms do not have the minimum prerequisites (e.g. the necessary human capital, physical infrastructure, research and development activities (R&D) and distribution networks to sustain inward FDI) that allow them to take advantage of FDI spillovers. In addition, we have found that firms who are based in Johannesburg tend to enjoy higher productivity than firms in other regions. This supports the geographical proximity spillover channel which supports that local firms who are closer to MNCs tend to enjoy much higher productivity.
The findings of this study do have some policy implications. Because MNCs are found to be more productive than local firms, we recommend to policymakers to continue attracting more FDI inflows in South Africa in general and the manufacturing industry in particular. We believe by encouraging more FDI inflows in South Africa and given that MNCs have the most updated technologies, local firms will somehow take advantage of these technologies from MNCs presence in the country. However, given that on one hand, there is some evidence of negative intra-industry spillover effects and on the other hand, there is evidence of positive inter-industry spillovers, national efforts to attract more FDI inflows in South Africa should be encouraged in inter rather than intra industries. For instance, they may encourage more backward linkages initiatives such as mergers and acquisitions (M&A) and joint venture projects rather than Greenfield projects. The insignificance of backward spillover effect may simply mean that MNCs affiliates have not been able to establish strong linkages with local firms in downstream industries. Thus, because of this, it is recommended to policymakers to adopt investment policies that encourage strong backward linkages between MNCs and local firms in all the manufacturing sectors.

However, it is important to mention that the findings of this study are only applicable to the South African manufacturing firm level cross sectional data. Thus, future studies are encouraged to use firm level panel data for South Africa to investigate the existence of horizontal and vertical spillover effects from FDI to local firms in the country. Furthermore, given that these findings are only applicable to the manufacturing industry, future studies may also aim to examine the interaction between FDI and local firms in other industries. For instance, the relationship between FDI and productivity of local firms in the service industry may be studied. In addition, to gain deeper insight and derive strong recommendations, future studies may also assess the inter-relationship between FDI, absorptive capacity and productivity of local firms.
6. References


Teaching and Assessing Personal Development Modules in Social Care Programmes in Ireland

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Abstract

Personal Development (PD) is a fundamental experiential component of many Level 8, B.A in Social Care Work (SCW) programmes. This paper explores how PD is taught and assessed and the commonalities between PD modules and SCW. PD modules facilitate the PD learner to gain these SCW competencies at their own pace often mirroring the work of the SCW.

Some of the PD topics covered include self-awareness regarding one's internal processes and how they impact upon self and others, reflective journal writing, contemplative pedagogies, the effects of family relationships and patterns, assertiveness, non-assertiveness, use of self when engaging with Service Users, loss, life story and working with diversity in human sexuality. These topics coincide with competencies required in SCW. Future work in this area is ongoing within the scope of PhD study at Trinity College Dublin.

Keywords: Personal Development, Social Care Work, Social Care Skills, Higher Education, Modules, Assessment
The Impact of Foreign Direct Investment on Employment in South Africa: A Time Series Analysis

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Abstract
South Africa has begun to integrate more fully into the global economy through trade and investments. This study aims to analyse the impact of foreign direct investment on employment in South Africa for the period 1985-2014. The Johansen Cointegration VAR method was employed to test for the long run relationship among the variables. The unit root results showed stationarity for FDI, GDP and import at first difference form, implying that they are integrated of order one, while employment was found to be stationary at second difference form implying that it is integrated of order two. The long run relationship exists among the variables, the cointegration test showed only 1 cointegrating vector. The long run results showed a negative relationship between FDI and employment, and a positive relationship between GDP, import and employment. According to the reviewed literature FDI has had a relatively low inflow into South Africa, hence it has an insignificantly negative relationship with employment. In conclusion, it is how much of FDI inflow South Africa experiences that determines its impact on employment, the higher rate of FDI the more significant relationship it builds with employment. Thus, FDI can be seen as a tool to enhance employment in South Africa.

Keywords: Employment, foreign direct investment, South Africa, cointegration

1. Introduction
Foreign Direct Investment (FDI) is regarded as a key component in the integration of international economy, it is known to create a direct, stable and enduring associations between economies. FDI introduces new technology and skills in the host economy and enables it to spread its products globally, thus can also be deemed as a potential factor that influences globalisation. FDI can be defined as “a cross-border investment by a resident entity in one economy with the objective of obtaining a lasting interest in an enterprise resident in another economy” OECD (2013). The investor has an influence in the decisions made by the management of the enterprise and acquires a controlling/voting power above ten percent.

South Africa as one of the countries in the developing world that needs sustainable mechanisms and/or tools that lead to the improvement of the economy, has adopted Foreign Direct Investment (FDI) among other driving forces of the economy and the employment driver. Masipa (2014) regard FDI, as a global study that is dominating economic literature, as a tool to sustained economy, increased exports and job creation. FDI has a greater impact in developing countries, Graham and Spaulding (2005) shows that FDI flows have increased from an average of less than $10 billion yearly average in the 1970s to a yearly average of less than $20 billion in the 1980s, and turned out in the 1990ss from $26.7 billion in 1990 to $179 billion in 1998 and $208 billion in 1999 and comprises a large portion of global FDI.

According to Kamaraj (2007), FDI can be classified into two categories and that is the outward and the inward FDI. FDI is classified in this manner with regard to restrictions imposed and the prerequisites required for the investment. The author describes outward bound FDI to be supported by the government against all kinds of risks associated with it. In addition, inward FDI is described as the one that includes interest loans, tax breaks, grants, subsidies, and the removal of restrictions and limitations. Also, the categories of FDI which are vertical and horizontal FDIs and vertical is
described as the one that exists when multinational corporations own shares in the foreign enterprises which are their input suppliers or which they use the outputs produced by the MNCs. When a MNC has similar business operations in different countries, the FDI is categorized as horizontal.

A transparent regulatory framework, a large number of population sizes, accessibility to raw materials and political stability are some of the factors that attracts FDI, and together with others have made a great impact in the BRICS countries in 2013. According to the UN report (2013), the BRICS countries were able to double their FDI share – to 22% of global FDI inflows -from pre-crisis level in 2013. BRICS accounted for a global FDI of over one fifth with China in the second spot, Russia in the third and Brazil in the seventh spot among top 20 host economies of 2013. Total inflow amounted to $322 billion with South Africa outperforming other countries with an inflow rising by 126% (UNCTAD report, 2013).

South Africa’s racially divided past impacted most facets of life, including the labour market and the education system (Burger and Fintel, 2009). Policies put in place to curb these imbalances- equalising opportunities that relates to labour market entry, and access to similar education for all- have not achieved the primary goal; Unemployment remains a factor to those previously disadvantaged in the midst of educational attainment converging across racial groups.

Masipa (2014) estimated from 1990-2013 the impact of FDI on economic growth and employment in South Africa. Results showed a positive long run relationship among variables and concluded that FDI is a considerable mechanism to boosting the long term economic growth and employment. According to Konings (2014), foreign firms use better technology than domestic firms which leads to attracting much better employees by paying them more.

Pinn et al (2011) viewed the effect of FDI on employment in three scenarios. They firstly argue that FDI inflow can increase employment directly and/or indirectly, directly by creating new businesses and indirectly by stimulating employment in the dissemination phase of production. They secondly argue that FDI can sustain employment by procuring and rebuilding the existing firms. And lastly that FDI can reduce unemployment through disinvestment and the closure of domestic firms because of intense competition.

This paper seeks to examine the impact of foreign direct investment on employment in South Africa. The paper is organised as follows: section two gives a brief overview of foreign direct investment and employment in South Africa, section three provides the literature review, section four discuss the methodology. In the last section, findings are interpreted and conclusions, policy recommendations and the limitations if the study are given.

2. Overview of FDI And Employment In South Africa

South Africa depends largely on investment for sustained growth. The injection of investment funds (FDIs) from abroad is fundamental to guarantee the proper operation of the country's natural resources, which helps in sustaining the economy. However, foreign direct investment has had a relatively low inflow in the country compared to other emerging market countries, in the most recent years. Regardless of the advantage South Africa has in terms of natural resources, there’s limited interest shown by foreign investors in acquisition, creation and/ in expanding domestic enterprises in the country. FDI is known to can act as a catalyst for investment, its role in the development of the country’s economy is quiet considerable. FDI forms a medium for foreign exchange inflows, which can strengthen the international reserves of the country.

Politics contributed largely to low inflow of FDI in the country in the 80s, it was a more dominating environment. Trade and financial sanctions imposed during that period, the financial crisis experienced, the tightening of capital controls and the moratorium declared on payments to external creditors, leading to South Africa being cut off international capital markets are among other factors that highly influenced the low inflow of FDI or even disinvestment in the country. The inflow for the period 1985-93 fluctuates within the approximated range of (-0.7; 0.2) before its significant increases a few years after the transition into the democratic South Africa, heavily influence by the partial sale of government shares in Telkom in 1997 and the takeover of De Beers by Anglo American in 2001, which were the two dominating events in that period. However, FDI inflow remains relatively low in comparison to other emerging market countries. Figure 2.1 depicts these trends.
Figure 2.1 FDI trends in South Africa 1985-2015

Source: Own graph with data adapted from (World Bank database, 2016)

Figure 2.1 shows that the inward inflow of FDI into South Africa had a considerable rise from 1994. Political stability and economic openness are amongst others factors that influence FDI, hence when democracy began in 1994, and politics in the country stabilised, FDI reached 0.268 percentage of GDP for the first time. According to Thomas and Leap (2005), a considerable increase in 1997 resulted from the partial privatisation of Telkom and South African Airlines, leaving inward flow amounting to 2.5%. This was followed by a declined in 1998 to 0.4%, an increase to 1.10% then a decrease by 0.4% in 1999 and 2000 respectively leading to a total of 0.7% by the end of the year 2000. The acquisition of De Beers by Anglo American in 2001 left a remarkable record with a rise to 5.98% which is the best record FDI inflow has ever reached in South Africa. This event together with the acquisition deal of ABSA by Barclays in 2005, the FIFA world cup and the integration of South Africa into BRICS both taking place in 2010 are among the major events associated with the significant FDI inflow in the country.

Natural resources do not form the basis of foreign investment as one would expect, from the events above it can be deduced that FDI has been mainly about acquisition in the service sector in the country. Mazenda (2012) states that according to the UNCTAD (2012), the primary sector accounted for 36.3% of inward FDI stock in 2001-2010, the mining sector accounted for 36.1% of the total, the service sector attracting 36.2% mainly in finance, which accounted for 27.5%, 4.5% was accounted by transport, storage and communications, trade and construction accounted for 3.7% and 3.4% respectively in the service sector. The manufacturing sector had the lowest contribution with 27.5% inward FDI stock.

An Overview of employment in South Africa

South Africa started to feel the impact of changes in the external political environment in the late 1960's and mid 1970's as pressure was brought to bear on the government to evacuate discriminatory labour legislation. Combined with an increasing population, a stagnant economy and internal labour strife, the government facilitated a portion of the confinements to permit other racial groups more access to labour markets. After some time, this brought about a secured economy and a racially divided labour force. In 1994 economic sanctions were eliminated and South Africa was able to at the
end of the day attract foreign investment. However, the world economy had changed significantly, as had South Africa's from the 1960's. Sectors such as, mining and agriculture had experienced declines in output as a percentage of Gross Domestic Product as the economy and employment shifted to the service sector.

The shift in capital to labour ratios in sectors that were labour intensive further brought more complications. This was influenced by the need of employers to labour costs and also to lessen their dependence on the now and again unpredictable labour market that was in turmoil in the 1980s. the aftereffects of these factors was that the labour market was shrinking in relative to terms and the skills required to meet a more capital intensive, technology oriented economy were lacking. Employment growth in market economy is determined by output growth and real wages. The race discrimination history of South Africa shaped the functioning of the labour market and created a structural element to the employment conundrum, with regard to the role of trade unions and skills level for workers in Africa.

Higher real wages lower the demand for labour in South Africa, with wage elasticities ranging from 0.3 for high-skilled labour to about 1 for less skilled labour. In part, the slowing rate of employment growth since the early 1980s reflects the rapid growth in real wages that accompanied the expansion in unionisation after the restrictions imposed on unions were lifted in 1979. In addition to the stronger position of unions, increasing focus on real wage bargaining in this period was also a reaction to higher inflation, which would have undermined real income levels if nominal wage growth did not keep pace.

Apartheid’s active de-skilling of workers and the extensive nature of development further cut off the economy’s potential by limiting improvements to labour productivity that might have kept unit labour costs stable. As real wages rose faster than labour productivity, South African firms experienced a 38 per cent increase in unit labour costs. The trends in these interrelated variables between 1970 and 1994 are shown in Figure 8. The rise in unit labour costs was especially detrimental to South Africa’s international competitiveness and contributed to the appreciation in the real effective exchange rate experienced between 1986 and 1993. South Africa’s unit labour costs in manufacturing over the period 1990-1994 was, on average, 59 per cent higher than a sample of eleven emerging market economies.

Over the years, the high rate of unemployment has been highly influenced by factors such as the structure of production, the level of investment, human development, labour market regulations, strong local currency, global competition, employment equity targets and population growth.

In an attempt to alleviate unemployment, the Growth Employment and Redistribution (GEAR) macroeconomic and social development policy framework was implemented in June 1996, in South Africa, with the following key strategic goals:

- Fast-tracking economic growth in order to generate formal employment for work-seekers;
- Redistributing income and generating opportunities for the poor.
- Creating a society in which sound health, education and other services are available to all.
- Enabling an environment in which homes are secure and places of work are productive.

In their overview of the performance of the South African economy since 1993, Hanival and Maia (2008) argue that the performance of the South African economy was complemented by a substantial labour absorption capacity with a total of 1.25 million jobs created between 2004 and 2007 in both the formal and the informal sector of the economy. They further mention that the retail and wholesale trade sector dominated the employment environment by creating 607 000 jobs. Among other sectors, 307 000 jobs were created within the labour-intensive construction sector, 250 000 jobs in the financial and business services subsector, with the manufacturing sector creating only 164 000 new jobs, which represents 13% of all additional employment since 2004. Figure 2.3 illustrates the trends of employment in South Africa.
Figure 2.3 Employment trends in South Africa 1985-2015.

Employment has fluctuated over time during and post-apartheid, the rate ranges up to 3.7 percent up until 1996 down to -4.1 percent in 2000. It is only in 2008 that it reaches a higher number with an increase of 1 percent from 1996 to make a total of 4.7 percent employment rate. Between 2008 and 2014, the employment rate fluctuates between an approximation of 2 percent and 4.7 percent which speaks well about the development of the country. Different sectors have contributed differently to the level of employment in the country. Figure 2.4 illustrates the trends in 3 sectors.
Figure 2.4 Employment trends in the private, the public and the non-agricultural sector.

Source: own graph with data adapted from SARB

The employment level in the three mentioned sectors vary in time according Figure 2.4. In 1985 the level of employment was only between 0.1 and 0.7 in all the above mentioned sectors, however, the public sector increased considerably in 1986 surpassing other sectors with the value of 3.6 percent. In it decline in 1988 to 1.3 percent the private and the non-agricultural sector made a significant increase to reach 4.2 percent and 3.6 percent respectively. 1990, 1993 1997-2002 and 2015 the public sector recorded a lower rate of employment. From 2002-2014 the public sector contributed significantly in the employment of the country. The private sector had its bad times in 1991-1992, 1998-2001, 2003, 2009 and 2014. The non-agricultural sector recorded an insignificant contribution in 1991-1993, 1997-2001, 2003, 2009-2010 and 2015.

3. Literature Review

This section provides literature review on employment and foreign direct investment. Different scholars and academics have developed theories that link employment and other economic factors many years ago. This section of this chapter provides a discussion of FDI and employment’s reining theories.

Internalisation theory of FDI

The internationalisation theory of FDI was firstly introduced in 1960 by Hymer before Buckley and Casson developed it into a full paradigm in 1976. It was developed to explain the motive of transnational companies for acquiring foreign direct investment and their growth. This theory stresses that the external markets invest in multiple countries to establish internal markets since they fail to provide an efficient environment where firms using their technology and intermediate inputs can profit. Which then allows the firms to create the needed market in which they will achieve their objectives. The theory emphasises internalisation in the basis of multinational enterprises. Internalisation is the activity in which a MNE internalises its globally dispersed foreign operations through a unified governance structure and common ownership (Buckely and Casson, 1976).

The internationalisation theory has the following limitations, the theory does not give clear motive for internationalisation. According to the theory, multinational firms bypass the market in intermediate products, through FDI. However, the rationale for internationalisation is not certain- whether it is the inefficiency of the external market in terms of relatively high transaction costs and longer time lags or anything else. Secondly, empirical evidence with regard to the theory is not strong; their conclusion that internationalisation is high in industries with relatively high case of research and development.
expenditure is a conclusion taken by a lot other studies. Thirdly, the internationalisation theory fails to explain FDI in the short run.

**Product Cycle Theory**

This theory was developed by Vernon (1966) with the aim of explaining international production and international trade. The centre argument of this theory is that technological development creates changes in the products’ factors intensity, resulting in changing the comparative advantages of countries. Vernon states that a product in its life cycle goes through three stages, from the newly developed product to the maturing product, then finally to a standardised product. According to Kusluvan (1998), this stage happens in high per capita income, large markets- due to demand and effective communication with the market, and in high labour cost industries, e.g. United States of America.

The second stage is set apart by the maturity and export of the product to countries next in line with regard to the high level of income. Due to increase in demand and the focus on achieving economies of scale, certain degree of standardization surfaces in this stage. Increased demand and growth in competition eventually result in direct investment by the domestic firms into these high income countries for local production.

In the third stage of the cycle the products are standardised and the production technique is no longer an exclusive possession of the innovator. A domestic firm is now forced to invest outside in order to gain cost advantage, as a result of price completion.

From its original version, the product cycle theory fails to provide a uniform theory for multinational firms. The production abroad of innovations is the only type of foreign investment addressed by the product cycle theory of Vernon, meaning the theory fails to explain the vertical investment. Furthermore, this theory does not take into account all determining factors of FDI, for instance for manufacturing facilities only the location is explained, that is when products will be preferred to export, and not ownership, that is who’s taking charge of the new products, whether it is the indigenous firm or the receiving country.

**The general theory of employment**

The general theory of employment was developed by Keynes, it addresses employment not only as occupation, also in terms of wage labour and the hire of labour for the sum of money. It’s a theory of employers’ decisions to hire and services offered by employees. According to Keynes the general theory is an essential mechanism to explaining how unemployment can result due to lack of aggregate demand. This theory does not regard questions like why a wage-dependent labour force exists, but considers the skill and number of labour available as its main conditions. Entrepreneurs are explained in this theory as those entities that make independent decisions on what to produce, how to produce and how to sell to product markets. Together with workers, entrepreneurs bargain over money-wages not real wages. The general theory’s main concern is employers and employees who prices the labour time that should actually be reached independently of the value of the subsequent output to which the labour may give rise.

The general theory is regarded as a special disequilibrium case of elasticity pessimism, with consumption being inelastic to wealth, interest rates being inelastic to money supply and investment being inelastic to interest rates. This criticisms are followed by the assumptions that flexible prices would shift a monetary production economy, trading at false disequilibrium prices, to a unique and stable full employment equilibrium, and that the psychological propensities of the theory have no solid long-term foundation in rational choice.

**Empirical literature**

This section provides a global view on empirical studies of foreign direct investment and employment. It is divided into two subsections in which the first part is the country studies, the second part is the group studies.
Country studies

Foreign direct investment (FDI) was found to be one of the crucial tools that can be used to accelerate employment. Its determining factors and ways of attraction were studied. Dominating economic literature, particularly in the developing nations of the world, FDI is said to have the most influence on the economy of a host country. Nahidi and Badri (2014) argues that FDI has influences on production, employment, income, prices, exports and imports to affecting the growth of the economy, balance of payments, and general welfare of the country.

Habib and Sarwar (2013), examined the impact of FDI on employment in Pakistan for the period 1970-2011. The Johansen Co-integration approach was used to analyse the long run relationship among the variables (employment, FDI, exchange rate and GDP per capita), and the results shows that there is a long run relationship the dependent variable and the independent variables.

In the study conducted in Malaysia, the effect of FDI on employment was empirically analysed using time series data for the period 1970-2007 by Pinn et al (2011). The long run and the short run relationship was tested among the variables using the econometrics models including the bound testing ADRL (Autoregressive Distributed Lag) approach and the ECM-ADRL model. FDI is found to be a significant factor contributing to the employment growth in Malaysia.

Masipa (2014) estimated the impact of FDI on economic growth and employment in South Africa used time series data for the period 1990-2013. The Johansen cointegration test was used to determine the long run relationship among the variables and the Granger causality test was used to test for causal relationship. The results showed stationarity among the variables, long run relationship and the direction of causality which ran from FDI to GDP and from FDI to employment. The conclusion was made that FDI should be considered amongst the mechanisms to boost long run economic growth and employment in South Africa.

Wei (2013) conducted a study in which the longitudinal macroeconomic data was examined to assess the effect of FDI inflows on job creation in China. The time series regressions models were used in this analysis with annual data from 1985-2011. The study looked into the effect of FDI on total employment for the entire China’s economy and the effect of FDI on employment in the three different sectors of the economy (primary, secondary and tertiary). The results showed no positive significant relationship between FDI and employment for the entire Chinese national economy and that FDI impacts employment differently in different sectors of the economy: a positive significant relationship was found in the primary sector, no significant relationship in the secondary sector and a negative significant relationship in the tertiary sector.

Manufacturing and services have been regarded as the “twin engines” of growth for Singapore economy. As the economy is moving up the value chain from downstream to upstream activities, a significant proportion of FDI (foreign direct investment) has been attracted to the manufacturing and services sectors. A study was conducted by Wong and Tang to examine the causal relationships between inward FDI and the host country’s employment in the manufacturing and service sector for the period 1997-2005 using tri-variate VAR (vector autoregressive) framework. The main findings showed evidence of unidirectional causality, running from employment in manufacturing and services to FDI inflows. Furthermore, there was evidence showing strong employment linkages, predominantly from the manufacturing to services. The present study provides useful policy implications towards promoting foreign investment in emerging areas of and manpower development in both sectors of the economy.

Group studies

The ongoing discussion held in policy debates about a complex issue of whether and to what extent FDI affects regional employment continues. Different regions and/ countries are affected different by FDI, all of them encourages FDI as a result of its positive effects on employment and economic growth but to what extent does it impact go differs. Marelli et al (2014) addressed three questions which speaks on how FDI affects different regions (the EU regions), those questions are: 1. Is regional (sub-national) employment significantly affected by FDI in the EU-27 context? 2. Are the results significantly different across different groups of regions (Eastern, Western, Northern and South EU regions)? 3. Is sectorial employment differently affected in the above mentioned groups of regions?
Using the unbalanced panel of 270 EU regions, seven manufacturing and service sectors, and three periods of time they empirically analysed this issue. The results showed FDI to be expanding employment in all economic sectors, in exclusion of the construction industry. They also found positive FDI effects on employment, in Northern and Western EU regions on average.

Hoang and Binh (2014) investigated the impact of foreign direct investment (FDI) on employment level in developing countries. The sample consists of 45 developing countries, using a panel data covering the period of 2006 – 2010. The estimation method used was the fixed effects estimation method. The empirical result suggests that FDI has a significantly negative, though quantitatively modest effect on employment in developing countries while gross domestic investment and total investment are positively and significantly associated with employment.

A major concern faced by the policy makers is to find remedial tools for the recovery of the negative growth rates and low levels of employment. Jude et al (2010) conducted a study in the CEE countries with the centre purpose of analysing the potential direct and indirect effects of FDI on employment. To also provide a structural analysis of FDI shares in employment and in the total value added. They presented theoretical arguments about FDI as a possible solution to reducing unemployment and to advancing growth. Their conclusion was that under the relationship FDI, employment and economic growth there exists a viable solution for CEE countries.

4. Methodology

4.1. Model Specification

The empirical analysis of this paper follows the model used by Habib and Sarwar (2013) when they examined the relationship between FDI and employment in Pakistan. This study only differs with their study in the sense that it analyses the relationship of FDI and employment in South Africa, and in the additional variables they included the exchange rate while in this analysis we included import. Imports reflect the more elevated amount of openness, which serves to increase the proficiency of labour utilization, it is usually considered as a substitution of domestic production with foreign production. Import has an impact on employment. The model is estimated as:

\[ \ln EMP = \beta_0 + \beta_1 \ln FDI_t + \beta_2 \ln GDP_t + \beta_3 \ln IMP_t + \mu_t \]  

Where:
- EMP= Employment
- FDI= Foreign Direct Investment
- GDP= Gross Domestic Product
- IMP= Import of Goods and Services
- \( \beta_0 \) = the intercept
- \( \mu_t \) = the error term
- \( \beta_1, \beta_2 \) and \( \beta_3 \) are the coefficients to be estimated

The employment function is expressed in logarithm form as:

4.2. Estimation technique

This paper uses the Johansen cointegration VAR method to test for the existence of the long run relationship between the variables in study. According ToSjö (2008), the Johansen cointegration method has all the desired statistical properties. Furthermore, the method's reliance on asymptotic properties is its weakness, therefore it is sensitive to specification errors. In computing the test, the variables are firstly subjected to unit root analysis in order to determine their order of integration, this procedure is done using the Augmented Dickey-Fuller (ADF) and the Philips-Perron (PP) unit root test. Following is the VAR representation of the variables. The process is p-dimensional, integrated of order d, \( \{ X_t \} \sim I(d) \) giving the VAR representation:

\[ X_t = \Pi_1 X_{t-1} + \Pi_2 X_{t-2} + \ldots + \Pi_p X_{t-p} + u_t \]
Where $X_t$ is a $n \times 1$ vector of variables integrated of $I(1)$, that is of order one. $u_t$ represents $n \times 1$ vector of innovations. $m \times m$ coefficients matrices are represented by $\Pi_1$ to $\Pi_p$. If one was to subtract $X_{t-1}$ on both sides of equation 1, the results would be:

$$\Delta X_t = \Gamma_1 \Delta X_{t-1} + \Gamma_2 \Delta X_{t-2} + \ldots + \Gamma_{p-1} \Delta X_{t-p+1} - \Pi \Delta X_{t-p} + u_t$$

Where $\Gamma_1 = \Pi_1 - I, \Gamma_2 = \Pi_2 - \Pi_1, \Gamma_3 = \Pi_3 - \Pi_2$ and $\Pi = I - \Pi_1 - \Pi_2 - \ldots - \Pi_p$. The extent of cointegration is determined by the matrix $\Pi$, and is called the impact matrix.

The reparametrized equation (the equation in which $X_{t-1}$ where subtracted on) can be written as:

$$\Delta X_{it} = \gamma'_{11} \Delta X_{t-1} + \gamma'_{12} \Delta X_{t-2} + \ldots + \gamma'_{p-1} \Delta X_{t-p+1} - \Pi' X_{t-p} + u_{it}$$

Where $\gamma'_{ij}$ is the first row of $\Gamma_j$. $\gamma'_{ij}$ is the first row of $\Pi$. $\Delta X_{it}$ is stationary at order zero, $1(i), j = 1, 2, \ldots, p - 1$, and $\Pi'_{ij} X_{t-p}$ are integrated of order zero too. $u_i$ must be stationary at $1(i)$ since $\Pi' X_{t-p}$ is assumed to be $1(i)$.

"The number of distinct cointegrating vectors depends on the row rank of $\Pi$" (Harris, 1995).

The matrix $\Pi$ forms the basis for $m$-dimensional space provided it has $m$ number of linearly independent rows and columns. That is, $m \times 1$ vectors can be generated as linear combinations of its row leading to stationarity, meaning that if the matrix $\Pi$ ranks $r < m$, then $X_{t-p}$ has stationary components (Ssekuma, 2011)

$$\Pi$$

Where

$$\Pi = \beta' \alpha'$$

for matrices $m \times 1, \beta$ and $\alpha$.

Where

$$\alpha' = \begin{bmatrix} \alpha_1' \\ \alpha_2' \\ \vdots \\ \alpha_r' \end{bmatrix}$$

$$\beta = \begin{bmatrix} \beta_1 \\ \beta_2 \\ \ldots \\ \beta_r \end{bmatrix}$$

Then $\Pi_{ij} X_{t-p} = \beta \alpha'^{-1} X_{t-p}$ and all linear combinations of $\alpha'^{-1} X_{t-p}$ are stationary. VAR is subjected to $\Pi' = \beta \alpha'$ with the assumption $u_t \sim i.i.d N(0, \Sigma)$, using the maximum likelihood estimator. Thus the estimates can be expressed as:

$$\Delta X_t = \Gamma_1 \Delta X_{t-1} + \Gamma_2 \Delta X_{t-2} + \ldots + \Gamma_{p-1} \Delta X_{t-p+1} - \beta \alpha' X_{t-p} + u_t$$

The trace test and the maximum eigenvalue are used to detect the number of cointegration vectors:

- **The trace test**

The trace test is given as:
The trace tests is performed under the null hypothesis that there are \( r \) cointegrating vectors against the alternative hypothesis that there are \( n \) cointegrating vectors. When the trace statistics value is greater than 0.05 critical value we reject the null hypothesis.

- **The maximum eigenvalue test**

It is given as:

\[
J_{\text{trace}} = -T \sum_{i=r+1}^{n} \ln\left(1 - \lambda_i \right)
\]

The hypothesis competing on this test is the null that there are \( r \) cointegrating vectors against the alternative that there are \( (r + 1) \) cointegrating vectors. When the max-Eigen statistics value is greater than 0.05 critical value we reject the null hypothesis.

5. **Interpretation of Findings, Conclusions And Policy Recommendations**

Table 1: Unit Root Tests results

<table>
<thead>
<tr>
<th></th>
<th>FDI</th>
<th>EMP</th>
<th>GDP</th>
<th>IMP</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ADF</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Level</td>
<td>1.338305</td>
<td>-1.108382</td>
<td>-1.841494</td>
<td>-1.077669</td>
</tr>
<tr>
<td>First Difference</td>
<td>-4.345705**</td>
<td>-3.160179**</td>
<td>-5.656902***</td>
<td>-4.945226***</td>
</tr>
<tr>
<td><strong>PP</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Level</td>
<td>1.482938</td>
<td>-0.150314</td>
<td>-1.857374</td>
<td>-2.008527</td>
</tr>
<tr>
<td>First Difference</td>
<td>-4.446796***</td>
<td>-3.122528**</td>
<td>-9.315075***</td>
<td>-6.572668***</td>
</tr>
</tbody>
</table>

***, ** and * represent significance levels at 1 %, 5 % and 10 % respectively.

To avoid the possibility of drawing up conclusions based on statistically spurious relationships, all data series were tested for stationarity. The Phillips-Perron and Augmented Dickey-Fuller unit root tests were used and test results are presented in Table 1. For the most part, both the Phillips-Perron and the Augmented Dickey-Fuller results suggested that the null hypothesis of the presence of unit root in the variables in levels could not be rejected at 1% significance level indicating that the variables are non-stationary in levels. However, when the variables are first differenced, the null hypothesis of the unit root in each of the series was rejected at 1% significance level. Therefore it can be concluded that all the variables are integrated of order one.

5.1. **Cointegration Test**

The cointegration approach permits an integration of the long run and short run relationship between variables within a unified framework. The most vital step is to ensure that all variables are integrated of the same order. This can be accomplished by differencing every one of the variables once. The trace and the maximum Eigen tests are employed to test for cointegration. Table 2.1 presents the results of the Johansen cointegration test based on the trace test, Table 2.2 presets the results based on the maximum Eigen value. The null hypothesis that there is no cointegration is rejected if the probability value of the test is less than the tests’ critical value.
Table 2.1 Cointegration results of the trace test

<table>
<thead>
<tr>
<th>Hypothesized No. of CE(s)</th>
<th>Eigen Value</th>
<th>Trace Statistics</th>
<th>0.05 Critical Value</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>None *</td>
<td>0.606747</td>
<td>48.44467</td>
<td>47.85613</td>
<td>0.0440</td>
</tr>
<tr>
<td>At most 1</td>
<td>0.454397</td>
<td>22.31220</td>
<td>29.79707</td>
<td>0.2815</td>
</tr>
<tr>
<td>At most 2</td>
<td>0.123177</td>
<td>5.348006</td>
<td>15.49471</td>
<td>0.7708</td>
</tr>
<tr>
<td>At most 3</td>
<td>0.057811</td>
<td>1.667392</td>
<td>3.841466</td>
<td>0.1966</td>
</tr>
</tbody>
</table>

The trace test indicates 1 cointegrating eqn(s) at 0.05 significance level. * denotes rejection of the hypothesis at the 0.05 level.

The trace test reflects that there is 1 cointegrating equation existing at 5 percent significance level. The null hypothesis that there is no cointegration is rejected at none because the trace (test) statistics of 48.44467 is greater than the 5% critical value of 47.85613. At most 1, 2 and 3 the null hypothesis is accepted since the trace statistics values are less than 0.05 critical value.

Table 2.2 Cointegration results of the maximum Eigen test

<table>
<thead>
<tr>
<th>Hypothesized No. of CE(s)</th>
<th>Eigen Value</th>
<th>Max-Eigen Statistics</th>
<th>0.05 Critical Value</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>0.606747</td>
<td>26.13247</td>
<td>27.58434</td>
<td>0.0758</td>
</tr>
<tr>
<td>At most 1</td>
<td>0.454397</td>
<td>16.96419</td>
<td>21.13162</td>
<td>0.1737</td>
</tr>
<tr>
<td>At most 2</td>
<td>0.123177</td>
<td>3.680614</td>
<td>14.26460</td>
<td>0.8914</td>
</tr>
<tr>
<td>At most 3</td>
<td>0.057811</td>
<td>1.667392</td>
<td>3.841466</td>
<td>0.1966</td>
</tr>
</tbody>
</table>

Max-Eigen value test indicates that there is no cointegration at 0.05 level.

The maximum eigenvalue test in Table 2.2 reflects that there are no cointegrating equations existing at 5 percent significance level. The null hypothesis that there is no cointegration is also rejected accepted for none, at most 1, at most 2 and at most 3.

### 5.2. Vector error correction model

The VECM allows us to distinguish between the long run and the short run effects of the variables so as to establish the effects of foreign direct investment on employment. Having discovered one cointegration equation allows the use of VECM. Table 2.3 and 2.4 presents the short run and long run results respectively.

<table>
<thead>
<tr>
<th>Variables</th>
<th>LEMP</th>
<th>LFDI</th>
<th>LGDP</th>
<th>LIMP</th>
<th>Constant</th>
</tr>
</thead>
<tbody>
<tr>
<td>coefficients</td>
<td>1.000000</td>
<td>0.323386</td>
<td>0.026561</td>
<td>0.533253</td>
<td>-2.756425</td>
</tr>
<tr>
<td>t-stats</td>
<td>[9.00516]</td>
<td>[2.41133]</td>
<td>[8.66760]</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The long run equation is written as:

LEMP = -2.756425 + 0.323386LFDI + 0.026561LGDP + 0.533253LIMP ……………………5.1
Equation 5.1 shows that LFDI has a positive significant relationship with LEMP. A 1% increase in LFDI leads to 0.32% increase in LEMP. LGDP and LIMP has a positive significant relationship with LEMP. 1% increase in LGDP leads to 0.03% increase in LEMP. 1% increase in LIMP leads 0.53% increase in LEMP. The literature reviewed (empirical literature) affirms the results of this test. Table 2.4 shows the error correction term results.

Table 2.4 Error correction term results

<table>
<thead>
<tr>
<th>Variables</th>
<th>D(EMP)</th>
<th>D(LFDI)</th>
<th>D(GDP)</th>
<th>D(LIMP)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Error term</td>
<td>-0.188974</td>
<td>0.900971</td>
<td>0.57463</td>
<td>0.780966</td>
</tr>
<tr>
<td>T-stats</td>
<td>[-2.84213]</td>
<td>[1.48401]</td>
<td>[3.12294]</td>
<td>[2.49408]</td>
</tr>
</tbody>
</table>

The speed of adjustment is approximately 18.8%, implying that only 18.8% is corrected in the equilibrium if there is a deviation- in one year as the variable moves towards restoring equilibrium. The speed of adjustment is statistically insignificant.

5.3. Diagnostic Tests

To validate the parameter evaluation of the outcomes achieved by the model used in this study, diagnostic checks were performed. The model was tested for fitness using three main tests, these are, the langrage multiplier (LM) test for serial correlation, the White test for heteroskedesticity and the Jarque-Bera test for normality. Results presented in Table 2.5 suggested that there is no serial correlation, there is no conditional heteroskedesticity and there is a normal distribution in the model.

Table 2.5 A summary of the diagnostic tests results

<table>
<thead>
<tr>
<th>Test</th>
<th>Null hypothesis</th>
<th>p-value</th>
<th>conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Autocorrelation</td>
<td>No serial correlation</td>
<td>0.4736</td>
<td>There is no serial correlation</td>
</tr>
<tr>
<td>LM test</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>No heteroskedestacity</td>
<td>0.5319</td>
<td>There is no heteroskedestacity</td>
</tr>
<tr>
<td>JarqueBera</td>
<td>Residuals are normally distributed</td>
<td>0.7045</td>
<td>The model is normally distributed</td>
</tr>
</tbody>
</table>

5.4. Conclusions and policy recommendations

The question of how FDI impacts employment in South Africa and to what extent has been the center of this study. It is commonly known that foreign direct investment is an important tool in the advancement and enhancement of employment worldwide. Section two provides the overview of the study in which the trends of the variables involved were analyzed. Literature reviewed in this paper gives the theoretical framework and the empirical evidence of the study. Theories discussed under FDI are the internalisation theory of FDI, the product cycle theory. The empirical literature involves the studies in developed and developing countries, in which the impact of FDI on employment was found to be significant and positive, implying that FDI is an important tool that should be included in policies that can enhance employment in South Africa. Section four is the methodology of the study in which the technique used to estimate our model is discussed. The long run suggests that GDP, FDI, IMP have a positive relationship with EMP. From the results we can suggest that the government should come up with policies that encourage Foreign Direct Investment.
6. List of references


How Inviting is the Learning Environment?

Hans Brits, Vaal University of Technology, South Africa

Abstract

The presentation will reflect on a study conducted to determine the satisfaction and importance values of questions that relate to services rendered by an institution of learning that adopted a teaching and learning model based on constructivism. The study was conducted from an invitational education point of view. The institution utilised a satisfaction survey questionnaire that measures a respondent’s satisfaction per question as well as the respondent’s view on the importance of the respective issues. The questions reflect on a wide spectrum of services rendered to the students. The information gathered during this study was interpreted within the framework of invitational education and socio-constructivism and was utilised for quality enhancement purposes. The rationale for the study was to collect information that will identify deficiencies and informs remedial action processes in order to enhance teaching and learning. The presentation will reflect on the method that was used during the study as well as the outcome of the exercise and the interpretation of the data within a context of invitational education and constructivism.
Bibliography


http://findarticles.com/p/articles/mi_6946/is (accessed 1 May 2011)


Relationship between Financial Performance and Stock Market Performance of the Companies Traded in Stock Exchange: An Application of the Companies Listed on the BIST Corporate Governance Index

Mehmet Nuri Salur, Necmettin Erbakan University, Turkey
Mustafa Nihat Demirci, Necmettin Erbakan University, Turkey
Yasin Cihan, Necmettin Erbakan University, Turkey

Abstract
In this study, stock performances and financial performances of the 50 companies listed on the corporate governance index of Borsa İstanbul (BIST-XKURY) in 2015 were compared. 8 financial ratios, determined as independent variables for the measurement of the financial performance of the enterprises, were calculated and the market value/book value ratio was used for the stock market performance in the analysis. In the study, the calculated financial ratios are converted to a single number by using the TOPSIS method which is one of the multi-criteria decision making methods. Then, the enterprises are ranked according to these scores indicating the financial performances of the enterprises. Financial performance scores obtained by the TOPSIS method as of the period examined were analyzed by comparing them with the stock market performance based on the market value/book value ratio.

The study also tried to reveal whether there is a statistically significant relationship between financial performances and stock market performances of the firms by using regression analysis.

Keywords: Borsa İstanbul (BİST), Financial Performance, Stock Market Performance, Multi-Criteria Decision Making, TOPSIS Method, Regression Analysis.
Effects of Total Quality Management Applications on Business Performance: An Application in Food Sector

Derya Öztürk, Ordu University, Turkey

Abstract
The main purpose of this study is to demonstrate the impact of total quality management practices on business performance. Within the scope of the study, data were collected by administering a face-to-face questionnaire to the employees of the quality department of 20 hazelnut companies operating in the food sector in Samsun and Ordu provinces. A factor analysis was performed on the total quality management and business performance scales obtained from the survey. Kaiser-Meyer-Olkin (KMO) and Bartlett's tests of Sphericity were conducted to measure the suitability of the scales for factor analysis. An Exploratory Factor Analysis (EFA) was performed for construct validity and a Cronbach’s Alpha analysis was carried out for reliability. KMO value was 0.687 and Bartlett's test χ2 value was 752.509 (p <0.001) for total quality management while KMO value was 0.626 and Bartlett's test χ2 value was 253.521 (p <0.001) for business performance. A three-factor structure explaining 82.30% of the total variance was obtained for total quality management while a two-factor structure explaining 73.40% of the total variance was obtained for business performance. The dimensions derived from the factor analysis are “leadership and continuous improvement”, “customer and employee satisfaction” and “supplier relationships and environmental awareness” for total quality management, and “financial performance” and “in-house performance” for business performance.

In addition, as the data did not show normal distribution, Spearman's Rho correlation coefficient, a nonparametric statistical test, was used to analyze the correlations between the scales. Spearman's Rho correlation coefficient was found to be r = 0.721 in determining the effect of total quality management on business performance. The results show that there is a positive and significant correlation between total quality management factors and business performance (p <0.001), indicating that total quality management practices have a positive effect on business performance.

Keywords: Quality, Total Quality Management, Business Performance, Factor Analysis

1. Introduction
The ever-increasing competition in the world market forces all companies wishing to survive to take customer satisfaction into account. Organizations wishing to take part in this competition have sought to adopt a philosophy of quality-based management as an element of competition which meets customer satisfaction. Various definitions of the concept of quality have been made by specialists at various times. According to Juran, quality refers to fitness for use or purpose while according to Crosby, it refers to conformance to requirements. Taguchi defines quality as the loss a product causes to society after being shipped while Feigenbaum defines it as satisfaction of customer expectations (Hemedoğlu, 2012). The common point in all the definitions of quality is to meet customers’ needs and desires. Total quality is a series of regular activities covering all employees, from managers to workers, in a fully integrated effort to improve performance at all levels in an organization (Imai, 1986: 15).

Total Quality Management (TQM) is a process aiming at reaching zero defects, starting from the stage of raw material and including subsidiary factories, customer complaints and after sales services that provide input to an operation (Küçük, 2010: 216). In other words, TQM is a philosophy aimed at continuously improving and sustaining products and processes by eliminating losses with the participation of management, workers and suppliers, shortening procurement times at all stages of the production process, reducing costs and improving people in order to meet and even exceed customer
The philosophy of continuous improvement—continuous change, which is at the core of TQM, is important for firms to stand out from the crowd in highly competitive markets and to reach a better position than other firms. TQM is an important tool to improve quality and, in this way, to have a corner on the world markets. TQM is based on the happiness of people and one of the most important elements of this understanding is the integration of all stakeholders of an organization into the system by taking them all into consideration (Günbatan, 2006). TQM requires a wide scale transformation in the principles of the corporate culture such as leadership, customer orientation, continuous improvement, teamwork, process management, and management of training and of supplier quality (Kannan & Tan, 2005: 153).

As a result of increasing global competition, many companies use TQM to survive and enhance their competitive power (Chenhall, 1997). Businesses base their sustainability, which is their main goal, on their performance values. Performance measurement is a critical factor for effective management, which leads us to the fact that unmeasured things cannot be improved (Salaheldin, 2009). In-house performance, customer performance, innovation and learning performance are as important as financial performance in the performance measurement of a successful business. The relationship between TQM and performance is analyzed depending on the extent to which TQM principles are implemented. In this respect, there are studies investigating the relationship between TQM and business performance (Corredor & Goni, 2010; Rahman & Bullock, 2005; Kaynak, 2003; Fuentes et al., 2004; Samson & Terziovski, 1999; Lemak et al., 1997).

The aim of this study is to determine the impact on business performance of TQM principles implemented in hazelnut companies with a quality department in Samsun and Ordu provinces. The study consists of five sections. The introduction section focuses on the purpose and importance of the study. The second section addresses the relationship between TQM and business performance. The third section discusses the methodology of the study. The fourth section presents the research findings and finally the fifth section analyzes the results.

2. Effect of Total Quality Management on Business Performance

Business performance refers to the degree of fulfillment of an objective or task of a business depending on the output/result obtained at the end of a certain period (Turunç, 2006: 131). Businesses set up to achieve specific objectives and tasks aim to achieve these objectives and tasks in the best and most successful way possible, that is, they strive to show the highest performance (Akal, 1998). The measurement of business performance is of vital importance for a business to monitor its own efforts, on the one hand, and generate customer satisfaction in the target market on the other hand. Moreover, performance measurement creates decision inputs that guide the decisions of business managers (Öztek, 2005: 22; Yıldız, 2011).

Using non-financial dimensions as well as financial dimensions in the measurement of performance yields more reliable results. One of these measurement techniques is the Balanced Scorecard (BSC) (Öncü, et al., 2015: 151-152) which is a strategic management approach that emerged in the 1990s, driven by such trends as quality assurance, total quality management, just in time production, customer-oriented production, integrated supply chain, reengineering, activity-based costing and competition management (Yıldız et al., 2010: 3). The Balanced Scorecard enables the integration of financial indicators of businesses' past performance with non-financial indicators belonging to factors which will constitute the source of their future performance (Walker & MacDonald, 2001: 368). The Balanced Scorecard classifies the mission and strategy in four main dimensions (Kaplan & Norton, 2015: 32): financial performance, in-house performance, customer performance and innovation and learning performance.

While there is a wide range of performance criteria used to measure performance values, the number of these performance criteria appears to be limited in the studies addressing TQM. A number of empirical studies have been conducted on TQM and their performance measures can be summarized as follows: Organization performance, institution performance, job performance, operational performance, financial and non-financial performance, innovation performance and quality performance (Salaheldin, 2009). Despite the use of different performance criteria in the studies conducted, the data obtained show that there is a positive correlation between TQM and performance.
3. Research Methodology

The aim of this study is to determine the impact of TQM practices on business performance. Initially, TQM practices and business performance dimensions were determined using factor analysis. Subsequently, all the sub-dimensions of the TQM and business performance scales derived from the factor analysis were evaluated together and the relationship and effect between these two scales were examined and the significance and level of the relationship and effect were investigated.

Figure 1 illustrates the research model pertaining to the relationship between TQM practices and business performance.

The hypothesis of the research is as follows:

- H₁: TQM practices have a statistically positive effect on business performance

The survey used in the research consists of three parts. In the first part, there are questions seeking general information and demographic data about the surveyed firm. The second part is composed of 30 statements on the sub-dimensions of TQM; management leadership, employee training, employee participation, customer and employee satisfaction, continuous improvement approach, and supplier relations and environmental awareness. The third part includes 12 statements on the sub-dimensions of business performance; financial performance, in-house performance, customer performance, and innovation and learning performance.

As a scale of TQM, the questions prepared to measure the leadership principle were adopted and reformulated from the study conducted by Cua et al (2001); employee training principle from Evliyaoğlu and Hemedoğlu (2012); employee participation principle from Cua et al (2001), Rahman and Bullock (2004) and Fuentes et al (2004); customer and employee satisfaction principle from Karaçam (2009); continuous improvement principle from Kaynak (2003), Rahman and Bullock (2004) and Fuentes et al (2004); supplier relations principle from Küçük et al (2015); and environmental awareness principle from Yüksel (2003). The questions prepared to measure financial performance, in-house performance, customer performance, and innovation and learning performance, which are the four basic dimensions of the Balanced Scorecard as a business performance scale, were adopted and reformulated from the studies conducted by Aslan (2007) and Özer (2016).

A 5-point Likert scale (1 = Strongly agree, 2 = Agree, 3 = Undecided, 4 = Disagree, and 5 = Strongly disagree) was used in the second and third part of the study. The questionnaire was sent to 20 hazelnut companies operating in the food sector in Samsun and Ordu, and employees working in the quality departments of those companies were asked to fill in it. 95 out of 102 people working in 20 companies...
filled in the questionnaire. The sample group (95 people) constitutes 93% of 102 people working in the quality department of 20 companies.

Data obtained from the survey were analyzed using SPSS v24 (IBM Inc., Chicago, IL, USA) statistical software program. Frequency and percentage distributions were used to interpret the descriptive statistics. A factor analysis was performed on TQM and business performance scales. The precondtion of performing a factor analysis is variables having a correlation, that is, a relationship, to a certain extent. Bartlett's Test of Sphericity shows whether there is a sufficient correlation between variables. If Bartlett's Test p value is less than 0.05, then there is a sufficient correlation between the variables to perform a factor analysis. Similarly, Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy assesses the suitability of inter-variable correlations for factor analysis. KMO value ranges from 0 to 1 (Durmuş et al., 2013: 79-80). KMO values between 0.9 and 1 are perfect, between 0.8 and 0.89 great, between 0.7 and 0.79 good, between 0.6 and 0.69 mediocre, between 0.5 and 0.59 poor and below 0.5 unacceptable for factor analysis (Aydı̇n, 2007).

If the result of the factor analysis shows that a variable has similar values in more than one factor, that variable should be extracted from the analysis and the factor analysis should be repeated. Another important issue is the factor loadings of variables in factors (Sipahi et al, 2008). Factor loading shows the relationship of a variable with the factor. The higher the factor loading, the greater explanatory power that variable has on the factor. Considering the sample size, it is appropriate to include statements with a factor loading of 0.55 or higher in the analysis in studies with a sample size of 85-100 (Hair et al., 2006). The sample size being 95 in this study, statements with a factor loading of 0.55 or higher were included in the analysis.

Spearman correlation analysis was performed as the data on the determination of the correlation between TQM and business performance were not normally distributed. Correlation analysis is performed to determine whether there is a relationship or dependency between two variables measured at interval or ratio level and to show the direction and power of the relationship or dependency, if there is any (Yazıcıoğlu & Erdoğan, 2011: 329). The correlation coefficient is denoted by “r” and the value of r takes values between -1 and +1. If the value r is close to -1, it means that there is a negative correlation between the variables and if the value r is close to + 1, it means that there is a positive correlation between the variables. If the value of r is close to zero, it is concluded that there is no relationship between the two variables (Özdamar, 2013).

4. Research Findings

This section contains the findings of the research. Firstly, the demographic characteristics of the participants will be presented and then the findings on the reliability of the scales will be addressed.

4.1. Demographic Characteristics

Table 1 shows that 95 people participated in the survey; 84.21% men, 15.79% women.

Table 1. Distribution of Participants in Terms of Gender

<table>
<thead>
<tr>
<th>Gender Distribution</th>
<th>F</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Man</td>
<td>80</td>
<td>84.21</td>
</tr>
<tr>
<td>Woman</td>
<td>15</td>
<td>15.79</td>
</tr>
<tr>
<td>Total</td>
<td>95</td>
<td>100.00</td>
</tr>
</tbody>
</table>

The education levels of the respondents were also assessed within the scope of the research. Table 2 shows that 55.80%, 21.05%, 17.89% and 5.26% of the respondents have a high school, associate, bachelors and master’s degree, respectively.
Table 2. Distribution of Participants in Terms of Educational Status

<table>
<thead>
<tr>
<th>Distribution of Education Level</th>
<th>F</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>High School</td>
<td>53</td>
<td>55.80</td>
</tr>
<tr>
<td>Associate Degree</td>
<td>20</td>
<td>21.05</td>
</tr>
<tr>
<td>Bachelor's Degree</td>
<td>17</td>
<td>17.89</td>
</tr>
<tr>
<td>Master's Degree</td>
<td>5</td>
<td>5.26</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>95</strong></td>
<td><strong>100.00</strong></td>
</tr>
</tbody>
</table>

Table 3 demonstrates the age distribution of the respondents. 31.58% of the respondents are below the age of 26 years. 42.11% of the respondents are between the ages of 26 and 35. 21.05% of the respondents are between the ages of 36 and 45 while 5% of the respondents are above the age of 45 years.

Table 3. Distribution of Participants in Terms of Age Groups

<table>
<thead>
<tr>
<th>Age Distribution</th>
<th>F</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 26</td>
<td>30</td>
<td>31.58</td>
</tr>
<tr>
<td>26 - 35</td>
<td>40</td>
<td>42.11</td>
</tr>
<tr>
<td>36-45</td>
<td>20</td>
<td>21.05</td>
</tr>
<tr>
<td>&gt;45</td>
<td>5</td>
<td>5.26</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>95</strong></td>
<td><strong>100.00</strong></td>
</tr>
</tbody>
</table>

4.2. Factor Analysis and Reliability of Scales

This section presents the results of the factor analysis and findings on the reliability of the scales used in the research.

Principal components factor analysis, a parametric statistical analysis method, was used to assess TQM principles, financial performance, in-house performance, customer performance and innovation and learning performance. Factor analysis was initially applied taking into account 42 variables. As a result of the analysis, 20 variables which were not fit to the basic factor components were excluded. Factor loadings were examined and reliability tests were taken into account. In this way, the variables that loaded to a substantial degree on a factor component other than its own factor were extracted one by one starting with the variable having the greatest value and factor analysis was repeated each time. Consequently, a 5-factor solution (3 from TQM and 2 from business performance) was decided to be the most appropriate solution. The 5 main factors were grouped according to the results of the factor analyses of 22 variables, the reliability of which was also analyzed.

Following the reliability analysis, TQM principles - independent variable – and performance results - dependent variable – were separately handled. Factor analysis was applied to TQM practices and performance scales by Varimax rotation using Principal Component method. KMO and Bartlett's values of some statements were not within acceptable limits for factor analysis related to TQM and performance scales. In addition, they loaded almost equally on more than one factor. Therefore, these statements were removed from the analysis and factor analyses were repeated. Table 5 shows the statements with a factor loading above 0.55.
Table 4. TQM Scale Factor Analysis and Reliability

<table>
<thead>
<tr>
<th>TQM Sub-dimensions</th>
<th>Survey Questions</th>
<th>Factor loading</th>
<th>Eigen values</th>
<th>Variance Explained %</th>
<th>Cronbach’s Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TQM1: Leadership and Continuous Improvement</strong></td>
<td>Company management creates a vision focused on quality improvement.</td>
<td>.942</td>
<td>32.249</td>
<td>31.614</td>
<td>.907</td>
</tr>
<tr>
<td></td>
<td>Company managers take on responsibility to improve the quality management system.</td>
<td>.939</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>All employees of the company are provided with training on quality.</td>
<td>.885</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>All employees of the company are provided with trainings on technical and vocational skills.</td>
<td>.768</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>TQM2: Customer and Employee Satisfaction</strong></td>
<td>Quality is based on customer demands by the company.</td>
<td>.977</td>
<td>26.967</td>
<td>27.323</td>
<td>.947</td>
</tr>
<tr>
<td></td>
<td>Customer satisfaction is regularly measured by the company.</td>
<td>.941</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Employee satisfaction is regularly measured by the company.</td>
<td>.931</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>TQM3: Supplier Relations and Environmental Responsibility</strong></td>
<td>Suppliers are regularly assessed within the framework of quality standards by the company.</td>
<td>.931</td>
<td>23.082</td>
<td>23.361</td>
<td>.853</td>
</tr>
<tr>
<td></td>
<td>Suppliers are effectively guided and informed on quality status a regular basis.</td>
<td>.857</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Environment-friendly production activities are carried out by our company.</td>
<td>.849</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

KMO= 0.687; Bartlett's Test of Sphericity = 752.509, p< 0.000

The KMO value for the sample adequacy of the TQM scale is 0.687. The value found in the analysis indicates that the data used are suitable for factor analysis. Bartlett's test of Sphericity is used to assess the hypothesized associations between the variables in the main set. The Bartlett's test result shows a chi-square value of 752.509 and a significance of 0.000. The KMO value for the sample adequacy of the business performance scale is 0.626. The value found in the analysis indicates that the data used are suitable for factor analysis. The Bartlett's test result shows that the chi-square value is about 253.521 and the significance is 0.000. KMO and Bartlett's test results indicate that the sample size of both scales is sufficient and that there is a strong relationship between the variables to conclude that it is appropriate to perform factor analysis. The results also indicate that the variables are appropriate for factor analysis (p = 0.000).

The results of the factor analysis applied to the TQM scale reveal a three-dimensional structure explaining 82.30% of the total variance. The factor loadings of the items related to these structures range from 0.768 to 0.942 in the sub-dimension of leadership and continuous improvement, from 0.931 to 0.977 in the sub-dimension of customer and employee satisfaction and from 0.849 to 0.931 in the sub-dimension of supplier relations and environmental awareness. The percentage of the variance explained by each factor is as follows: 31.61% (1st factor), 27.32% (2nd factor) and 23.36% (3rd factor). The Cronbach Alpha values of these factors for TQM principles are as follows: 0.907 for the 1st factor; 0.947 for the 2nd factor and 0.853 for the 3rd factor (Table 4).
Table 5 Business Performance (BP) Scale Factor Analysis and Reliability

<table>
<thead>
<tr>
<th>Business Sub-dimensions</th>
<th>Survey Questions</th>
<th>Factor loading</th>
<th>Eigen values</th>
<th>Variance Explained %</th>
<th>Cronbach’s Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BP1: Financial Performance</strong></td>
<td>Our company is in good condition in terms of its market share.</td>
<td>.892</td>
<td>39.406</td>
<td>37, 397</td>
<td>.828</td>
</tr>
<tr>
<td></td>
<td>Our company is in good condition in terms of profitability.</td>
<td>.887</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Our company has increased its sales.</td>
<td>.805</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>BP2: In-house Performance</strong></td>
<td>The capacity utilization rate of our company is high.</td>
<td>.937</td>
<td>33.999</td>
<td>36.008</td>
<td>.797</td>
</tr>
<tr>
<td></td>
<td>Employees of our company have high levels of satisfaction.</td>
<td>.895</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>The rate of defective products is low in our company.</td>
<td>.669</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

KMO= 0.626; Bartlett's Test of Sphericity = 253.521, p< 0.000

The results of the factor analysis applied to the performance scale manifest a two-dimensional structure explaining 73.40% of the total variance. The factor loadings of the items related to these structures range from 0.805 to 0.892 in the sub-dimension of financial performance and from 0.669 to 0.937 in the sub-dimension of in-house performance. The percentage of the variance explained by each factor is as follows: 37.98% (1st factor) and 36.01% (2nd factor). The Cronbach Alpha values of these factors for business performance are as follows: 0.828 for the 1st factor and 0.797 for the 2nd factor (Table 5).

4.3. Correlation Analysis

Figure 2 illustrates the research model revised as a result of the dimensions that emerged after factor analysis.

Figure 2. Research Model after Factor Analysis

Table 6 shows the results of the correlation analysis between TQM and business performance after factor analysis.
The results of the correlation analysis for this study are given below.

**For Hypothesis 1;**

Table 6, in which all sub-dimensions are evaluated together, shows that the correlation between TQM and business performance is close to 1 with \( r = 0.721 \), indicating a strong and linear relationship between them. In addition, \( H_1 \) hypothesis was accepted as the relationship between TQM and business performance is statistically significant (\( p < 0.001 \)). There is a positive correlation between TQM and business performance (\( r = 0.721 \)). If hazelnut companies improve TQM practices, their performance will increase by 72.1%. In other words, any change in TQM corresponds to a change of 0.721 in business performance.

5. **Results**

Quality practices can significantly improve business performance. Thus, today, quality practices are regarded as the most important factor that enables a business to gain competitive advantage in national and international markets. This study was carried out in order to determine the impact of TQM practices on business performance of hazelnut companies operating in food sector in Samsun and Ordu provinces. As a result of the analyses carried out in the study, three dimensions regarding TQM practices were identified; “leadership and continuous improvement,” “customer and employee satisfaction” and “supplier relations and environmental awareness” while two dimensions regarding business performance were identified “financial performance” and “in-house performance.”

Spearman correlation analysis was used to determine the relationship between quality practices and performance of the businesses. The result of the research model indicates that TQM practices have a positive effect on and contribute to the improvement of the performance of the businesses. According to the results, it can be stated that business managers who are willing to improve business performance should focus on leadership and continuous improvement, customer and employee satisfaction, supplier relations and environmental awareness. If businesses adopt the understanding of TQM and effectively implement it, they will see that they can achieve their goals and bring their operations to perfection.

In conclusion, the success of a business largely depends on the adoption of TQM principles and their integration into all operations, processes and practices as a management philosophy. Overall, the results indicate that businesses should place greater emphasis on TQM principles, provide their employees with trainings on quality and support continuous improvement under the leadership of top management in order to improve their performance.

This study conducted field research on hazelnut companies applying TQM practices and operating in Samsun and Ordu. The most important limitation of the study is that it was carried out on hazelnut companies only in Samsun and Ordu. It is recommended that further studies investigate companies operating in different cities and determine whether there are any regional differences.
References


Stock Market Volatility and Private Consumption Expenditure in South Africa

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Yohane Khamfula, North West University, South Africa

Abstract
This study examines the impact of stock market volatility on private consumption expenditure in the South African economy. It employs a vector error correction model to determine the relationship between the variables of interest for the period 1980I to 2015IV. The variables included in the long run equation are final private consumption expenditure, stock market volatility, nominal exchange rate, interest rate, household disposable income and gross domestic product. Two cointegrating vectors were evident from the Johansen cointegration test. The study recommends the need to improve the functioning of the stock market in the South African economy to bring about stock market stability, which will ultimately benefit the average consumer.

JEL classification: G1, E21, C32

Keywords: Private Consumption Expenditure, Stock Market Volatility.
Abstract

**Introduction** Air transport deregulation has created a turbulent business environment characterized by increased instability and fierce competition. The wave of change swept airlines first causing a number of bankruptcies, merges and strategic alliances. Accordingly, airports have experienced the impacts of free market rules through extensive commercialization and privatization initiatives all across the world. The demanding aviation scenery calls for increasing efficiency and innovative management. However, conventional airport performance measures strictly adhered to financial and traffic indices fall short of capturing the complexity of the airport business and to produce results able to create value for all major airport stakeholder groups.

**Objectives** The objective of this presentation is to describe the development and first application of an innovative airport performance management system, namely the Airport Business Excellence Model (ABEM).

**Methods** Airport Business Excellence Model is based on the general philosophy of European Foundation of Quality Management (EFQM) Business Excellence Model, from which it has received formal recognition as an airport-specific, holistic performance assessment model. ABEM is comprised of two groups of Key Performance Areas (KPAs): Enablers, referring to what actions an airport *does* in six KPAs: Leadership, Strategy, People (HRM), Suppliers & Resources, Partners & Customers, Processes, Products & Services and Results, which refer to what an airport *achieves* in six KPAs, too: People results, Operational results, Quality results, Customer results, Society results, Financial results. ABEM has been implemented in an extensive global sample of 143 airports, located in 52 countries and 40 USA states. Collected data was analyzed using Partial Least Squares-Structural Equation Modeling (PLS-SEM) methodology, to investigate all possible causal relations among ABEM elements. KPAs’ relevant weights were also estimated by the responders, allowing for Importance-Performance Analysis to be conducted additionally.

**Results** The statistical evaluation of the final measurement and structural model with PLS-SEM methodology revealed an intriguing nexus of causal interactions within the model. Most KPAs have a direct or indirect impact on other ABEM elements, with the Leadership and Strategy being the most influential factors, both affecting directly other Enablers and by acting in the background to establish indirect linkages with all other KPAs. Suppliers & Resources, Partners & Customers, Processes, Products & Services have a more direct effect to business Results, while HRM directly affects People results which in turn has a broad effect within Results group. Further, Financial results seem to be the direct outcome of Customer and Society results but also receives the indirect effect of People results. Finally, the Importance-Performance Analysis offered additional useful insights: Among the factors considered highly important for business excellence, airports are doing well in Leadership and Operational results but still fall behind in HRM and Customer results, areas that call for additional attention. On the other side, Society issues are not considered of primary importance, gathering the lowest performance scores.

**Conclusion** The very high ranking of People results and Operational results indicate that airports are anthropocentric business where the main priorities are effective operations (like safety, security, air traffic control, apron management, aircraft and passengers handling), rather than the usual top priorities of ‘traditional’ business like market share and financial profits. The complicated network of causal relations among KPAs helped us to shed light on the business ‘black box’ that remained so far neglected by the ordinary performance measurement surveys. Moreover, it proves that excellent
business outcomes are not a matter of a big volume of incomes but rather the distilled effect of a nexus of intermediating synergies.

**Presentation structure** My presentation will be materialized using Power-point slides where the concept of ABEM will be explained, supported by relevant graphs and illustrations. Since I have already completed all stages of my research, I would be able to fully cover the above sections. Moreover, this presentation will be the first public appearance of the innovative and very promising Airport Business Excellence Model.

**Key words:** Airport Management, Airport Performance, Total Quality Management, Business Excellence, PLS-SEM
References:


Emotional Intelligence, Financing Structure and Performance of Tunisian Firms

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Manel Dahmani², University of Sfax, Tunisia
Ghazi Zouari³, University of Sfax, Tunisia

Abstract

Set within the context of theoretical framework with behavioral corporate finance, the present article is designed to investigate the relationship binding emotional intelligence and firm performance via the financing structure as applied to the Tunisian context. Our envisaged model is targeted to ensure whether the financing structure does actually stand as a mediating variable between performance and emotional intelligence.

The conducted empirical study is constructed over a sample comprising 56 managers of firms observed over the year 2014. The results of the conducted regressions prove to confirm the persistence of a mediating effect of the financing structure in the relationship between emotional intelligence and the Tunisian firms’ performance

Key words: Emotional intelligence, financing Structure, firm performance.

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An Empirical Analysis of Government Expenditure and Economic Growth in South Africa

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Gisele Mah, North West University, South Africa

Abstract
This study examines the effects of the component of government expenditure on economic growth in South Africa from the period 1983 to 2013. The data was obtained from the South African Reserve Bank. The components of government expenditure used in this study are public order and safety, education, health and social protection. The study employed Engle-Granger estimation and the Granger causality techniques to determine the relationships. The results provide evidence of long run relationship among all the variables which are also statistically significant with the exception of social protection which is insignificant. Moreover, public order and safety, social protection, health and taxation have a positive impact on growth while education has a negative impact on economic growth. The Granger causality result reveals that government expenditure does granger cause economic growth and vice versa.

Keywords: government expenditure, economic growth, Engle-Granger Approach, Granger causality, South Africa.

Classification of JEL codes: C22, E12, E62, H51, H52, H5

1. Introduction
Black, Calitz and Steenekamp (2011) define fiscal policy as decisions by national government on the nature, level and composition of government expenditure, taxation and borrowing aimed at pursing particular goals. The growing importance of government expenditure in most countries has encouraged a significant amount of research on the relationship between the size of government and economic growth (Bojanic 2013). Government actions are often carried out inefficiently and the regulatory process imposes extreme burdens and costs on the economy. As a result, countries with larger government expenditure as a percentage of output experience lower economic growth as stated Abdullah, Habibullah and Baharumshah (2009).

However, lack of consideration of public expenditure for the urgent needs of the country may cause greater distortion in the economy which may lead to a decline in economic growth (Olabi and Funlayo, 2012). The correlation between government expenditure and economic growth can be explained by two approaches namely Keynes and Wagner’s school of thought that begins on the direction of the causality between the two variables. Patricia and Izuchukwu (2013) pointed out that according to the Keynesian view, government expenditures are tools adopted by the government to reverse economic downturns by borrowing money from the private sector and then returning it to them through various spending programs which contributes positively to the economy. This is seen as an exogenous factor that can be used to generate national income. While Wagner’s view states that government expenditure is a consequence of economic growth meaning that are an endogenous factor or outcome but not a cause to growth in national income Ansari, Gordon and Akuamoah (1997).

There are ten main categories under functional classification of government expenditure that is, general public services, defense, public order and safety, economic affairs, environmental protection, housing and community amenities, health, recreation, culture and religion, education and social protection. This study focuses on the components of government expenditure which are public order and safety, education, health and social protection. In the budget review of the 2015 the government

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declared that it will spend at least 60% of non-interest expenditure to improve social services and to alleviate poverty, R647 billion on basic education including R197 on post education and training and R498 billion on social protection.

In 2009, social services reported to be 49, 3% of general government spending in South Africa making it the largest functional category. Furthermore, from 2001 to 2009 increase in general government expenditure facilitated growth in the GDP shares of approximately all the functional categories, except education spending, public debt transactions and defense outlays. During this period government spending on other general public services, social protection and other social services increased significantly as percentages of total general government expenditure and of economic growth (Black, Calitz and Steenekamp, 2011).

As government expenditure increases every year, the economy is still facing challenges in producing growth in the economy in developing country such as South Africa. The major concern arises where the government is trying to fill in the gaps to accelerate growth by spending but no growth is shown although it is not something done over short term period however it shows no positive results in the long run. This highly affects people living in poverty and those who earn little income for living. As government expenditure increase it will also increase the prices of goods and services which becomes difficult for people to afford to buy goods and services. Although the budget speech is presented every year and expenditures are shown, the economy still faces challenges in dealing and implementing policies to accelerate growth. For example, one of the priorities is education and a huge amount is spent on education yet we find other schools not having excess to textbooks, furniture’s, incomplete infrastructure and most importantly safety in schools. This opposes a negative impact on the economic growth. Similarly, due to higher demand and lower supply of electricity as no other plants are built to generate electricity, we have no other choice but to use electricity wisely for the time being, resulting in the country to face power cuts (load shedding) which has a negative impact on businesses, production firms and especially on the economy.

Like other developing countries South Africa is faced with huge challenges such as poverty, electricity crises, unemployment, inequality and many more (Gadinabokao, 2012). It becomes difficult on how to solve the challenges in order to bring growth and development into the country. For this reason it has drawn my attention to investigate whether there is an impact of government expenditure on economic growth in South Africa.

The rest of the paper proceeds as follows: Section 2 discusses the theoretical framework and empirical review; Section 3 discusses the methodology; Section 4 presents the results; and the final Section concludes the study.

2. Literature review

Theory states that for a growing and stable economy, government intervention is necessary. Moreover, it believes an increase in government expenditure helps to improve the problems that arise from the inefficiencies of the market and stability in the economic growth of a country during the short run fluctuations. Government expenditure contributes positively in the economy as it leads to higher economic growth. Keynes considers that an increase in government expenditure will lead to an increase in employment, investment and profitability by through the multiplier effect on aggregate demand. On contrary the neo-classical theory suggested that government intervention has no impact on economic growth since it assumes the economy is perfect in terms of full employment and adjusting wage and interest rate level.

Barro (1990) and Barro (1991) found that government expenditure is associated with higher taxation. When there is an extreme involvement of government in the economic activity through higher taxation and government expenditure, it can cause economic distortion incentives. The Keynesians see demand as a condition for growth. In their study (Nworji, Okwu, Obiwuru and Nworji, 2012) concluded that in order to improve economic performance, aggregate demand management policies can and should be applied. In addition, in the Keynesian model, higher economic growth is also led by increase in government expenditure on infrastructure. On contrary the neo-classical growth model disagrees and states that government fiscal policy does not cause growth of national output. Nevertheless, markets failed due to inefficiencies, government fiscal policy is used to improve.
Olugbeng and Owoeye (2007) employed the regression analysis from the period 1970 to 2005 and examined the relationship between government expenditure and economic growth in a group of 30 OECD countries. In their study, a long run relationship was found between government expenditure and economic growth. The analysis also revealed for 16 of the countries there was a unidirectional causality from government expenditure to growth which ultimately supports the Keynesian hypothesis of government intervention. Although 10 of the countries, causality runs from economic growth to government expenditure which prove Wagner’s law. While the other four remaining countries it was found that existence of feedback relationship between government expenditure and economic growth.

Liu, Hsu and Younis (2008) investigated the casual relationship between GDP and public expenditure in United States from the period 1947-2002. The causality results obtained showed that total government expenditure causes growth of GDP while in the end it does not cause expansion of government expenditure. Given that public expenditure grows in the US economy based on the causality test it was concluded that Keynesian hypothesis has more control than the Wagner’s law.

In 1983 the “law of increasing state activity” was developed at the end of the 19th century after some empirical indication from the Western European countries, in which he argued that the purpose of upturn industrialization and economic development is government growth. The law simply stated that during the industrialization process when the real income per capita of the nation rises, part of the public expenditure will rise. This implied that as the production of the economy develops government expenditure including its functions will rise.

Wagner aimed a rise in state public expenditure through three main sources. First is during the industrialization procedure public sector activity will be changed by private sector activity in which the administrative and protective functions increases. Second the government must provide cultural, welfare services and welfare functions. Lastly firms that are large will be likely to monopolize and there will be a change in technology if there is a rise in industrialization. Therefore the government will have to provide social and merit goods in order to balance these effects through budgetary means.

In addition, Wagner declared that a positive relationship is found between government spending and per capita income of the nations in the country in a way that the elasticity of income of government expenditure is greater than one. Nevertheless, further researchers have learned that there are periods whereby the relationships is not positive because when income elasticity is inelastic to government expenditure meaning when it is less than one, than the relationship to government expenditure to national income will decrease.

Moreover, Wagner established the idea that when there is an increase in public expenditure it is an expected feature of a progressive society, which simply means that as per capita income increase, the share of public expenditure increases to meet the increased protective, administrative and educational functions of the state. This would entail that expansion in government expenditure is caused by economic growth.

Similarly Olapade and Olapade (2010) stated as per capita on income rises it will lead to a rise in public expenditure in the economy, since it will increase the number of urban centers which are associated with social vices (e.g. crime) that allows for government intervention in order to keep up law and order.

Mulamba (2009) hypothesis that government expenditure and economic growth is supported by the view of demand-side since it allows for government intervention through government expenditures and money supply to stimulate the goods and services demanded as well as for stability and economic growth. On the other hand, the supply-side in which it involves public finance and bureaucratic waste are measured as the alteration of economic growth causing inflation if it is not engaged to design infrastructure or investment.
3. Research methodology

The following estimation of techniques is employed to analyze the relationship between government expenditure and economic growth. It begins with stationarity test: visual inspection and ADF stationary test, followed by Engel-Granger cointegration test, error correction model and granger causality test and lastly the diagnostic and stability tests. The model is simulated and closed.

3.1. Model specification

To determine the impact of government expenditure on economic growth in South Africa, the Engel-Granger test technique is approached as it is a good instrument for government expenditure and economic growth forecasting. The model is adopted from the study of Patricia and Izuchukwu (2013).

\[ Y_t = \beta_0 + \beta_1 X_t + \mu_t \]  
(1)

Where, \( Y_t \) is the real gross domestic product, \( \beta_0 \) is the constant, \( \beta_1 \) is the regression coefficient, \( X_t \) is a set of baseline of explanatory variables and \( \mu_t \) is the error term. The model is modified and estimated into the logarithm form hence the regression will be:

\[ \text{LGDP} = \beta_0 + \text{LPOS} + \text{LEDU} + \text{LSP} + \text{LHEA} + \text{LTAX} + \mu_t \]  
(2)

Where, \( \beta_0 \) = constant, \( \text{GDP} \) = Gross domestic product (economic growth), \( \beta_1 \) = POS = public order and safety, \( \beta_2 \) = EDU = education, \( \beta_3 \) = SP = social protection, \( \beta_4 \) = HEA = health, \( \beta_5 \) = TAX = taxation and \( \mu_t \) = error term

3.2. Stationarity test

According to Gujarati (2010) a series is said to be stationary when its mean and variance are constant over time. Unit root tests are done to avoid the generation of spurious regression results which obtains biased results. When a data is stationary it is integrated of order zero, denoted as I (0). If it is non-stationary it will be differenced n-times in order to become stationary, denoted as I (n). Stationary test includes both visual inspection and unit root test.

3.2.1. Visual inspection

To see if the variables are stationary visual inspection is one of the ways in which you can see if the mean and variance are constant over time. It can be through graphical analysis or through the correlogram test. In this study, the graphical analysis approach is used as it provides a plot of times series of the variables. The graphical analysis shows if the variables are decreasing, increasing or constant. If variables are increasing or decreasing it is means it is non-stationary and if it is constant it means that is stationary.

3.2.2. Augmented Dickey-Fuller test

While the ADF test is a version of the Dickey-Fuller test for larger sets of time series models. The ADF statistic, used in the test, is a negative number. The more negative the number, the stronger the rejection of the hypothesis than there is a unit root at some level of confidence. The Augmented Dickey-Fuller test is represented as

\[ \Delta Y_t = \alpha + \beta t + \delta Y_{t-1} + \sum_{i=1}^{p} \lambda_i \Delta Y_{t-1} + \varepsilon_t \]  
(3)

Therefore for the purpose of this study I have decided to go with the Phillips Perron test as it is the most advantageous than the ADF test. However, I have done the ADF test just to compare it with the PP test. The hypothesis stated for the PP test is as follows:

\[ H_0: \text{Series has unit root} \]
\[ H_1: \text{Series has no unit root} \]
3.3. Engle-Granger Cointegration test

Cointegration test is an econometric technique to test the relationship between non-stationary time series variables. Engle and Granger (1998) stated out that a linear combination of two or more non-stationary series may be stationary, if linear combination exists, the non-stationary time series are said to be cointegrated. That is, when variables are individually non-stationary and integrated of the same order but their linear combination is integrated of a lower order. If variables are stationary at first difference, I (1) while the residuals are stationary at level form, I (0) it is concluded that there is cointegration. This method is used to test whether there is a long run equilibrium relationship between government expenditure and economic growth.

3.4. Error correction model test

The error correction model is a short run improvement in the model; it overcomes the problems of spurious regression through the use of appropriate differenced variables. The model is estimated in first differenced form including an explanatory variable which is the error correction term Gujarati (2004). The ECM corrects the amount of the disequilibrium from one period in the next period.

In order to obtain the error correction term (ECT) one can regress the dependent variable with all the independent variables in the model. The residual from the cointegrating regression are taken as valid error correction term, \( \varepsilon_t \), which is built into the error correction model in lagged form. The error correction term (ECT) is the lagged values of the error term that has been derived from the regression model. To be sure that the proportion of the disequilibrium in our model is corrected in the next period, the coefficient of the ECT should be negative and statistically significant.

3.5. Diagnostic and Stability tests

Diagnostic test and Stability test determines if the model is stable in order to be used for economic decisions as well as predictions and deciding whether or not a model has been correctly specified. We test for Heteroskedasticity, Serial correlation, Normality, Ramsey Reset test and Cusum test.

3.6. Closing the model

The model is simulated and closed in order to determine whether the estimated values are approximated to the actual values. Closing the model also determines that it is good at fit.

3.7. Granger causality

In 1969 Granger came up with simple statistical test named causality, it explained that granger causality is done to determine whether one variable can be useful in predicting another variable in a time series data. It occurs when \( X_t \) variable Granger causes \( Y_t \) variable, then the past values of \( X_t \) variable should have some useful information to predict \( Y_t \) variable above and beyond the information contained in past values of \( Y_t \) variable alone. This test is most significant as mentioned in chapter one the aim of the study is to determine the casual relationship between government expenditure and economic growth.

4. Results and interpretation

4.1. Stationary tests

The two methods in which stationarity can be tested is visual inspection and through the ADF and PP unit root test which will be interpreted below with the results obtained.

4.2. Unit root

For a series to be stationary the ADF test is done. When the series is non-stationary it leads to nonsensical and meaningless results whereby it cannot be tested for cointegration and further tests, therefore it is highly important to test for stationarity. If the variables are found to be non-stationary at level form than it will be tested by their order of integration which is 1 and 2, until the results show that the variables are stationary.

The null hypothesis for unit root: \( H_0^c: \) There is unit root (non-stationary)
There is no unit root (stationary)

The variables were tested for unit root at three different levels beginning with intercept, trend and intercept and none. The results show that the series is non-stationary therefore this study fails to reject the null hypothesis. Hence the series will have to be tested for stationarity at 1st difference. The following above variables were tested for unit root at three different levels beginning with intercept, trend and intercept and none. The above results show that the series begins to become stationary revealing that its mean and variance are constant however, some variables still show that it is non-stationary therefore it fails to accept the null hypothesis. Hence the series will have to be tested for stationarity at 2nd difference. The following above variables were tested for unit root at three different levels beginning with intercept, trend and intercept and none. The above results are tabulated and show that the series is stationary, its mean and variance are constant. Therefore it fails to accept the null hypothesis.

### 4.3. Engel-Granger Cointegration test results (long run)

<table>
<thead>
<tr>
<th>Variables</th>
<th>Coefficient</th>
<th>Standard error</th>
<th>t-statistics</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>LPOS</td>
<td>0.470348</td>
<td>0.190268</td>
<td>2.472023</td>
<td>0.0206</td>
</tr>
<tr>
<td>LEDU</td>
<td>-0.447982</td>
<td>0.195131</td>
<td>-2.295795</td>
<td>0.0303</td>
</tr>
<tr>
<td>LSP</td>
<td>0.082992</td>
<td>0.00805</td>
<td>1.027059</td>
<td>0.3142</td>
</tr>
<tr>
<td>LHEA</td>
<td>0.570863</td>
<td>0.110255</td>
<td>5.177655</td>
<td>0.0000</td>
</tr>
<tr>
<td>LTAX</td>
<td>0.128705</td>
<td>0.034694</td>
<td>13.709737</td>
<td>0.0010</td>
</tr>
<tr>
<td>C</td>
<td>6.152540</td>
<td>0.402036</td>
<td>15.30344</td>
<td>0.0000</td>
</tr>
<tr>
<td>R-square</td>
<td>0.998296</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adjusted R-square</td>
<td>0.997956</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Durbin-Watson stat</td>
<td>1.762180</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 4.4. Test the residuals at level form

The null hypothesis states that: $H_0$: There is no cointegration

$H_1$: There is cointegration

<table>
<thead>
<tr>
<th>Variable</th>
<th>Trend</th>
<th>Lag</th>
<th>t-statistic value</th>
<th>Probability value</th>
</tr>
</thead>
<tbody>
<tr>
<td>RESID01</td>
<td>None</td>
<td>0</td>
<td>-4.750337</td>
<td>0.0006***</td>
</tr>
</tbody>
</table>

***statistically significant at 1%, **statistically significant at 5%, *statistically significant at 10%

The results obtained are from the period of 1983 to 2013 using time series data in South Africa. The results presented show that there is a positive relationship between public order and safety, social protection, health, taxation and economic growth while a negative relationship exists between education and economic growth. It is found that social protection is insignificant since the probability value is high while the rest of the variables are statistically significant and are in line with economic theory that an increase in government expenditure boosts the economy. The R-square is 0.996 which is high and indicates that it is too good to be true. The next step is to test whether there is a cointegration relationship exists between the variables by performing a unit root test on the residuals.

The results of the residuals (RESID01) at level form intercept, show that it is significant at 1%, therefore this study does not accept the null hypothesis since the residuals are stationary and it
therefore concludes that the is cointegration in other words there is a long run relationship between the variables. The next step is to estimate for error correction model (ECM).

4.5. Error Correction Model Results

The error correction model forces the short run estimation in order avoid spurious results and to measure any movement away from the long run equilibrium. The ECM specifies the long run performance of the endogenous variable to unite to their cointegrated relationships, while accepting short run dynamics. In order to prove cointegration the error correction term should be negative and significant. The dimension of the error correction term specifies the speed of adjustment of any equilibrium towards the long run equilibrium state.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>probability</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECM(-1)</td>
<td>-0.139483</td>
<td>0.4578</td>
<td>From the results of the ECM it shows that the coefficient value is negative but the probability value is insignificant which concludes that there is no adjustment to the equilibrium in the short run. It shows evidence that there is no equilibrium between the short run and long run relationship.</td>
</tr>
</tbody>
</table>

4.6. Diagnostics and stability test

<table>
<thead>
<tr>
<th>Test</th>
<th>Null hypothesis</th>
<th>Probability</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heteroskedasticity test: white</td>
<td>( H_0: \text{There is no heteroskedasticity} )</td>
<td>0.4076</td>
<td>The probability value of the obs* R-square is more than 0.05 level of significance therefore this study fails to reject the null hypothesis and concludes that there is no heteroskedasticity, in other words it is homoscedastic.</td>
</tr>
<tr>
<td>Breusch-Godfrey Serial Correlation LM test:</td>
<td>( H_0: \text{There is no serial correlation} )</td>
<td>0.6633</td>
<td>The probability value of the obs* R-square is more than the level of significance which is 0.05, therefore this study fails to reject the null hypothesis and conclude that there is no serial correlation.</td>
</tr>
<tr>
<td>Normality test: histogram</td>
<td>( H_0: \text{The residuals are normally distributed} )</td>
<td>0.462748</td>
<td>The probability value is more than 0.05 level of significance therefore do not reject the null hypothesis as it concludes that the residuals are normally distributed.</td>
</tr>
<tr>
<td>Ramsey Reset test</td>
<td>( H_0: \text{The model has no misspecification} )</td>
<td>0.0993</td>
<td>The probability value of the likelihood ratio is more than 0.05 therefore do not reject the null hypothesis and conclude that the model has no misspecification.</td>
</tr>
</tbody>
</table>
The graphical representation above is the cusum test. The red line shows the level of significance which is 5% while the blue line shows the series that is being tested for stability. From the graph it shoes that the model is stable since the blue line is within the level of significance. Therefore it indicates that the model is good for determining the relationship between government expenditure and economic growth from the period 1983 to 2013.

4.7. Closing the model

The model was simulated and closed and from the graph it can be concluded that the blue line which is actual and the red line is the estimated are more or less the same. There is no much difference between the actual and estimated values therefore it can be concluded that the model is a good fit and can be used for forecasting.
### 4.8. Granger causality

<table>
<thead>
<tr>
<th>Null hypothesis</th>
<th>Observations</th>
<th>f-statistics</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>LPOS does not granger cause LGDP</td>
<td>29</td>
<td>0.75010</td>
<td>0.4831</td>
</tr>
<tr>
<td>LGDP does not granger cause LPOS</td>
<td></td>
<td>4.55935</td>
<td>0.0210**</td>
</tr>
<tr>
<td>LEDU does not granger cause LGDP</td>
<td>29</td>
<td>0.91495</td>
<td>0.4141</td>
</tr>
<tr>
<td>LGDP does not granger cause LEDU</td>
<td></td>
<td>4.65075</td>
<td>0.0196**</td>
</tr>
<tr>
<td>LSP does not granger cause LGDP</td>
<td>29</td>
<td>0.00584***</td>
<td>0.9942</td>
</tr>
<tr>
<td>LGDP does not granger cause LSP</td>
<td></td>
<td>4.99955</td>
<td>0.0153**</td>
</tr>
<tr>
<td>LHEA does not granger cause LGDP</td>
<td>29</td>
<td>0.31994</td>
<td>0.7292</td>
</tr>
<tr>
<td>LGDP does not granger cause LHEA</td>
<td></td>
<td>3.15351</td>
<td>0.0608*</td>
</tr>
<tr>
<td>LTAX does not granger cause LGDP</td>
<td>29</td>
<td>3.64856</td>
<td>0.0414**</td>
</tr>
<tr>
<td>LGDP does not granger cause LTAX</td>
<td></td>
<td>2.30612</td>
<td>0.1213</td>
</tr>
<tr>
<td>LEDU does not granger cause LPOS</td>
<td>29</td>
<td>0.27597</td>
<td>0.7612</td>
</tr>
<tr>
<td>LPOS does not granger cause LEDU</td>
<td></td>
<td>5.47356</td>
<td>0.0110**</td>
</tr>
<tr>
<td>LSP does not granger cause LPOS</td>
<td>29</td>
<td>0.34252</td>
<td>0.7134</td>
</tr>
<tr>
<td>LPOS does not granger cause LSP</td>
<td></td>
<td>8.26157</td>
<td>0.0019***</td>
</tr>
<tr>
<td>LHEA does not granger cause LPOS</td>
<td>29</td>
<td>1.61823</td>
<td>0.2191</td>
</tr>
<tr>
<td>LPOS does not granger cause LHEA</td>
<td></td>
<td>0.02632**</td>
<td>0.9741</td>
</tr>
<tr>
<td>LTAX does not granger cause LPOS</td>
<td>29</td>
<td>1.94209</td>
<td>0.1653</td>
</tr>
<tr>
<td>LPOS does not granger cause LTAX</td>
<td></td>
<td>1.45414</td>
<td>0.2535</td>
</tr>
<tr>
<td>LSP does not granger cause LEDU</td>
<td>29</td>
<td>0.85597</td>
<td>0.4374</td>
</tr>
<tr>
<td>LEDU does not granger cause LSP</td>
<td></td>
<td>5.26144</td>
<td>0.0127**</td>
</tr>
<tr>
<td>LHEA does not granger cause LEDU</td>
<td>29</td>
<td>2.46909</td>
<td>0.1059</td>
</tr>
<tr>
<td>LEDU does not granger cause LHEA</td>
<td></td>
<td>3.03686</td>
<td>0.0667*</td>
</tr>
<tr>
<td>LTAX does not granger cause LEDU</td>
<td>29</td>
<td>0.65044</td>
<td>0.5308</td>
</tr>
<tr>
<td>LEDU does not granger cause LTAX</td>
<td></td>
<td>5.70722</td>
<td>0.0094***</td>
</tr>
<tr>
<td>LHEA does not granger cause LSP</td>
<td>29</td>
<td>0.99989</td>
<td>0.3827</td>
</tr>
<tr>
<td>LSP does not granger cause LHEA</td>
<td></td>
<td>0.27585</td>
<td>0.7613</td>
</tr>
<tr>
<td>LTAX does not granger cause LSP</td>
<td>29</td>
<td>1.14985</td>
<td>0.3335</td>
</tr>
<tr>
<td>LSP does not granger cause LTAX</td>
<td></td>
<td>1.94298</td>
<td>0.1652</td>
</tr>
<tr>
<td>LTAX does not granger cause LHEA</td>
<td>29</td>
<td>2.29810</td>
<td>0.1221</td>
</tr>
<tr>
<td>LEDU does not granger cause LTAX</td>
<td></td>
<td>1.56034</td>
<td>0.2306</td>
</tr>
</tbody>
</table>

***Statistically significant at 1%, **Statistically significant at 5%, *Statistically significant at 10%

The above table represent the results of the granger causality relationship between government expenditure and economic growth. The test employed 2 lags. From the table it shows that most of the probability values are greater than the level of significance 5%, this proves that government expenditure does granger cause economic growth. Therefore do not reject the null hypothesis at 5% that government expenditure does not granger causes economic growth. While some probability values are less than the level of significance 5%, the null hypothesis is rejected since there is evidence that economic growth does granger cause government expenditure as well as taxation does granger cause economic growth some components of government expenditure.

### 5. Conclusion and recommendations

The main aim of this study was to determine the impact of government expenditure on economic growth in South Africa from the period of 1983 to 2013 using time series data. This study succeeded in achieving its aim and objectives. The study employed the Engle-Granger approach to test the variables. The results obtained gives evidence that decrease in government expenditure leads to a slower rate of economic growth, this maybe also be due to the global crisis’s that South Africa is experiencing. The null hypothesis of this study stated that there is a positive impact of government expenditure on economic growth; however the results presented in chapter 4 showed a negative
impact of government expenditure on economic growth. Therefore it can be concluded that this study
does not accept the null hypothesis. The model was tested for granger causality and evidence show
that government expenditure does not cause economic growth, instead economic growth granger
causes some of the components of government expenditure and taxation. The diagnostics and stability
tests concluded that the model is good and stable in determining the impact of government
expenditure on economic growth.

From the study it can be concluded that government expenditure does affect growth. Since
government do not have enough and accurate information about the state of the economy it becomes
difficult for policymakers to understand what the economy needs and what policies to implement.

**Policy implications along with Recommendations**

In this study, there is enough evidence that suggest that increase in government spending will
accelerate economic growth in the long run. The long run equation implies that government
expenditure on public order and safety, social protection, health as well as taxation have a positive
impact on growth, therefore a 1% increase in these components of government expenditure and
taxation will result in a 1% rise in economic growth. While expenditure on education is shown
negative it implies that a 1% increase in government expenditure will cause a 1% decrease in
economic growth. However, due to the slow rate of the South African economy, government
expenditure has been reduced this has affected the economy a negative way.

There is also evidence that government expenditure does not granger cause economic growth, instead
economic growth granger cause government expenditure and taxation does granger cause economic
growth.

According to research literature increase in government expenditure will boost the economy. Having
stated the above policy implications, this paper recommends policymakers to focus more on the fiscal
policy especially with regards to government spending and taxation; they can reduce taxes or increase
government expenditure.

Government spending on each sector should be reviewed in order to bring changes and achieve the
objectives. Government should also develop strategies to stimulate growth during the recession. One
of the ways is to also increase infrastructure and create jobs.
Reference list


Embedding Art Therapy into a Kindergarten Curriculum to Promote Positive Relationships between Kindergarteners and Their Parents

Minh-Anh Nguyen, National College of Education, Vietnam
Oanh Truong, National College of Education, Vietnam

Abstract
Research “Design of supplementary program for the purpose of promoting positive family relationships between five-to six-year-old children and their parents in Ho Chi Minh City, Vietnam based on Art therapy” had been conducted in two years (2015 and 2016) under supervision and evaluation by Deparment of Science and Technology, Ho Chi Minh City People’s Committee. This is the very first time in Vietnam, Art therapy has been applied in the context of education - a context of development for preschool children. In this paper, we present an overview of scientific and practical values of our research and provide one Art therapy processes in 35 unique processes of our supplementary program.

Keywords: Art therapy, kindergarten curriculum, supplementary program, positive family relationships

I. An overview of research values
1. Title research: Design of supplementary program for the purpose of promoting positive family relationships between 5-to 6-year-old children and their parents in Ho Chi Minh City, Vietnam based on Art therapy
2. Government research grant: Ho Chi Minh City Department of Science and Technology, Vietnam
3. Amount of government research grant: USD 22,000
4. Duration: 24 months, from 12/2014 to 12/2016
5. Evaluation: 93 points, ranked as Excellence
6. Registration of results of a science and technology mission using state budget: 2016-253 on December 09th 2016 in Ho Chi Minh City, Vietnam

7. Joint organizations and their roles/participation in research:

<table>
<thead>
<tr>
<th>No</th>
<th>Joint organizations</th>
<th>Roles / Participation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Public kindergartens in urban districts in Ho Chi Minh City, Vietnam</td>
<td>Situation research, teacher questionnaire date, training teachers in implementation of supplementary program based on Art therapy</td>
</tr>
<tr>
<td>2.</td>
<td>Creative Arts Therapies Department, College of Nursing &amp; Health Professions, Drexel University,</td>
<td>Construction methodology, design of supplementary, soliciting perspectives of experts</td>
</tr>
<tr>
<td>3.</td>
<td>John F. Kennedy University, Berkeley, California, U.S.A</td>
<td>Presentation of research methodology and processes of supplementary program Getting feedback from experts</td>
</tr>
<tr>
<td>4.</td>
<td>University of Hawai’I, Honolulu, Hawai’I, U.S.A</td>
<td>Presentation of research methodology and processes of supplementary program Getting feedback from experts</td>
</tr>
</tbody>
</table>
8. Values and results of research:

8.1. Scientific and practical values:

Our research had been conducted with the aim of applying the theoretical foundation of Art therapy and positive family relationships in order to develop a supplementary program with the aim of promoting positive family relationships for five-to six-year-old children and their parents in Ho Chi Minh City, Vietnam. The new scientific findings and contributions of our research include the methodology of Art therapy which emphasizes the metaphorical aspect of expressive artwork, the definitions and characteristics of positive family relationships, the definition of supplementary program as compared with educational curriculum, and the supplementary program itself to enhance positive family relationships for children and their parents in Ho Chi Minh City, Vietnam. Our supplementary program had been designed with the structure of these scientific bases.

This research had been developed in Vietnam and the United States of America and divided into 13 phases, ranging from the survey of 350 pre-school teachers on the status of development's family relationships under Early Childhood Education Program, study of tool concepts and methodology, building supplementary program to expert survey, training and pilot testing.

Art therapy is an incipient pathway in the field of psychotherapy, even in highly developed countries, which has currently been applied in clinical settings. In essence, Art therapy is of great value to the development of children's psychology before entering school by virtue of characteristics of Art therapy containing non-verbal communication, metaphor as therapeutic means and relationships oriented. Our research team has attempted to exploit these features of Art therapy in order to design a supplementary program to develop the emotional-social education content of Early Childhood Education Curriculum promulgated by Vietnam Ministry of Education and Training. This is the very first time in Vietnam, Art therapy has been applied in the context of education - a context of development for preschool children.

8.2. Results:


- **03 national publications**, including:


- **01 supplementary program with the aim of developing positive family relationships between 5-to 6-year-old children and their parents in kindergartens in Ho Chi Minh City, Vietnam.** This program contains 35 Art therapy processes which are divided into four sets of components: Drawing, Clay, Collage and Combination. Depending on the condition of time and place (at home or at kindergarten), these four sets could be implemented for the duration of 1 year, 6 months or 3 months.
II. One process of program

Cozy Little Bed (Drawing)

1. Purpose and Goals:

1.1. Purpose: The use of art within a family context allows all members to participate from the youngest to the oldest because the communication includes the developmentally appropriate means of expression for both children and parents. The use of metaphoric images and narratives allows all family members to express their family perceptual and emotional experience with less inhibition but also with more safety due to the distance from the real experience that the metaphor provides. Metaphors carry potent messages that help people create and discover meaning in their lives (Moon, 2007).

1.2. Goals addressed (Borden, 2014; DeFrain, 2007; DeGenova & Stinnett, 2010)

| 1. commitment and cohesion | ✓ | 4. appreciation and affection | ✓ |
| 2. positive communication | ✓ | 5. time together / involvement | ✓ |
| 3. spiritual wellbeing | ✓ | 6. ability to cope with stress and crisis | ✓ |

1.3. Objectives of developing positive family relationship (according to the survey results of kindergarten teachers)

| Hobbies of children and parents |
| Love |
| Solidarity in family |
| Direct relationships with parents |
| Support and protection |
| Express opinion (agree or disagree) |
| Listen and respond positively |
| Peace in family |

2. Relationships as Outcomes of the Process: This “cozy little bed” metaphor is expected to bring in a sense of safety given to the child from the parents, and that whenever the child feels unsecured or stressed, he/she can always turn to his/her parents for endless support and unconditional love. At the child’s developmental level, the “cozy little bed” metaphor promotes the feeling of trust and warmth of the child towards parents.

3. Age Group: Children 5 to 6 years old and their parents

4. Materials: A4, crayons

5. Description:

Step 1: The child is given a piece of 12 x 18 paper, different colored pencils, and asked to draw his/her bed, color it as he/she wishes.

Step 2: The child hands the picture of his/her bed to the parents. The parents add details, colors etc. that make the bed cozier, safer and more fun for the child.

Step 3: After the child receives the picture of the bed back from parents, a conversation is carried out with him/her. Stimulating questions might be:

- What has been added to your little bed?
- Do you like what has been added?
- How are you feeling about your bed now?

Step 4: The child gives his/her bed picture a title.

Step 5: The child is encouraged to share with art therapist / facilitator the experience of the process developed at home with parents.
Step 6: Information and artworks are recorded and kept in the art therapist / facilitator’s journal.

6. Developmental and Prevention (Therapeutic) Aspects of the Process

6.1. Developmental Aspect (Lusebrink, 1990, p. 92-95)

• The perceptual/affective or P/A level: different forms, shapes or textures can be applied to make the picture of the bed and details added to it later; size of bed and distance between details can be defined; various colors can be chosen to represent the bed and different things; emotions can be expressed on the bed and details added to it; feelings expressed in the picture and the title of the artwork.

• The cognitive/symbolic level: how the child and parent(s) interact and draw together, what logical thought and solutions they have for situations presented here and now; what title is given to the artwork; what symbolic expressions of meaning are created (Kagin and Lusebrink, 1978, in Lusebrink, 1990, p. 92-95).

6.2. Prevention (Therapeutic) Aspect

The “cozy little bed” is a metaphor about the perception and experience of safety that parents can provide the child with. Through this metaphor the child reframes his/her feelings with the parents, and both the child and the parents reframe their emotional experiences by drawing together on the same piece of paper, giving and receiving, laughing together, and creating an artwork that may reveal new perspectives, insight and understanding through the concrete visual images.

7. The Role of Facilitators in the Process

Art therapist / facilitator works with children according to Vygotsky’s scaffolding concept: “Development based on collaboration and imitation is the source of all specifically human characteristics of consciousness that develop in a child” (Vygotsky, 1987, p. 210). This means questions are designed to encourage the child’s imagination, feelings and inner plan for actions. Interpretation and intervention are not necessary. This interaction promotes the internalization of experiences (Vygotsky, 1978).
References

Borden, L. M. et al. (2014). *Strong family functioning*, Military REACH Team, Research and Outreach (REACH) Laboratory, University of Minnesota.


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The Effects of Good Governance and Decentralisation on Technological Driven Curriculum

Emmanuel Innocents Edoun, University of Johannesburg, South Africa
Valdenisa C Norris, University of Johannesburg, South Africa

Abstract

Education has been challenged to respond to the inequality of the past and rapid changing demands of the world of work. Past studies revealed that the South African’s apartheid legacy left many sectors and professions with skewed demographic profiles. It is argued that after twenty years of democracy, the shift in demographics in most cases has been miniscule and transformation clearly needs to be accelerated. Acceleration of transformation means that the responsibility of the South Africa education system is to ensure that its curriculum creates equal opportunities for all students that prepare them for the world of work and develop skills and knowledge for all students to take responsibility for their own learning. This paper is based on the premise that, decentralisation and good governance could assist with effective and corrective measures to put the South African education sector in the right path accepted by international standard.

Key words: Education, South Africa, Apartheid, decentralisation, good governance,

Introduction

The South African education system both on basic education and higher educational levels, has experienced a paradigm shift from content-based education towards an outcome-based education (OBE) in the early 1990’s (Van der Horst & McDonald 2007, Council of Higher Education 2013) Prof Yin Choeng Cheng from the Hong Kong Institute of Education (2005:405) agrees that there is a profound need for a paradigm shift in education and its reform to meet challenges in the new millennium. He continues by saying that these challenges include rapid globalisation, the tremendous impact of information technology towards knowledge-driven economy and strong demands for societal development. Prof Cheng refers to the Acceleration of transformation means that the responsibility of the South Africa education system is to ensure that its curriculum creates equal opportunities for all students that prepare them for the world of work and develop skills.

The application of the three-dimensional re-engineering concept as mentioned by Prof Cheng for the South African education system means addressing the challenges related to the economic growth, social development, job creation, poverty and inequality.

There are at least three aspects of change that results in applying real pressure on educational system to ‘re-engineer’ or else face the dire consequences these being : the growth of student numbers which requires a quantum leap in education capacity: the widespread, real revolution in informatics and communication technology, that should have profound effects on the way education and schooling should be re-conceptualised ; and accompanying this phenomenon, is the virtual explosion of available information to the average person so that the learner is no longer in a desert looking for an oasis of information, but is instead in an ocean of information looking to how to use it selectively and drown in it. (Springer). It is therefore important for a shift towards a shared intention to provide students with rewarding careers, so that they can ultimately contribute to the local and global economy by all stakeholders in education. The re-engineering concept is one which aims at taking education and educators out of There are at least three aspects of change that results in applying real pressure on educational system to ‘re-engineer’ or else face the dire consequences these being : the growth of student numbers which requires a quantum leap.
The first step in reshaping the South African education was to introduce a system of encouraging higher public participation since in April 1994 after South Africa's first democratic elections. This resulted in the implementation of governing bodies for government and non-government institutions. The South Africa Constitution underpins the promotion of democratic values through governing bodies as a key factor for any development initiative. With these systems in place, accountability becomes a yardstick to achieve greater results. This study therefore set out to explore the impact that decentralisation has on the re-engineering of the South African education system. In most countries schools are largely or wholly a government responsibility and the factors shaping government priorities are potentially important influences on the perceived necessity for school reform, the resources available for reform, and the direction of the reforms.

**Theoretical consideration and discussions**

The main objective of the study is to demonstrate that re-engineering of the South African education system is necessary and that can only be achieved through good governance and decentralisation. The trend towards decentralisation acknowledges that the dynamic for transformational change in schools must come from within the school community. For South African schools, as part of the education system, the dynamic for transformational change is the introduction of School Governing Bodies as one of the first changes that links to decentralisation. Other significant changes were the administrative role of the principal which has evolved from the practicing teacher, with added technical and administrative duties, to the full-time manager and developer of human, financial and physical resources. The general responsibility for governance in the school lies with the SGB and the general responsibility for professional management lies with the principal (Potterton, Grobler, Loock, Dowjee and Summers 2006:9)

Decentralisation being an instrument of good governance, the study wants to investigate if it applicability on schools in particular and the education system in general could stimulate economic development. And whether a policy of decentralisation could be considered as an important tool for economic development if the process is adequately implemented (Edoun 2015:1) Central to the process of education transformation was the policy of education decentralisation and two noteworthy pieces of legislation: the South African Schools Act (SASA) and the National Norms and Standards for School Funding (NNSSF)(Sayed 2008:1). Changes in public opinion about the role and ability of government and the spread of democracy and popular participation have contributed to the shift (Gaynor C 1998:2)

The educational system must change to become one geared towards lifelong learning, where it offers education for any phase in one’s life, more akin to an open supermarket rather than a closed assembly line. (Cheng 2005:406)

The South African government is of the opinion that, the single most important investment any country can make is in its people and that education has intrinsic and instrumental value in creating societies that are better able to respond to the challenges of the 21st century. Government further argues that lifelong learning, continuous professional development and knowledge production alongside innovation are central to building the capabilities of individuals and society as a whole (National Development Plan, 2013).

The local and international experience in the past reform have provided many painful failure lessons, showing that in meeting the serious challenges of globalization there is an urgent need for a new paradigm of re-engineering education and a set of coherent implementation strategies for success of educational change. Human-Hendricks (2014) sees the introduction of a responsive curriculums as the a form of re-engineering of the South African education system. This model below is grounded on the call for a responsive curriculum that not only addresses the global needs, but also the South African needs of students, industry and society.
Figure 1.1: A responsive curriculum design model

Source: Human-Hendricks (2014)

Phase 1, the curriculum visioning, Phase 2 the curriculum development and Phase 3 the alignment, coordination and development. Guiding questions are provided in each phase to ensure that the curriculum is responsive to the needs of students, industry and society and that students can experience optimal learning.

In fact the bottom line is that in re-engineering in education is no longer a choice: the dramatic transformation of society is that educational systems adapts and change or face obsolescence.

Re-engineering is a systematic process of analysis, design, and implementation. Compared to traditional educational methods, the re-engineered methods using advanced technology and associated resources can provide major reductions in cost to individual learners, institutions, and society in general. (Sprawl). The term curriculum refers to the lessons and academic content taught in a school or in a specific course or program (Glossary of educational reform). The Department of Higher Education and Training (2007:10) defines the curriculum as everything planned by educators which will help develop the learner and maximise their potential. This can be an extra-mural sporting activity, a debate or even a visit to the library. When the curriculum is being planned, the physical resources, work programmes, assessment criteria and extra- mural programmes should all be taken into account (Maree, 2007:8). Dezure (2010:1) defines curriculum as a “formal academic plan for learning experiences of students”
The implication of decentralisation and governance in this study

Decentralisation is the process of redistributing or dispersing functions, powers, people or things away from a central location or authority. (Wikipedia). Oxford Dictionary defines decentralisation as the transfer of authority from central to local government. Smith 1985:1 says decentralisation as a process involves the transfer of authority and power to plan, make decisions and manage resources, from higher to lower levels of the government, in order to facilitate efficient and effective service delivery. Decentralisation gives a voice and decision-making power to local stakeholders who know more about the local education systems than do central policy makers and this strategy can improve educational outcomes and increase client satisfaction (World Bank 2009:2). Involving stakeholders in decision making creates a sense of ownership, this is clear from the above views. There is definitely a need for greater participation in order to ensure greater accountability. Wittenberg (2003:2) states that a common view, expressed in the phrase “bringing government closer to the people” is that decentralisation may be a key ingredient in making government more accountable. This means that decentralisation, to be really effective, it has to accompany serious attempts to change the existing structures of power within communities and to improve the opportunities for participation and voice and engaging the hitherto disadvantaged or disenfranchised in the political process.(Bardhan 2002:202)

According to Heller 2001:140 decentralisation contributes to democratic deepening if and when it expands the scope and depth of citizen participation in public decision making. Democratic decentralisation in other words means redistributing power (the authority to make binding decisions about allocation of public resources) both vertically (incorporating citizens)

Governance refers to “all of processes of governing, whether undertaken by a government, market or network, whether over a family, tribe, formal or informal organization or territory and whether through the laws, norms, power or language.”[1] It relates to “the processes of interaction and decision-making among the actors involved in a collective problem that lead to the creation, reinforcement, or reproduction of social norms and institutions.”[2] (Wikipedia).

In South African Public Schools governance means the act of governing, guiding or ruling an organisation (Lotter; Waddy;Naicker & Goolam 1997:5). For Mncube 2009:84 governance in South Africa, refers to the institutional structure entrusted with the responsibility or authority to formulate and adopt school policy on a range of issues which include school uniforms; school budgets and developmental priorities; endorsement of the code of conduct for learners, staff and parents; broad goals on the educational quality that the school should strive to achieve; school-community relations, and curriculum programme development

Van Niekerk, Van der Walt & Jonker, 2001:305 defines governance as the connections and interactions between central, provincial and local authorities and their publics. They further states that the purpose of governance includes the maintenance of law and order, the defence of society against external enemies, and the advancement of what thought to be the welfare of the group, community, society or state itself. The role of good governance in raising education provision performance is important and provides a useful entry point for discussions of policy, programs, and implementation (Lewis&Petterssen 2009:50) Borzel& Rissie (2010:114) defines governance as the various institutionalized modes of social coordination to produce and implement collectively binding rules, or to provide collective goods.

Good governance seeks to promote efficient, effective and sustainable organisations that can contribute towards development endeavours. It is about fair, efficient and transparent administration of organisations to meet well-defined objectives (Hendrickse 2008:35). Edoun 2015:13 view is that governance is an important concept in development initiative and that it is a requirement or rather a precondition for socio-economic development of Africa’s underdeveloped economies because of the positive correlation that exist between governance and socio-economic development.
Conclusion and recommendations

Decentralisation and Good governance are keys for the success of self-managed schools in South Africa. Good governance advocates for transparency and accountability in the management of schools while decentralisation is ought to give the power to appointed and elected bodies to manage the schools without the interference of the school’s directors. Caldwell and Spinks (1988:5) strongly argued that, a well-managed school included decentralisation as a policy in order to allow decision-makers to facilitate the allocation of resources. Decentralisation in this case is purely administrative where decisions are made within the framework of national policies and guideline in managing schools in South Africa. Joubert (2006) inferred that, school governance in South Africa is related to the distribution of authority such as financial and policy decision including implicit authority that embodies the culture and values that determine the ethos of the school. It is therefore advisable that learners and their respective parents should be involve in the management of schools affairs for better results and give a better visibility to schools in terms of the values they incarnate through their vision and mission.
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Is Inflation a Determinant of Exchange Rate in South Africa? A CVAR Analysis

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Abstract
Exchange rate is one of the economic factors which are very crucial in terms of stimulating the growth of the economy in South Africa. The main objective of the study is to analyse the relationship between exchange rate, inflation, interest rate and foreign direct investment in South Africa by using the annual data from 1985 to 2015, which was collected from the International Monetary Fund. The Johansen cointegration and the Vector Error Correction Model was employed to estimate the model. The results obtained from the analysis postulate that there is a positive significant relationship between exchange rate and inflation. Similarly, there is a positive significant relationship between foreign direct investment and exchange rate, while on the other hand, interest rate and exchange rate have a positive insignificant relationship. Based on the findings, the study recommends that the value of the exchange rate can be maintained at a given level by capping inflation and foreign direct investment.

Keywords: Exchange rate, Inflation, Johansen Cointegration test, South Africa.

JEL Classification: C18, E31, E43, F31

1. Introduction
For the past decades, exchange rate has been the center of attention in the macroeconomic policy arguments. The South African currency (rands) has been the most changing and fluctuating among the currencies which are still emerging over the past years. The fluctuations in the rand has encouraged global economic instability and the capital inflows from the developed countries (Davies, 2010). South Africa experienced the continued and considerable volatility in the rand for the past few years regardless of the strong economic fundamentals. Exchange rate is one of the factors which are very important in the open economy like the South African economy and it does affect the foreign direct investment and ultimately the economic growth of the country. Grannellis and Papadopolous (2011) found out that the highly misaligned exchange rates will tend to become more volatile.

South Africa like many other African countries is depends more on the global economy, hence the volatility of the rand can become a serious threat in terms of international competitiveness and also can prevent growth. The weak rand poses a number of repercussions on the economy of the country, especially the issue of growth. The rand has been weak and not doing well against other currencies around the globe (Trading economics, 2016) in recent years. According to Khan, Khan, Awan, Usman and Imran, (2012) the depreciation of the rand is advantageous in that an increase in the exchange rate will create a competitive advantage in terms of international trade. This depreciation of the currency implies that the domestic export goods will become less expensive hence increase in the demand of the exports goods.

Since South Africa is experiencing this challenge, it is important to understand the link between exchange rate changes and inflation. Exchange rates and Inflation are one of the macroeconomic variables which play a very crucial role in the economy. An increase in the foreign exchange and the prices of goods and services are considered the important aspects responsible for growth in an economy. Therefore if not closely watched and dealt with, it can cause a lot of challenges and unfavorable conditions in the economy.
The main objective of this study is to empirically investigate the relationship between the exchange rate changes and inflation in South Africa. The rest of the paper proceeds as follows: Section 2 discusses the theoretical framework and empirical review; Section 3 discusses the methodology and presents the results; and the final Section concludes the study.

2. Literature

The first theory under the theoretical section is the theory of interest rate parity (IPR) which is used in the analysis of the relationship between the corresponding future rate of currencies and the spot rate. The theory postulates that interest rate differentials between different currencies will reflect the premium for future exchange rate on the currency from foreign countries if there is no arbitrage, which is the activity of purchasing currency or shares in a financial market and selling at a profit to the other. Bleaney and Fielding (2002), states that the theory also emphasizes the size of the future premiums on a foreign currency must equal the interest rates differentials between the nations which are in comparison. Therefore, interest rate parity theory focuses on the relationship between exchange rate and the interest rate of two nations. Theory assumes that the interest rate differentials will affect the exchange rate of two countries (Fadli, et al, 2011). According to Bergen (2010), in a situation where relative levels of interest rate exists, when the interest rate in the economy of a country increases, it will lead its currency’s depreciation. Thus, an increase in the interest rates of a domestic country relative to the interest rate in foreign countries will cause the exchange rate to appreciate due to induced capital inflows. Interest rate differentials are able to cause drastic changes in the rates of exchange. Abdul and Husain (2010), view the relationship between the interest rates and the rate of exchange in the following: An increase in the foreign currency demand can put a lot of pressure on the foreign currency value. More foreign- dominated bonds purchased through the increasing of preference. More of foreign capitals are attracted by the increase in the present domestic interest rates. This theory of interest rate parity takes into consideration the difference between domestic and foreign interest rates with the future exchange rates and spot differences. Hence, the parity condition says that the interest rate domestically should be equal to the interest rate in foreign countries, and also the perceived changes in the rate of exchange. In a situation where the investors have rational expectations and are neutral in risk, the exchange rate for the future should adjust perfectly given the differentials in interest rates presently.

The other theory in this paper is the purchasing power parity (PPP) theory of Gustav (1921). The theory is also known as the “law of one price”, the theorem is based and focuses on the notion that the prices of comparable goods must not differ in two different locations or countries. Purchasing power parity theory’s hypothesis emphasizes that countries which normally experience high depreciation tend to also have high rate of inflation. The relative form of the PPP theory affirms that beginning from the equilibrium base of the rate of exchange between two currencies, the relative movements in the price level in the two countries will determine the future of the exchange rate between the two currencies. This hypothesis of the theory is more significant in the economy that is using the floating exchange rates. According to Kuttner and Posen (2006), the purchasing power theorem assumes that the normal equilibrium rate of exchange which is existing between two of the inconvertible currencies is determined by the purchasing power rates, hence the exchange rates tends to be established at the equality point between two currencies purchasing power. Most importantly, when one country’s rate of inflation increases relative to that of the other country, increases the imports which depresses the currency of the country and on the other hand decreases the exports. This theory attempts to quantify the relationship between inflation rate and the exchange rate by the emphasis that the changes in the exchange rate are caused by the differentials on the inflation rate (Kara and Nelson, 2002). The purchasing power parity theory (PPP) states that the rate of exchange between the currencies of the two countries is equal to the ratio between prices of goods in these two countries. Nevertheless, the expected differentials in the inflation rate are equal to the expected spot rate and also the current spot rate differential (Kamin, 1997). The purchasing power theorem postulates that in the long-run, the exchange rate changes among the countries tend to reflect relative changes in terms of the price level. If exchange rates are left to be floating, the movements can be explained in terms of the changes in relative purchasing power. However, when exchange rates are fixed, equilibrium can be easily determined by the satisfactory methods comparisons, which are: Assessment of the exchange rate appropriateness. Explanations of the observed movements in the rate of exchange for countries using
the floating system. Determination of equilibrium parity rates for the countries whose surviving rates
with post war market conditions were out of line.

The empirical literature of Mishkin and Schmidt-Hebbel, Lin and Ye (2009) found out that the
implementation of the inflation targeting regime leads to considerably lower inflation average and
also reduced volatility when compared to those that do not use this regime. In contrast, Brito and
Bystedt (2010) argues that by the time common trends are taken into account, the positive benefit of
the inflation target regime will disappear and also points out that the disinflation period is more
recessionary under the inflation targeting regime. Changes in the exchange rate are of the utmost
importance in terms of determining the monetary policy, because they have a huge impact on the
inflation rate of the country. Looking at the small open economies exchange rate movements are very
key and significant than the industrialized economies, as they are likely to have a greater effect on the
prices, resource allocation, price competitiveness and output (Van Der Merwe, 2004). Kocenda and
Valachy (2006) postulates and attributes the rises inflation to the volatility in the exchange rate, also
points out that low and stable inflation promotes less exchange rate volatility. Mishkin (2000) clearly
points out that the emerging or developing economies cannot be able to ignore the effect of inflation
targeting policy on the exchange rate, and also maintains that under the policy of inflation targeting,
exchange rate volatility cannot be avoided. Berganza and Broto (2012) had a positive and also
significant relationship which lead to a conclusion that exchange rate volatility is induced by the
inflation targeting. They also added that beyond the rapid exchange rate volatility cost which is under
the inflation targeting, there is a benefit of the ability to contain it using the foreign exchange
intervention through the central bank. Inflation targeting would lead to much higher volatility in
exchange rate and that lack of credibility in the monetary authority can also lead to the problem of
exchange rate volatility (Levy-Yeyati and Sturzenegger, 2002). On the contrary, in trying to come up
with an answer to the question of whether inflation targeting brings a cost of exchange rate volatility,
Rose (2007) took into account the exchange rate volatility against a dummy variable binary for the
countries that uses inflation targeting as monetary policy and using zero for those that do not. The
results showed that all the coefficients were negative; hence the conclusion was that exchange rate
volatility is less under the inflation targeting. Also Erizim, et al (2012) conducted a study on the
interdependencies between inflation and exchange rates behavior in Nigeria. They carried the study
using the autoregressive distributed lag framework analysis and found that the inflation spiral and the
exchange rates movements are cointegrated, both in the long run and in the short run. Therefore
showing that in the inflation targeting regime, the policy aimed at the manipulation of exchange rates
becomes a suitable monetary policy action and vice versa.

Chit, Rizov and Willenbockel (2010), they indicate exchange rate volatility depends on the policies
which are initiated by the policy makers. They put into perspective the issue that the exchange rate
policies have always had a strong impact on the international trade nature that nations have with the
other nations. Therefore, these investigations imply that the impact of the exchange rate on the
inflation rate depends on the exchange rate regime that the country has chosen to adopt. The exchange
rate system plays a crucial role in the reduction or the minimization of risk in the exchange rate
fluctuations which will eventually have an effect on the economy of the country as a whole. Any of
the changes in exchange rate will definitely have a huge impact in the economic standing
(Eichengreen, 2004). On a contrary, Mishkin (2004) in the study he carried out on the three inflation
targeting countries in Asia, he found that there is no evidence of the response of the monetary policy
to the exchange rate. The relationship between the exchange rate regime and the inflation targeting
regime led to some of the analysts making conclusions that the increase in the exchange rate volatility
is one of the costs of the inflation targeting. But, some of the studies done shows that when the free
floating exchange rate is adopted, does not necessarily imply that there are more effective nominal
and real exchange rate floating. In addition to the issue of the exchange regime that the country choses
to adopt, Hausmann, Panizza and Rigobon (2004) found out that the volatility in the nominal
exchange rate of the inflation targeting economies does not increase when compared with other
countries using the floating exchange rate regimes. According to Choudhri and Hakura (2006) in the
recent study they conducted taking into consideration seven countries and in extension to the
economy of Chile indicated that exchange rate volatility does not increase as a result of the inflation
targeting. Hence, the researcher emphasizes that the adoption of inflation targeting does help in
reduction of the unexpected shocks simply making the monetary policy predictable and transparent in some way.

However, there are some researchers and economists who have different views when it comes to the role of exchange rate on the monetary policy in the emerging countries. According to Calvo and Reinhart (2002) the exchange rate has indirect effect on output and inflation in the reaction of the policy function and that it is not important in the policy reaction function to include the exchange rate term. In contrast, Gali and Monacelli (2005) in the study they conducted using the six Eastern and Central European countries, found that during the periods of fixed exchange rate regimes, the exchange rate plays a very crucial role in the monetary policy of a country. However, the effect fades away after the countries start to implement the flexible regimes to manage their economies. On the other hand, Makochekamwa (2007) found out that the granger causality goes in both directions for the statistical significance of the variables that shows the relationship between market exchange rate and inflation. Edwards and Yeyati (2004) also in their study observed that the flexible exchange rate indeed helps to reduce the real impact of shocks in the terms of trade in both the industrialized economies and the emerging economies. They point out that this is because the link between foreign exchange market and international transactions runs in both directions. Imimole and Enoma (2011) found that exchange rate depreciation, real gross domestic product and money supply are core determinants of inflation and that the currency depreciation is positive and also has a significant effect on the long run inflation in the Nigerian economy. According to Kandil (2004), argue that taking into consideration the degree of openness, depreciation and exchange rate volatility in particular affects the performance of the economy by reducing inflation and the output growth. Also in the long run, expected exchange rate changes significantly decrease and increase output growth and inflation respectively in Kenya.

On another study, Aghion, Bacchetta, Ranciere and Rogoff (2009), investigated whether the developing markets are only trying to stabilize the real exchange rates or they are following pure inflation targeting rules. The results showed that the inflation targeting markets used the strategy of mixed inflation. The central banks in which there is inflation targeting responded to both the real exchange rate and inflation by the setting of the interest rates. They also found the robust feedback to the exchange rate in the countries that follow inflation targeting rules which are somehow intensive in terms of exporting some of the basic products. They showed that the exchange rate changes decreases productivity in developing nations, regarding it as an influence on the financial channels. The results showed unfavorable effects of the exchange rate volatility were bigger for the less developed nations and are practically significant for all the developing countries and the emerging markets.

According to Duarte and Stockman (2002), inflation is among others is one of the major or key factors that affect exchange rate. Low inflation rate in a country will exhibit increase in the currency rate, and this is because of the purchasing power of the currency will rise when compared to the other currencies. According to Utami and Inanga (2009), the interest rate differentials have an insignificant positive influence on exchange rate changes for UK, Singapore and USA, relative to Indonesia. On the other side, interest rate differentials have significant negative effect on exchange rate changes for Japan.

3. Methodology

The cointegrating Vector Error Correction Model is used for the analysis. It starts with the specification of the model as follows:

\[ \log (EXR_t) = \beta_0 + \beta_1 \log (INF_t) + \beta_2 \log (INT_t) + \beta_3 \log (FDI_t) + e_t \]

where exchange rate is EXR, inflation is INF, interest rates is INT and foreign direct investment is FDI.

Visual inspection

The study uses the graphical analysis which provides a plot of the variables in a time series model. According to Gujarati and Porter (2009), the graphical analysis shows how the variables move in a given time period, whether they are constant, increasing or decreasing. The results in Figure 1 shows
that LOGEXR, LOGINF, LOGINT and LOGFDI are non-stationary at their level form, hence they need to be differenced.

![Graphs of LOGEXR, LOGINF, LOGINT, and LOGFDI](image)

Figure 1: LOGEXR, LOGINF, LOGINT and LOGFDI at level form

LOGEXR, LOGINF, LOGINT and LOGFDI are constant in their fluctuations hence it is stationary at differenced. It is concluded that the mean and the variance for all the variables at first difference are constant over time.
Unit Root Test

The Augmented Dickey Fuller (ADF) and the Phillips Peron (PP) is used for unit root testing. The Augmented Dickey-Fuller (ADF) test is an improved version of the Dickey-Fuller (DF) test. The test is used to test for the larger sets of time series models and the ADF statistic that is used in the test is actually a negative number. The ADF is advantageous because it allows for the presence of the deterministic drifts and trends to be tested. The Phillips Perron (Phillipps and Perron, 1988) test is conducted in order to ensure whether the data series at hand is stationary or not. To deal with any of the correlation in the t-statistics and also the error terms, the PP test uses the non-parametric correction. This test is used to address the issue that the generation of data process for yt might in some way contain a higher autocorrelation order that is actually taken into the test equation. Thus, it makes yt-1 endogenous. The PP test has the advantage is that when conducting the test, the user does not necessarily have to specify the lag length to test the regression. The other advantage is that it is robust in terms of the general forms of the heteroskedasticity concerning the error term. Therefore, it involves fitting the time series regression where the constant can be excluded and where the trend term may be included. According to Enders (1995), the PP test is more powerful and accurate than ADF.

Therefore, both the ADF and PP tests is carried out at level form of all the variables at intercept, trend and intercept and also at none. Table 1 shows the results at level form while Table 2 shows the results at first difference. The results show that LOGEXR, LOGINF and LOGINT are non-stationary at level form while LOGFDI is stationary based on the PP test.
Table 1: ADF and PP Unit Root Test at Level Form

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>MODEL SPECIFICATION</th>
<th>ADF TEST</th>
<th>PP TEST</th>
<th>CONCLUSION</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>P-VALUES (lags) SIC</td>
<td>P-VALUES (Bandwidth) N-WB</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LOGEXR</td>
<td>Intercept</td>
<td>0.5913 (0)</td>
<td>0.7108 (5)</td>
<td>Non stationary</td>
</tr>
<tr>
<td></td>
<td>Trend and intercept</td>
<td>0.0924 (1)</td>
<td>0.3991 (5)</td>
<td>Non stationary</td>
</tr>
<tr>
<td></td>
<td>None</td>
<td>0.3504 (0)</td>
<td>0.0703 (13)</td>
<td>Non stationary</td>
</tr>
<tr>
<td>LOGINF</td>
<td>Intercept</td>
<td>0.1971 (0)</td>
<td>0.2799 (6)</td>
<td>Non stationary</td>
</tr>
<tr>
<td></td>
<td>Trend and intercept</td>
<td>0.1335 (0)</td>
<td>0.3991 (5)</td>
<td>Non stationary</td>
</tr>
<tr>
<td></td>
<td>None</td>
<td>0.2361 (0)</td>
<td>0.1194 (29)</td>
<td>Non stationary</td>
</tr>
<tr>
<td>LOGINT</td>
<td>Intercept</td>
<td>0.9226 (2)</td>
<td>0.5574 (9)</td>
<td>Non stationary</td>
</tr>
<tr>
<td></td>
<td>Trend and intercept</td>
<td>0.0022 (1)</td>
<td>0.5482 (11)</td>
<td>Non stationary</td>
</tr>
<tr>
<td></td>
<td>None</td>
<td>0.2750 (2)</td>
<td>0.0072 (29)</td>
<td>Non stationary</td>
</tr>
<tr>
<td>LOGFDI</td>
<td>Intercept</td>
<td>0.1115 (0)</td>
<td>0.0129 (2)*</td>
<td>Stationary</td>
</tr>
<tr>
<td></td>
<td>Trend and intercept</td>
<td>0.0032 (0)</td>
<td>0.0032 (4)*</td>
<td>Stationary</td>
</tr>
<tr>
<td></td>
<td>None</td>
<td>0.6350 (3)</td>
<td>0.0446 (4)*</td>
<td>Stationary</td>
</tr>
</tbody>
</table>

Note: (*) represent that the variable is statistically significant at 10% significance level

Table 2 shows that LOGEXR, LOGINF and LOGINT are stationary at first difference, which implies that they are integrated of order one I (1).

Table 2: ADF and PP Unit Root Test at First Difference

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>MODEL SPECIFICATION</th>
<th>ADF TEST</th>
<th>PP TEST</th>
<th>CONCLUSION</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>P-VALUES (Lags) SIC</td>
<td>P-VALUES (Bandwidth) N-WB</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LOGEXR</td>
<td>Intercept</td>
<td>0.0003 (0)*</td>
<td>0.0000 (12)*</td>
<td>Stationary</td>
</tr>
<tr>
<td></td>
<td>Trend and intercept</td>
<td>0.0020 (0)*</td>
<td>0.0002 (13)*</td>
<td>Stationary</td>
</tr>
<tr>
<td></td>
<td>None</td>
<td>0.0000 (0)*</td>
<td>0.0000 (9)*</td>
<td>Stationary</td>
</tr>
<tr>
<td>LOGINF</td>
<td>Intercept</td>
<td>0.0002 (1)*</td>
<td>0.0000 (28)*</td>
<td>Stationary</td>
</tr>
<tr>
<td></td>
<td>Trend and intercept</td>
<td>0.0008 (1)*</td>
<td>0.0000 (28)*</td>
<td>Stationary</td>
</tr>
<tr>
<td></td>
<td>None</td>
<td>0.0000 (0)*</td>
<td>0.0000 (28)*</td>
<td>Stationary</td>
</tr>
<tr>
<td>LOGINT</td>
<td>Intercept</td>
<td>0.0000 (1)*</td>
<td>0.0012 (20)*</td>
<td>Stationary</td>
</tr>
<tr>
<td></td>
<td>Trend and intercept</td>
<td>0.0001 (1)*</td>
<td>0.0000 (28)*</td>
<td>Stationary</td>
</tr>
<tr>
<td></td>
<td>None</td>
<td>0.0000 (1)*</td>
<td>0.0000 (18)*</td>
<td>Stationary</td>
</tr>
<tr>
<td>LOGFDI</td>
<td>Intercept</td>
<td>0.0000 (2)*</td>
<td>0.0000 (15)*</td>
<td>Stationary</td>
</tr>
<tr>
<td></td>
<td>Trend and intercept</td>
<td>0.0001 (2)*</td>
<td>0.0000 (13)*</td>
<td>Stationary</td>
</tr>
<tr>
<td></td>
<td>None</td>
<td>0.0000 (2)*</td>
<td>0.0000 (17)*</td>
<td>Stationary</td>
</tr>
</tbody>
</table>

Note: (*) represent that the variable is statistically significant at 10% significance level
Lag Order Selection

Lag order selection criteria is all about selecting the relevant lag for the time series variables which are included in the model of the study. This is conducted so that the results which are obtained will be significant and make economic sense. Hence, there are different criteria’s which are looked at when you select the appropriate lag length for the variables. The criterion which is used include the Schwarz information Criterion (SIC), Akaike Information Criterion (AIC), Hanann-Quinn Criterion (HQ), Sequential modified Likelihood Ratio (LR) and the last one is the Final Prediction Error (FPE). When selecting the correct lag using the above mentioned criterions, they are all compared to the 5% critical value. In order to choose which lag to select, we consider the lag which is indicated by the asterisk (*) on each of the criterion in the results obtained. The results in Table 3 below shows the results of the best lag which is selected in our study. The results obtained show that lag length of two (2) is appropriate lag for our study.

Table 3: The lag length selection

<table>
<thead>
<tr>
<th>Lag</th>
<th>LogL</th>
<th>LR</th>
<th>FPE</th>
<th>AIC</th>
<th>SC</th>
<th>HQ</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>-18.36783</td>
<td>NA</td>
<td>5.50e-05</td>
<td>1.542609</td>
<td>1.731201</td>
<td>1.601674</td>
<td>Not good</td>
</tr>
<tr>
<td>1</td>
<td>43.69247</td>
<td>102.7205</td>
<td>2.33e-06</td>
<td>-1.633964</td>
<td>-0.691001*</td>
<td>-1.338640</td>
<td>Not good</td>
</tr>
<tr>
<td>2</td>
<td>63.41355</td>
<td>27.20149*</td>
<td>1.93e-06*</td>
<td>-1.890590*</td>
<td>-0.193257</td>
<td>-1.359006*</td>
<td>Good</td>
</tr>
</tbody>
</table>

* indicates lag order selected by the criterion.

Johansen Cointegration Test

The Johansen cointegration technique is used as a procedure to test for cointegration of several time series variables I(1) and it also allows more than one cointegrating vectors. There are steps that need to be followed when implementing the Johansen technique procedure. This techniques methodology begins with the vector autoregression (VAR) of order p and it is represented as follows:

\[ Y_t = \mu + A_1 Y_{t-1} + \ldots + A_p Y_{t-p} + \varepsilon_t \]

where: \( Y \) represents an \( n \times 1 \) vector variables which are integrated of order one I (1) and \( \varepsilon_t \) represents the \( n \times 1 \) vector innovations.

There are two types of Johansen technique tests, which are the maximum eigenvalue and the trace. Below are the representations of the trace and maximum eigenvalue tests. Hence, the null hypothesis of trace test is \( r \) cointegrating relationships, while the alternative hypothesis is \( n \) cointegrating relationships. As for the maximum eigenvalue test, the null hypothesis is \( r \) cointegrating relationships and the alternative hypothesis is \( r + 1 \) cointegrating relationships. The Johansen technique tests hypothesis are:

1. There are no cointegrating vectors (spurious regression)
2. There is only one cointegrating vector.
3. There are more than one cointegrating vectors.

If none of the above mentioned hypotheses that is rejected, it implies that the regression produces spurious results. On the other hand, if the first hypothesis is rejected, it is assumed that there is one cointegrating vector and if the first and the second hypotheses are rejected, then we will carry on assuming that there are at most two cointegrating vectors. However, if all the hypotheses are rejected, the conclusion will be that in all the variables, none of them possess a stochastic trend. All this is because it is the only way that many cointegrating vectors as variables can be realized.

The results for both the Trace statistic and Maximum eigenvalue are given in the below Table 4 and 5.
**Table 4: The Trace Statistic**

<table>
<thead>
<tr>
<th>Hypothesized No. of CE(s)</th>
<th>Eigen value</th>
<th>Trace Statistic</th>
<th>0.05 Critical Value</th>
<th>Probability</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>None*</td>
<td>0.678644</td>
<td>52.64154</td>
<td>47.85613</td>
<td>0.0166</td>
<td>Reject H0</td>
</tr>
<tr>
<td>At most 1</td>
<td>0.337227</td>
<td>20.85582</td>
<td>29.79707</td>
<td>0.3667</td>
<td>Fail to reject H0</td>
</tr>
<tr>
<td>At most 2</td>
<td>0.224139</td>
<td>9.338776</td>
<td>15.49471</td>
<td>0.3350</td>
<td>Fail to reject H0</td>
</tr>
<tr>
<td>At most 3</td>
<td>0.076649</td>
<td>2.232872</td>
<td>3.841466</td>
<td>0.1351</td>
<td>Fail to reject H0</td>
</tr>
</tbody>
</table>

Trace test indicates 1 cointegrating eqn(s) at the 0.05 level
* denotes rejection of the hypothesis at the 0.05 level
**MacKinnon-Haug-Michelis (1999) p-values

**Table 5: Max-Eigen Statistic**

<table>
<thead>
<tr>
<th>Hypothesized No. of CE(s)</th>
<th>Eigen value</th>
<th>Max-Eigen Statistic</th>
<th>0.05 Critical Value</th>
<th>Probability</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>None*</td>
<td>0.678644</td>
<td>31.78572</td>
<td>27.58434</td>
<td>0.0136</td>
<td>Reject H0</td>
</tr>
<tr>
<td>At most 1</td>
<td>0.337227</td>
<td>11.51704</td>
<td>21.13162</td>
<td>0.5957</td>
<td>Fail to reject H0</td>
</tr>
<tr>
<td>At most 2</td>
<td>0.224139</td>
<td>7.105904</td>
<td>14.26460</td>
<td>0.4767</td>
<td>Fail to reject H0</td>
</tr>
<tr>
<td>At most 3</td>
<td>0.076649</td>
<td>2.232872</td>
<td>3.841466</td>
<td>0.1351</td>
<td>Fail to reject H0</td>
</tr>
</tbody>
</table>

Max-eigenvalue test indicates 1 cointegrating eqn(s) at the 0.05 level
* denotes rejection of the hypothesis at the 0.05 level
**MacKinnon-Haug-Michelis (1999) p-values

The trace and max-eigen value statistics has only cointegrating vector which. Trace statistic indicates that at none, the probability value is 0.0166 which is less than 5%, and also the Trace statistic is 52.64154 and it is greater than the critical value of 47.85613. Hence there is only one cointegrating relationship, because the probability values of at most 1, 2 and 3 are greater than 5% and the Trace statistic values are less than the critical values.

Maximum eigenvalue statistic results also show that there is one cointegrating vector at none, since the probability value is 0.0136 which tends out to be less than 5%, and also the Max-eigenvalue statistic is equal to 31.78572 and the value is greater than the critical value of 27.58434. The probability values for at most 1, 2 and 3 are more than the 5% significance level and also the max-eigen statistic values are less than the critical values. Therefore, considering both the Trace and Max-eigenvalue statistics, we conclude that there is just one lung run relationship between LOGEXR and the other variables included in the model.

**Vector Error Correction Model (VECM) Estimates**

The vector error correction model is developed to be used for non-stationary series at the level form of which are known to be cointegrated and the estimated VAR object can be used to test for cointegration. In the VECM, the short-run dynamics of the included variables in the series are affected by the deviation from the equilibrium as it is shown below:

\[ \Delta y_t = \beta_1 \Delta x_t + \beta_2 (y_{t-1} - \gamma x_{t-1}) + \epsilon_t \]

The Vector Error Correction Model reconciles the short-run behavior of the time series variables in the model with the long-run behavior. It combines the short-run adjustment mechanism with the long-run information. The VECM helps to measure any movement that deviate from the long-run equilibrium and the error correction term size reflects the speed of adjustment for any equilibrium moving towards the equilibrium state of long-run. The below Table 6, shows the results of the vector error correction model.
Table 6: Long Run Coefficients and Significance Level

<table>
<thead>
<tr>
<th>Variables</th>
<th>LOGEXR</th>
<th>LOGINF</th>
<th>LOGINT</th>
<th>LOGFDI</th>
<th>Constant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coefficient</td>
<td>1.000000</td>
<td>-0.227483</td>
<td>-0.167165</td>
<td>-0.136616</td>
<td>-3.610859</td>
</tr>
<tr>
<td>t-statistics</td>
<td>-3.68443*</td>
<td>-1.82392</td>
<td>-2.13962*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conclusion</td>
<td>Positive and significant</td>
<td>Positive and insignificant</td>
<td>Positive and significant</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Error correction term</td>
<td></td>
<td>t-statistics</td>
<td>Conclusion of ECT</td>
<td>R-squared = 0.672187</td>
<td></td>
</tr>
<tr>
<td>D(LOGEXR)</td>
<td>-0.350286</td>
<td>-3.12908</td>
<td>Negative and significant</td>
<td>Adjusted R-squared = 0.508280</td>
<td></td>
</tr>
</tbody>
</table>

Note: (*) represents significance

The vector error correction model estimate results shows that there is a positive significant relationship between LOGEXR and LOGINF. This is in line with the purchasing power parity (PPP) theory mentioned in chapter three. There is a positive insignificant relationship between LOGEXR and LOGINT, this in line with the study done by Bowe and Saltvelt (2004) in the empirical review. On the other hand, LOGEXR has a positive significant relationship with LOGFDI. The Error Correction Term (ECT) is negative and statistically significant, this brings about equilibrium in the long run. Hence, it measures the correction resulting from the disequilibrium of the past time period of which has good economic implications. The value of the R-squared (which measures the goodness of fit in the model) is 0.672187, this simply implies that 67% of the variation in the dependent variable (LOGEXR) is been explained by the independent variables included in the model. On the other hand, Adjusted R-squared is equal to 0.508280, meaning that the independent variables in the model explain 50% of dependent variable (LOGEXR). Both the values of R-squared and the Adjusted R-squared confirm that the model estimated is good.

Diagnostic and Stability tests

The AR root graph is used for the stability test while the diagnostic tests included: Jarque-Bera for normality,

AR root graph

According to this stability test, the model (VAR/VECM) is considered to be stable only if all the roots are inside the unit circle and if they are outside, then the model is not stable. The results are presented in Figure 3 below. The results of the AR roots graph show that all the roots are inside the circle. Therefore we conclude that the vector error correction model estimated is reliable and stable.
Inverse Roots of AR Characteristic Polynomial

Figure 3: AR root graph

**Jarque-Bera Normality test**

The entire test is mainly characterized by the first two moments of distribution, which is the variance and the mean. The Jarque-Bera null hypothesis states that the distribution of the series under study is symmetric. If the residuals from the model are significantly skewed, the null hypothesis of normality will be rejected. The null hypothesis for the test is that the residuals are normally distributed, while the alternative hypothesis states that the residuals in the model are not normally distributed. We look at the probability value of Jarque-Bera and if it is less than 5% we reject the null and conclude that the residuals are not normally distributed.

Table 7: Jarque-Bera Normality test

<table>
<thead>
<tr>
<th>Component</th>
<th>Type</th>
<th>Chi-square</th>
<th>df</th>
<th>Probability</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Joint</td>
<td>Skewness</td>
<td>9.591800</td>
<td>4</td>
<td>0.0479</td>
<td>Not normally distributed</td>
</tr>
<tr>
<td>Joint</td>
<td>Kurtosis</td>
<td>7.320211</td>
<td>4</td>
<td>0.1199</td>
<td>Normally distributed</td>
</tr>
<tr>
<td>Joint</td>
<td>Jarque-Bera</td>
<td>16.9101</td>
<td>8</td>
<td>0.0310</td>
<td>Not normally distributed</td>
</tr>
</tbody>
</table>

Looking at the results on Table 7, the probability value of the Jarque-Bera test is 0.0310 and it is less than 5% significance level. Therefore, we reject the null and conclude that the residuals in the model are not normally distributed.

**The Langrange Multiplier (LM) test Serial Correlation**

The Langrange Multiplier (LM) test is used to detect whether there is any evidence of autocorrelation in the estimated model. It focuses more on the R-squared (R²) value for the auxiliary regression, and if one or more coefficients of variables in the regression model are statistically significant, then it implies that the value of the R² will tend to be relatively high (significant). However, if none of the variables in the regression is statistically significant, the value of the R² will tend to be relatively low. The null hypothesis of this test states that there is no serial correlation, and the alternative hypothesis says there is serial correlation. Hence, if the probability value is less than 5% significance level, we reject the null and conclude that there is serial correlation in the model. The results of this test are presented in Table 8 below:
Table 8: The Lagrange Multiplier (LM) test Serial Correlation

<table>
<thead>
<tr>
<th>Lags</th>
<th>LM-Stat</th>
<th>Probability</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>20.48753</td>
<td>0.1991</td>
<td>No serial correlation</td>
</tr>
<tr>
<td>2</td>
<td>16.97772</td>
<td>0.3870</td>
<td>No serial correlation</td>
</tr>
<tr>
<td>3</td>
<td>7.927249</td>
<td>0.9510</td>
<td>No serial correlation</td>
</tr>
</tbody>
</table>

The results of the LM test shows that at lag two which is the chosen lag of this study, the probability values are greater than 5%. Therefore, we fail to reject the null and conclude that there is no serial correlation in the model.

**White Heteroskedasticity test**

White (1980) test will be used for heteroskedasticity in this study. The test to be used is very useful because there are several assumptions of which it takes into account concerning the model. The null hypothesis states that there is no heteroskedasticity, and the alternative hypothesis states that there is heteroskedasticity. If the probability value for the test is less than 5%, we reject the null and conclude that there is heteroskedasticity in the model. Table 9 below contains the estimated results. The results shows that the probability value is equal to 0.2947, which is greater than the 5% significance level. Therefore, we fail to reject the null and conclude that there is no heteroskedasticity in the model.

Table 9: White Heteroskedasticity test

<table>
<thead>
<tr>
<th>Component</th>
<th>Chi-square</th>
<th>Probability</th>
<th>df</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Joint</td>
<td>189.7466</td>
<td>0.2947</td>
<td>180</td>
<td>No Heteroscedasticity</td>
</tr>
</tbody>
</table>

4. **Conclusion and policy recommendations**

The long run results which were obtained in the model showed that there is a positive and significant relationship between LOGEXR and LOGINF. Similarly, there is a positive significant relationship between LOGEXR and LOGFDI. As for LOGINT, it has a positive but not significant relationship with LOGEXR. Based on the findings, the study recommends that the value of the exchange rate can be maintained at a given level by capping inflation and foreign direct investment.
References


Mishkin and Schmidt-Hebbel, Lin and Ye (2009).


Adoption of IFRS 9 by JSE Listed Financial Firms: Possible Challenges and Consequences

M Mashamba, University of Venda, South Africa

Abstract
The IASB has published the complete version of IFRS 9 Financial Instruments, which replaces most of the guidance in IAS 39. The new standard includes the final classification and measurement model for financial assets and liabilities as well as the new expected credit losses model that replaces the incurred loss model that is used today. The mandatory adoption date in January 2018 has forced financial institutions to plan for the implementation of IFRS 9. According to EY (2015) this will require three years of preparation, assuming two years to implement and one year of parallel run, to ensure readiness for 2018.

The purpose of the present study is to highlight the key changes introduced by IFRS 9, the likely challenges and consequences JSE listed financial firms will encounter in implementing the new standard. The mixed methods approach will be used to collect quantitative and qualitative data to address the research questions.

The findings of the study will be beneficial to JSE listed firms, the JSE, regulatory bodies and the public at large.
Corporate Governance and Well-Being: Case of the Karmex Automotive Manufacturer

Lilia Trabelsi Masmoudi, Engineering School of Statistics and Information Analysis, Tunisia
Rim Abdennadher Shehadeh, Tunisia

Abstract
We propose to discover the limits of the old system of governance which defines the company as a node of contracts and which is based on utilitarianism and optimization of individual interests (agency theory, property rights and of transaction costs). And to develop the idea of governance, which views the enterprise as a repertoire of knowledge, as a whole, as a living and dynamic organism, rather than as a set of separate organs and members. This living and dynamic organism consists of a community of free and responsible human beings engaged in a project serving the common good. The idea is to move from the logic of anonymous or limited liability companies with property rights, a concept that has now passed, to the logic of conscious, informed, transparent and socially responsible companies whose purpose is not just the simple alignment of one’s interests with another, but the concurrence that each brings to the common work. We bring the lived experience of an automotive industry where governance is primarily aimed at performance, but also in a specific way the company's well-being.

Key words: Corporate Governance, well-being, utilitarism, agency theory/cost, companies social responsibility, integration.

J.E.L : G, M, O.
Risk Management and Performance of Islamic Banks: Using the Income of Mudharaba and Musharaka as a Moderator

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Vatimetou Mokhtar Maouloud, University of Sfax, Tunisia
Anwar Al Abbasy, University of Malaysia, Malaysia

Abstract
Risk management in banks is a crucial issue mainly in Islamic banks. This study seeks to examine the impact of the incomes of mudharaba and musharaka on the relationship between risk and performance, which is measured by ROAA. This study employs unbalanced panel data regression analysis of Ordinary Least Squares method, from 16 Islamic banks from different countries over the period 2012 to 2015, which was processed by the software stata13. The results show that the income of PLS products (mudharaba and musharaka) has a moderating effect particularly on the relationships between performance and liquidity risk, and operational risk. However, it has no moderating effect on the relationship between performance and market risk. This study helps to enrich the literature with new models that can help bankers and Islamic finance students to get ideas and make relevant decisions in terms of investment.

Key words: performance, mudharaba, musharaka, moderating effect.

1. Introduction
The advances in financial engineering and some changes in the economic have facilitated the development of financial products that integrate the requirements of Islamic finance. At this stage the risks of Islamic finance have occurred. Because of their unique presence, Islamic institutions are recommended to apply rigorous systems to identify and manage the risks that they encounter. Islamic banks usually take more risk than conventional banks because of their lack of experience and lack of familiarity with all new financial instruments.

Indeed, risk management has become a central and transversal function in Islamic and conventional financial institutions. It is a method for identifying, measuring, monitoring and managing the various risks faced by a financial institution, regardless of whether Islamic or conventional. This allows us to say that the effective risk management is a way for better performance.

This paper attempts to respond to the questions of bankers in terms of risk management of PLS products and performance, which form the major concerns of the Islamic banks. It has focused on the effect of the income of mudharaba & musharaka on the relationship between the risk and performance. To do this and within the framework of a hypothetical -deductive approach, we try to answer the following problem:

Can revenues from participatory products (mudharaba and musharaka) moderate the relationship between the performance and risks of Islamic banks?

2. Previous Studies And Significant Contributions
Iqbal and Mirakhor (2009) pointed out that "the risk may be due to the failure of a bank in its management, neglect in the management of companies and in compliance with contractual obligations, and also the weakness of the internal and external institutional environment including the legal framework, when banks cannot implement their contracts."
Smith (1995) and Schroeck (2002) showed that there is a strong relationship between risk management and the profitability of Islamic banks. As Islamic banks are newly established institutions, they face an operational risk that arises mainly from the lack of qualified personnel capable of effectively conducting Islamic financial operations. Moreover, the special character of Islamic banks makes that computer software on the market, is not useful for Islamic banks because they are designed for conventional banks. This makes it possible to add a new type of risks related to the use of information technology at the level of Islamic banks. Islamic banks offer financing under the principles of profit sharing and risk with its depositors. As such, investment risk arises from investment choices, since by investing in capital, the bank incurs the risk of a loss of its contributions, which it shares, with its depositors. Bashir (2000) and Habiboullah (2009) found a positive relationship between bank liquidity and profitability. Berger (1995) showed that the liquidity risk has a positive impact on the ROA. Kasman et al. (2011) have studied the impact of market risk in emerging countries, they have found that market risk has a significant effect on the profitability of banks. According to Srairi (2009), Islamic banks usually take more risk than conventional banks because of their lack of experience and lack of familiarity with all financial instruments to which they should resort. Islamic banks do not use PLS products so much because their risks are too high, but if these products positively affect their performance or reduce the risks faced by these banks, these two possibilities can be a motivation for the banks to adopt these financial products and to integrate them into their activities. In this research paper, we introduced a control variable that is the size of the Islamic bank, since it is a key variable in the performance of Islamic banks. Trujillo-ponce (2013) showed that a large banking size implies economies of scope in the bank, and results from the varied goods and services. The theoretical framework and hypothesis:
The literature review has given the basis in determining the dependent variable and independent variables. Therefore, the theoretical framework can be presented as follow:

Generally, the moderator variable interacts with the independent variable to influence the dependent variable. The model which contains a moderator variable was has been adopted and treated by several researchers. Granted, this study focuses mainly on the work conducted by Frazier & al. (2004) and Marsh & al. (2011).
Khan and Ahmed (2001) give an example of the widespread use of the profit-and-loss-sharing contract that is perceived as the least risky, while this type of contract exposes Islamic financial institutions to a specific risk.

Izhar and Asutay (2007) found a relationship between revenues from PLS products of Islamic banks and banks’ ability to generate profits.

Rahman and Rochmanika (2012) examined the effect of mudharaba and musharaka on the profitability of Islamic banks, they found that they may eventually affect the profitability of Islamic banks.

In this paper, we are interested in studying the moderator effect of the income of mudharaba and musharaka on the relationship between risks and the performance of Islamic banks. To do this, we will include the incomes of mudharaba and musharaka in the model by multiplying it into each variable.

It is important to examine and analyze the (possible) moderator effect of the income of the PLS products on the relationship between performance and risk through these assumptions:

H1: the incomes of PLS products moderate the relationship between performance and liquidity risk of Islamic banks.
H2: the incomes of PLS products moderate the relationship between the performance and market risk of Islamic banks.
H3: the incomes of PLS products moderate the relationship between performance and operational risk of Islamic banks.

3. Data And Methodology

For our research, we are only interested in Islamic banks. The study population is composed of 16 Islamic banks in seven countries of the world, mainly Asia, Europe and Africa. Indeed, we did not include other banks because of the unavailability of data. We are working on unbalanced panel data from 2012 to 2015. The data are derived from the financial statements of 16 Islamic banks. Moreover, this data was taken from bankscope, which contains the financial statements of those banks. By pooling all the data together, 53 observations were collected.

3.1. Variables measurements

3.1.1. Dependent variable

The dependent variable is the profitability of the bank and it is measured by the ratio ROAA (average return on assets). It is calculated by dividing the net income of the bank to its total assets). Flamini and al (2009) have demonstrated that ROA is the best indicator for measuring the performance. It is more adequate than ROE because ROE does not take into consideration the leverage effect.

3.1.2. Independent variables

The data related to the operational and market risks are taken directly from the database bankscope. However, the liquidity risk was measured by the ratio below:

\[
LR = \frac{\text{Liquid assets}}{\text{Deposits and short term funding}}
\]

This liquidity ratio can be used to measure the quality of liquidity in banks and has been used by Cihak and al. (2012).

In this empirical study, we have introduced the incomes of musharaka and mudharaba as a moderator variable. These revenues were taken directly from the Bankscope. Furthermore, the size of the bank is measured by the total of its assets.
In this research, we have used the logarithm of all those variables.

3.2. Research Model

\[ \text{ROAA}_i = \alpha_0 + \alpha_1 \text{LR}_i, t + \alpha_2 \text{OR}_i, t + \alpha_3 \text{MR}_i, t + \alpha_4 \text{MM}_i, t + \alpha_5 \text{MMLR}_i, t + \alpha_6 \text{MMOR}_i, t + \alpha_7 \text{MMMR}_i, t + \alpha_8 \text{SIZE}_i, t + \varepsilon_i \]

WHERE:

- \( \alpha_0 \) is the constant.
- \( \text{LR}_i, t \) is the liquidity risk of the bank \( i \) in the period \( t \)
- \( \text{OR}_i, t \) is the operational risk of the bank \( i \) in the period \( t \)
- \( \text{MR}_i, t \) is the market risk of the bank \( i \) in the period \( t \)
- \( \text{MM}_i, t \) is the moderator variable of the bank \( i \) in the period \( t \)
- \( \text{MMLR}_i, t \) represents the incomes of mudharaba & musharaka multiplied to the liquidity risk of the bank \( i \) in the period \( t \)
- \( \text{MMOR}_i, t \) represents the incomes of mudharaba & musharaka multiplied to the operational risk of the bank \( i \) in the period \( t \)
- \( \text{MMMR}_i, t \) represents the incomes of mudharaba & musharakamultiplied to the market risk of the bank \( i \) in the period \( t \)
- \( \text{SIZE}_i, t \) it is the size of the bank \( i \) in the period \( t \)

4. Results and discussion

4.1. Descriptive Statistics:

Descriptive analysis of the dependent variable:

According to the table below (table 1), the average return on assets is 1.612 for our sample of 16 Islamic banks, which corresponds to 1.599 for the poorest bank and 1.621 for the best performing bank.

Descriptive Analysis of Independent Variables:

On average, the liquidity risk (LR) is in the order of 1.377, which is likely to take a minimum value of -0.076 for the least risky bank and 2.382 for the most risky bank. Indeed, these values have changed when the variable. Moderator (MMLR). The average has become 21.540, and the variable LRMM can take its minimum value which is of the order of -1.36 and its max value which is equal to 40.829. For operational risk (OR), its average is of the order of 13.997, which is likely to take a minimum value of 10.043 for the least risky bank and 21.292 for the most risky bank. Indeed, these values changed when the moderator variable (MMOR) was introduced. The average has become 222.723, and the variable ORMM can take its minimum value which is of the order of 110.996 and its max value which is equal to 401.564. For market risk (MR), its average is of the order of 12.577, which is likely to take a minimum value of 8.699 for the least risky bank and 21.177 for the most risky bank. Indeed, these values changed when the moderating variable (MMMR) was introduced. The average has become 200.317, and the variable MRMM can take its minimum value which is of the order of 106.793 and its max value which is equal to 394.747. For the size of the bank (SIZE), its average is in the order of 22.628, which is likely to take a minimum value of 19.505 for the smallest bank and 25.15 for the largest bank.
The performance hypothesis to liquidity and allows moreover the hypothesis H1. We can say that the variable MM is a moderator of the relationship between liquidity risk and performance and acts negatively on this relationship.

The variables OR and MMOR are significant to the order of 10% in this model, this result allows us to say that the moderator variable reinforced the relation between the operational risk and the performance. In addition, the variable MMOR is significant to the order of 10% this validates the hypothesis H2. The variable MM is a moderator of the relationship between operational risk and performance and acts positively on this relationship.

The variables MR and MMMR are not significant, in this model, this result allows us to say that the moderator variable has no effect on the relationship between the market risk and the performance of

4.2. Regression analysis

The table 2 shows that the coefficient of multiple determination $R^2$, which measures the quality of the adjustment between the endogenous variable and the explanatory variables (the proportion of the variation of the dependent variable explained by the regression model), is of the order of 0.4133. The Fisher test ($F = 4.53$) which evaluates the quality of $R^2$ (verifies the degree of significance of the linear relationship between the dependent and independent variables) is significant at the 5% threshold. Therefore, the model is globally significant.

Table 2: Regression results

<table>
<thead>
<tr>
<th>variable</th>
<th>Obs</th>
<th>Mean</th>
<th>Std. Dev</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROAA</td>
<td>53</td>
<td>1.612</td>
<td>0.003</td>
<td>1.599</td>
<td>1.621</td>
</tr>
<tr>
<td>LR</td>
<td>53</td>
<td>1.377</td>
<td>0.498</td>
<td>-0.769</td>
<td>2.382</td>
</tr>
<tr>
<td>OR</td>
<td>53</td>
<td>13.998</td>
<td>2.962</td>
<td>10.043</td>
<td>21.292</td>
</tr>
<tr>
<td>MM</td>
<td>53</td>
<td>15.785</td>
<td>1.934</td>
<td>10.043</td>
<td>18.859</td>
</tr>
<tr>
<td>MMLR</td>
<td>53</td>
<td>21.540</td>
<td>8.081</td>
<td>-1.360</td>
<td>40.829</td>
</tr>
<tr>
<td>MMOR</td>
<td>53</td>
<td>222.723</td>
<td>62.293</td>
<td>110.996</td>
<td>401.564</td>
</tr>
<tr>
<td>MMRM</td>
<td>53</td>
<td>200.317</td>
<td>66.402</td>
<td>106.793</td>
<td>394.747</td>
</tr>
<tr>
<td>SIZE</td>
<td>53</td>
<td>2.628</td>
<td>1.394</td>
<td>19.505</td>
<td>25.155</td>
</tr>
</tbody>
</table>

Moreover, the variables LR and MMLR are significant to the order of 5% in this model, this result allows us to say that the moderator variable has improved the relationship between the liquidity risk and the performance. Moreover, the MMLR variable is significant in the order of 1% this confirms the hypothesis H1. We can say that the variable MM is a moderator of the relationship between liquidity risk and performance and acts negatively on this relationship.

The variables OR and MMOR are significant to the order of 10% in this model, this result allows us to say that the moderator variable reinforced the relation between the operational risk and the performance. In addition, the variable MMOR is significant to the order of 10% this validates the hypothesis H2. The variable MM is a moderator of the relationship between operational risk and performance and acts positively on this relationship.

The variables MR and MMMR are not significant, in this model, this result allows us to say that the moderator variable has no effect on the relationship between the market risk and the performance of
the Islamic banks. This shows that the hypothesis \textbf{H3 is unconfirmed} \(\Rightarrow\) we can; thus, conclude that the variable MM is not a moderator of the relationship between market risk and performance.

Table 3 summary of the hypothesis

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1: the incomes of PLS products moderate the relationship between</td>
<td>Accepted</td>
</tr>
<tr>
<td>performance and liquidity risk of Islamic banks.</td>
<td></td>
</tr>
<tr>
<td>H2: the incomes of PLS products moderate the relationship between</td>
<td>Accepted</td>
</tr>
<tr>
<td>the performance and market risk of Islamic banks.</td>
<td></td>
</tr>
<tr>
<td>H3: the incomes of PLS products moderate the relationship between</td>
<td>Rejected</td>
</tr>
<tr>
<td>performance and operational risk of Islamic banks.</td>
<td></td>
</tr>
</tbody>
</table>

5. Conclusion

This study analyses the impact of the income of mudharaba & musharaka (as a moderator variable) of the relationship between performance and risk. The study involved basically three stages: Firstly, analysis of the literature view which explains the relationship between bank’s profitability and risks; secondly, application of a suitable methodology which overcomes the classical econometric problems involved in this kind of studies; and finally, empirical testing of the hypotheses.

In order to test the validity of our hypotheses, which highlight the effect of the moderator variable (income of mudharaba and musharaka) on the relationship between risks and the performance of Islamic banks, we have elaborated the model based on the work of Frazier and al. (2004), focusing mainly on liquidity risk, operational risk, and market risk in the Islamic bank. The estimation of this regression was done by the ordinary least squares method (OLS), on a sample of 16 Islamic banks covering the years 2012-2015, highlighted the usefulness of Islamic financial products in improving performance of Islamic banks.

The main conclusions derived from this study are: in first place, an empirical effect of the moderator variable (MM) on the relationships between the bank’s profitability and liquidity risk and operational risk. In second place, the variable (MM) does not have a moderating impact on the relationship between performance and market risk.
References


Tailoring Cause Marketing Campaigns Using Demographical Insights: An Empirical Study in India

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Abstract

Cause-marketing have been around for over thirty years, and has developed significantly over time. According to the American Marketing Association, “Cause related marketing refers to promotional strategy that links a company’s sales campaign directly to a non-profit organization”. Today Cause-Marketing ranges from specific short term collaborations to long-term partnerships and from product sales and promotions to program-driven collaborations. Consumer’s reception towards cause marketing has been linked to their demographics. A brand can design their marketing campaigns around many different social causes like health, education, women empowerment, environmental protection etc. It has become essential for brands to accurately identify their targeted customer base and consequently design their cause related marketing campaigns to resonate with their views on the subject. Though there has been some study on consumer’s reception towards cause marketing, a detailed analysis of the impact of demographics on their perception and behaviour towards different cause marketing campaigns has not been explored. This paper aims to analyse the impact of demographics on a consumer’s perception towards different cause marketing campaigns. A qualitative research has been undertaken to find various social causes that resonate with Indian consumers. Subsequently a qualitative research has been undertaken & data has been gathered through means of a structured questionnaire to study the influence of demographics on consumer’s perceptions. Analysis of variance is used where within column variance along with between column variance will be applied to the F-Hypothesis test to uncover the relationship, if any between Cause-Marketing focus areas and Demographics. The paper concludes with suggestions for implementing cause-marketing campaigns that have a long lasting credible impact on consumers buying behaviour & loyalty towards a particular brand.

Key Words: Emotional Branding, Cause-Marketing, Market share

Literature Review

Cause Marketing started back in 1983 when an American Airline introduced a campaign to renovate Liberty statue. Since then Companies have invested approximately $922 million in 2004 and they witness 57% rise in their sales. (Gard 2004)

Cause – related marketing has obtained interest in the past years as a corporate philanthropy based on increasing profits and sustaining a cause through giving (Varadarajan and Menon, 1988). Cause – marketing therefore can be defined as a process of formulating and instigating marketing activities that are branded by contributing specific amount to a Non-profit organization, which in return will increase company’s revenue and sales. (Mullen, 1997). It can also be considered a “commercial activity by which businesses and charities or good causes form a partnership with each other to market an image, product or service for mutual benefit”(Dkins 2003).

A survey was conducted by Farache (2008) to study the consumer’s perception regarding Cause Related Marketing [CRM]. 200 consumers were surveyed. The result of the research was that consumer has a positive attitude towards brand that is involved in good causes than those who are not. Consumers were aware about the fact that the firms benefit from such marketing strategy. Farache identified that the cause, which is related to children, was more supported by consumers. It was also noticed that individual’s connection with the cause have further influence on consumers attitude and relation.
The fondness’s among customers was also based on the amount of donation a company did for a particular cause. (Pracejus et al., 2003/4). Both men and women preferred campaigns that were related to a particular cause. (Ross et al., 1992). The effect of campaign increased when it was for local cause than a national cause (Brown and Dacin, 1997). Some researchers found that celebrity endorsements have positive impact on customers (Kamins and Gupta, 1994).

Firms that are involved in cause-related marketing programs have witness a great positive impact in their increase their product sales, service offerings and revenue. This is because firms are able to differentiate their products from that of competitors’.

A study of the literature finds a harmony among corporate executives that they use cause-related marketing because it increases a company’s profits. A writer in Incentive states, “worthy causes benefit from such campaigns, but make no mistake about it: Cause-related marketing is first and foremost a marketing program”.

Firm, which indulge in cause, demonstrate a commitment that enables a firm to attract more employees. Daw (2006) states that corporations in cause-related marketing partnerships are able to attract and retain employees. In 2002, the convey survey was carried which implied that the companies which are supporting social causes was favored 40% more by the employees than companies who don’t. Even 25 percent more likely to be loyal to their employers than those whose companies do not have such programs Daw (2006). A Study by chivus Regal found that 53 % of employees feel more loyal as they were helping in corporate giving programs (Mullen, 1997).

Cause-related marketing is growing and its progress is due to numerous factors such as favorable consumers’ response and consumers’ purchasing intention towards Cause-related marketing, growing companies concern to support causes as well as to increase companies’ profits.

Dupree also indicates that growth of interest in Cause-related marketing is due to consumers’ growing social consciousness. The corporate benefits in several ways by adopting cause-related marketing like attracting new customers, increasing product sales, creating and sustaining a positive brand identity; enhancing corporate image, differentiating products and organizations increasing brand loyalty and sales.

There might be negative impact of using cause-related marketing Varadarajan and Menon(1988) warn that firms making cause- related marketing offers could be perceived as primarily self- interested and experience.

John Burnett in his research work ‘Core concepts of marketing’ states that, “By implication, for consumers to respond positively to cause-related marketing, they must find convincing elements in the structure of the offer to justify the belief that the company is rejecting its basic self-interested nature”.

Brand researcher Douglas Holt discusses in his book "How Brands Become Icons” (2004) that there are four dominant branding models which is explanation for nearly all the current branding strategies or disciplines: mind-share branding, emotional branding, viral branding and cultural branding (Holt, 2004).

“Challenging the traditional approach to branding, Gobé (2009, xix) developed a paradigm of emotional branding, which relies upon anthropology, sensory experiences, imaginative ways to capture the attention of customers within brand design and a visionary approach to doing business”

When the purchase or use of a particular brand gives the customer a positive feeling, that brand is providing an emotional benefit. The strongest brand identities often include emotional benefits. Emotional benefits add richness and depth. Emotional association is the most dominant tool for a brand, which can increase brand motivation, but marketing must also involve the consumers by creating curiosity and interest. Cause related marketing has demonstrated that it generates the kind of interest and emotional appeal that draws consumers.

A long time ago economic and social objectives were seen as competing, but academic researchers underline that they are not. Every company belongs to the community where it develops it’s activity, and they are not isolated. When a social goal related to the main objectives of the company, sustaining
a social cause could produce economic benefits, and strengthen the emotional bond between consumers and a firm.

**Research Objective**

The literature review revealed that a lot of research has been done on validating the positive relationship between cause marketing campaigns and brand building. The literature review finds very little research that has researched on the relationship between demographics and different social causes that a brand can associate with, while designing its cause marketing campaign. Consequently lists of social causes previously associated with different companies were identified. The categories that been chosen are broad-based categories that represent the direction in which the cause-marketing campaign serves to engage with the community. The factors that have been popularly taken up in the past have been also taken into consideration. The following groupings were selected as the most dominant and visible social causes that have been associated with corporate cause marketing campaigns.

- Healthcare
- Education
- Community Development
- Women Empowerment
- Environment
- Traffic Regulation

Additionally demographical data was collected from every respondent. Factors that could influence an individual’s decision regarding cause-marketing were collected. The demographical data consisted of the following fields-

- Age
- Income
- Highest education qualification
- Gender

After obtaining demographic data, consumer’s perspectives regarding different causes were ascertained using a Likert scale. The averages returned by the causes give a fair idea of the overall affinity of the cause with the customers in general.

**Research Methodology**

In this study, both primary and secondary data was used. Primary data was collected based on questionnaire filled by respondents. Structured questionnaire was constructed to measure the impact of cause related marketing on consumers mindset and behavior. The questionnaire was distributed in different cities including Ahmedabad, Gandhinagar, Rajkot, Surat, Gandhidham, Chennai, Delhi, and Kolkata etc. The questionnaire assessed consumers buying attitude and emotional perception. A 5-point Likert-scale ranging from “Strongly Disagree” to “Strongly Agree” was used. “Strongly disagree” was denoted as “1” where, strongly agree is denoted as “5” on the scale. Average ratings above 3 states a high-level of agreement and anything below an average of 2.5 would represent disapproval of people. A total of 400 questionnaires were issued based on a non-probability convenience sampling method. Since most of the population had access to internet, survey forms were floated online. For the section of respondents that did not have access to internet or were not comfortable with the online mode of survey, paper based questionnaires were distributed and sent by post. Out of the 400 questionnaires issued, 344 were returned and had all relevant data for a proper analysis. This resulted in an 86% response rate.

The exclusionary criteria for the samples were in the age limits; respondent not less than 17 years old and older than 65 years were excluded. The questionnaire was pre-tested on a batch of 10 respondents and a few corrections to the structuring of the questions were made to ensure easy comprehensibility
for respondents. Secondary data was collected based on reports, journals, articles and other research papers published in journals of both online and offline format.

Analysis of within column variance (ANOVA) was carried out to determine if trends between different age groups & income groups were significantly aligned with different preference for different social causes. The following hypotheses were developed to analyze the result.

**Hypothesis:**
1. \( H_0: \mu_1 = \mu_2 = \mu_3 \ldots = \mu_k \)

*Null Hypothesis:* Age and Income level do not have any significant impact on a consumer’s preference with reference to different causes.

2. \( H_1: \) Means are not all equal.

*Alternative hypothesis:* There is significant impact on preference for different social causes on consumers because of Age and Income levels.

Where \( k = \) the number of independent comparison groups

<table>
<thead>
<tr>
<th>Factor</th>
<th>Distribution</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age</strong></td>
<td>Eighteen to twenty-four</td>
</tr>
<tr>
<td></td>
<td>Twenty five to thirty five</td>
</tr>
<tr>
<td></td>
<td>Thirty six to forty five</td>
</tr>
<tr>
<td></td>
<td>1.4 Forty six and above</td>
</tr>
<tr>
<td><strong>Income (per month)</strong></td>
<td>Twenty thousand to forty thousand</td>
</tr>
<tr>
<td></td>
<td>Forty thousand to eighty thousand</td>
</tr>
<tr>
<td></td>
<td>Eighty thousand to one lakh</td>
</tr>
<tr>
<td></td>
<td>One lakh &amp; above</td>
</tr>
</tbody>
</table>

Table 2 Demographic Data & Classification
Classifications of Demographics

1. Age:

The survey was only accessible to consumers above eighteen years of age. Further segregation was done by, grouping participants into categories of-

1.1. 18-24

This group included youth as identified by companies as a customer segment. This segment predominantly includes student in universities.

1.2. 25-35

This group is the middle-aged working population as regarded by surveys. The segment of population that has just entered the workforce is the majority here.

1.3. 35-45

This grouping consisted of the post middle-aged respondents with varying preferences.

1.4. 45 and above

The average age in this segment is above 50, representing retiring and post-retirement population.

2. Income:

Average monthly income was taken as a basis of classification. The lowest grouping was set at twenty thousand per-month.

2.1. 20, 000-40, 000

The perception of this group with relatively less disposable monthly income adds to the overall consumer mentality. The rural and sub-urban consumer class is included here.

2.2. 40, 000-80, 000

The urban middle class with relatively higher income group is grouped here.

2.3. 80, 000-1, 00, 000

The urban elite class is represented in this category with higher disposable income.

2.4. Above 1, 00, 000

This class sets represents the highest disposable income available for use on products and services. Luxury brands have a strong customer base here.

Results and Discussions

The ANOVA test reveals if the sample data supports the alternative hypothesis, which establishes some relationship between the comparing factors. Here age and income groups are compared with preference for different social causes. Although the nature of the relationship (positive or negative) is not determined by ANOVA, by analyzing the mean scores returned by different groups the nature can be assumed. The ANOVA test returns F-values which can determine if there is a correlation between the data sets. For the alternate hypothesis to be accepted the F-value must be higher than the calculated value which is derived from the degree of freedom within which range the mean values vary. The results are derived by taking age as an independent variable and then income as an independent variable respectively.
Hypothesis testing with Age as independent variable

![F-Value Graph for age as independent variable](image)

1. **“I am more likely to have a positive image of a brand that supports cause or social campaigns?” and Age groups.**

   The F-value for different age groups and their likeliness to have a positive perception of a brand that supports various cause campaigns is calculated at 0.26 which is quiet low. The null hypothesis test stands verified for this factor. All the age groups have consistently returned 3.8 as their average likeliness to have a relatively positive perception of a brand that actively includes social causes in its marketing tendencies. The above middle age group has returned the highest average value of 4 amongst the age groups. It can be concluded from this that across all age group platforms cause marketing contributes to the overall perception of a brand.

2. **Education and Age groups**

   The F-value for education as a theme and the age groups is calculated to be 2.67. This value lies just above the acceptable region of 2.6. This establishes the alternate hypothesis that there is some relation between this particular demographic factor and education. The middle aged groups from thirty six to forty five have the highest preference to education as basis of social campaign amongst all the age groups.

3. **Health and Age groups**

   The variances as calculated by the F-value test for Health as a factor is calculated to be 1.27 which is below the degree of freedom for the numerator and denominator at 2.6. The null hypothesis stands validated. There is no significant of a person’s age and his preference for healthcare as a theme to a marketing campaign. Even amongst the age group the general preference is quiet high with all age groups returning average values above 4 for healthcare as a preference.

4. **Traffic Sense & Age Groups**

   The F-value is calculated to be 3.30 for causes associated with traffic sense as the central theme. Since this value is quiet higher than 2.6, the relation between age groups and their relative preference for traffic related campaigns is quiet high. The alternative hypothesis stands verified for traffic as a campaign. The aggregate mean value on the likert scale shows a rising tendency for the first three age groups; however the last age group of individuals above 45 shows a dip relative to the rest of the age groups.
5. Women Empowerment & Age Groups

The F-value for women empowerment and age is calculated to be 2.78 that are just above the degree of freedom for the fraction. The alternate hypothesis stands verified for women empowerment and the different age groups. The tendency of the averages on the likert scale is rising with the exception being that of the last age group comprising people with ages above forty-five. The middle aged groups consisting of people between ages of 36 and 45 have returned the highest mean value of 4.25 on the likert scale for women empowerment as a theme for a marketing campaign. Women have a higher average of 4.11 for this particular cause than men who have returned a value of 3.9 on the likert scale. The difference is however not very significant suggesting that the increase in brand value of a company or product supporting women empowerment is equally well received by both the genders.

6. Community Development & Age Group

The F-value for community development and age groupings as a factor is calculated to be 0.45 which is lower than the degrees of freedom at 2.6. The null hypothesis stands verified for this particular cause. Community development as a cause is not very well received by all the age groups in the population sample that has responded to this particular survey. The averages on the likert scale lie around 3.5 for all the age groups with 3.7 being the highest value returned by the lower middle-age group of 25 to 35. This age group primarily comprising of the population that has just entered the working age group is significant as the buying behaviours set at this age could carry on for the rest of their life.

7. Environment & Age Groups

The F-value for the various age groups and environment as a theme is well above the degrees of freedom at 3.6. The averages returned on the likert scale are quiet varied with the lowest being returned by the oldest age group at 3.6. The older generation is not very closely attached with environment as a factor that can be leveraged for social marketing. The highest average value is 4.25 returned by the middle aged group of 36 to 45. The generation gap between the consecutive generations on matters of environment is strikingly varied.

8. It is important to me that the brand I buy or use is involved in social campaigns & Age Groups.

The F-value for different age groups and importance that a consumer attaches to his brand’s marketing campaigns is 3.11 which are above the limiting value of 2.6. The alternative hypothesis is therefore conclusive established. In a price sensitive market such as India, the utility of a product or service would tend to be important to a consumer. The values are consistently on the lower end for all the age groups, with the price sensitive segment consisting of the population between 18 and 24 returning an average mean of 3.1 on the likert scale. Similarly the segment consisted predominantly by the retired age group also returned a low average value of 3.2. The highest average is returned by the middle aged working population which is calculated at 3.62 on the likert scale.

9. What would you prefer: Company donates % of sales revenue to NGO vs company donates a product or service for every purchase.

The F-value for different age groups and their view of a cause campaign donating a product or service in lieu of increased purchases by customers in alternative to making a financial contribution is calculated to be 2.7 which establishes the alternative hypothesis. However all the age groups have returned values between 3.4 and 3.8. The overall population sample has an average value of 3.6 which is close to the median which signifies that there is no real consensus on this factor.
<table>
<thead>
<tr>
<th>Social Cause</th>
<th>AgeGroup (18-24)</th>
<th>AgeGroup (25-35)</th>
<th>AgeGroup (36-45)</th>
<th>AgeGroup (45 and above)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education</td>
<td>3.7</td>
<td>3.8</td>
<td>4.2</td>
<td>3.7</td>
</tr>
<tr>
<td>Health</td>
<td>4.1</td>
<td>4.0</td>
<td>4.4</td>
<td>4.0</td>
</tr>
<tr>
<td>Traffic Sense</td>
<td>3.3</td>
<td>3.6</td>
<td>4.1</td>
<td>3.5</td>
</tr>
<tr>
<td>Women Empowerment</td>
<td>3.9</td>
<td>4.0</td>
<td>4.2</td>
<td>3.6</td>
</tr>
<tr>
<td>Community Development</td>
<td>3.5</td>
<td>3.7</td>
<td>3.6</td>
<td>3.7</td>
</tr>
<tr>
<td>Environment</td>
<td>4.0</td>
<td>3.9</td>
<td>4.2</td>
<td>3.7</td>
</tr>
</tbody>
</table>

Table 3 Average mean scores on a 5 point Likert Scale for perspectives regarding different age groups
### Hypothesis testing with Income as an Independent Variable

![Graph showing F-Value for Income as an Independent Variable]

1. **Health and Income groups**

   The F-value for the various income classes in the population sample and health as theme for cause marketing is calculated to be 3.44. The degrees of freedom, as calculated above are 2.60. The alternative hypothesis is correct in this case. Mean scores of different income groups as reaction to health as a cause (4.1041), (4.0266), (3.625), (4.1933). It can be noted that all income group consider this to be an important issue. Whether the income is high or low health related issues are considered to be priority for consumers and government. Companies should divert their campaigns towards Health causes. It will improve their brand image and will increase sales of their products.

2. **Education and Income groups**

   The F-value for the various income classes in the population sample and education as theme for cause marketing is calculated to be 2.754. The degrees of freedom, as calculated above are 2.60. The alternative hypothesis therefore is proved correct. There is impact of income on the preference of educational cause. Mean score of different income groups are (3.6666), (3.7466), (3.4), (3.8618) we can observe from these mean scores that consumers consider education as an important cause that is prevailing in the society and are willing to support a company who promotes such causes. The companies can therefore engage themselves in such cause, which will benefit them in increasing their brand image as well as making an emotional appeal by influencing the mindset of consumers.

3. **Community development and Income groups**

   The F-value for the various income classes in the population sample and community as theme for cause marketing is calculated to be 2.64. The degrees of freedom, as calculated above are 2.60. The alternative hypothesis is true in this case with a narrow margin. It is observed that the average of all means is 3.5, which suggests that consumers do give importance to community. This depicts that consumers do think about the community they are living in and are keen to take an initiative in developing it and making it better for their future generation. Therefore marketers should try and indulge into campaigns, which help, in developing community. Such Advertisement campaigns and promotion activities should portray emotions like pity and Happiness as these emotions trigger most of the people according to our research.
4. Women Empowerment and Income Groups

The F-value for the various income classes in the population sample and women as theme for cause marketing is calculated to be 1.36. The degrees of freedom, as calculated above are 2.60. Null hypothesis is applicable in this case. The lowest mean value is calculated for the middle-income group of 40, 000 to 80, 000 with 3.7 as the average on the five point likert scale.

5. Environment and Income Groups

The F-value for the various income classes in the population sample and environment as theme for cause marketing is calculated to be 3.196. The degrees of freedom, as calculated above are 2.60. The alternative hypothesis is correct in this case. The mean on the likert scale is close to 4 with only the first & lowest group having a 3.3 average return on the likert scale. It can be noted that almost each income group has consider this as an importance issue. Environment is considered to be crucial for all. Due to increase in climate change and environmental issues consumers are concerned and wish to consume products that doesn’t harm environment. They even appreciate companies who are shifting towards product which are eco-friendly. Therefore companies should focus more on environmental cause in order to attract more consumers and to further increase their sales.

6. Traffic Sense and Income Groups

The F-value for the various income classes in the population sample and traffic as theme for cause marketing is calculated to be 0.4010. The degrees of freedom, as calculated above are 2.60. Null hypothesis stands true in this case. The average mean value is between 3.4 and 3.6 for all income groups. There is no significant change in perception towards this cause with fluctuations in the disposable income available to an individual. Therefore there is no impact of income on traffic as cause.

7. Income and Global Community vs Local Community

The F-value for the various income classes in the population sample and local community as theme for cause marketing is calculated to be 3.50. The degrees of freedom, as calculated above are 2.60. The alternative hypothesis is true in this case. Income has influence on consumer’s preference of local community over global community. Consumers wish to develop local community rather than global. So marketers and companies should make sure to use campaigns and promotion activities which shall benefits local community. As it has been noted that consumers are more emotionally invested in development and growth of their community therefore consumers can relate to such causes and can develop an emotional attachment with a brand.

<table>
<thead>
<tr>
<th>Social Cause</th>
<th>Income (20-40k)</th>
<th>Income (40-80k)</th>
<th>Income (80-100k)</th>
<th>Income (over 100k)</th>
</tr>
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<tr>
<td>Education</td>
<td>3.6</td>
<td>3.7</td>
<td>3.6</td>
<td>3.8</td>
</tr>
<tr>
<td>Health</td>
<td>4.1</td>
<td>4.0</td>
<td>4.1</td>
<td>4.1</td>
</tr>
<tr>
<td>Traffic Sense</td>
<td>3.4</td>
<td>3.4</td>
<td>3.6</td>
<td>3.4</td>
</tr>
<tr>
<td>Women Empowerment</td>
<td>3.9</td>
<td>3.7</td>
<td>4.1</td>
<td>4.0</td>
</tr>
<tr>
<td>Community Development</td>
<td>3.9</td>
<td>3.4</td>
<td>3.6</td>
<td>3.6</td>
</tr>
<tr>
<td>Environment</td>
<td>3.8</td>
<td>4.0</td>
<td>3.9</td>
<td>4.0</td>
</tr>
</tbody>
</table>

Table 4 Average mean scores on a 5 point Likert Scale for perspectives regarding different Income groups
Comparing the average mean scores obtained from different age & income groups reveals that in all age groups and all income groups, healthcare the most preferred social cause which a company can associate with, to drive its cause –marketing campaign. Women empowerment and Environment have returned high average values in the middle age groups of 25-35 and the middle income groups of twenty to forty thousand.

Some more results regarding specific questions are discussed below.

1. **The trigger of which emotion generated by a cause-advertisement compels a consumer to change their brand.**

![Figure 1: Emotions that leads to change in brand](image)

Emotion is an important sense of perception that can evoke a particular response and alter buying behavior. Looking past the utility perspective, one of the major factors that firms differentiate their offerings is by creating a sense of attachment to the product and the brand. The pie above analyzes the emotional trigger in the entire sample, which is the most potent at influencing their decision to change their brand. Social cause campaigns are designed to evoke an emotional response in a viewer. The intensity of the connection that is established between the brand and the consumer also depends on which emotion is triggered in the minds of the consumer. Happiness was ranked as the most probable emotional trigger that was regarded by the respondents as an emotion that encouraged them to relate to the brand. Pity and anger followed with seventeen and thirteen percent respectively.

When emotional response was analyzed between the genders, not much difference was observed. Happiness was regarded as the most potent emotion at changing perception in both the genders. When comparing anger, women gave higher preference than men but the absolute difference is only about 2 percentage points. These results show that between both the genders, the emotional triggers are consistent in relation to a cause marketing campaign. Cause campaigns that have happiness at the core of the campaign will be better placed to influence consumer mindsets.
2. How often consumers buy a product only to support the social cause that is associated with it

![Buying behaviour graph]

Figure 2: Buying behaviour

Cause related marketing campaigns provide an actionable response to a consumer to support a particular issue. In price sensitive markets such as India, the probability of a consumer buying a product only in support of the cause that the brand supports was analyzed. Out of the total sample population more than half of the respondents stated that they occasionally buy a product to show their support to a particular cause. A quarter of the respondents were very favorably inclined towards buying a product to support a cause. The better connect a customer has with the cause as portrayed by the company, the more the chance of a customer taking action in form of a purchase of a product or a service.

3. Best medium to increase customer engagement for social campaigns

![Media Preference graph]

Figure 3: Techniques of customer engagement for social campaigns

The most preferred medium for companies to interact with customers in their cause marketing campaigns is social media across all age spectrums. The relative absolute percentages vary but the overall social media is able to connect to a wide range of audience. Social media pages and profiles have been leveraged by many campaigns to reach across to many people within the least amount of
time. Videos are a popular medium to invoke emotional response and usually the action that a consumer can undertake is linked to a campaign as video in the end.

4. **The ambassador associated with the social campaign is very important**

![Importance of Ambassador](image)

Figure 4: Importance of Ambassador

The association of an ambassador with advertisement campaigns is a well-established fact. However the benefits of having a personality to endorse a social cause marketing campaign seem to only marginally help in its reach amongst the customers. Almost a quarter of the respondents do not deem to give any importance to the personality endorsing a campaign. About one in every five respondent is of the view that the ambassador is very important to the endorsement of the campaign. Credibility to a campaign can also be lent by keeping it focused on the community, which is being benefitted by it.

5. **How often consumer buy a product only to support the social cause that is associated with it**

![Local Community over Global Community](image)

Figure 5: Local community over global community
The selection of the cause that will be associated with a campaign and ultimate with the brand is very important. Brands also have the choice to support a local community or cause rather than supporting a cause in another country. Here local is interpreted as within a nation as a community. While Multinational brands could prefer a single global cause that can serve to communicate with it all its customers worldwide, most of the respondents preferred local community upliftment. Since Indian community is also regarded as developing country, customers would associate themselves with many local communities and causes. A very percentage (2.9)% of the survey group strongly favors socially responsible activities towards global communities. This ratio could be dissimilar to those in the more developed western nations because of the parity in community development.

6. Company donates % of sales revenue to a NGO vs. Company donates a product or services for every purchase.

![Cash vs Kind](image)

Figure 6: Cash vs. Kind

Another crucial decision taken by a brand is its action in which it supports a cause. Monetary donations to a NGO in the relevant sector seem to be the most convenient donation for a brand. However giving a service or product free of cost adds to the credibility of the brand.

Conclusion:

Amongst the surveyed population it has been found that across all age groups cause marketing contributes to the overall perception of a brand.

Education is perceived as an important social cause by the older age group classes. The middle-aged groups from thirty-six to forty five have the highest preference to education as basis of social campaign amongst all the age groups. The F-value indicates that there is a correlation between the income level of a customer and their preference towards education as a social cause.

All income groups consider improving healthcare a priority with the F score of 3.44 in contrast with age groups where there is no significant relation a consumers’ age and their preference for healthcare as a theme to a marketing campaign. However analyzing the simple mean shows that all age groups and income groups have consistently returned the highest average for healthcare as an effective social cause around which a company can weave its marketing campaign.

The relation between respondent’s age groups and their relative preference for traffic related campaigns is quiet high where as income has no significant effect on traffic related campaigns. The F-value for women empowerment and age is calculated to be 2.78 that are just above the degree of freedom for the fraction in contrast with income that has as such no significant preference on women empowerment campaigns with F value of 1.36.

Community development as a cause is not very well received across all the age groups in the population sample that has responded to this particular survey. Level of income has a significant impact on a consumer’s perspective on community development as a potent social cause for marketing campaign. However the mean averages vary between 3.3 to 3.9 for all age groups and all income groups.
Environment is seen an essential across therefore income as well as age group has impact on environment as a campaign. The F-value for different age groups and importance that a consumer attaches to his brand’s marketing campaigns is 3.11. The means show an increasing trend with income; as average income increases, their preference for taking up environmental issues as a major social cause increases. However with age, the youngest consumer age groups shows the highest affinity for a company directing its campaign towards environmental issues.

Though this study focused on limited geographical area it succeeds in providing insights regarding the behavior of consumer towards cause marketing and their emotional attachment and reaction to a company’s campaign. Future research conducted in this area should focus more on relationship among different campaigns with demographics and problems faced by companies in maintaining their brand image and connect with consumers.
Suggestion:

1. Companies should use advertisement and promotional activities which invokes emotions like happiness and pity which is favored by most of the people that leads them to switch between brands and helps them to relate to particular brand.

2. Companies should target consumers who occasionally buy their product to support cause and convert them to regular consumers. They should introduce campaigns that directly appeal to their target market.

3. Companies should promote their campaigns through social media as well as broadcast media as it engages more customers. Ambassador selection should be very appropriate in order to get more sales and support for social cause.

4. Companies should design their social campaigns in such a way that their donate more in physical goods or tangible services rather than only contribute financially to a cause. Long term engagement with a social cause will lend credibility and be a huge positive for the brand value.

5. Demographics of the target consumer base are an important determinant that should be taken into account when selecting and subsequently designing a campaign around a specific social cause.
Reference:
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13. Sneha Rajput, Nitin Tyagi, Bhakar.SOCIAL CAUSE RELATED MARKETING AND ITS IMPACT ON CUSTOMER BRAND PREFERENCES
The Comparison of Water User Associations Based on EFQM Model; the Experience of Iran

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Abstract
The experiences of the irrigation systems managed by farmers and local communities around the world showed that such systems have a great potential for advancing the sustainability of irrigation system’s productivity. There is no doubt that farmers’ performance in the framework of these irrigation systems, played a significant role in solving the problems of irrigation and drainage plans, improving the irrigation efficiency and effectiveness and also improving the situation of the irrigation networks, and is one of the main topics in operating systems. In this regards, the main purpose of the present study was to evaluate and compare of the water user associations (WUSs) in the Khuzestan province in south of Iran based on the empowerment dimension of the EFQM model. The dominant approach of the present study was quantitative in the form of the descriptive survey. The study area includes four WUSs entitled “Nasr” and “Keshtgaran” in the left beach in Ramshir Township, “Novin Dez” in the Dezful Township and “Nasuhi” in the Shushtar Township. The study population consisted of all farmers in the aforementioned cooperations. Among them selected 45 farmers as the statistical sample. The data collection tool was a researcher made questionnaire based on the empowerment dimension of the EFQM model and its reliability of all 5 factors (i.e. Leadership - Strategy - Partnerships and resources - processes, products, and services) confirmed by calculation of alpha coefficient more than 0.7 and its validity confirmed based on the experts’ viewpoint. SPSS and excel software were used to analyze the data. The results showed that, in total among the WUSs, the factors of partnership and resources, processes, products and services and human resources were at the highest level. Also between the factors and sub-factors of the EFQM were significant mean difference based on the WUSs.

Keywords: Water Users’ Associations (WUSs), Quality management, EFQM, Organizational excellence Model, Water management.
Prospects of Using the Financial Statement Data in Formation of SNA Indicators

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Abstract
The proposed approach to the development of gross value added indicator for Gazprom Group on the basis of consolidated financial statement data is an example of practical solution to the complex of methodological and technical problems related to the harmonization of indicators, developed in accordance with the accounting systems based on International Financial Reporting Standards (IFRS) and methodology of the System of national accounts (SNA).

According to presented calculations, in 2015 the volume of gross output at basic prices by specified in reporting segments of the Group was estimated at the level of 8,991.4 bln. rub., intermediate consumption – 4,591.2 bln. rub., gross value added at market prices – 4,928.2 bln. rub. or 6.1% of total GDP of the Russian Federation.

Keywords: gross value added, gross output, International Financial Reporting Standards, intermediate consumption, System of National Accounts, production account.

In analytical practice the most challenging problem which does not currently have any adequate solution is estimation of impact of the economic performance of individual enterprises or groups of institutional units on macroeconomic (sectorial, regional) indicators. For the Russian practice characterized by the dominance of corporate, government or state-controlled structures in a number of sectors the solution of this problem has the highest priority.

At the present time in international statistics the System of National Accounts (SNA) is methodological basis for development of information base for macroeconomic analysis and forecasting. Combination of SNA indicators in analysis facilitates solving problems of strategic planning and management of key processes implemented at the macroeconomic, sectorial and regional levels.

An important additional source used for development of national accounts is financial statement of organization prepared for different groups of users, including investors and shareholders of enterprises engaged in various spheres of economic activity. At the same time compared to the national accounts, where methodological standards recognized in the international statistics are effective, methodology of financial statement preparation is currently under development.

Orientation of SNA on financial statements as the primary data source in formation of macroeconomic indicators is defined by the prevalence of International Financial Reporting Standards (IFRS) provisions in international accounting practice. Specified provisions are currently used in accounting in more than hundred countries around the world. The standards are currently being used not only by significant part of the large private companies in the countries where corresponding national standards are effective but also by almost all transnational companies.

Alternatively to the SNA methodology development of methodological standards for financial statement is related to later period and connected with the activities of International Accounting Standards Committee (IASC). In 1973 the Committee developed the basic accounting standards (International Accounting Standards - IAS), which were later renamed International Financial
Reporting Standards (IFRS). During the functioning period the Committee, in accordance with changes in economic conditions, regularly updated Standards provisions, which significantly improved the quality of developed data. At present these data in full can be used for the formation of national accounts, and first of all for industries, which are characterized by the dominance of large enterprises.

Compared to the data generated according to official statistics, the financial statement by analogy with administrative sources is characterized by the following features:

- lower costs associated with obtaining relevant information, which in some cases may be received free of charge;
- wider (in some cases almost complete) coverage of population units which are objects of recording;
- higher quality of the formed information in the absence of observational errors, greater reliability and detailing of data, connected with different groups of units specified in the population structure;
- greater degree of formed information updating;
- lower burden on respondents, presented by business entities, in the process of primary data collection;
- opportunity of using relevant information to improve the quality of the business registers used as the basis for statistical observations etc.

The main disadvantage of the information base, formed on the basis of financial statement, are problems of obtaining access to information which may be associated with the absence of legislative regulations allowing statistical agencies to use relevant data as part of common information base and data reconciliation problems with their various formats, detailing, observation periods, etc.

Both systems are characterized by continuous development and convergence of conceptual and methodological principles of economic transactions accounting. At the same time International Financial Reporting Standards, being less formalized system than SNA and focused on the priorities of essentiality, possibilities of interpretation and availability of information for different users, allow forming the primary data, using of which provides necessary quality, reliability and adequacy of analytical indicators developed on their basis.

Formally used in the SNA rules of formation of accounts are based on the principles applied in business accounting.

Generally the main provisions and methods of accounting (International Accounting Standards - IAS / International Financial Reporting Standards - IFRS) are consistent with the provisions and methods of SNA concerning recording of transactions on accrual basis, using double-entry principle, balance sheet constructing, value estimating, ensuring of accounting system coherence, etc.

With compliance of basic rules and methods of business and SNA accounting there are differences between two accounting systems which are currently the most important subject area of international research.

Basic and internationally recognized recommendations on methodology of harmonization of macroeconomic indicators system and financial statement indicators are presented in the provisions of the System of National Accounts (SNA 2008). In practice the SNA methodology is the basis for harmonization of macroeconomic statistics indicators in the following aspects:

- SNA is considered as a conceptual framework to ensure consistency of definitions and classifications used in various fields of statistics;
- SNA functions as accounts structure that provides balancing of data obtained from various sources, including data received from business observations, results of households surveys, foreign trade statistics, tax information, as well as data from other administrative sources.
The basic document containing specific recommendations for harmonization of national accounts and business accounts is Handbook “Links between business accounting and national accounting”, developed by the United Nations Statistics Division. The main purpose of the Handbook is to encourage the use in national statistics financial statement data in the process of development of System of national accounts indicators.

An example of relevant regional methodological developments in harmonization of SNA indicators and administrative sources data are Eurostat’s developments, containing the schemes of macroeconomic indicators formation based on financial statement data for non-financial, financial corporations and government sector (Eurostat handbook “Essential SNA: Building the basics”, Eurostat, 2013 edition).

At the present time progressive methodological developments in this area also exist in national statistics. For example, advanced practice is French experience in development of “bridge tables”. The purpose of the tables is transformation of business accounts indicators into intermediate level, adapted to SNA indicators.

Theoretically the system of indicators, based on SNA accounting principles, could be formed on the basis of financial statement data. In this case analysts have the opportunities of using the alternative approaches to construction of SNA macroeconomic indicators that makes estimation of their quality based on assessment of convergence of corresponding calculated values possible.

The paper covers one of the possible approaches to building of gross value added (GVA) for non-financial corporations (NFC) indicator on the basis of financial statement data. GVA is the key macroeconomic indicator used in international practice in the analysis of processes related to the production of goods and services. The proposed approach is example of practical solution to the complex of methodological and technical problems connected with the harmonization of primary and macroeconomic indicators, developed according to relevant accounting systems based on International Financial Reporting Standards and System of National Accounts methodology.

In the SNA non-financial corporations (NFC) are defined as corporations the major activity of which is production of market goods or nonfinancial services. Main part of NFC sector are resident non-financial corporations. In addition the sector includes some non-profit institutions (NPIs) engaged in market production of goods and services as well as business associations, financed by contributions from non-financial corporations and unincorporated enterprises.

According to the SNA classification of non-financial corporations sector includes the following structural elements:

- national private non-financial corporations;
- public non-financial corporations;
- foreign controlled non-financial corporations.

The basis for harmonization are the SNA methodological principles, which define the content of NFC production activity and its boundaries, composition of performance indicators and formats of their presentation in the system of accounts under development. In the SNA the production is defined as an activity carried out “under the responsibility, control and management of institutional unit in which labor and assets are used to transform inputs of goods and services into outputs of other goods and services”.

The production process for NFC in the SNA is defined by its boundaries, covering defined in the System types of production according to the purpose of manufactured products (goods and services) for sale, own use by manufacturers or provision to other units free of charge or at the prices that are significantly different from market prices of similar products. In the economic analysis of the production, as a rule, its main aspects are connected with activities of enterprises related to the production of goods and services as part of market production.

Market production in the SNA is defined as production of goods and services in the accounting period:

- sold at economically significant prices;
bartered in exchange for other goods, services or assets;
used for payments in kind, including compensation in kind;
supplied by one establishment to another belonging to the same market enterprise to be used as intermediate inputs;
value of changes in inventories of finished goods and work-in-progress intended for one or other of the above uses;
margins charged on the supply of goods and services, transport margins, margins on the acquisition and disposal of financial assets, etc.

Goods and services produced and used within the enterprise unit (SNA terminology - establishment) in the accounting period according to the SNA principles should be excluded from the measure of output unless manufactured goods are used for purposes of gross accumulation or own final consumption by unit which produced them.

Basic indicators related to production activities of the NFC in the SNA are presented in Table 1.

<table>
<thead>
<tr>
<th>Use of resources</th>
<th>Resources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intermediate consumption</td>
<td>Gross output</td>
</tr>
<tr>
<td><strong>Gross value added</strong></td>
<td></td>
</tr>
<tr>
<td>Consumption of fixed capital (-)</td>
<td></td>
</tr>
<tr>
<td><strong>Net value added</strong></td>
<td></td>
</tr>
</tbody>
</table>

In the SNA the intermediate consumption consists of the value of the goods and services consumed as inputs by a process of production, excluding fixed assets whose consumption is recorded as consumption of fixed capital.

GVA - the balancing item of the production account for the economy as a whole - defined as the difference between gross output and intermediate consumption indicators.

This indicator can be determined using the basic and producers’ prices. Gross value added at basic prices is defined as output valued at basic prices less intermediate consumption valued at purchasers’ prices. Gross value added at producers’ prices is defined as output valued at producers’ prices less intermediate consumption valued at purchasers’ prices.

Value added estimates the newly created value and in the SNA is recommended to be measured on net basis - excluding the consumption of fixed capital (CFC) - the element of production costs. However, due to the methodological problems, associated with CFC estimations, in accordance with the SNA methodology for the economy the value added indicator allows calculating on gross basis.

In forming the SNA production account it is preferable to use the entire set of elements, included in the financial statement of the organizations which economic content corresponds to defined SNA elements of output and intermediate consumption. The main methodological and technical tasks in solving this problem are:

- rationale for hypotheses, defining relevant elements of output and intermediate consumption in financial statement;
- analysis of accounting policy of organization to clarify the content of statement elements and rationale for their inclusion in the calculations of corresponding production account indicators;
- adjustments to financial statement elements, correlated with SNA production account indicators, in the absence of direct analogues;
quality evaluation of developed SNA indicators in case of absence of some elements in financial statements, which should be included in the SNA indicators.

The SNA principles are generally similar to the principles used in IFRS regarding the use of accrual method, double-entry principle of etc. At the same time experts recognize the existence of a number of conceptual differences in accounting methodology related, in particular, to cost accounting based on the historical (in business accounting) and current (in the SNA) costs, value-added tax (VAT) calculated on gross and net basis and others. Such differences are of fundamental importance in the subsequent selection of the schemes of financial statement data transformation into the SNA production account indicators. Their selection is also determined by format of the statement, degree of detailing of the accounting information, availability of comments to the statement etc.

As information base for output indicator formation the standard (IAS) 18 “Revenue” is used. The standard defines revenue as gross acquisition of economic benefit from ordinary activity of the company for the accounting period.

Revenue is recognized as acquisition of economic benefits, related to sales of goods, rendering of services or use by other business units company's assets and received in the form of interest, dividends or royalties. The main type of revenue for business enterprise is the revenue from sales of goods and rendering of services.

The output component of the SNA production account, containing such elements as: trading margins, transportation expenses, markups on transactions related to the acquisition and sale of financial assets, etc., is formed according to the residual principle and economic content of the revenues from activities that are not included in other components.

The standard (IAS) 2 “Inventories” is initial in the formation of the SNA intermediate consumption indicator. The Standard regulates the procedures of production costs accounting and rules for selection of theirs calculation methods.

In the production cost structure in accordance with the standard (IAS) 2 the following types of costs are identified:

- production variable direct costs;
- production fixed indirect costs;
- production variable indirect costs.

For exchange transactions included in the gross output of the NFC in the IFRS the principle of non-cash transactions accounting between subjects is provided. In accordance with the principle transactions generating revenue for organization are recognized in cases of non-equivalence of the relevant exchange transactions (standard 18 “Revenue”). The key feature of non-equivalence is connected as a rule with exchange of unanalogous goods, works and services transactions. In these cases estimations of non-equivalence degree should be carried out on the basis of fair value and differences between the value estimates should be compensated in cash. In determining the fair value it is advisable to orient to IFRS standard 13, provisions of which allow using indirect estimates, related to goods, works, services, industrial (sectorial) indicators with similar characteristics.

The accounting of goods and services, produced by enterprises and used for making payments in kind, in the IFRS is regulated by IFRS 19 “Employee Benefits”. This standard contains only the most general information about relevant component in the structure of benefits without specific explanations regarding peculiarities of accounting and disclosure of information about corresponding component in financial statement. Taking into account the essentiality of this component, the general requirements for disclosure of information on the personnel costs of organization are contained in the IFRS 1 “Presentation of Financial Statements”.

In the statement the NFC’s output component “Costs of goods and services transferred or provided to other establishments of enterprises - market producers, for their use for intermediate consumption” at the primary level may be recorded only for operating segments of the enterprise, specified in accordance with the Standard (IFRS) 8 “Operating Segments”. The standard also defines the criteria
for identification of operating segments in the statement of the organization, depending on their share in the total revenue and in the total assets of its operating segments. If these criteria are not met, the operating segments may be classified as reportable. In this case information on them can be disclosed separately if it is significant for potential users of financial statement.

The provisions of this standard under certain conditions (circulation of their debt or equity instruments in open markets) in addition to the consolidated financial statement may also be applied to separate or individual financial statement of the units.

The output components in the form of changes in inventories of finished and unrealised goods and changes in inventories of products at the stage of work in progress are regulated by the standard (IAS) 2 “Inventories”. The standard identifies in their structure the groups of assets: intended for sale in the course of ordinary economic activity, assets used in the process of production and intended for sale as well as assets in the form of raw materials and supplies which are intended for use in production or in the rendering of services.

The assets, specified in the structure of inventories, intended for sale in the course of ordinary economic activity, include finished goods disposable at the moment. Accordingly, when changes in inventories of this group of assets (similar to the change in the work-in-process component) are result of production activities, relevant estimates should be included in the gross output indicator.

The components of the inventories in the structure of organization's assets are also purchased goods intended for resale, finished products and work in progress. In the IFRS, the recognition of inventories in accounting is carried out at the time of the transition of property-related risks and benefits to the organization.

In the IFRS for value estimates of inventories it is recommended to use estimates based on calculations of their actual value or net sales price with orientation on the lowest value of compared indicators.

To determine the value of interchangeable inventories in IFRS it is preferable to use “First-in-first-out method” or the “Weighted average cost method”. In cases when both methods are used the inventories should be estimated on the basis of the lowest of the calculated values.

The existing differences in the structure and accounting principles for the elements of output and intermediate consumption indicators of the SNA production account, developed for the NFC, and the elements of the income statement considered as a potential basis for formation of relevant macroeconomic indicators, exclude the possibility of using the standard aggregation algorithms for these purposes.

At the present time in the international practice approaches, based on the development of interim accounts, that concentrate the elements of financial statement used at subsequent stages in the formation of relevant SNA indicators, are used.

The corresponding formats of interim accounts, developed for the NFC indicators of gross output and intermediate consumption, are presented in Figures 1 and 2.
Gross output

= Sales less discounts, refunds, VAT and sales taxes
  “-”
Cost of goods purchased for resale
  “-”
Inventories of finished goods at the end of reporting period
  “-”
Inventories of finished goods at the beginning of reporting period
  “-”
Cost of production at the work-in-progress stage at the end of reporting period
  “-”
Cost of production at the work-in-progress stage at the beginning of reporting period
  “-”

Components of other income of the organizations:
• income from renting of buildings and equipment
• licensing income on intellectual property products

Figure 1 - Formats of the interim account for gross output indicator development for the NFC

Intermediate consumption

= Cost of materials used in production
  “-”
The cost of consumed services and renting services
  “-”
The cost of materials, services (including commission charges and rent), used in production
  “-”
License payments for the use of “intellectual property products”
  “-”
Costs for materials and services related to the discontinued operations segment

Figure 2 – Formats of the interim account for intermediate consumption indicator development for the NFC

The general methodological approaches to the harmonization of the SNA production account indicators and financial statement data, presented in the paper, are the basis for further development of schemes and algorithms for development of output and intermediate consumption indicators for economic units of non-financial corporations sector.

An additional element, included in the SNA production account, is consumption of fixed capital indicator, which corresponds by criterion of the economic content to depreciation indicator. In practice the harmonization of these elements requires the use of special schemes.

The paper proposes the approach to GVA for NFC calculation by the example of using consolidated financial statement data of Public Joint Stock Company Gazprom (PJSC Gazprom) (before July 2015 - JSC Gazprom) and its subsidiaries (Gazprom Group) for the year of 2015 (PJSC Gazprom IFRS Consolidated Financial Statements, 31 December 2015)

In calculation data, presented in the sections “Segment information”, “Operating expenses” and “Inventories”, included in the Notes to the consolidated financial statement of the Group, were used.

The statement covers the following reportable segments of economic activity of the Group:
• Production of gas – exploration and production of gas;
• Transportation – transportation of gas;
• Distribution of gas – sales of gas within the Russian Federation and abroad;
• Gas storage – storage of extracted and purchased gas in underground gas storages;
• Production of crude oil and gas condensate – exploration and production of oil and gas condensate, sales of crude oil and gas condensate;
• Refining – processing of oil, gas condensate and other hydrocarbons, and sales of refined products;
• Electric and heat energy generation and sales.

Other activities have been included within “All other segments” column.

The schemes for estimation of gross output, intermediate consumption and value added of Gazprom Group for the year of 2015 on the basis of consolidated financial statement are presented in Tables 2-4.

Table 2 - Scheme of gross output estimation for Gazprom Group, bnl. rub., 2015

<table>
<thead>
<tr>
<th>№</th>
<th>Financial statement indicators</th>
<th>Information base</th>
<th>Indicator value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Revenues from external sales for reportable segments (net -excluding VAT and other similar obligatory charges)</td>
<td>Notes to the Consolidated financial statement. Segment information.</td>
<td>5, 864.7</td>
</tr>
<tr>
<td>2</td>
<td>(+) Revenues from external sales for other segments</td>
<td>Notes to the Consolidated financial statement. Segment information.</td>
<td>287.4</td>
</tr>
<tr>
<td>3</td>
<td>(=) Total external segment sales</td>
<td>Notes to the Consolidated financial statement. Segment information.</td>
<td>6, 152.1</td>
</tr>
<tr>
<td>4</td>
<td>(-) Differences in external sales</td>
<td>Notes to the Consolidated financial statement. Segment information.</td>
<td>78.8</td>
</tr>
<tr>
<td>5</td>
<td>(=) Total external sales per the consolidated statement of comprehensive income</td>
<td>Notes to the Consolidated financial statement. Segment information.</td>
<td>6, 073.3</td>
</tr>
<tr>
<td>6</td>
<td>(+) Revenues from inter-segment sales</td>
<td>Notes to the Consolidated financial statement. Segment information.</td>
<td>2, 453.7</td>
</tr>
<tr>
<td>7</td>
<td>(=) Adjusted segment sales</td>
<td>Estimated value.</td>
<td>8, 527.0</td>
</tr>
<tr>
<td>8</td>
<td>(+) Changes in inventories of finished goods, work in progress</td>
<td>Notes to the Consolidated financial statement. Operating expenses.</td>
<td>121.8</td>
</tr>
<tr>
<td>9</td>
<td>(+) Research and development expenses (capitalized output)</td>
<td>Notes to the Consolidated financial statement. Operating expenses.</td>
<td>30.6</td>
</tr>
<tr>
<td>10</td>
<td>(-) Goods for resale purchased during the period</td>
<td>Notes to the Consolidated financial statement. Operating expenses.</td>
<td>193.3</td>
</tr>
<tr>
<td>11</td>
<td>(-) Changes in inventories for resale</td>
<td>Notes to the Consolidated financial statement. Inventories.</td>
<td>9.9</td>
</tr>
<tr>
<td>12</td>
<td>Net output at basic prices</td>
<td>Estimated value.</td>
<td>8, 476.2</td>
</tr>
<tr>
<td>13</td>
<td>(+) Depreciation</td>
<td>Notes to the Consolidated financial statement. Operating expenses.</td>
<td>515.2</td>
</tr>
<tr>
<td>14</td>
<td>(=) Gross output at basic prices</td>
<td>Estimated value.</td>
<td>8, 991.4</td>
</tr>
</tbody>
</table>
Table 3 – Scheme of intermediate consumption estimation for Gazprom Group, bnl. rub., 2015

<table>
<thead>
<tr>
<th>№</th>
<th>Financial statement indicators</th>
<th>Information base</th>
<th>Indicator value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Purchased gas and oil</td>
<td>Notes to the Consolidated financial statement. Operating expenses.</td>
<td>1,048.5</td>
</tr>
<tr>
<td>2</td>
<td>(+) Transit of gas, oil and refined products</td>
<td>Notes to the Consolidated financial statement. Operating expenses.</td>
<td>534.5</td>
</tr>
<tr>
<td>3</td>
<td>(+) Materials</td>
<td>Notes to the Consolidated financial statement. Operating expenses.</td>
<td>299.1</td>
</tr>
<tr>
<td>4</td>
<td>(+) Repairs and maintenance</td>
<td>Notes to the Consolidated financial statement. Operating expenses.</td>
<td>161.6</td>
</tr>
<tr>
<td>5</td>
<td>(+) Electricity and heating expenses</td>
<td>Notes to the Consolidated financial statement. Operating expenses.</td>
<td>91.8</td>
</tr>
<tr>
<td>6</td>
<td>(+) Rental expenses</td>
<td>Notes to the Consolidated financial statement. Operating expenses.</td>
<td>35.6</td>
</tr>
<tr>
<td>7</td>
<td>(+) Transportation services</td>
<td>Notes to the Consolidated financial statement. Operating expenses.</td>
<td>32.2</td>
</tr>
<tr>
<td>8</td>
<td>(+) Research and development expenses</td>
<td>Notes to the Consolidated financial statement. Operating expenses.</td>
<td>30.6</td>
</tr>
<tr>
<td>9</td>
<td>(+) Insurance expenses</td>
<td>Notes to the Consolidated financial statement. Operating expenses.</td>
<td>27.2</td>
</tr>
<tr>
<td>10</td>
<td>(+) Processing services</td>
<td>Notes to the Consolidated financial statement. Operating expenses.</td>
<td>18.8</td>
</tr>
<tr>
<td>11</td>
<td>(+) Inter-segment sales expenses</td>
<td>Notes to the Consolidated financial statement. Segment information.</td>
<td>2,453.7</td>
</tr>
<tr>
<td>12</td>
<td>(-) Changes in gas inventories in pipelines and storages</td>
<td>Notes to the Consolidated financial statement. Inventories.</td>
<td>96.8</td>
</tr>
<tr>
<td>13</td>
<td>(-) Changes in inventories of materials and supplies</td>
<td>Notes to the Consolidated financial statement. Inventories.</td>
<td>51.4</td>
</tr>
<tr>
<td>14</td>
<td>(+) Changes in inventories of crude oil and refined products</td>
<td>Notes to the Consolidated financial statement. Inventories.</td>
<td>5.8</td>
</tr>
<tr>
<td>15</td>
<td>(=)Intermediate consumption</td>
<td>Estimated value.</td>
<td>4,591.2</td>
</tr>
</tbody>
</table>

Table 4 – GVA estimations for Gazprom Group, bnl. rub., 2015

<table>
<thead>
<tr>
<th>№</th>
<th>Financial statement indicators</th>
<th>Information base</th>
<th>Indicator value</th>
</tr>
</thead>
<tbody>
<tr>
<td>16</td>
<td>Gross value added (GVA) at basic prices</td>
<td>Estimated value (item 14 table 2 – item 15 table 3).</td>
<td>51.4</td>
</tr>
<tr>
<td>17</td>
<td>Gross value added (GVA) at market prices</td>
<td>Estimated value.</td>
<td>4,928.2</td>
</tr>
</tbody>
</table>


In accordance with the calculations the contribution of Gazprom Group to Russia's GDP in 2015 was estimated at the level of 4,928.2 bnl. rub. (6.1% of the total volume of Russia's GDP).

Further adjustments of the proposed calculation schemes are connected with the extension of the related information base and inclusion in the financial statement additional elements taken into account in the construction of SNA production account indicators.

In particular, in the structure of gross output it is preferable to include elements of income, resulted from the secondary activities of the Group - income from rentals of buildings, equipment, copyright royalties, etc. For their inclusion in the output it is required additional information, separating them from other comprehensive income of the Group.
Such income must also be differentiated from SNA property income, included in allocation of primary income account, which is not part of the output and, accordingly, not included in the production account – interest receivable, income from leasing of non-produced assets (mineral resources, land resources), objects of patenting etc.

Similarly, in the intermediate consumption it should be included the expenses, related to the payment of royalties from use of copyright objects, purchased from other institutional units.
References


Energy Sufficiency Through Crude Oil: An Indian Perspective

Pal Y. Brahmbhatt, Pandit Deendayal Petroleum University, India

Energy is an essential factor of an economic growth and is vital to the sustenance of a modern economy. The future of an economy and its growth depends on the long-term availability of energy from sources that are accessible, affordable and environmentally friendly. For any developing nation, the strategy to obtain and meet the energy requirements and energy developments are the integral part of the overall economic strategy.

Crude oil industry has been considered as the backbone of an economy because of its prime importance as a source of energy till date. Thus, it is understood that any economy around the world shall fail to precede a single step in the absence of crude oil industry; making crude oil, a paramount factor amongst other high importance factors of an economy. The price of the crude oil industry is determined by the demand-supply mechanism around the world. The crude oil industry always needs to perform an exploration research all over the world for finding more crude oil sites which also become instrumental in the setting up of crude oil industry. Crude oil exists as a liquid that rests in various formations deep within the Earth’s crust. This liquid forms as a result of the decomposition of organic material that dates back millions of years. Crude oil is a mixture of complex hydrocarbon molecules and other organic compounds. Crude oil is far from being one homogenous substance. Its physical characteristics differ depending on where in the world it’s pulled out of the ground, and those variations determine its usage and price. The Energy Information Administration (EIA) puts it succinctly: “not all crude is created equal.” Some has a lot of sulphur, and it’s called sour. Oil with less sulphur is called sweet. Crudes also vary in how dense they are. Sweet, light crude is the most valuable type of oil. Sour, heavy oil fetches the lowest prices. The price of crude oil is the most significant factor determining the prices of petroleum products. Consequently, the price of gasoline is largely determined by the worldwide demand for and supply of crude oil.

Oil is the world economy’s most important source of energy and is therefore critical to economic growth. Its value is driven by demand for refined petroleum products, particularly in the transportation sector. Petroleum products power virtually all motor vehicles, airport, marine vessels, and trains around the globe. In total, products derived from oil, such as motor gasoline, jet fuel, diesel fuel, and heating oil, supply 33% of all the energy consumed by households, businesses, and manufacturers worldwide. The global market responds to shifts in crude oil production and consumer demand in differing geographic areas. Activities in the physical markets are supported by futures and other financial contracts that allow buyers and sellers to efficiently insure themselves against significant price and other business risks, thereby minimizing the impact of price volatility on their operations. In sum, the global oil market comprises thousands of participants who help facilitate the movement of oil from where it is produced, to where it is refined into products, and from there to where those products are ultimately sold to consumers.

India’s substantial and sustained economic growth is placing enormous demand on its energy resources. India’s crude oil and natural gas production has been stagnating in recent years. The wide gap between demand and supply has increased the nation’s dependency on imports. India is Asia’s second-biggest energy consumer since 2008, overtaking Japan as the world’s third-largest oil consuming nation behind US and China. India produces a little under a quarter of its crude oil demand. According to the PPAC (Petroleum Planning & Analysis Cell), in fiscal year 2014 the country produced ~37, 800 TMT (thousand metric tons) of crude oil. The total consumption for the year was 158, 400 TMT. As a result, 77.6% of the requirement was fulfilled by imports. This trend continues to date. In November 2014, India’s crude oil production only accounted for 22% of its domestic consumption.
The nations’ domestic oil production has never been able to keep pace with its alarming consumption which has led to an exponential amount of net imports. According to the BP Statistical Review of World Energy, India’s oil consumption will be the fastest among all major economies by 2035. While energy consumption will grow by 4.2 per cent per annum — faster than all major economies in the world — India’s consumption growth of fossil fuels would be the largest in the world. Oil consumption will rise from 4.1 million barrels per day in 2015 to 9.2 million bpd in 2035. Its share of global energy demand increases to 9 per cent by 2035, accounting for the second largest share among the BRICS countries with China at 26 per cent, Russia at 4 per cent and Brazil at 2 per cent; states the report.

Presently, almost 83% of India’s crude oil is availability is through imports. Such high dependency restricts the nation to become self-sufficient in the energy sector. According to Indian petroleum and natural gas statistics (2014-15), the crude oil production for the year 2014-15 was at 37.461 Million Metric Tonnes (MMT) as against production of 37.788 MMT in 2013-14, showing a decrease of about 0.87%. Apart from natural decline in the old and ageing fields, production of crude oil was affected due to less production from RION-90/1 related to operational problems in July, 2014. Rajahmundry and Cauvery assets’ production was affected due to closure of wells owing to the GAIL pipeline incident. In Neelam–Heera asset there was reduced crude oil production due to clamping of sub-sea lines.

As discussed earlier, the country’s dependence on imports to meet the domestic crude oil requirements has increased markedly. This increased dependence on foreign countries also exposes the country to geopolitical uncertainties and the volatility in the international oil markets. More than two-thirds of the total crude oil imported by India originates in the Middle East and more than 80% imports are from OPEC countries (Table 2 and Figure 6). This implies that a significant proportion of India’s crude oil supplies pass through the geopolitical bottleneck – the Straits of Hormuz.
Table- 1. Sources of crude oil imports

<table>
<thead>
<tr>
<th>Region</th>
<th>2009-2010</th>
<th>2010-2011</th>
<th>2011-2012</th>
<th>2012-2013</th>
<th>2013-2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Middle East</td>
<td>92.94</td>
<td>94.96</td>
<td>103.72</td>
<td>104.98</td>
<td>118.64</td>
</tr>
<tr>
<td>Africa</td>
<td>21.49</td>
<td>21.23</td>
<td>32.94</td>
<td>35.58</td>
<td>31.13</td>
</tr>
<tr>
<td>Asia</td>
<td>4.63</td>
<td>4.90</td>
<td>3.95</td>
<td>3.27</td>
<td>3.44</td>
</tr>
<tr>
<td>South America</td>
<td>1.43</td>
<td>7.63</td>
<td>12.09</td>
<td>15.06</td>
<td>14.54</td>
</tr>
<tr>
<td>Eurasia</td>
<td>2.47</td>
<td>1.81</td>
<td>3.98</td>
<td>1.54</td>
<td>1.04</td>
</tr>
<tr>
<td>North America</td>
<td>0.41</td>
<td>-</td>
<td>0.22</td>
<td>0.2</td>
<td>0.02</td>
</tr>
<tr>
<td>Australia</td>
<td>0.17</td>
<td>0.07</td>
<td>0.36</td>
<td>1.69</td>
<td>0.65</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>123.54</strong></td>
<td><strong>130.62</strong></td>
<td><strong>157.26</strong></td>
<td><strong>162.32</strong></td>
<td><strong>169.46</strong></td>
</tr>
</tbody>
</table>

Table- 2. Crude Oil Production

<table>
<thead>
<tr>
<th>Year</th>
<th>Crude Oil Production (MMT)</th>
<th>Percentage Growth in crude oil production</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009-2010</td>
<td>33.690</td>
<td>0.54</td>
</tr>
<tr>
<td>2010-2011</td>
<td>37.684</td>
<td>11.85</td>
</tr>
<tr>
<td>2011-2012</td>
<td>38.090</td>
<td>1.08</td>
</tr>
<tr>
<td>2012-2013</td>
<td>37.862</td>
<td>-0.60</td>
</tr>
<tr>
<td>2013-2014</td>
<td>37.788</td>
<td>-0.19</td>
</tr>
<tr>
<td>2014-2015</td>
<td>37.461</td>
<td>-0.87</td>
</tr>
</tbody>
</table>
There was an increase of 0.10% in the estimated reserve of crude oil for the country as a whole during 2014-15 as compared to the position a year ago. During the same period, estimated reserves of crude oil in Arunachal Pradesh, Rajasthan and Assam decreased by 44.75%, 17.04% and 2.11% respectively, while the same in Tamil Nadu, Andhra Pradesh, Gujarat, Western Offshore and Eastern Offshore increased by 18.42%, 15.30%, 2.58%, 1.88% and 0.59% respectively.

Table 3. Statewise Estimated Reserves of Crude Oil in India as on 31.03.2014 and 31.03.2015

<table>
<thead>
<tr>
<th>States/UTs/Regions</th>
<th>Crude Petroleum (million tonnes)</th>
<th>31.03.2014 Distribution (%)</th>
<th>Estimated Reserves</th>
<th>31.03.2015 Distribution (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arunachal Pradesh</td>
<td>2.95</td>
<td>0.39</td>
<td>1.63</td>
<td>0.21</td>
</tr>
<tr>
<td>Andhra Pradesh</td>
<td>11.44</td>
<td>1.50</td>
<td>13.19</td>
<td>1.73</td>
</tr>
<tr>
<td>Assam</td>
<td>137.08</td>
<td>22.69</td>
<td>169.42</td>
<td>22.19</td>
</tr>
<tr>
<td>Eastern Offshore 1</td>
<td>56.09</td>
<td>7.35</td>
<td>56.42</td>
<td>7.39</td>
</tr>
<tr>
<td>Gujarart</td>
<td>135.01</td>
<td>17.70</td>
<td>138.49</td>
<td>18.14</td>
</tr>
<tr>
<td>Nagaland</td>
<td>2.69</td>
<td>0.35</td>
<td>2.69</td>
<td>0.35</td>
</tr>
<tr>
<td>Rajasthan</td>
<td>45.00</td>
<td>5.90</td>
<td>37.33</td>
<td>4.89</td>
</tr>
<tr>
<td>Tamil Nadu</td>
<td>9.12</td>
<td>1.20</td>
<td>10.80</td>
<td>1.41</td>
</tr>
<tr>
<td>Tripura</td>
<td>0.07</td>
<td>0.01</td>
<td>0.07</td>
<td>0.01</td>
</tr>
<tr>
<td>Western Offshore 2</td>
<td>327.28</td>
<td>42.91</td>
<td>333.44</td>
<td>43.67</td>
</tr>
<tr>
<td>Total</td>
<td>762.73</td>
<td>100.00</td>
<td>763.48</td>
<td>100.00</td>
</tr>
</tbody>
</table>

Note: Proved and indicated Balance Recoverable Reserves.
1. Includes JVC/Pvt. Parties for Crude Oil and includes West Bengal for Natural Gas
2. Includes Bombay High offshore, Rajasthan and JVC for Crude Oil and Bombay High offshore, Rajasthan and Madhya Pradesh

Source: Ministry of Petroleum & Natural Gas

The import dependency of crude oil for the Indian economy is alarming. However, India has developed sufficient processing capacity over the years to produce different petroleum products so as to become a net exporter of petroleum products. According to the governmental report, the export of petroleum products has increased from a 23.46 MT during 2005-06 to 63.93 MTs during 2014-15. According to the International Energy Agency, by 2035, India will need to import 92% of its oil up from 73% in 2010. This makes energy security a major issue.

India was a very insignificant producer of petroleum at the time of Independence and remained so till Mumbai High started production on a large scale. In fact, off-shore production did not start till the mid-1970s and the entire production was received from on-shore oil fields. In 1980-81 about half of the production of crude oil came from on-shore fields while the remaining half was received from the off-shore resources. After that juncture, the off-shore production increased at a much faster rate than the on-shore production. For more than two decades from 1990-91 to 2003-04, about two-thirds of production of crude oil has been provided by the off-shore fields. The production touched the all-time peak of 34.09 million tonnes in 1989-90 but slumped to 30.44 million tonnes in 1991-92, 28.46 million tonnes in 1992-93 and further to 27.03 million tonnes in 1993-94. Sharp drop of production by over 7 million tonnes in a short span of four years is ascribed to overworking of Mumbai High oil wells. This was a dangerous trend and was to be reversed at all costs. A number of short term and medium term measures such as early production from satellite fields, use of state-of-the-art technology i.e. horizontal drilling, drain hole drilling, etc. were initiated in 1993. As a result of these measures the production increased to 32.24 million tonnes in 1994-95, 37.24 million tonnes in 1995-96 and to 38.57 million tonnes in 1996-97. A second phase of falling production was noticed after 1996-97 and the production stood at 31.9 million tonnes in 1999-2001. After 2001-02, a marginal increase in production has been recorded. In 2003-04 India produced 33.4 million tonnes of crude oil out of which 11.5 million tonnes came from on-shore sources while about twice that quantity, i.e., 21.9 million tonnes of oil was produced by off-shore oilfields.

Oil extracted from the oil wells is in its crude form and contains many impurities. It is refined in oil refineries before use. After refining, various products such as kerosene, diesel, petrol, lubricants, bitumen, etc. are obtained. Although India’s first oil refinery started working way back in 1901 at
Digboi in Assam, it remained the only refinery in the whole of India for more than half a century. It was only in 1954 that another refinery at Tarapur (Mumbai) joined the lone refinery of Digboi. Since then oil refining in India has progressed at a rapid pace. Today there are 19 refineries in the country, 17 in the public sector, one in joint sector and one in private sector. The installed refining capacity was only 0.3 million tonnes in 1950-51 which rose to 121.8 million metric tonnes in 2003-04. Oil Refineries are the prime units to separate crude oils to different products. India is one of the largest oil importers. There are hundreds of Refineries in India, below mentioned are Major Refineries that could refine maximum of the total oil imports. The Coastal cities of India own Major Oil Refineries and transports to other cities or parts India. Kerala, Assam, Maharashtra, and Karnataka have Oil and other energy-related companies. Jamnagar Refinery is the largest Oil Refinery in India and World with daily production of 1.24 million barrels which is owned by Reliance Industries, located in Gujarat.

Table 4. Major Oil refineries of India

<table>
<thead>
<tr>
<th>Refineries Name</th>
<th>Companies Name</th>
<th>Production (barrels per day)</th>
<th>Production (m3/d)</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jamnagar Refinery</td>
<td>Reliance Industries</td>
<td>1,240,000</td>
<td>197,000</td>
<td>Gujarat</td>
</tr>
<tr>
<td>Essar Refinery</td>
<td>Essar Oil</td>
<td>406,000</td>
<td>64,500</td>
<td>Gujarat</td>
</tr>
<tr>
<td>Mangalore Refinery</td>
<td>Mangalore Refinery and Petrochemicals Limited</td>
<td>199,000</td>
<td>31,600</td>
<td>Karnataka</td>
</tr>
<tr>
<td>Kochi Refinery</td>
<td>Bharat Petroleum</td>
<td>190,000</td>
<td>30,000</td>
<td>Kerala</td>
</tr>
<tr>
<td>Chennai Refinery</td>
<td>Indian Oil Corporation</td>
<td>185,000</td>
<td>29400</td>
<td>Tamil Nadu</td>
</tr>
<tr>
<td>Mathura Refinery</td>
<td>Indian Oil Corporation</td>
<td>156,000</td>
<td>24,800</td>
<td>Uttar Pradesh</td>
</tr>
<tr>
<td>Visakhapatnam Refinery</td>
<td>Hindustan Petroleum</td>
<td>150,000</td>
<td>24,000</td>
<td>Andhra Pradesh</td>
</tr>
<tr>
<td>Paradip Refinery</td>
<td>Indian Oil Corporation</td>
<td>150,000</td>
<td>24,000</td>
<td>Orissa</td>
</tr>
<tr>
<td>Mumbai Refinery</td>
<td>Bharat Petroleum</td>
<td>135,000</td>
<td>21,500</td>
<td>Maharashtra</td>
</tr>
<tr>
<td>Cuddalore Refinery</td>
<td>Nagarjuna Oil Corporation</td>
<td>125,000</td>
<td>19,900</td>
<td>Tamil Nadu</td>
</tr>
<tr>
<td>Bina Refinery</td>
<td>Bharat Oman Refinery Ltd.</td>
<td>116,000</td>
<td>18,400</td>
<td>Madhya Pradesh</td>
</tr>
<tr>
<td>Haldia Refinery</td>
<td>Indian Oil Corporation</td>
<td>116,000</td>
<td>18,400</td>
<td>West Bengal</td>
</tr>
<tr>
<td>Mumbai Refinery</td>
<td>Hindustan Petroleum</td>
<td>107,000</td>
<td>17,000</td>
<td>Maharashtra</td>
</tr>
</tbody>
</table>

With the rise in prices of oil and oil products in the international market, Indian bill has been rising rather disturbingly both in terms of quantity and value. The oil import bill increased from less than 9 per cent of the total imports in 1960s to 30 per cent following the first oil crisis in 1973-74 and to 75 per cent in 1980s after the second oil crisis. Decline in indigenous production during 1989-90 and 1993-94 further worsened the balance between production and consumption. In the year 2003-04, India imported 99, 495 thousand tonnes petroleum, oil and lubricants against the home production of 33, 043 thousand tonnes only. Thus, the imports of oil were more than three times the indigenous production.
Table 5. Imports of crude oil (2004-2012)

<table>
<thead>
<tr>
<th>Year</th>
<th>Crude Oil Qty.</th>
<th>Crude Oil Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004-05</td>
<td>95861</td>
<td>117003</td>
</tr>
<tr>
<td>2005-06</td>
<td>99409</td>
<td>171702</td>
</tr>
<tr>
<td>2006-07</td>
<td>111502</td>
<td>219029</td>
</tr>
<tr>
<td>2007-08</td>
<td>121672</td>
<td>272699</td>
</tr>
<tr>
<td>2008-09</td>
<td>132775</td>
<td>348304</td>
</tr>
<tr>
<td>2009-10</td>
<td>159259</td>
<td>375277</td>
</tr>
<tr>
<td>2010-11</td>
<td>163595</td>
<td>455276</td>
</tr>
<tr>
<td>2011-12*</td>
<td>171729</td>
<td>672220</td>
</tr>
</tbody>
</table>

Source: Ministry of Petroleum and Natural Gas

International experience of volatility in crude oil supply There have been periods of significant changes in oil supply where the quantity of oil available in international markets varied significantly due to prevailing circumstances in oil producing countries. The major oil price shocks that have occurred are summarized in the below table along with their start and end dates and the estimated crude oil supply loss for each period.

Table 6. Crude oil shocks

<table>
<thead>
<tr>
<th>Start</th>
<th>End</th>
<th>Crude oil supply loss (mbpd) *</th>
</tr>
</thead>
<tbody>
<tr>
<td>Month</td>
<td>Month Year</td>
<td></td>
</tr>
<tr>
<td>November</td>
<td>November 1956</td>
<td>Suez Crisis</td>
</tr>
<tr>
<td>June</td>
<td>June 1957 August</td>
<td>Six day war</td>
</tr>
<tr>
<td>October</td>
<td>October 1973 March 1974</td>
<td>Arab Israel War and Arab Oil embargo</td>
</tr>
<tr>
<td>November</td>
<td>November 1978 April 1979</td>
<td>Iranian Revolution</td>
</tr>
<tr>
<td>October</td>
<td>October 1980 January 1981</td>
<td>Iran-Iraq War</td>
</tr>
<tr>
<td>August</td>
<td>August 1990 January 1991</td>
<td>Iraqi invasion of Kuwait</td>
</tr>
<tr>
<td>June</td>
<td>June 2001 July 2001</td>
<td>Iraqi Oil export suspension</td>
</tr>
<tr>
<td>December</td>
<td>December 2002 March 2003</td>
<td>Venezuelan Strike</td>
</tr>
<tr>
<td>March</td>
<td>2003 December 2003</td>
<td>Iraq War</td>
</tr>
<tr>
<td>September</td>
<td>September 2005</td>
<td>Hurricane Katrina</td>
</tr>
<tr>
<td>July</td>
<td>July 2011</td>
<td>Libya Collective Action</td>
</tr>
</tbody>
</table>

Source: IEA (2012)

*mbpd: million barrels per day

The Iranian revolution of 1956 and the Arab oil embargo (1974) have caused the largest supply shocks/shortages in the global crude oil markets. Figure 4 presents the trend in crude oil prices for the past six decades. A significant change in the prices of crude oil took place only after the first oil shock in the 1970s. The oil shocks over time have been driven by different reasons and characteristics that destabilised the international oil markets in the course of the past four decades. The shock of early 1970s was due to the embargo imposed by Arab countries and the eventual formation of OPEC
1973. The formation of this oligopoly like structure in the oil markets led to the group maintaining control over the marginal production of crude oil to eventually controlling the prices.

Organization of Petroleum Exporting Countries (OPEC) and India

The Organization of Petroleum Exporting Countries (OPEC) was founded in 1960 to coordinate the petroleum policies of its members, and to provide member states with technical and economic aid. OPEC is a cartel that aims to manage the supply of oil in an effort to set the price of oil on the world market, in order to avoid fluctuations that might affect the economies of both producing and purchasing countries. OPEC membership is open to any country that is a substantial exporter of oil and that shares the ideals of the organization. As of 2011, OPEC had 12 member countries, including founder members Iran, Iraq, Kuwait and Venezuela. OPEC’s influence on the market has been widely criticized. Because its member countries hold two-thirds of crude oil reserves and nearly half of natural gas reserves in the world, the organization has considerable power in these markets. OPEC is a swing producer and its decisions have had considerable influence on international oil prices. For example, in the 1973 energy crisis OPEC refused to ship oil to western countries that had supported Israel in the Yom Kippur War or 6 Day War, which Israel had fought against Egypt and Syria. This refusal caused a fourfold increase in the price of oil, which lasted five months, starting on October 17, 1973, and ending on March 18, 1974. OPEC nations then agreed, on January 7, 1975, to raise crude oil prices by 10%.

India imports three quarters of its annual oil and gas requirements, with the Middle East and North Africa regions contributing to a substantial chunk of it. India’s import bills amount to $18 billion. As Indian crude oil import is the part of bulk imports in the balance of payments (BoP), the fluctuations in international crude oil prices tends to fluctuate the domestic economy’s current account balance, foreign exchange reserves, inflation etc. Since international oil prices are controlled by OPEC, any price rise has its impact on Indian economy. In 1973, after first oil shock and in 1980 after the second oil shock Indian economy went into crisis. According to Goldman Sachs report, a rise in global oil prices by $10 a barrel would reduce India’s economic growth by 0.2 percentage points and also affect the country’s current account deficit. Global oil prices have almost doubled in the past one year. In 2011, the political unrest in Libya, a major oil exporter and OPEC member, had disrupted supplies and pushed up crude prices further. Rising crude oil prices will impact the inflation whether the government absorbs the burden or pass it to the consumer by increasing the prices of petroleum products. If the government acts as buffer between international prices and domestic prices by absorbing the extra cost, oil subsidy bill will rise and will affect fiscal deficit. The recent strengthening of crude oil prices could impact economic growth momentum.

As it is being believed that demand for oil is going to rise faster than its supply, the prices are unlikely to come down in future on a sustainable basis except for a few aberrations. In such a situation, in order to ensure sustainable growth for the country’s economy, dependence on fossil fuel had to be reduced and alternate source of energy are needed to be developed. Yet, Fossil fuels, oil and natural gas will continue to meet most of the world’s energy needs and thus OPEC having the maximum oil reserves will remain the leading player in the world oil scenario.

India- Saudi Arabia

Over the past decade, the relationship between India and Saudi Arabia has grown stronger, attaining the level of a strategic partnership and incorporating more political and security content. In January 2006, King Abdullah became the first Saudi monarch to visit India in 51 years. Thus began what both sides generally regard as “a new era” in the bilateral relationship. The late King’s visit culminated in the signing of the historic Delhi Declaration (2006), which imparted fresh momentum to the relationship and supplied the framework for developing more expansive ties. Four years later, then-Prime Minister Manmohan Singh travelled to Saudi Arabia, where the two sides’ agreed to elevate their bilateral engagement to a “Strategic Partnership,” articulated in the Riyadh Declaration (2010). Crown Prince and now King Salman’s trip to India in 2014 sealing deals in the energy, business and defence sectors — yet another milestone in the progressive development of bilateral ties.

The most recent major thrust forward in the bilateral relationship came when Indian Prime Minister N. Modi paid a two-day visit to the Kingdom in April 2016. The Joint Statement issued during the
visit emphasized the two sides’ desire to harness each other’s potential for mutual gain. It declared their interest in increasing cooperation in a variety of economic and cultural spheres, including defence and security, energy, trade and investment, education and research, technology transfer, diaspora relations, and cultural and people-to-people ties. Trade and commerce has long been one of the strongest components of the bilateral relationship. Today, Saudi Arabia is India’s fourth-largest trading partner and eighth-largest export market. During the 2000s, bilateral trade experienced sustained growth, peaking at $48.6 billion in 2013-14. Since then, however, bilateral trade has plummeted, totalling just $26.6 billion in 2015-16.

Energy has been one of the key pillars of India-Saudi Arabia relations. The visit of King Abdullah to India in 2006 underlined the importance of Saudi Arabia’s energy resources to India’s fast-growing economy. During the visit, the two sides entered into a Strategic Energy Partnership (SEP), based on the principles of complementary and interdependence. The SEP called for Saudi Arabia to provide a “reliable, stable and increased crude supply” to India through ‘evergreen’ long-term contracts. Until only very recently, Saudi Arabia has consistently been India’s number one supplier of crude oil, accounting for around 20 percent of its total oil demand. However, with Iran’s re-entry into the energy market following the removal of nuclear-related sanctions and Iraq’s increased production, their shares of India’s oil imports have risen, eating into that of Saudi Arabia. In April 2015, as the competition for market share under conditions of low oil prices and relatively weak demand intensified, Iraq briefly overtook Saudi Arabia as India’s top supplier. (In fact, Saudi Arabia lost ground to rivals in nine of its 15 key markets.) Late the next year, Iran occupied the top spot, as the jockeying for position in the Indian oil market continued. In the longer term, though, Saudi Arabia is likely to reclaim its ranking, or at least retain a very sizable market share, given its reserve capacity and India’s projected energy needs.

The Strategic Energy Partnership signed a decade ago also called for the establishment of public and private joint ventures in the upstream and downstream sectors in India, Saudi Arabia and third countries; Saudi investment in oil refining, marketing and storage; and the construction of gas-based fertilizer plants in Saudi Arabia. The Joint Statement issued during Prime Minister Modi’s visit to Saudi Arabia in 2016 breathed new life into India-Saudi Arabia energy relations. Under the Modi administration, India has invited Saudi Arabia to develop a stake in its petroleum reserve. Following Subsequent to Prime Minister Modi’s visit to the Kingdom, Chief Minister Nara Chandrababu Naidu held discussions with Saudi Aramco President and CEO Amin H. Nasser regarding the setting up of a refinery in Andhra Pradesh.

Over the span of a mere decade, the India-Saudi Arabia relationship has been transformed from a transactional relationship to a strategic partnership. Accordingly, the scope of cooperation has widened not just within traditional areas such as energy, migration, and trade but has expanded to other sectors, including investment, health, pharmaceuticals, IT, ICT, and space. India and Saudi Arabia have also reached a greater understanding on security and defence matters. Importantly, India and Saudi Arabia seem to have reached the point where, unlike in the past, they are both determined not to permit the further development of ties between them to be bracketed by their relations with third countries (e.g., Iran or Pakistan).

**India- Venezuela**

India and Venezuela have always enjoyed cordial relations. There is a similarity of views on major international, political and economic issues. Besides actively promoting bilateral relations, the two countries cooperate in multilateral forums. During President Chavez's visit to India in March 2005, the two countries signed a bilateral agreement on co-operation in the hydrocarbon sector and an MoU granting ONGC Videsh Ltd (OVL) rights for oil and gas exploration in Venezuela. OVL subsequently opened an office in Venezuela. In April 2008, OVL and PDVSA established a joint venture called Petrolera Indovenezolana SA for exploration and production oil in the San Cristobal field. OVL has a 40% stake in the company and the remaining 60% is held by PDVSA. OVL helped certify heavy oil reserves in the Orinoco river belt in 2010. India is among the few countries with the capability to refine Venezuelan crude oil. Venezuelan crude oil requires special processing because of its inferior quality compared to Middle Eastern crude oil as the former is heavier and contains more sulphur. Reliance Industries Limited (RIL) secured a 15-year crude supply contract with PDVSA to
import 400,000 barrels of oil per day, for processing at its twin refineries at Jamnagar, Gujarat. Essar is another major importer of oil from Venezuela.

<table>
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</tr>
</thead>
<tbody>
<tr>
<td>India’s oil imports from Venezuela</td>
<td>6653.12</td>
<td>14105.91</td>
<td>13936.59</td>
<td>11669.14</td>
<td>2808.57</td>
</tr>
</tbody>
</table>


Venezuela has given up the fight for coveted market share in India because of a combination of declining crude production and heavy obligations under oil-for-loan deals with China and Russia, according to internal PDVSA (Petróleos de Venezuela) data and two people familiar with the company’s strategy and operations. Caracas needs the oil to pay debts to China and Russia, key political allies that have together lent Venezuela at least $50 billion in exchange for promised crude and fuel deliveries. In 2013, when Venezuela exports and oil prices were high, PDVSA raked in nearly $14 billion from India, the world’s fastest growing large economy. By last year, after an oil price crash, that figure had plummeted to $2.7 billion, according to a Reuters analysis of the PDVSA data.

India wants to diversify oil imports to protect its economy against external shocks, meaning South American shipments can help mitigate the risk of supply disruption from Middle Eastern suppliers. But India doesn’t necessarily have to buy the Venezuelan oil it wants from PDVSA - it can buy it from Chinese and Russian firms that receive Venezuelan crude as payment for loans. That means China and Russia can use Venezuelan crude to increase their market share in India at the expense of PDVSA’s declining share. Chinese firms are already taking some of the Venezuelan crude and selling it to the same Indian refineries that were previously buying the oil directly from PDVSA. Russia is poised to start doing the same.

**India- Iran**

According to data published in March 2011 by India’s Ministry of Petroleum and Natural Gas, in fiscal year 2009 (April 2009- March 2010), India imported a total of 15.93 million tons (approximately 3.2 million B/D) of crude oil, of which 21.20 million tons (approximately 430,000 B/D), or 13 percent came from Iran. Different statistics for 2010, announced by US Energy Information Administration, say that total crude oil imports to India stood at more than 2.20 million B/D, 11 percent of which were of Iranian origin, and therefore, Iranian crude oil imports are estimated to have been approximately 240,000 B/D in 2010. The volumes of Iranian crude oil processed vary greatly among oil refinery companies. For example, in fiscal 2009, MRPL and EOL together accounted for almost 60 percent of the total processed. The crude oil imported from Iran to India is mainly heavy crude oil, which is used mostly to produce high-sulphur diesel for agricultural machinery and pumps.

Iran is the second largest supplier of crude oil to India, supplying more than 425,000 barrels of oil per day, and consequently India is one of the largest foreign investors in Iran's oil and gas industry. The two nations have had friendly relations since the start. There are significant trade ties, particularly in crude oil imports into India and diesel exports to Iran. In 2008–09, Iranian oil accounted for nearly 16.5% of India's crude oil imports. Indian oil imports from Iran increased by 9.5% in 2008–09 due to which Iran emerged as India's second largest oil supplier. About 40% of the refined oil consumed by India is imported from Iran.

While Iran is now free of international sanctions, those imposed by the US remain in place. The Trump administration has so far not taken any steps to walk away from the nuclear deal, but by throwing in its lot so strongly with Saudi Arabia and Israel it has weakened the US’ ability to act as a go-between and ensure regional stability – which is what a strategically minded superpower would want to be. The Iranian question continues to keep the geopolitical sands of the Persian Gulf and much of West Asia fluid and unstable.
Conclusion

This rising dependence on petroleum products and the growing share of imports in the domestic oil consumption subjects the domestic economy to the volatility in international markets thereby creating a need to examine in detail the relation between oil shocks and macroeconomic parameters. Despite the dependence on crude oil, domestic production has remained low and has, in fact, stagnated in the recent years. This has led to a rise in dependence on imports of crude oil to meet the domestic demand. As the dependence on imports is likely to continue and so is the vulnerability to shocks, it is pertinent to look at measures that help in reducing the vulnerability and building resilience to oil shocks. In the short term, building defences against supply and price shocks by construction of Strategic Petroleum Reserves (SPRs) provides the most immediate defence against any shocks in supply or even demand. Further, SPRs also have the potential to act as a strategic signal against any intended blockage of supplies.

In the 2017-18 budget speech by the Indian finance minister Arun Jaitley, it was announced that two more such caverns will be set up Chandikhole in Jaipur district of Odisha and Bikaner in Rajasthan as part of the second phase. This will take the strategic reserve capacity to 15.33 million tons. Apart from this, India is planning to expand more strategic crude oil facilities in second phase at Rajkot in Gujarat, Padur in and Udupi district of Karnataka.

Further, efforts to diversify sources of crude oil imports and substitution towards alternatives need to be made. As stated previously, countries from the Middle East constitute the largest sources of crude oil supply for India. Efforts need to be made to diversify the crude oil import portfolio of the country and to enhance diplomatic relations with oil producing countries. Similarly, imports from Nigeria, have also increased from nearly 10 MT in 2007-08 to the level of over 14 MT (2011-12). Increasing imports from these countries and furthering bilateral ties with their respective Governments will form a key component of India’s oil security policy in the coming years. In addition to these emerging players, imports of unconventional oil (tar sand, natural gas liquids etc.) from North America (Canada and USA) also provide an opportunity to diversify the country’s supply base. Not only do these options provide additional sources of oil, the relative geo-political certainty of supplies region adds to the long term security of oil supply for India.

Further, in order to reduce the dependence on crude oil altogether, efforts to move towards alternative sources of supply need to be made. Particularly in the transport sector, policies on blending of biofuels in automotive fuels have already been introduced but the enforcement of such regulations, coupled with investments in making the entire value chain feasible need to be provided. Moreover, promotion of electric and hybrid vehicles, encouraging a shift towards public modes of passenger transport and towards railways in freight transport needs to be undertaken. Also notable is the increased share of renewables in the total energy mix of the country. An emphasis has been placed on developing the solar based energy generation capacity of the country. With the Jawaharlal Nehru National Solar Mission in place (JNNSM), the total solar based power generation capacity is set to rise to 20 GW by 2022. The average tariff has reduced by more than Rs10 per kWh in just two round of bidding. Significant more gains are in store for the sector with an increase in the scale of production in the sector and the improvements being initiated in terms of technology. Introduction of measures such as feed-in tariffs, renewable purchase obligations and other forms of government support will also bolster the efforts to diversify the energy basket. In addition to these sources, as more unconventional natural gas is becoming increasingly available in North America, and there is a likelihood of global gas prices stabilising in the long term, a policy on importing gas on a sustained basis, establishing infrastructure to ensure its absorption in some of the major petroleum product dependent sectors will be useful in diversifying the energy economy away from crude oil dependence.
Bibliography


Sociology of Adult Education

H. Eylem Kaya, Süleyman Demirel University, Turkey

Abstract
A growth interest started at early 1970’s in the sociology of education, but that was mostly related with the initial education processes. However, one decade later a growing sociological interest on adult education just started in Europe then later in United States as well. By the time of progress adult education was set in a wide sociological context all around the world. Actually, the education of adults has existed for centuries in one form or another, yet generally embedded in psychology and in adult learning fields since the intelligence was traditionally declined in adulthood. On the other hand, when the education of adults was recognized as an instrument for social change, especially as stated in Gramsci’s work that the worker education could cause for example destroying the cultural hegemony of the dominant social classes in Italy, the education of adults was accepted as one of the core issues in the field of socially too. Therefore, in this study, the significance and role of adult education both in society and in sociology will be discussed within a dialectic and critical perspective.

Key words: Adult education, society, praxis, social change, hegemony
Music Therapy for the Disabled – An Asian Success Story

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Abstract
Disability in Sri Lanka could be due to congenital, illness, road traffic accident, occupational accident, Riot & violence, war or terrorism. The barriers for dealing with disability include factors such as negative and wrong beliefs & prejudices, parents/teachers not seeing the value of learning for the disabled, parents have low expectations of the ability, and employers discriminate in selection of disabled, inadequate funding and lack accessibility especially to public places in order to access services. According to the World Report on Disability published by the WHO in 2011, about 15% of the world's population lives with some form of disability. This paper is written based on the research and application of Music therapy for disabled war heroes over a period of 8 - 10 months. The team of researchers include experts from the music field, IT field and Counselors who interact in a day-today basis with young people. Continuous music therapy sessions were carried out for disabled soldiers with Post-Traumatic Stress Disorder (PTSD), Musculoskeletal injuries, mental health issues, loss of sight/hearing, amputations of legs/arms and Traumatic Brain Injury (TBI). Their mental and physical progress was monitored from a therapeutic angle.

An increasing amount of scientific evidence indicates that rhythm stimulates and organizes a person's muscle responses and helps people with neuromuscular disorders. There were 12 personnel who continuously attended the weekly sessions and their improvement was monitored. These 12 persons had various permanent disabilities such as Spinal Cord Injuries, partial/full blindness, arm/leg amputated, facial disfigurations, partial or neck down paralysis and traumatic brain injuries. Many of them were having mental disorders such as depression, anxiety disorders, schizophrenia, eating disorders, lack of confidence and addictive behaviors. Through observations, it was observed that their participation in many activities has improved considerably with the improvement of self-confidence after the continuation of Music Therapy as a treatment. They are more energized, more actively participating in events and are motivated to work as a group to help one another to achieve a common goal. Many want to perform to a larger audience and to a public gathering which can be seen as a major positive outcome of the study.

Keywords: Music Therapy, Positive Psychology, Disabled, Counseling, Differently able

Introduction
Music therapy has been used as an alternative healing mechanism for psychological healing of young people as well as differently abled humans in western countries. The focus of this research and application of Music therapy for the disabled is a very important for Sri Lanka as it is one of the countries with highest suicides rates in the world where around 10 committing suicide each day and 100 being attempted (https://en.wikipedia.org/wiki/List_of_countries_by_suicide_rate). Also, as a country which has suffered a Civil war for the last 30 years, there are many military personnel with disabilities and permanent injuries who are in need of therapy for their survival & improvement as well as their mental and physical development.
History of Music Therapy for the disabled

Music therapy finds its roots in the military. The United States Department of War issued Technical Bulletin 187 in 1945, which described the use of music in the recuperation of military service members in Army hospitals. The use of music therapy in military settings started to flourish and develop following World War II and research and endorsements from both the United States Army and the Surgeon General of the United States.

An extensive literature survey was carried out on the therapeutic and healing power of Music in India and Europe where Music therapy is used for prevention and cure of many diseases such as stomach related illnesses, hypertension, insomnia, gall stones, cough, headache, rheumatic arthritis, etc through Hindu Raaga Chikitsaa using different ragas such as Bageshri, Gurjari todi, Yeman, etc (Sairam, 2004a, 2004b). In addition to many other research, a very interesting study was conducted by Retallack in 1973 which shows how plants react to different types of music (Retallack, 1973). She has carried out a study where plant nurseries in different chambers having same sunshine, water and fertilizer were exposed to different types of music, namely, loud rock music, classical music and Indian Carnatic music. After few days, the plants started showing different levels of growth where the nurseries with classical music and Indian music started showing signs of fresh greener leaves and 20% more growth and leaned towards the speakers and the plants moved away from the loud rock music.

The Importance of using Music Therapy for the Disabled

According to the World Report on Disability published by the WHO in 2011, about 15% of the world's population lives with some form of disability (Sivarajah, 2012). Of these disabled 2-4% experience significant difficulties in functioning. The global disability prevalence is higher than previous WHO estimates, published in 1970s which was estimated to be around 10%. Disability is not only a person in a wheelchair or the blind and the deaf, there are many other types of disability such as a child born with a congenital defect to a person who has lost a limb in a landmine or a woman who is unable walk due to severe arthritis or a mentally ill persons. Those with disability become marginalized from society and are crippled physically, mentally, socially and economically due to the following reasons in any country. They have poor health outcomes, lower educational achievements even though their intellectual capacity is good, less economically active, experience higher rates of poverty, cannot live independently or participate fully in community activities.

Disability in Sri Lanka could be due to congenital, illness, road traffic accident, occupational accident, Riot & violence, war or terrorism. The barriers for dealing with disability include factors such as negative and wrong beliefs & prejudices, parents/teachers not seeing the value of learning for the disabled, parents have low expectations of the ability, employers discriminate in selection of disabled, lack or inadequacy of services for health care, rehabilitation, support & assistance due to inadequate funding and lack or inadequacy of accessibility especially to public places in order to access services.

The social services department in Sri Lanka provides services such as mobility aids, vocational training, job opportunities, self-employment opportunities, schooling facilities for hearing impaired children, rehabilitation Centers, supply of hearing aids & spectacles to a certain extent. However, the emotional improvement and the positive psychological aspects of the disabled are mostly not looked in to as there are many negative forces working on the disabled and the families they are attached to. The whole idea of this research is self-improvement of the disabled to have a positive attitude about life by enhancing their own psychological attitudes and background.

Music therapy is the use of sounds and music to support and encourage physical, mental, social, emotional and spiritual well-being. From a therapeutic point of view, it can be used for people for disabilities for the improvement of speech & communication, improve gross motar skills, development of academic and social skills, enhancement of behavioral and emotional aspects and improve self esteem and quality of life. Music therapy in general has the following benefits when used as treatment for the disabled people - Improve of self-image and body awareness, Increase communication skills, Increase ability to use energy purposefully, Reduce of maladaptive (stereotypic, compulsive, self-abusive, assaultive, disruptive, perseverative, impulsive) behaviors, Increase interaction with peers and others, Increase independence and self-direction, Develop
creativity and imagination, Enhance emotional expression and adjustment, Improve fine and gross motor skills, Improve auditory perception, etc. Also, This has many aspects for empowerment as music can make a pivotal difference to one’s state of mind and the approach towards situations in life. It channelizes the efforts and heightens the confidence and has the following benefits.

- **Stress Buster**: Music relieves you from stress and helps you relax. This helps you think and understand things in a more coherent and logical way.

- **Source of Inspiration**: Music provides you with strength and inspires you to overcome obstacles in life. If you are suffering from a low self-esteem, music can assist in boosting your confidence. It helps you to gain emotional and mental satisfaction.

- **Enhances the power of concentration**: It is a scientifically proven statement that music helps one to improve one’s concentration power. It keeps your mind alert and fresh so that all your efforts are directed towards a particular goal.

- **Brings In positive vibes**: Soothing and mesmerizing music brings in a sense of positivity in your personality. It makes you more optimistic and confident. With these positive vibes one tends to restructure the thinking process and change the perspective of solving various issues.

- **Energy & Confidence Booster**: Music can provide a person with immense energy while you are feeling tired or lethargic. Music has the power to change the physiology of the body. Learning how to play an instrument is certainly a difficult task. One will certainly need a great amount of determination, patience, co-ordination and a positive mentality to learn a new instrument. Going through this process boosts the confidence levels tremendously.

**The Significance of This Research**

This paper is written based on the research and application of Music therapy for disabled war heroes over a period of 8 - 10 months. The team of researchers include experts from the music field, IT field and Counselors who interact in a day-today basis with young people. A field study of over 500 persons have been used in a survey to identify how they react to different types of music through online surveys and music therapy sessions with young people, disabled soldiers and differently abled people. Continuous music therapy sessions were carried out for disabled soldiers with Post-Traumatic Stress Disorder (PTSD), **Musculoskeletal injuries, mental health issues, loss of sight/hearing, amputations of legs/arms** and Traumatic Brain Injury (TBI). Their mental and physical progress was monitored from a therapeutic angle.

An increasing amount of scientific evidence indicates that rhythm stimulates and organizes a person’s muscle responses and helps people with neuromuscular disorders. There were 12 personnel who continuously attended the weekly sessions and their improvement was monitored. These 12 persons had various permanent disabilities. Six of them had Spinal Cord Injuries, 3 of them having partial/full blindness, 3 of them having an arm/leg amputated, many of them having facial disfigurations due to multiple operations, 3 of them having partial or neck down paralysis, many of them having traumatic brain injury in addition to the above. Many of them were having mental disorders such as depression, anxiety disorders, schizophrenia, eating disorders, lack of confidence and addictive behaviors.

**Research Methodology**

Action Research was used as the main methodology where active participation of the researchers with the participants involved in the study was a necessity. The music therapy sessions for this research was conducted in 3 phases.

i. The First phase being the introductory stage,

ii. The Second phase being the common music lessons stage and

iii. The Third being the self development stage.

**The First phase** consisted of working with the disabled people to create an interest in music, to build faith in the music therapy and motivate them to come for the sessions conducted every week as it was
not compulsory. Workshops were conducted which included musical sessions to positively influence the participants along with a survey to identify how they reacted to music.

Figure 1: Music Therapy workshop conducted for Disabled War Heroes – Introductory Session

The Second phase in the treatment process was to continuously conduct music classes for any participant who was willing to come for the weekly sessions. Many instruments were used for this purpose to create an interest and to give a variety of instruments to match the disabilities.
The third phase involved the functional assessment of the individual's strengths and needs through musical responses in the areas of motor, cognitive, communication, social, emotional, behavioral, sensory and musical abilities. After identifying their disability, their strengths and weaknesses, appropriate musical instruments were assigned and goals were given to participants to motivate them to go through the treatment.
Figure 3: Music Therapy sessions with individual focus conducted for Disabled War Heroes for self-development and confidence building

Their progress was monitored in a non-invasive manner to get a feeling of how effective the music therapy sessions have been. The sessions were conducted weekly for the last 10 months with other activities such as physiotherapy sessions for disabled participants, family problems, attending home related matters, vacations, religious functions and many other ongoing activities.

**Music therapy sessions with the disabled – Implementation & Observations**

The following table shows the participants, their disabilities, the problems faced and the final outcome of the weekly music therapy sessions. The whole exercise was carried out to create the opportunity for positive, successful, and pleasurable social experiences, otherwise not available to them and to develop awareness of self, others, and the environment that improves functioning on all levels, enhances well-being.

The professional counselors observed the results in a non-invasive manner.

<table>
<thead>
<tr>
<th>Person No.</th>
<th>Observed Disability</th>
<th>Difficulties and Barriers</th>
<th>Instrument Practiced</th>
<th>Observations &amp; Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Paraplegia, Spinal cord injury</td>
<td>Difficult to keep guitar on legs for long time</td>
<td>Guitar - ✔ Rhythm</td>
<td>Playing guitar, Singing in Public, Attending Class enthusiastically</td>
</tr>
<tr>
<td>2</td>
<td>Leg amputated</td>
<td>Walking Difficulty</td>
<td>Guitar – ✔ Lead/Rhythm</td>
<td>Learning the Guitar 10 times faster than an abled amateur, Sings in Functions</td>
</tr>
<tr>
<td>3</td>
<td>Facial operations (more than 10), blindness, right arm amputated from wrist</td>
<td>Tried Playing the Organ, Tambourine – Got demotivated</td>
<td>Organ – ✖ Tambourine - ✖ Bongo - ✔ (Percussion)</td>
<td>After trying many instruments, he liked playing Bongo – most excited about his talent, Dances in all functions</td>
</tr>
<tr>
<td>4</td>
<td>Paraplegia, Spinal cord injury, partial blindness</td>
<td>The guitar keeps slipping off his lap</td>
<td>Guitar – ✔ Rhythm</td>
<td>Plays guitar well, attends every class enthusiastically</td>
</tr>
<tr>
<td></td>
<td>Paraplegia, Spinal cord injury</td>
<td>Not used to playing music in a group – lone musician</td>
<td>Keyboards - ✔, Guitar – ✔, Lead/Rhythm Vocals - ✔</td>
<td>Best player among the group, works well within group, attends every class enthusiastically</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>5</td>
<td>Partial (left) paralysis - one eye blind, facial disfigured</td>
<td>Difficulty in sitting in one place for long</td>
<td>Tambourine - ✔</td>
<td>Tried many instruments and plays the Tambourine well. Participates at all Functions</td>
</tr>
<tr>
<td>6</td>
<td>Memory loss, inability to process instructions, leg amputated</td>
<td>Difficulty in processing instructions</td>
<td>Vocals - ✔</td>
<td>Attends every class and tells jokes to make all laugh. Sings at functions</td>
</tr>
<tr>
<td>7</td>
<td>Spinal cord injury, brain operation, paralysis from neck down</td>
<td>Difficulty in taking long breath in singing</td>
<td>Vocals - ✔</td>
<td>The song is sung in a different manner in short breath intervals</td>
</tr>
<tr>
<td>8</td>
<td>Spinal cord injury, Paraplegia</td>
<td>Severe pain in the legs from time to time</td>
<td>Guitar - ✔ Rhythm</td>
<td>Plays guitar well, attends music classes every time.</td>
</tr>
<tr>
<td>9</td>
<td>90% blindness</td>
<td>Has confidence issues and depression</td>
<td>Guitar – ✔ Lead/Rhythm</td>
<td>Plays lead guitar very well.</td>
</tr>
<tr>
<td>10</td>
<td>Paraplegia, Spinal cord injury</td>
<td>lack of self confidence</td>
<td>Guitar - ✔ Rhythm</td>
<td>Has learning issues as others catch up faster. Loves to learn to play</td>
</tr>
<tr>
<td>11</td>
<td>Male Nurse – Not Disabled</td>
<td>Motivates others and helps others</td>
<td>Guitar - ✔ Rhythm</td>
<td>Learns Guitar well while motivating others to come for Music therapy</td>
</tr>
</tbody>
</table>

Table 1: Progress of the Music Therapy sessions conducted weekly for Disabled by the researchers

**Conclusion & future Work**

After evaluating the level of disability and their strengths and weaknesses, different instruments were tried on different persons and what suits each participant was selected and trained. String instruments such as guitars, percussion instruments such as drums and tambourines, keyboard instruments such as Piano and organs were mainly used in the study. Due to the lack of instruments at the home for the disabled, many instruments were donated to participants for them to practice during and after sessions.

The music playing sessions are available on youtube on

- ✔ [https://www.youtube.com/watch?v=BBj9XDM-AIc](https://www.youtube.com/watch?v=BBj9XDM-AIc).
- ✔ [https://www.youtube.com/watch?v=5FVLCnSr-N8](https://www.youtube.com/watch?v=5FVLCnSr-N8) and
- ✔ [https://www.youtube.com/watch?v=9LRZ5jtUPHM](https://www.youtube.com/watch?v=9LRZ5jtUPHM).

The objective of using Music therapy was to improve the mental state of the disabled was because it facilitates group participation, social interaction, recreation as well as independent recreation and relaxation which resulted in reduction of stress as well as decision making/planning and taking responsibility for the actions performed by oneself. Monitoring of progress was carried out through observations and working in collaboration with the resident Counselor of the Home for the Disabled war personnel.

Through observations, we have seen that their participation in many activities has improved considerably with the improvement of self-confidence after the continuation of Music Therapy as a
treatment. They are more energized, more actively participating in events and are motivated to work as a group to help one another to achieve a common goal. Many want to perform to a larger audience and to a public gathering which can be seen as a major positive outcome of the study.

The Music therapy sessions and their benefits were shared among the community over social media and requests are coming from institutions and media for more awareness sessions on the positive influence it has on many parts of the society. Some TV and Radio programs were carried out to discuss the positive psychological influence music has on people from a therapeutic point of view.

When working with adults, with special physical and intellectual disabilities, our music therapy research group used many activities to provide a range of cognitive, physical and sensory experiences whilst providing opportunities for social skills development, social interaction, confidence building and communication. As future activities, the commandant, the head of the institution for the disabled has decided to organize a musical evening for the group to play the instruments at a musical evening where all the newly learnt skills and confidence can be displayed to the entire audience at the function. The music therapy sessions in this research, have a very positive impact on the disabled participants by creating hope, encouragement, self-development, confidence building, building self-esteem and motivation.

Acknowledgement

Our Music Therapy Research team would like to express our gratitude to the University Grants Commission of Sri Lanka for giving the grant to our team at the University of Colombo School of Computing (UCSC) to carry out this research. We would also like to thank the Mihindu Seth Madura (A home for war heroes with spinal cord injuries and TBI (Traumatic Brain Injury)) for getting involved actively in the Music Therapy research to allow us to continuously conduct sessions and monitor their progress at the same time giving a positive and pleasurable experience to the disabled war heroes.
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Revivable Management Model of Multidisciplinary Aviation and Tourism in Thailand

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Abstract

This paper was intended to be the feasibility study of revivable management model and sustainable growth of multidisciplinary aviation and tourism firms in contemplation of freeing from failing to adequately deal with the situation of over significant safety concerns. During its audit earlier in 2015, the ICAO raised issues relating to the former Department of Civil Aviation’s (DCA), now Civil Aviation Authority of Thailand (CAAT), ability to supervise airline operators and operations due to a shortage of staff. The process of secondment from Royal Thai Air Force had been effectively established during the period of shortage of airline pilot decades ago. Similarly, in shortage of staff of CAAT, the adoption of same type of process, by secondment from national flag carrier with more remunerative opportunities, could be an effective way of resolution, it would not only worthwhile for CAAT in red-flagged withdrawing but also revive a shortfall in eligibility of tourism revenue as a whole.

The researchers conducted in mixed methods positivist social science research and reflected on the philosophical and theoretical foundations of the study, for qualitative proposed to describe social phenomenon, reliability had been used in statistical hypothesis test. The conceptual framework has been refined and formed as integral part of data analysis. The finding suggested the public sectors should play a major role on truthfully and sincerely foster over strategically exercise of authority and always keep in mind “continuously develop effective staffing strategy” Data analysis and hypothesis test resulted at the significant level of 0.05.

Keywords: process of secondment, red-flagged withdrawing, revivable management model.

Introduction

As Thailand’s aviation standards have been downgraded by the International Civil Aviation Organization (ICAO) since December 2015. ICAO stresses that a red flag ‘does not necessarily indicate a particular safety deficiency but rather, indicates that the State is not providing sufficient safety oversight to ensure the effective implementation of all applicable ICAO safety standards’. The red flagging raised the concerns about the ability of the regulator, DCA, to supervise airline operators and operators and declined the country for failing to address safety concerns (downgraded from category 1 to category 2) and brought almost all aviation and tourism businesses to standstill, the warning meant the country’s airlines had to cancel flights and refund or alter thousands of air tickets. The move was not only led to a total ban on new flights to China, Japan and South Korea but also affect both inbound and outbound tourism as a whole. During its audit earlier this year, the ICAO raised issues relating to the Department of Civil Aviation’s (DCA) ability to supervise airline operators and operations due to a shortage of staff.

According to ICAO Doc 8335 AN 879: State safety oversight organization; 5.3 Staffing 5.3.1 The ability of a state to effectively supervise and control commercial air transport operations in the public interest is dependent upon the competence of the CAA inspectorate. To effectively fulfill its responsibilities, the CAA inspectorate needs to be properly organized and staffed with qualified personnel capable of accomplishing the required wide range of technical inspection activities. To adequately perform their duties, it is important that the CAA inspectorate staff have the qualifications, operational or technical work experience, and training compatible with the operations that they are
required to certificate or inspect and that their qualifications compare favorably with those of operator personnel they will encounter in their inspections. Furthermore, the CAA inspectorate staff should enjoy conditions of service and remuneration consistent with their education, technical knowledge and experience and comparable to those personnel of the operator whose activities they will inspect and supervise.

In addition to Thailand, only 12 other nations are red flagged by the ICAO-Angola, Botswana, Djibouti, Eritrea, Georgia, Haiti, Kazakhstan, Lebanon, Malawi, Nepal, Sierra Leone and Uruguay. In response to the red flag, flag carrier Thai Airways issued a statement saying that it operates with the highest safety standards.

A significant safety concern does not necessarily indicate a particular safety deficiency in the air navigation service providers, airlines (air operators), aircraft or aerodrome; but, rather, indicates that the State is not providing sufficient safety oversight to ensure the effective implementation of applicable ICAO Standards.

The growth in tourism industry directly reflects onto the air transportation. The expansion of international tourism has a large impact on the discipline of transport geography. Air transport plays a dominant role in inter-regional movements of tourists, which normally entails travel over long-distance. Growth rates of international air traffic are pegged with growth rates of international tourism.

In response to the audit results the DCA has taken the matters very seriously, this resulted in major changes in three areas, namely laws and regulations, organization, and personnel. The Government has passed several laws and regulations to support the new organizations that will be established. The former DCA was reorganized and divided into three organizations to separate the functions:

- the new aviation regulator: the “Civil Aviation Authority of Thailand” (CAAT);
- airport operations are the responsibility of: the “Department of Airports”;

search and rescue operations now reside directly under the Ministry of Transport’s Office of the Permanent Secretary.

Regarding the personnel, highly qualified staff members were recruited. The training programs were also set up not only to maintain but also to improve staff skills. The early actions which was already taken by CAAT is “Air Operator Certificate Recertification” or “AOC Recertification”. All 41 air operators currently operating in Thailand were required to be recertified and inspected by the CAAT to ensure that all air operators in Thailand strictly complied with the aviation safety standards and recommended practices of ICAO.

Although it has been a difficult year, the red flag from ICAO and the downgrade by the FAA lead to the new chapter of Thai aviation industry. Several actions have been undertaken by both public and private sectors that have been working together closely in order to improve the aviation safety standards and to restore the confidence to the Thai aviation industry. We applaud the progress made in such a short period of time; ‘Thailand is a good example for other countries that are aiming at improving aviation safety standards’.

**Material and Methods (Theoretical Backgrounds)**

**ICAO Universal Safety Oversight Audit Program (USOAP)**

1.3 The capability of a state’s CAA to carry out the task is “assessed on a regular basis by the ICAO Universal Safety Audit Program USOAP. This audit program initially examined the level of implementation by states of safety provisions contained in Annex 1-Personal Licensing, Annex 6-Operation of Aircraft, and Annex 8-Airworthiness of Aircraft” Annex 17-Security, Implementation of Annex 17 is monitored by the ICAO Universal Security Audit Program USAP. The activities of USOAP and those of USAP are coordinated to the greatest extent possible.

1.4 Where USOAP findings indicate that a State experiences difficulties in the implementation of SARPs and the critical elements of a safety oversight system, ICAO is able to provide for
assistance in improving the capabilities of the State, through its Implementation Support and Development ISD Branch, the Technical Cooperation Program and with the help of other mechanisms, including the International Financial Facility for Aviation Safety IFFAS.

1.5 In order to provide the necessary level of confidence in the system, and subsequent to the Directors General of Civil Aviation Conference on a Global Strategy for Aviation Safety, held in March 2006, it was determined that, with respect to audits conducted under the CSA:

- the results of these audits should continue to be shared openly among States;
- a process should be developed by ICAO to provide for the release of relevant audit information to the public, and
- States have given consent to the publication of the relevant information.

The resolution:

According to ICAO Doc 8335 AN 879: State safety oversight organization; 5.3 Staffing

5.3.3 A state that is unable to provide sufficient staff for its operations inspectorate could arrange for experienced personnel of an operator to be seconded to the CAA to act as CAA inspectors. In this case a strategy to mitigate potential conflict of interest issues should be established and documented. However, it may be impossible to ensure that an inspector in such a case would not be involved in inspections concerning the operator from which the secondment was effectuated. It is incumbent upon the DGCA to ensure that operator personnel, seconded as CAA inspectors, are adequately trained and qualified and subsequently supervised in the carrying out of their duties.

5.3.4 A state unable to provide sufficient staff for its operations inspectorate could also arrange to use the services of experienced inspector personnel from another state authority on a part time basis. The details of any such arrangement, including procedures for requesting the services of an inspector on particular occasion or for a specific period of time, should be documented in an arrangement between the CAA and that other authority.

Definition of sustainable tourism: Sustainable tourism development guidelines and management practices are applicable to all forms of tourism in all types of destinations, including mass tourism and the various niche tourism segments. 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. Thus sustainable tourism should:

1. Make optimal use of environmental resources that constitute a key element in tourism development, maintaining essential ecological processes and helping to conserve natural resources and biodiversity.

2. Respect the socio-cultural authenticity of host communities, conserve their built and living cultural heritage and traditional values, and contribute to inter-cultural understanding and tolerance.

3. Ensure viable, long-term economic operations, providing socio-economic benefits to all stakeholders that are fairly distributed, including stable employment and income-earning opportunities and social services to host communities and contributing to poverty alleviation.

Sustainable to tourism development requires the informed participation of all relevant stakeholders as well as strong political leadership to ensure wide participation and consensus building. Achieving sustainable tourism is a continuous process and it requires constant monitoring of impacts, including the necessary preventive and/or corrective measures whenever necessary. Sustainable tourism should also maintain a high level of tourist satisfaction and ensure a meaningful experience to the tourists, raising their awareness about sustainability issues and promoting sustainable tourism practices amongst them.
This requires the involvement of all stakeholders as well as ongoing monitoring of the impacts of tourism in 2005 UNWTO and UNEP outlined 12 specific aims to work towards in achieving more sustainable forms of tourism (as box 3.2)

**UNWTO and UNEP (2005) 12 aims for sustainable tourism**

1. Economic viability: To ensure the viability and competitiveness of tourism destinations and enterprises so that they are able to continue to prosper and deliver benefits in the long-term.
2. Local prosperity: To maximize the contribution of tourism to the prosperity of the host destination including the proportion of visitor spending that is retained locally.
3. Employment quality: To strengthen the number and quality of local jobs created and supported by tourism including the level of pay, conditions of service and availability to all without discrimination by gender, race, disability or in other ways.
4. Social equity: To seek a widespread distribution of economic and social benefits from tourism throughout the recipient community including improving opportunities, income and services available to the poor.
5. Visitor fulfillment: To provide a safe, satisfying and fulfilling experience for visitors, available to all without discrimination by gender, race, and disability or in other ways.
6. Local control: To engage and empower local communities in planning and decision making about management and future development of tourism in their area, in consultation with other stakeholders.
7. Community well-being: To maintain and strengthen the quality of life in local communities including social structures and access to resources, amenities and life support systems, avoiding any form of social degradation or exploitation.
8. Cultural richness: To respect and enhance the historic heritage, authentic culture, traditions and distinctiveness of host communities.
9. Physical integrity: To maintain and enhance the quality of landscapes both urban and rural and avoid the physical and visual degradation of the environment.
10. Biological diversity: To support the conservation of natural areas, habitats and wildlife, and minimize damage to them.
11. Resource efficiency: To minimize the use of scarce and non-renewable resources in the development and operation of tourism facilities and services.
12. Environmental purity: To minimize the population of air, water and land, and the generation of waste by tourism enterprises and visitors. Source: UNWTO/UNEP (2005)

**The green economy: A new paradigm and pathway to sustainable tourism**

A gear change is required to move from the traditional economic theory that creating wealth is an end goal in itself toward a more holistic economic philosophy which places human and environmental needs equally alongside motivations for private profit.

A move towards the green economy is the implementation of such a gear change. Greening the economy refers to the process of reconfiguring business and infrastructure to deliver better returns on natural, human and economic capital investments, while at the same time reducing greenhouse gas emissions, extracting and using fewer natural resources, creating less waste and reducing social disparities. The recent “Tourism and Travel in the Green Economy” conference in Gothenburg in September 2009 highlighted key issues for the industry as including:

- Actions in the tourism sector to reduce its negative impact on the environment.
- Ways that new technologies could be used to achieve more environmentally friendly results in the area of transportation.
- The application of sustainable consumption and production policy in the tourism sector.
The role of action plans adopted by national tourism organizations such as VisitBritain epitomized by its influential report on sustainable tourism (VisitBritain 2007)

**The role of public policy interventions:** The development of sustainable tourism has seen a growing interest and involvement of different stakeholders in the process with the public sector often playing a leading role. The role of the public sector can be multifaceted in the way it promotes a sustainable route to tourism development with a range of levels of intervention:

- Regulation. To control activities/behavior (e.g. via legislation)
- Coercion. To encourage change to meet policy objectives (e.g. via tax breaks or additional taxation)
- Encourage. People to change their behavior by education and advertising (e.g. social marketing)
- No intervention or interference. Minimal involvement of the state.

Ultimately this is dependent upon the government’s political philosophies. It is against this background that the work of the UNWTO Sustainable Tourism Program needs to be viewed as arguably it has been one of the most active and influential bodies in promoting a global framework to create sustainable tourism activity (Box 3.3)

**The Work of the UNWTO Sustainable Tourism Program**

The mission statement of the UNWTO Sustainable Tourism Program is to promote the sustainable development and management of tourism globally in Member States regions and specific types of destinations involving both public and private sectors for the generation of social, economic, and cultural benefits for host community commensurate with global development interests, for ensuring the supply of quality tourism products and avoiding or reducing negative impacts upon the natural and social-cultural environments.

The program of work is consistent with the Millennium Development Goals and Global Code of Ethics for tourism

**Key Objectives:**

- Facilitate the integration of sustainability and quality criteria into national, regional, and local tourism policies, development plans and strategies through the application of policy tools, instruments and measures.
- Increase international awareness on the Global Code of Ethics for Tourism and improve effective implementation of its principles by government and the tourism industry.
- Support the further improvement and application of methodologies, model, and techniques for the enhanced sustainability and quality in tourism at specific types of destinations and at natural and cultural heritage sites.
- Guidance international harmonization and recognition of best practices.
- Support the integration of poverty reduction agendas into tourism policies at the global and national levels and a wider involvement of poor communities in tourism operations.
- Ensure the social and cultural sustainability of tourism with a special focus placed on the rights and interests of local communities and vulnerable groups.
- Improve the understanding of the relationship between climate change and tourism, and promote the formulation and implementation of adaptation and mitigation policies and measures.

**Barriers to tourism:** Despite the significant growth in international and domestic growth of tourism since 1950s, there is also a range of obstacles and barriers which continue to inhibit the growth of tourism. These have been analyzed in detail by OECD’s (2008) Tourism in OECD countries 2008:
Trends and Policies in relation to the specific obstacles and the respective policy responses which may help to overcome the barriers which is described as:

1. Air transport liberalization, including the license of low-cost carriers to reduce the cost of travel and to grow the passenger volumes so that state monopolies or other monopolies on air routes are reduced to low prices. (Policy and Practice for global Tourism)

**Methods:** Positivism sees social science as an organized method for combining deductive logic with precise empirical observations of individual behavior in order to discover and confirm a set of probabilistic causal laws that can be used to predict general patterns of human activity. For more precise about the resolution calling of red-flagging chaotic, an explanation was logically connected to laws and based on facts and precise observations. Data analysis and hypothesis test resulted at the significant level of 0.05.

**Results**

Though it was long time ago and brought into procrastination, but still no any perfectly proper action can be used as the resolution. Policy recommendations and strategic development plans were developed based on the findings of this study and also be used to evaluate and apply to management of the tourism sectors in dimensions of practice. The revivable management model has been crystallized, analyzed, and test. The findings suggested in causal explanation, spuriousness when two variables, shortage of staff and red flagging, were associated but were not causally related because, while collecting qualitative data and interpreting quantitative data, there was actually an unseen third factor (causes both the apparent independent and the dependent variable) that is the real cause, an accumulatively illegitimate and procrastinative working pattern of authorization. In terms of conditions for causality, the unseen third factor represents a more powerful alternative explanation. (W. Lawrence Nueman)

Major disadvantages of political intervention, concerned with power within governmental organization rather than with matter of principles, governmental organization is good at doing all of those things, in theory, and largely in practice. For example, in certification phase, the CAA (Civil Aviation Authority) project manager will have notified the applicant of all discrepancies that need to be resolved before an AOC (Air Operator Certificate) and its associated operations specifications can be issued. An AOC will not be issued until the state organization responsible for the economic and financial assessment of the applicant has presented a favorable report, and until the CAA is satisfied that the operator has the financial resources to conduct its planned operations, including resources for the disruptions that can be reasonably expected in daily operations.

According to ICAO Doc 8335 AN 879: ICAO Universal Safety Oversight Audit Program; 1.4 Where USOAP (Universal Safety Oversight Audit Program) findings indicate that a state experiences difficulties in the implementation of SARPs (Standards and Recommended Practices) and the critical elements of a safety oversight system, ICAO is able to provide for assistance in improving the capabilities of the state, through its Implementation Support and Development (ISD) Branch, the technical cooperation program and with the help of other mechanisms, including the International Financial Facility for Aviation Safety (IFFAS). Such assistance can be provided either directly to a state or in association with groupings of other states on a regional basis.

According to Power, privilege and disadvantage the merit of intersectionality theory can be found in its ontology of power. Those who possess the organizational advantage will always succeed in overcoming those who lack organizational resources by means of a principal strategy which Mann calls organizational outflanking. (Mann 1986) An eye for an eye, a tooth for a tooth, organizational outflanking finds expression in the ability to eliminate resistances with relative ease, to prevent them in advance by means of organizational priority, as well as to impose the order desirable to those doing the outflanking. All these goals can be achieved by those who possess the preferred organizational means.
Conclusions

This paper has been conducted on the theme of multidisciplinary studies to encourage and support creativity, innovation, critical thinking, and integrative for revival organization: stand on national dignity and coping with ICAO in all respects.

Revivable Model finally fell into DOT Model, detailed as follows:

1. Determined to success: An organization must aim and determine to achieve proper goal, keep adjusting management goals, once a goal is set, an organization must play a major role in determining to see it through to the end.

2. Organizational outflanking: finds expression in the ability to eliminate resistances with relative ease, to prevent them in advance by means of organizational priority, as well as to impose the order desirable to those doing the outflanking. All these goals can be achieved by those who possess the preferred organizational means. (Mann 1986) In the respect of national dignity, the only short cut to this chaotic recovery, the CAAT should be free from political domination and refrain from discrimination or nepotism in which eclipsed all essential technological breakthrough in the realization of a zero-emission, zero-fatality world for everyone.

3. Transformation: in 1975, giving birth to the World Tourism Organization (WTO), this transformation allowed it to become an executing agency in the field of tourism of the United Nations Development Program (UNDP) and to establish cooperation agreements with the International Civil Aviation Organization (ICAO). The fundamental aim of the Organization shall be the promotion and development of tourism with a view to contributing to economic development, international understanding, peace, prosperity, and universal respect for, and observance of, human rights and fundamental freedoms for all without distinction as to race, sex, language or religion. The Organization shall take all appropriate action to attain this objective. Lastly, it should be pointed out that tourism statistics and the tourism satellite account are the fields in which recommendations and standards have been most extensively developed.

![Figure: Revivable Model Conceptual Framework](image-url)
References


From Anthropocentrism to Ecocentric Ethic: Environmental Consciousness in Native American Literature

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Abstract

The publication in 1995 of Lawrence Buell’s *The Environmental Imagination* and Cheryl Glotfelty and Harold Fromm’s *The Ecocriticism Reader* in 1996 opened the scope for a literary analysis of science itself asking pertinent questions about it and how literature presents and re-presents nature and its changing concepts. (Glotfelty xviii) The need for this interdisciplinary interface between the disciplines of humanities and science – Ecocriticism – was stressed by Glotfelty “in our postmodern age the profession of English Literature must – redraw the boundaries (to -remap) the rapidly changing contours of literary studies.” (xvii)

As the environmental crisis grips the world, all disciplines are integrating deliberations on ecological concerns within their critical studies. Ecocritics concern themselves not only with the references of the deterioration and destruction of the natural world but also identifying implicit pro-environment attitudes in literary and cultural texts, to ensure environmental consciousness as an important dimension of critical discourse. Thus, ecocriticism being an interdisciplinary approach crosses the terrain of environmental, social and cultural studies.

In contemporary society humans have had an anthropocentric approach to nature and have overlooked the significance of an ecocentric ethic. The paper endeavors to examine if an anthropocentric approach should be replaced with an ecocentric one or is there need for a middle ground? Does the nature/culture binary must be erased for an ecocentric world? What are the factors that govern the relationships between humans and their environment? Whether literature is providing responses to contemporary sociological and ecological challenges from which mankind can learn?

The study answers these questions through an analysis of the works of two contemporary Native American women writers Leslie Marmon Silko and Linda Hogan. Both writers are environmentalists who are actively engaged in ecological activism for protection of wilderness and habitat. Their activism finds place in their works and encourages a new prospective for viewing Native American culture and identity, exhibiting ecological concerns implicitly and explicitly thus opening the texts to several contemporary ethical arguments.

Native American history has been one of struggle for their lands and displacement, dispossession and destruction of its natural resources has been therefore articulated in their writing. They are recognized for their complex association with their land and their literature reflects this deep reverential connection between their indigenous culture and natural environment. The narratives stress the inherent worth of nature and the age-old continuity of the community living in close connection with it. The world view and the value system maintained by the Native Americans is the closest we come to a long practiced ecocentric ethic, which humankind may consider adopting for addressing our environmental concerns and halting the process of degradation.
Practices Concerning Early Intercultural Foreign Language Teaching/Learning in French Teacher Education: An Example of Holistic Multiple Case Study Design with Instructors from Turkey*

Çiğdem Kurt, Anadolu University, Turkey
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Abstract

In today’s world, where intercultural communication is increasing rapidly, it is thought that prejudices fed to other cultures and societies that are to say the ‘others’ can only be overcome by providing intercultural foreign language and cultural awareness at an early age. In this regard, the instructors’ roles and responsibilities as intercultural mediators are of paramount importance in the education of future generation. Regarding the limited number of researches on Early Intercultural Foreign Language Teaching/Learning (EFLT), it is of fundamental importance that the researches which will primarily question its place in teacher education programs. Given its importance, the general purpose of this research is to provide exemplary practices for the instructors in order to develop intercultural communication skills in children in accordance with the views and practices of the instructors responsible for Foreign Language Teaching to Children course included within the compulsory courses in the foreign language teaching programs in Turkey. In response to this general objective, the following inquiries were sought within the scope of the research: What are the intraclass practices of instructors responsible for Foreign Language Teaching to Children course in French as Foreign Language Teaching programs in Turkey where the intercultural approach is given rise in the contents and aims of this course? Is the Early Intercultural Foreign Language Teaching/Learning being implemented to instructors’ intraclass practices? The method of this research is holistic multiple case study design which is one of the qualitative research method based on the postpositive paradigm. Within the context of the holistic multiple case study where the researcher has assumed the role of evaluator, the intraclass practices of the two instructors responsible for Foreign Language Teaching to Children course during the fall semester of the 2016/2017 academic years were examined by participant observation technique. The participants of the study chosen in accordance with purposeful sampling method consist of two instructors who assume the Foreign Language Teaching to Children course and who give rise to intercultural approach in the aims, contents and evaluations of this course. The qualitative document analysis, semi-structured interviewing and observation were used as data collection tools in the study and the data were analyzed by qualitative content analysis. As a result of the analysis of the data, it is found that the instructors responsible for Foreign Language Teaching to Children course have conceptual confusion for EFLT as well as a number of significant theoretical and methodological deficiencies. Consequently, it is seen that there was hardly any place for the intercultural approach in the content, aim, method and evaluation of the course in view of the multitude of topics in the content of the Foreign Language Teaching to Children course as an only one-term compulsory courses. Therefore, it is proposed that Early Intercultural Foreign Language Teaching course should be added to the compulsory courses in foreign language teacher education programs. It is also recommended that more research be carried out on developing teaching materials suitable for children’s age and level so that teachers can develop intercultural communication skills in children.

Keywords: Early intercultural foreign language teaching/learning, foreign language teaching to children, intercultural approach, intercultural communication skills, teacher education.

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Explore the Relationship between the Students and Their Teachers Using E-Learning Resources At Najran University

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1. Abstract
The use of the internet in the twenty-first century has led to a remarkable changes in several aspects of our daily lives. It has come to be an essential means of communication for both learners and educators. In Saudi Arabia, with a recent educational system, accessing e-learning in higher education is a challenge. E-learning in higher education, however, needs to be taken into consideration in order to increase the ability for understanding new methods of learning. This study investigated the number of students taking e-learning courses in the higher education sector and how they developed online course availability. To the knowledge of the researchers, no such surveys have investigated the perception of students about-learning; recent developments in using technology in the Saudi Arabia educational system has highlighted the importance of these issues. Semi-structured interviews were used to examine a number of issues by investigating the perception of students focusing on the use of technology by e-mails, university websites, and the facilities available in the preparatory year of college at Najran University. 10 female students in this college were asked for interviews. The findings indicated a lack of time investment and inadequate facilities which can lead to failure in practicing e-learning, especially in the absence of training; therefore, there are several concerning issues facing the e-learning services in the colleges in Saudi Arabia. After discussing the conclusions of the study, some recommendations are made for improving the quality of e-learning and the need for additional research is presented.

Keywords: E-learning, higher education, technology, undergraduate

2. Introduction
The Saudi Arabian educational system has experienced major growth to meet the religious and economic needs of the country, as education receives 25% of total spending in the nation’s budget, which is considered the highest in the world (Ministry of Higher Education, 2010). According to the mission statement of the Ministry of Higher Education, "e-learning is not just an ‘added value’ to facilitate and accelerate traditional education. E-learning does not only provide massive information ‘vessels,’ but it also stimulates in the learning mechanisms of information acquisition, it is processing, and sharing with others in its construction and conversation into interactive positive information" (Al Saif, 2005). The Saudi Arabian educational system has high demands to provide additional educational opportunities for the increasing population. In 2008, a national plan focused on adopting information technology across the country. The plan recommends implementation of e-learning and distance learning and their prospective application to higher education (Chanchary & Islam, 2011). The rapid growth of e-learning in Saudi Arabia seems to be affected by the demand for higher education with other crowding and insufficiency of facilities and human resources for the delivery of traditional-style education. Since Saudi Arabia is a large country geographically, e-learning provides the opportunity to deliver educational services locally, therefore reducing disparities across various regions and areas (Al Saif, 2005). Currently, learning resources were applied and a project was started by the Ministry of Higher Education which aimed to make a leap from a repository of information to a place to work, activity, and focus of study within the framework of a comprehensive system to provide a learning environment that may be able to accommodate technological development.
3. Literature And Theory

E-learning has been defined in many different ways and the definition of e-learning, online learning, technology enhanced learning (TEL), and distance learning often overlap (Moore et al, 2011). Khan (2005) also defines this term as "an innovative approach for delivering well-designed, learner-centered, interactive, and facilitated learning environment to anyone, anyplace, anytime by utilizing the attributes nod resources of various digital technologies along with other forms of learning materials suited for open, flexible, and distributed learning environment." Furthermore, Al-Harbi's (2011) investigated the concept of e-learning in Saudi tertiary education with challenges which showed that e-learning is influenced by different factors. A student's attitudes towards e-learning is the most important factor in determining a student's intention to use e-learning. A student’s decision to use e-learning is also determined by their subjective norms, such as the influence of the important people around them. These findings are supported by the seminal works in the area of technology acceptance; however, Bendania (2011) attempted to explore and investigate instructors' and learner' attitudes towards teaching and learning courses online with the use of Instructional communication and Technology (ICT) at King Fahad University of Petroleum and Minerals in Saudi Arabia.

Bendania’s (2011) study exploring learners’ and lecturers’ attitudes about teaching and learning online at KFUPM showed positive results towards the use of ICT mainly in experience, confidence, usefulness, and enjoyment. These findings were confirmed by Al-Dosari’s (2011) study that students’ perception of learning in the English department indicated that learning could be improved with a traditional approach, consistent with king Khalid’s study by Islam (2004) which showed enhancement towards the use of technology at the ministry of Higher Education and shift to an e-learning and modern models; therefore, based on the previous e- learning, he provided a definition of this term as "the use of new multimedia technologies and the internet to improve the quality of learning by facilities access to resources and services as well as remote exchanges and collaboration.” According to Alharbi (2011), e-learning has the potential to positively impact education, and it provides a great chances for both students and teachers to enrich the educational experience and skills with unfathomable amounts of information, independent of the pressure of time and the constraints of distance.

This paper is constructed as follows: first, it gives a brief introduction of e-learning; second, it provides a perception of students that examined the use of e-learning internationally and regionally; third, it presents the research methodology. Finally, the findings are discussed in the light of previous research studies. The purpose of this study is was to investigate the factors that influence e-learning use and acceptance by the girls attending a preparatory year college at Najran University.

Finally, some implications are discussed:
- To investigate the perceptions of students regarding their own roles and function;
- To determine the views of using of multimedia (using e-mail and websites to follow their courses electronically);
- To identify obstacles faced by the students during their using of e-learning in order to make recommendations for further development of higher educational programs

4. Methods

4.1. Participants

The study sample was drawn from students attending the preparatory college at Najran University. To achieve the study aim, students from each level of the college were interviewed to collect qualitative data on their thoughts, satisfaction, problems, and recommendations for e-learning. The students interviewed were between 20-23 years old. The interviewees were all seeking university preparation for undergraduate degrees.
4.2. Measures

In-depth semi-structured interviews were developed for this study. The students were asked questions concerning the availability of e-learning and their perceptions of their own use of methods and techniques used in dealing with course planning and challenges they faced.

The questions developed for the students are as follows:

1) What is your perception of using e-mail to communicate with your lecturers on your course issues?
2) How do you follow your courses electronically on the university website?
3) How do you follow and ensure your assessment and questions from your teachers?
4) What facilities are available at the college to provide you with opportunities to communicate with your lecturers?
5) How do you rate your satisfaction with your experience with e-learning at your college?

Information on the students’ age, interest, and satisfaction with using e-learning was recorded in written notes, which allowed for a full manual analysis. Interviews were conducted at the interviewees’ convenience at the college, after the purpose of the study was explained. When the questions had been answered, the interviewees were invited to add any comments or information they thought was important.

5. Results

5.1. Students’ perceptions about using university e-mails to communicate with their teachers.

Seven students were not able to contact their teachers by e-mail. Some teachers have prevented students from contacting them due to privacy, as one student stated, "some teachers do not want us to contact them by e-mails, they thought that these are private issues from letting us contacting them." Due to this issue, they did not communicate with their teacher through e-mail.

5.2. Receiving course files from teachers at the university websites.

Most students did not receive course files at the teachers’ website, as it is not accessible for most of them. Furthermore, students also were not be able to access these courses even when they were available, due to the lack of student training and skills on how to access these lectures electronically on the university portal sites. One students stated, “I do not have an enough skills that abled me from accessing my courses on line via the university sites of academic staff.” Another student stated, "because of the heavy schedules I got especially in the last level, I do not have enough time to inter my course online that I took my lecture with enough information in the class." The areas they found most difficult were those that were time-consuming and skill-based.

5.3. Completing an assessment, activities, and problem solving with e-learning.

Seven of the students indicated that they encountered problems with activities and assessments. One student and some others agreed that "it is very difficult for us to solve out assignment and provides some activities on line that we do not have enough time because of the heavy courses loads we got every semester." All of the students mentioned that they were trained by their teachers on how to use the instructional technology but that they did not have enough time and easy access to the internet both in and outside their college.

5.4. The facilities used by the students provided by teachers.

All of the respondents indicated that they needed a computer lab inside the college as one student pointed out, "we need these labs to give us a chance to communicate directly and easily without teachers and solve out assignment that teacher asked us about it." They agreed that this method helped them discuss the questions asked. Eight students agreed with the same point. One student said, "If the computer labs provided, we will be able to discuss many concerned issues with my teachers and also with my colleagues." Due of the large numbers of students, individual work was limited to special training which required time and skill.
5.5 Are the students satisfied with using e-learning?

When the students were asked about their satisfaction with e-learning, the students agreed with the same response: "they did not get enough support with time and skills to practice this…we like using of e-learning, but the lack of time, training skills, and limited facilities provided, we are not able to work on it easily."

The most frequently used methods for collecting information was the interview: "the interview methods remains the only options". Nevertheless, some students still need more training on these areas: "we need more training programs specified a time for us to practice using of e-learning in front of the teachers to check our understanding of these concept, show us the users we could access to the courses by either new site on university websites." Students experienced previous support from self-learning at their high school: "I could access to e-learning easily because of my previous background during my study at the high school with some courses prepared me to the university study easily and comfortably.” Other students indicated that, "I had not experienced enough support from teachers especially those with low academic experiences and achievement". Therefore, all respondents pointed out that they did not have enough time for e-learning which they had to spend up to 40% of their time practicing. It was very difficult for them to contact their teachers by e-mail.

All respondents stated that they were happy to practice e-learning with the support of enough training and facilities with more time offered to them; however, some students claimed that there were few training courses which prevented them from participating in their courses. It is clear from these results that a number of problems exist regarding student satisfaction with e-learning.

These findings may be summarized as follows:

1) Students do not use e-mail with their teachers in order to contacting them with issues related to their courses;
2) Students do not follow their courses electronically on teachers’ websites at the university portals;
3) The students need more opportunities to access their course requirements with their teachers confidently when using e-learning;
4) Computer labs and facilities at colleges are lacking;
5) Students are no satisfied due to time constraints that prevented them from practicing E-learning.

6. Discussion

It is clear from the findings of this study that most students did not have a satisfactory e-learning experience; for example, some e-learning knowledge and background is needed so that students can practice more easily. From the students’ perceptions, there is clearly some level of understanding of the importance of using of e-learning in the field of higher education directed by the ministry of higher education, whose emphasis is almost wholly on higher educational college for all majors which one considered to be important (Islam, 2014). Focusing on the advantages and benefits of using of e-learning at higher educational institutions, one goal is to assist the students in taking responsibility to increase their ability of understanding the use of technology in their daily life. In addition, it is important to assist the students in examining the personal issues of self-learning (Alshehry, 2009).

The students in this study indicated that providing them with a guide and enough time was necessary in order to assess their e-learning more accurately. This issue must be addressed in course planning from higher leadership, as well as showing the students how to achieve each task. Given limited skills and training, some of the students found that participation in technology and social media with their teachers was difficult, especially for following each assignment, course plan, and the timetable on the websites; therefore, it is not surprising that students with a limited background in e-learning found it difficult to conduct case studies, which was especially evident in understanding how to analyze results and find viable solutions.
Case studies require someone who is knowledgeable about the subject, able to investigate results, and also capable of finding the right solutions and suggestions. In this situation, unqualified, untrained students could not respond to e-learning problems which case studies require; the students may simply look for a quick solution in order to avoid the issues regarding the study. Whereas, the students interviewed extensively used certain methods, techniques, and approaches to learning which is usually more traditional than the new way of learning, only one student stated that she used instructional technology during her learning. However, determining the right methods to use for learning is an important step and should be based on the abilities of the students as well as the type of the problem. Interestingly, these findings contradict those of Moore et al (2011) and Khan (2005), who found that e-learning is an innovative technique with a well-designed approach and that interactive learning environments are suitable to be used every time at any place.

All respondents agreed that e-learning needed more attention and that it was important to resolve some of these issues with their teachers or academic directors at school, including a lack of computers labs and rooms for student groups discussion with available computers for each course to train their students using of Instructional Technology (IT). Among the techniques provided for collecting information on interviewees, teachers’ records and observational approaches were neglected. The interview method was used as a means of collecting information from the students. The use of this method was likely restricted by the lack of time and instead was used as a quick, effective method for information. The college vision and attitudes towards e-learning clearly play an important role in enabling students to achieve their instructional communication and technology. Support and cooperation from the principals and teachers is crucial.

It was also discovered that course overload with lack of time is an obstacle for e-learning. Bendaria (2011) reported that the teachers with responsible leaders in their colleges have a major impact on the role of e-learning. From the results of this study, lack of time and background also seem to be critical problems; yet if teachers do not work hard, the success of the learning process and evaluation will be affected. Alharbi (2011) stressed the role of e-learning processes in higher educational related with other schools. She pointed out the importance of using of IT and the need for good communication. A possible explanation of the support and co-operation received from students might be that they understood the importance of using of e-learning at their college. Their familiarity with IT perhaps means that they could accept the guidance and enhancement extended to them in regards to their studies on their academic or practical futures after graduation. All students complained about the time constraint with course overloads each semester and more time in organizing IT; however, students need more comfortable time with activities that focus on e-learning outside college rather than inside.

All of the students interviewed explained that time constraints were major issues and impacted the quality of services offered. Aldosari (2011) found substantial evidence to support the positive assertions of using new learning methodology rather than traditional approaches. These problems could be partly attributed to the large numbers of students, although the situation may be further complicated for those with different levels of knowledge; moreover, not only are very few training courses available, but none that exist are based on lecturers without open discussion. As a result, these offerings little benefits and do not fulfill their requirements.

7. Limitations of the Study

Although this research was carefully structured, several limitations are apparent. First, there was not enough time for the interviews, which were conducted during the college hours. Each interview lasted between 20 and 30 minutes and had to be slotted into a busy day. The methods used, although considered appropriate for the present study, are not free of limitations, because of their interpersonal nature. Furthermore, the use of the Arabic language and the translation of the interviews raise issues of translational accuracy.
8. Conclusion And Future Work

The quotes in the students’ samples in this research demonstrate a lack of specific e-learning background and training based on their skills and understanding. From the results of this study, it can be concluded that there are several problems facing these students with e-learning services at this college. The Ministry of Higher Education is encouraging the use of e-learning into higher education but needs to focus on increasing training. Although the development units inside each college focus on these areas, there are no well-organized training or resources. Without a doubt, students need training in order to compete with in society. Solutions for these problems might involve, for example, high outcomes with alternative way of evaluating IT in order to increase the number of beneficial uses of new modern techniques of learning.

Another problem identified in the present results is the lack of understanding about the important of IT. Students themselves bear the main part of this responsibility. They should also maintain a high standard of capability and understanding, which is a fundamental principle of the profession, although exceptions may be made in certain circumstances.

Finally, all students should be required regular internal supervision to ensure the way that e-learning is practiced in their college. The supervision process should enable students to think positively, such that they give the best possible understanding of applying the new issues of learning. Further research should be carried out to develop this aspect of the learning and educational process.

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10. References


Improving Performance in Industrial Value Chains: Insights from the Textiles Industry in Zimbabwe

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Abstract
In Africa, improving the performance of industrial value chains offers a realistic opportunity for improving the socio-economic status of the African people. However, lacking is a framework for improving performance in industrial value chains. The existence of many interrelated performance variables in Africa’s industrial value chains makes it more difficult to isolate the exact factors to be manipulated to sustain value chain performance. The purpose of this study is to determine the factors influencing performance in industrial value chains and therefore propose a framework to guide industrial policies to improve performance in industrial value chains. Using Porter’s diamond, New Institutional Economics, and Social Network theories, a conceptual framework was developed and tested using a unique data set from the Textiles value chain case study from Zimbabwe. The analysis was based on survey data sets obtained from 188 purposively sampled experts from the textiles value chain in Zimbabwe. Exploratory factor analysis was used to find the factors influencing performance in the value chain. The results showed both architectural and governance factors as important determinants of performance in the textiles industry in Zimbabwe. The findings of the study have policy implications for industrial value chains in the developing countries and also indicate areas for further robust investigations based on wider data sets from other industrial chains in Zimbabwe, or even beyond to validate the framework for improving performance in industrial value chains.

Key words: value chains, textiles, national diamond, new institutional economics, social network theory, exploratory factor analysis

Introduction
Traditionally, business management research focused on single firms as units of analysis. This allowed managers somewhat sufficient guidance on improving performance of business entities. This epoch marked by highly globalized markets and ever-increasing competition, it is clearly no longer feasible for managers to base their decisions on standalone businesses. Moreover, for most products, value chains are the link between the producers and customers. As a consequence, research in business management now tends to focus on multi-firm analysis as opposed to single firm analysis. Given the foregoing, management theory and practice the world over now progressively recognizes the centrality of the value chain approach in improving business performance. Despite this development developing countries such as Zimbabwe seem to lack the appreciation of the efficacy of the value chain approach in sustaining performance in industrial value chains (Ngatia, 2013; Kundu, 2013; Altenburg, 2011). Industrial value chains in developing countries are persistently plagued by imminent collapse with the attendant social and economic well-being.

For example, the textiles industry in Zimbabwe faces a realistic challenge on how to improve on poor performance. The last 15 years are quite distinct in this failure as the lack of sustained productivity, value addition and capacity utilization are all evident. There is every reason therefore to seek to arrest further decline in performance as a matter of urgency to avert socio-economic problems for the country. However, a lack of a guiding framework to indicate the performance constraining factors seriously impacts on any attempts directed to the improvement of performance in the textiles industry in Zimbabwe. Thus, the answers to the question “Which key factors influence performance in the
cotton value chain in Zimbabwe?” are pertinent in the quest for improving performance in the textiles industry in Zimbabwe. As there is no unified theoretical understanding of industrial value chains and the factors that influence their functioning (Gereffi & Fernandez-Stark, 2011), developing such a framework of performance factors forms the study’s objective. To achieve this aim, the study is divided into two parts namely the theoretical and empirical study.

Literature

The prevalence of diverse conceptual and analytical approaches for use in value chain analysis makes the endeavour nebulous exercise if not one in futility. Nonetheless, value chain scholars (for example, Baker et al., 2009) continue to argue for the identification of the performance and competitiveness variables and their assessment so as to bring about improvements that are essential in value chains. A close examination of literature discussing performance in value chains shows that three “stylized” theories are relevant to the understanding of the factors influencing performance in the industrial value chains of the world, namely, Porter’s competitiveness diamond, Transaction Cost economics and Social network theory. The following sections are dedicated to the discussion of the individual theories showing how they contribute to the understanding of the value chain performance factors.

Porter’s competitiveness Diamond

When it comes to understanding the factors that drive the competitiveness of national industries Porter’s competitiveness Diamond shows signs of being an all-inclusive approach. Porter (2011) articulates that only the new factors such as skilled labour, research and technology, culture and government support are responsible the comparative advantage of any given country. Although similar to the factors presented by the classical view of a nation’s comparative advantage, the competitiveness diamond is an encompassing view of national advantage. Evidently, in the eyes of Porter (2011), national advantage emerges from a deliberate nationally formulated and implemented strategy. The salient requirements for creating national advantage thus government support, industry structure (or firm structure) (Chandler, 1962, 1990, and 1992), and national resources (Bonanno and Salete Barbosa Cavalcanti, 2011; Hart and Milstein, 2003). Here, it can be argued that even while taking a “global” view, Porter seems to be essentially analyzing the inter-play at the level of industries, taking an industry based in one nation as having an advantage over an industry based in another nation, with firms in value chains playing their roles as industrial organizations.

As implied above, advanced factor endowments in a nation appear to arise from government support and culture with skilled labour, technological base, their up-grading and deployment and innovation underpinning advancement of such factor conditions, which in turn coalesce into a resource that helps create the national advantage. Taking this argument to value chains is logical as these entities are made up of various industries within the country coming together to add value to customers (Porter, 1985; Kaplinsky & Morris, 2001). For Porter (2011, 1990), the existence of clusters in value chains is a necessary condition for sustaining competitiveness The competitiveness diamond identifies four mutually reinforcing determinants of national competitive advantage, namely, demand conditions, factor conditions, firm strategy, structure and rivalry, and ‘related and supporting industries.’ According to Porter (1998), these four elements shape the competitive environment for a nation’s firms.

Nevertheless, extant literature locates the lack of depth in the discussion of the determinants of competitiveness in Porter’s diamond. For example, Martin & Sunley (2003) find fault on the link between performance and the competitiveness diamond. In other words, while the competitiveness diamond explores the role of an industry in the competitiveness of territories (Porter, 1998), the framework itself is not explicit about the performance objectives of the industries in the value chains (Ferreira and Otley, 2009) nor does it recognize the dynamic forces that could alter the competitive environment.
Transaction Cost Economics

Transaction cost economics signifies the choices humans make when facing limitations such as information inadequacy, information processing capabilities, perceptive competencies, evolving norms, and lack of trusting bonds. Central to the theory are transactions and associated costs, property rights and contracts (Richter, 2015). For Ménard and Shirley (2014), economic agents tend to rely on institutions when managing transaction costs, property rights, and contracts. In the context of value chains, TCE intensely explains the relationships among incumbent firms (Freeman et al., 2010; Williamson, 2008). Certainly, the structure of an industrial value chain, as delineated by the degree of vertical integration, follows the characteristics of articular transaction: uncertainty, frequency and the degree of asset specificity (Cao & Zhang, 2011; Fawcett et al., 2008).

Literature is clear on the need to first understand the purposes served by particular firms in value chains before examining their activities. In so doing, it becomes easy to isolate the factors influencing the governance of activities in value chains. In other words, activities in industrial value chains are carried out with the aim of minimising transaction cost. As has been said before, costs are inherent and permanent in the functioning of markets thus their reduction implies a higher performance. Williamson (2008) clearly distinguishes among the costs associated with searching, negotiating and specifying a transaction. This goes to show that, indeed, transaction costs define how firms are organized in the value chains. In brief, as propounded by Standifird and Marshall (2000), transaction costs determine the interactions that result in the production of goods and services in value chains. Johansson (2015) identifies specific transactions based on asset specificity, uncertainty and frequency all bearing on the type of governance mechanisms needed to protect economic agents against potentially hazardous exchange relationships (Scott and Davis, 2015). In reality the presence of uncertainty in business exchanges results in bounded rationality and opportunism tied to human actors, the contracts, or transactions in the process affecting the performance of organizations. In any case, minimizing transaction costs ensures competitive advantages accrue to the industrial value chains (Gereffi, Humphrey and Sturgeon, 2005).

Given the above, the most important issue in value chains would be the selection of institutional arrangements that can mediate specific business relationships and choices. Johansson (2015) articulates the argument that a specific type of governance structure usually is better indicated than others to deal with some transactions. In order to survive, actors in value chains must properly align the transaction characteristic (for example, uncertainty, asset specificity and frequency) with selected governance mechanisms. TCE is thus instrumental in explaining the behaviour of actors in the value chains. Besides, many scholars (for example, Ashenbaum et al., 2009) support the notion that only a proper alignment of transactions with the different governance mechanisms can foster sustained performance in value chains.

In spite of the above, the efficacy of TCE in explaining the performance in value chains has generally been questioned. A number of omissions are cited with TCE on a number of issues. Firstly, TCE does not acknowledge the role played by organizational capability differences in shaping organizational structures. Secondly, power relationships (Riisgaard & Hammer, 2011), trust and other social embeddedness mechanisms (Granovetter, 2005) are ignored in the discussions of TCE. Further, the lack of empirical measurement with regards transactions in value chains (Han et al., 2012; Becerra, 2009) is rather disturbing. In any case, transactional costs effects on vertical co-ordination appear to be rare in value chains literature. On the whole, the insights which TCE provides into the nature of governance still needs empirical verification through micro-analytical studies of value chains.

Social network theory

Typically, social network theory attempts to clarify interactions that occur in the society by looking at how interrelationships impact on the behaviour of the agents from the point of view of interrelationships. Indeed as argued by Marin & Wellman (2011) individual motivations, mind-sets, or demographic attributes count for nothing in the behaviour of people. Instead, it is the pattern of interrelationships that shape how people respond to their circumstances. Thus, the social network theorists believe in holism explaining industrial value chains. Therefore according Marin & Wellman (2011)’s reasoning it is the relationships and the associated patterns that should define social life in
industrial value chains rather than the categorical entities thereof. It further clear that the social network theorists’ focus goes beyond the dyadic ties in systems. Especially, when one considers that information and resource flows in a given industrial value chain usually depends on the totality of relationships in the system. This means that due to the fuzziness in group boundaries, the structure of a particular value chain is a result of network overlaps rather than individual connections since, under normal circumstances, individual players always have other relationships with many other groups.

From the above, therefore, persons, firms, communities, countries or regions comprising industrial value chains are the nodes implied in the social network theory. As Shaikh & Jiaxin (2006) finds, there network ties at particular levels (for example, ties connecting individual entities to each other) or at cross levels (such as those ties connecting individual entities to groups) of the value chains. For Marin & Wellman (2011) these denote information ties, formal ties, affective ties, material or work flow ties, proximity ties, and cognitive ties. The foregoing, indicates the possibility that social networks complexity of social networks in terms of relationships with other nodes. Accordingly, the strength of the social ties is relevant in explaining the performance in industrial value chains (Granovetter, 1982). Memon et al. (2011) maintain that stronger social network ties result in higher socio-emotional support and high trust levels while weak social network ties may cause exclusive information among the value chain actors.

With the foregoing, it is clear that the social network theory can amply be used in defining the performance factors in an industrial value chain. Indeed, Trienekens (2011) applied the social network theories to explain embeddedness of firms in complex horizontal, vertical and support connections that allow the access of inputs and services pertinent to the success of business undertakings. In addition, diverse social network theories (self-interest, social exchange or dependency, mutual or collective interest, cognitive theories, and homophily) are well indicated in the analysis of performance variables of a value chain. Furthermore, Scott & Davis (2015) point to the instrumentality of external group ties in the success of value chains such as the provision of useful knowledge or the reduction of conflict within organizations (Robbins, Judge, Millet and Doyle, 2013; Daft, 2012). As well, the work of Hackman & Katz (2010) gives of evidence of free rider behaviour reduction in those groups with many overlapping external ties. Certainly, such structural embeddedness (Scott & Davis, 2015; Foster, Borgatti, & Jones, 2011; Granovetter, 1985) harmonizes the effort level of group members for better performance.

In literature, many network theorists (Granovetter, 2010; Bowie, 2001; Shankman, 1999, Coleman, 1988) align with the paradigm of rational self-interest in business by asserting the role of network ties in maximizing personal preferences and desires. However, this desire to maximize individual interests is met with constraints in the interdependent relationships in which the actor is embedded. This implies that the actor’s self-seeking behaviour is constrained by the relationships the actor is part to. Nevertheless, increased resource access through the other actors in the network reduces the constraints to self-interests. Hence, in accordance with Zaheer, Gözübüyük and Milanov (2010) individual entities in industrial value chain create ties as an investment to accumulate “social capital.” Social capital entails the “sum of the resources, actual or virtual, that accrue to an individual or group by virtue of possessing a durable network of institutionalized relationships of mutual acquaintance and recognition” (Bourdieu, 2011:84). In other words, the self-interest perspective explains how individuals use social capital (Myers and Nelson, 2010) to create opportunities of profitmaking. Burt (2001) emphasizes that there are sometimes “structural holes” within social networks that present opportunities for the individuals to deploy their own social capital. Accordingly, value chain actors receive return on their investments when they are able to “broker” knowledge and information flows with those they are not in direct connection. This flow of knowledge is crucial for the sustainability of a value chain.

Scott & Davis (2015) allude to the instrumentality of external group ties in the success of value chains (for example by providing useful knowledge and reduction of conflict within organizations (Robbins, Judge, Millet, & Boyle, 2013Daft, 2012). In related literature Hackman & Katz (2010) observe that free rider behaviour is lessened in circumstances where group membership is characterised by many overlapping external ties. Certainly, such structural embeddedness (Scott & Davis, 2015; Foster,
Borgatti, & Jones, 2011; Granovetter, 1985) harmonizes the effort level of group members for better performance.

In so far as the above goes, the first challenge encountered when using the social network theory tends to pertain to positioning the network within the gambit of value chain. Another problem stems from the need to differentiate findings through the different levels of analysis (Scott, 2012; Borgatti, Mehra, Brass and Labianca, 2009). As it stands, most of the social network analysis is rather static in nature (Baggio, 2011), only providing a single view of network ties. As a result of the inability to obtain the network data prior to group outputs (and received feedback), it is difficult to conclude whether the observed network patterns are a consequent of the ties leading to success or success leading to ties. In line with Ross (2016), while any value chain can demonstrate a network structure with individual businesses connected to others in order to collectively produce goods and services for the market, focusing on the social relations to the exclusion of other pertinent factors in the value chain kind of detracts its applicability in a holistic depiction of the functioning of value chains. This means the necessity of other theories to augment the theory’s contribution to the understanding of performance in industrial value chains.

Towards the conceptual framework

As can be seen, the three theoretical frames used in this study cannot fully inform the value chain analyst of all the possible factors affecting the performance of an industrial value chain. With regard to Porter’s diamond framework, many scholars of economics heavily discredit it. Specifically, Krugman (1995:464) describes the competitiveness diamond as misleading since the logic behind the linkages has not been clarified. For Krugman (1995), the framework is simply “a clever didactic device” that cannot be of any particular use to economists. True, the relevance of some of the factors incorporated in the competitiveness diamond model cannot be discounted. Moreover, many other scholars (Riasi, 2015; Herciu, 2013; Dögl et al., 2012) still utilize the theory. However, with increasing globalization (Friedman, 2011; Liu, Stanturf, and Goodrick, 2010; Ray, 2007) together with the continuous disaggregation of value chains (Meredith, 2007), Porter (1990)’s initial ideas and assumptions are increasingly becoming questionable.

Within TCE theory, two critical limitations are evident, that is, there are difficulties due to social interference to attempts on measuring transaction costs (Schmidt, 2006; Sarason, Pierce, & Sarason, 2014) and the higher focus on efficiency (Schwartz & Lorber, 2012). It is clear that organizations in industrial value chains adjust to the external environment as well as to the internal competences. This calls for a vigorous approach for identifying as well as quantifying the subsequent transaction costs. Additionally, without taking efficiency as the principal condition for a firm’s choice of procurement strategies, TCE theory is particularly not useful on its own, due to the implied loss of resources and/or synergy effects that contribute to the value created in the organization.

Using Social network theory to explain the performance and competitiveness of value chains faces two limitations. To begin with, clarity on the network position in the midst of chain of events is questionable. Secondly, how to extrapolate one level of analysis from the other is a major conundrum. In the main, social network analysis is a static theoretical lens, that is, it is indicated for single view of the network ties (Leinhardt, 2013). Furthermore, for Prell (2012), the ex-post collection of network data makes it particularly difficult to determine which comes first, success or connectedness. In other words, it is problematic to ascertain causes of performance in value chains by using networks theories on their own.

However, when combined the three theories complement and reinforce each other to produce a framework that encompass the external environment, structure and governance variables that affect performance in value chains as indicated in Figure 1
Methods
The field work was conducted from April 2016 to September 2016. A quantitative survey was conducted with textiles industry value chain experts in order to identify and classify the factors influencing the textiles value chain. Experts were identified on the basis of their work experience in the textiles industry in Zimbabwe. Their expertise was also critical especially with regards governance of the textiles value chain in Zimbabwe. Heads of concerned government departments and operations managers of businesses with activities in the textiles value chain were instrumental in identifying resource persons who helped with the identification of the possible textiles value chain experts for the distribution of a questionnaire. The sampling method was a purposive variant called snowballing. A structured questionnaire was then used to collect the data. Data were analysed using descriptive and multivariate statistics. The Cronbach’s alpha coefficients were instrumental in establishing the reliability of the data collection instruments used to measure the constructs used in the study.

Results
Statistical analysis
Internal consistency analysis Cronbach’s alpha was used to test the reliability of the questionnaire items used in the study. As a test, Cronbach’s alpha allows researchers to estimate the consistency in instrument items. (Tavakol & Dennick, 2011). Having no lower limit, Cronbach’s alpha ranges from 0 to 1 with those alpha coefficients closest to 1.0 exhibiting greatest internal consistency on the items. Nonetheless, any value above 0.6 is accepted as offering sufficient internal consistency reliability (Yücel, 2012; Malhotra, 2010). Tables 1 presents the Cronbach alphas for the respective items used in this study.

Table 1: Reliability testing on the items measuring performance factors in the textiles value chain

<table>
<thead>
<tr>
<th>Reliability Statistics</th>
<th>N of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cronbach's Alpha</td>
<td>22</td>
</tr>
<tr>
<td>.790</td>
<td></td>
</tr>
</tbody>
</table>
Exploratory factor analysis

An exploratory factor analysis (EFA) was carried out on the instrument items. An exploratory factor analysis can be employed to do basically two things on the data, namely, to reduce the number of variables as well as to categorize the variables (Hair, 2015; Kline, 2014). Before embarking on exploratory factor analysis, it was essential to ascertain the factorability of the items in the instrument. Thus, as an initial step, the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy and the Bartlett Test of Sphericity were performed in order to determine the factorability of the data. Pallant (2010) stresses that only those values greater than 0.6 for the KMO test and a significant Bartlett’s Test of Sphericity value indicate the factorability of the data. Presented in Table 2 are the results KMO and Bartlett’s tests on the dataset from the textiles industry value chain.

Table 2: Results of KMO and Bartlett’s Test of Sphericity on performance factors

<table>
<thead>
<tr>
<th>KMO and Bartlett’s Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kaiser-Meyer-Olkin Measure of Sampling Adequacy.</td>
</tr>
<tr>
<td>Bartlett's Test of Sphericity</td>
</tr>
<tr>
<td>Approx. Chi-Square</td>
</tr>
<tr>
<td>df</td>
</tr>
<tr>
<td>Sig.</td>
</tr>
</tbody>
</table>

The results presented in the Table 2 indicate, firstly, that the KMO value for the data (KMO=0.763) was greater than the benchmark of 0.6 (Dimitrov, 2014). It was thus suitable for factor analysis. Secondly, the Bartlett test result (Chi-square Bartlett test=1995.041(df=666), p=.000<0.05) was significant (Leech, Barrett, & Morgan, 2014). This means that the correlation between the variables was sufficient for factor analysis. Accordingly, the results of the two tests were satisfactory to allow factor analysis on the data sets measuring the performance variables from the textiles value chain in Zimbabwe.

Based on the KMO and Bartlett test results the data collected from the textiles industry value chain experts in Zimbabwe to measure the performance factors instruments were subjected to exploratory factor analysis as indicated in the following sections.

Eigenvalues of factors

Eigenvalues of factors represent how much the factors contribute to the total variance of the model. Higher eigenvalues thus indicate higher significance from the viewpoint of the solution. Presented in Tables 3 are the eigenvalues of the performance factors using the Kaiser rule of eigenvalues greater than one (> 1)

7.5.1.1 Performance factors in the textiles value chain in Zimbabwe

Table 3: Eigenvalues of textiles industry performance factors
Table 4: Initial factor solution for the extracted performance factors

<table>
<thead>
<tr>
<th>Q26</th>
<th>Factor 1.1</th>
<th>Factor 1.2</th>
<th>Factor 1.3</th>
<th>Factor 1.4</th>
<th>Factor 1.5</th>
<th>Factor 1.6</th>
<th>Factor 1.7</th>
<th>Factor 1.8</th>
</tr>
</thead>
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<td>0.268</td>
<td>0.217</td>
<td>0.293</td>
<td>-0.054</td>
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<td>0.229</td>
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<td>0.153</td>
<td>0.431</td>
<td>0.041</td>
<td>0.006</td>
<td>-0.448</td>
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<td>-0.118</td>
<td>-0.247</td>
<td>-0.171</td>
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<td>0.314</td>
<td>0.081</td>
<td></td>
</tr>
</tbody>
</table>
Table 5 presents Equamax\(^1\) rotated solution of the eight performance factors of the cotton value chain in Zimbabwe.

**Table 5: Equamax rotated performance factor solution**

<table>
<thead>
<tr>
<th></th>
<th>Factor 1.1</th>
<th>Factor 1.2</th>
<th>Factor 1.3</th>
<th>Factor 1.4</th>
<th>Factor 1.5</th>
<th>Factor 1.6</th>
<th>Factor 1.7</th>
<th>Factor 1.8</th>
</tr>
</thead>
<tbody>
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<td>-0.072</td>
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<td>0.265</td>
<td>0.01</td>
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<tr>
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<td>-0.086</td>
<td>0.057</td>
<td>-0.02</td>
<td>0.075</td>
<td>0.666</td>
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<td>0.204</td>
<td>-0.112</td>
<td>-0.13</td>
<td>0.141</td>
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<tr>
<td>Q30</td>
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<td>-0.099</td>
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<td>0.086</td>
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<td>0.106</td>
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<td>0.25</td>
<td>-0.538</td>
<td>0.07</td>
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<tr>
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<td>Q35</td>
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<td>0.313</td>
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<td>-0.065</td>
<td>-0.152</td>
<td>0.309</td>
<td>0.039</td>
<td>0.152</td>
<td>0.063</td>
</tr>
<tr>
<td>Q68</td>
<td>0.259</td>
<td>0.257</td>
<td>-0.099</td>
<td>0.09</td>
<td>-0.185</td>
<td>-0.174</td>
<td>0.496</td>
<td>-0.264</td>
</tr>
<tr>
<td>Q69</td>
<td>0.465</td>
<td>0.097</td>
<td>-0.009</td>
<td>0.293</td>
<td>-0.117</td>
<td>0.105</td>
<td>0.253</td>
<td>-0.656</td>
</tr>
<tr>
<td>Q74</td>
<td>0.244</td>
<td>-0.313</td>
<td>0.149</td>
<td>0.011</td>
<td>0.145</td>
<td>0.162</td>
<td>0.586</td>
<td>-0.664</td>
</tr>
<tr>
<td>Q77</td>
<td>0.107</td>
<td>0.272</td>
<td>0.005</td>
<td>0.44</td>
<td>-0.097</td>
<td>0.002</td>
<td>0.064</td>
<td>0.653</td>
</tr>
<tr>
<td>Q83</td>
<td>0.295</td>
<td>-0.005</td>
<td>0.054</td>
<td>0.159</td>
<td>-0.47</td>
<td>0.232</td>
<td>0.107</td>
<td>-0.655</td>
</tr>
<tr>
<td>Q84</td>
<td>0.629</td>
<td>0.041</td>
<td>-0.017</td>
<td>0.158</td>
<td>0.272</td>
<td>0.15</td>
<td>0.008</td>
<td>-0.114</td>
</tr>
<tr>
<td>Q85</td>
<td>0.701</td>
<td>0.056</td>
<td>-0.084</td>
<td>0.155</td>
<td>0.05</td>
<td>0.026</td>
<td>0.169</td>
<td>-0.122</td>
</tr>
<tr>
<td>Q89</td>
<td>0.268</td>
<td>0.03</td>
<td>0.293</td>
<td>0.118</td>
<td>0.567</td>
<td>0.049</td>
<td>0.189</td>
<td>0.058</td>
</tr>
<tr>
<td>Q91</td>
<td>0.723</td>
<td>-0.075</td>
<td>0.265</td>
<td>0.180</td>
<td>0.001</td>
<td>0.014</td>
<td>0.179</td>
<td>0.048</td>
</tr>
<tr>
<td>Q93</td>
<td>-0.261</td>
<td>-0.048</td>
<td>0.648</td>
<td>0.073</td>
<td>0.045</td>
<td>-0.053</td>
<td>0.129</td>
<td>0.101</td>
</tr>
<tr>
<td>Q98</td>
<td>0.366</td>
<td>-0.282</td>
<td>-0.088</td>
<td>-0.15</td>
<td>-0.085</td>
<td>-0.012</td>
<td>0.1</td>
<td>-0.075</td>
</tr>
<tr>
<td>Q119</td>
<td>0.208</td>
<td>0.005</td>
<td>0.114</td>
<td>0.662</td>
<td>-0.045</td>
<td>0.177</td>
<td>-0.004</td>
<td>0.018</td>
</tr>
<tr>
<td>Q121</td>
<td>0.233</td>
<td>-0.15</td>
<td>-0.302</td>
<td>0.485</td>
<td>0.06</td>
<td>-0.019</td>
<td>-0.396</td>
<td>0.205</td>
</tr>
<tr>
<td>Q125</td>
<td>-0.163</td>
<td>0.035</td>
<td>0.05</td>
<td>0.687</td>
<td>0.001</td>
<td>0.041</td>
<td>-0.043</td>
<td>-0.112</td>
</tr>
<tr>
<td>Q128</td>
<td>0.127</td>
<td>0.213</td>
<td>-0.031</td>
<td>0.587</td>
<td>-0.049</td>
<td>-0.033</td>
<td>0.119</td>
<td>0.14</td>
</tr>
<tr>
<td>Q129</td>
<td>0.077</td>
<td>0.076</td>
<td>-0.005</td>
<td>0.196</td>
<td>-0.561</td>
<td>0.059</td>
<td>-0.026</td>
<td>0.457</td>
</tr>
<tr>
<td>Q131</td>
<td>0.255</td>
<td>-0.09</td>
<td>0.104</td>
<td>0.049</td>
<td>-0.366</td>
<td>0.25</td>
<td>-0.023</td>
<td>0.473</td>
</tr>
<tr>
<td>Q132</td>
<td>0.077</td>
<td>0.042</td>
<td>0.141</td>
<td>-0.092</td>
<td>0.066</td>
<td>-0.175</td>
<td>-0.181</td>
<td>0.592</td>
</tr>
<tr>
<td>Q138</td>
<td>-0.25</td>
<td>-0.003</td>
<td>0.002</td>
<td>-0.102</td>
<td>0.103</td>
<td>0.103</td>
<td>0.057</td>
<td>0.674</td>
</tr>
<tr>
<td>Q140</td>
<td>-0.239</td>
<td>0.113</td>
<td>0.136</td>
<td>0.135</td>
<td>0</td>
<td>0.129</td>
<td>0.12</td>
<td>0.538</td>
</tr>
<tr>
<td>Q194</td>
<td>0.067</td>
<td>0.899</td>
<td>-0.115</td>
<td>0.061</td>
<td>0.054</td>
<td>0.05</td>
<td>0.027</td>
<td>0.002</td>
</tr>
<tr>
<td>Q197</td>
<td>0.069</td>
<td>0.897</td>
<td>-0.105</td>
<td>0.073</td>
<td>0.042</td>
<td>0.049</td>
<td>0.022</td>
<td>0.017</td>
</tr>
</tbody>
</table>

\(^1\) All other rotation methods (Varimax, Quartimax, Oblimin and Promax) were applied and Equamax yielded a solution that is relatively easiest to interpret.
Table 6: Summary of performance factors of the Zimbabwe textiles value chain

<table>
<thead>
<tr>
<th>Factor 1.1 (Value chain barriers)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q68: Absence/presence of chain related information and knowledge along the cotton.</td>
</tr>
<tr>
<td>Q84: Extent of economic activity diversification</td>
</tr>
<tr>
<td>Q86: Extent of product diversification</td>
</tr>
<tr>
<td>Q91: Influence of &quot;sticky labour&quot; on cotton value chain performance</td>
</tr>
<tr>
<td>Q98: Number and impact of intermediaries on transaction costs along the value chain</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Factor 1.2 (Value chain strategy)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q67: Impact of the absence of related skilled labour on value chain success</td>
</tr>
<tr>
<td>Q194: Overall governance efforts must be focused towards improving the performance of the entire value chain</td>
</tr>
<tr>
<td>Q107: Infrastructure and technology should be improved.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Factor 1.3 (Agglomeration effects)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q26: Strength of linkages for cooking oil and cake production to other agents</td>
</tr>
<tr>
<td>Q28: Strength of linkages quality control to other agents</td>
</tr>
<tr>
<td>Q35: Strength of linkages market regulation to other agents</td>
</tr>
<tr>
<td>Q37: Strength of linkages international textiles trading to other agents</td>
</tr>
<tr>
<td>Q40: Strength of linkages local textiles trading to other agents</td>
</tr>
<tr>
<td>Q93: The prevalence of &quot;sticky prices&quot; along the cotton industry's value chain</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Factor 1.4 (Collective action problems)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q77: The level and effect of internal versus external cooperation on performance</td>
</tr>
<tr>
<td>Q119: Intensity of collection action problems in the export Trade</td>
</tr>
<tr>
<td>Q121: Intensity of collection action problems in the transport and logistics infrastructure</td>
</tr>
<tr>
<td>Q125: Intensity of collection action problems in the Textiles manufacturing industry</td>
</tr>
<tr>
<td>Q128: Intensity of collection action problems Industrial financing</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Factor 1.5 (Internal rivalry)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q32: Level of intermediation along the value chain</td>
</tr>
<tr>
<td>Q49: Intensity of internal rivalry in cotton ginning industry</td>
</tr>
<tr>
<td>Q55: Intensity of internal rivalry among farming inputs suppliers</td>
</tr>
<tr>
<td>Q83: Diversity in knowledge and skills along the value chain</td>
</tr>
<tr>
<td>Q89: Amount and effects of entry barriers along the cotton value chain</td>
</tr>
<tr>
<td>Q129: Amount and effects of research and innovation along the value chain</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Factor 1.6 (Value chain Linkages)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q27: Clothing manufacturing links</td>
</tr>
<tr>
<td>Q33: Cotton research links</td>
</tr>
<tr>
<td>Q36: International clothing wholesaling/retailing links</td>
</tr>
<tr>
<td>Q52: Cotton lint export links</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Factor 1.7 (Diversity)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q26: Textiles manufacturing linkage strength</td>
</tr>
<tr>
<td>Q30: Industrial financing linkage strength</td>
</tr>
<tr>
<td>Q68: Impact of customers and suppliers on the performance of the value chain</td>
</tr>
<tr>
<td>Q74: Level of diversity along the chain</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Factor 1.8 (Collective action regimes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q131: Importance of export markets to value chain performance</td>
</tr>
<tr>
<td>Q132: Importance of Marketing and promotion organizations to performance of a value chain</td>
</tr>
<tr>
<td>Q138: Importance of the presence of collective action mechanisms to value chain performance</td>
</tr>
<tr>
<td>Q140: Importance of tolerance of a &quot;community argument&quot; to value chain performance</td>
</tr>
</tbody>
</table>
Factor loadings

Factor loadings were used in order to decide on what the extracted performance factors represented in terms of tangible steps or policy dimensions needed to resuscitate the dying textiles industry value chain in Zimbabwe. As displayed in the Table 5, the estimated standard loadings ranged from 0.35 to 0.90 for the identified themes. This assured the researcher of the unidimensionality of the items of each factor (Chen & Cheng, 2012; Gerbing & Anderson, 1998). In general, the higher the absolute value of the loading, the more the item adds to the underlying factor (Stewart, Ivy and Anslyn, 2014; Gorsuch, 2010; Field, 2009). On this basis, the item with the highest factor loading was taken to represent the factor. In turn, the use of established theoretical constructs to describe the factors managed to reduce the probability of the threat to validity.

Major outcomes that arose from the research data offered important insights and also were a significant step towards the construction of a framework to improve performance in the textiles industry value chain in Zimbabwe.

Value chain barriers

This first factor (Factor 1.1) in Table 6 comprised five variables where the lowest loading was 0.366 and the highest loading was 0.728. According to Gorsuch (2010) factors can be identified by the largest loadings (Gorsuch, 2010). This rule was applied in labelling this factor. The variable in question sought to establish the influence of “Stick labour” which is one of the most significant value chain barriers (Harkins and Forster-Holt, 2014; Wang, 2013; Markusen, 1996). The factor was consequently labelled value chain barriers. Indeed given the significance of value chain barriers to performance, value chain managers in the textiles industry value chain should seek to understand and address these barriers. Moreover, this is one of the architectural factors influencing the performance in value chains. Accordingly, it was established that value chain barriers affect the performance of the textiles industry value chain in Zimbabwe.

Value chain strategies

This theme consists of three variables. Of the three, two of the variables loaded highly (almost the same on the construct dealing with possible strategies for improving performance in value chains). Accordingly, the factor was labelled value chain strategies. Value chain strategies generate a distinctive position for achieving operational effectiveness in the value chain. Indeed, to improve the performance in a given industrial value chain, a holistic perspective regarding integration of the management tools such as productive improvement, total quality control, quality improvement, speed, benchmarking and outsourcing along the activities, functions, and systems required to bring a product or service to market is required. Only through the strategies adopted by the entire participants of the value chain (Flynn, Huo and Zhao, 2010) can efficiency and better utilization of resources be enhanced. Thus, creative value chain strategies can produce collaborative partnerships which are important for operational excellence that may provide success for all the actors in the value chain. In fact, value chain strategies determine the stability of value chain processes necessary to achieve effective and efficient flows of products, services, information, money and decisions with the objective of providing maximum value to the customer (Zhao et al., 2008).

Furthermore, value chain strategies determine how a value chain functions in its environment (Qi, Zhao & Sheu, 2011). To the extent that there is a proper fit between the strategies followed in the value chain and the environment, performance is positively influenced. Firm strategy was acknowledged in the competitiveness diamond (Porter, 2011). Though acknowledged but omitted in the theoretical analytical framework developed in this study, the dataset apparently indicated the importance of the strategies followed by the participants in influencing the performance of this chain. On this basis, therefore, the construct was included in the framework of factors affecting the performance of the textiles industry value chain in Zimbabwe.

Strength of value chain linkages

Six variables loaded on this factor. However, one item that loaded highly with 0.72 indicated the importance of the intensity of value chain linkages to specific agents. Accordingly, the theme was determined as the strength of value chain linkages. A stronger linkage with other stakeholders
enhances overall value chain performance. The findings of Mizanur, Rahman, Takrima and Sayeda (2016) strongly validate the importance of value chain linkages to performance. The researchers show that both backward linkages with suppliers of intermediate inputs and forward linkages with retailers positively affect firms’ output and labour productivity. Furthermore, the flow of products and services from source to market depends on the linkages between firms at various stages in the value chain (USAID, 2014). Since the quality of relationships among firms depends on vertical cooperation, it means efficient transactions among such firms translate to the competitiveness in the entire value chain. In addition, valuable benefits and embedded services also accrue from linkages in the value chain. As seen in this study, the textiles industry value chain actors in Zimbabwe are vertically linked to other actors, such as ginners, cotton merchants, input suppliers, exporters and intermediaries.

Both formal as well as informal linkages between firms at all levels in a value chain can reduce transaction costs, create economies of scale, and contribute to the increased efficiency and competitiveness of an industry. These horizontal linkages can contribute to shared skills and resources and enhance product quality through common production standards. Too often value chain linkages have been perceived as contributing to collective learning and risk sharing, while increasing the potential for upgrading and innovation. The most successful horizontal linkages maintain a balance between competition and cooperation among the economic agents at the same level of the value chain. One of the objectives of value chain analysis was to identify areas where collaborative bargaining power could reduce the cost or increase the benefits to small firms operating in the chain.

Value chain analysis should therefore seek to identify opportunities for improved linkages for target value chain actors in such a way that the support markets are simultaneously strengthened, rather than undermined. Although the theme on linkages was acknowledged by the competitive Diamond theory, it was not included in the theoretical framework for analyzing the performance of a value chain. However, the dataset obtained from the cotton value chain in Zimbabwe showed that value chain linkages are an important theme. Thus, the factor of value chain linkages was included in the framework of factors influencing the performance of the textiles value chain in Zimbabwe.

**Collective action problems**

The fourth factor consisted of four variables with most factor loadings occurring on the presence of collective action problems along the value chain. The factor was labelled collective action problems. A value chain is mostly seen as a solution to the coordination problem. Collective action is important in reducing high transaction costs (Markelova, Meinzen-Dick, Hellin and Dohrn, 2009; Valentinov, 2007) along the value chain in terms of accessing inputs and outputs, obtain market information, secure access to new technologies, and access new market opportunities. Similarly, collective action may reduce barriers of entry to markets by improving the bargaining power with other supply chain actors, and may offset to a certain degree the lack of basic infrastructure and services, such as roads, access to water, education, and others (Markelova et al., 2009).

However, there is always no spontaneity in the development of cooperation in value chains to achieve common goals. This is in light of the fact that individual actors may freely ride on the efforts of other firms thereby limiting collective action. As the foregoing shows, by implication, the presence of limited collective action negatively affects the performance of a value chain. The role of value chain analysis is therefore to determine the source and level of collective action problems and then take corrective action. While the presence of collective action problems per se were not included in the theoretical analytical framework, the dataset from the cotton value chain in Zimbabwe revealed that collective action problems were a significant theme in discussing the performance of the cotton value chain.

**Presence of internal competition**

While five variables loaded onto this theme, the largest factor loading on the factor (Gorsuch, 2010) indicated the primacy of internal rivalry in explaining the performance of the cotton value chain in Zimbabwe. Accordingly the factor was labelled presence of *internal competition*. The results of this study also amplified the importance of studying internal rivalry among the economic agents operating at various stages of the value chain. Indeed, the literature (Chambers, 2011; Tjosvold, 2003) also accedes that internal competition may be either destructive or constructive to the outcomes for the
value chain. Furthermore, as a dynamic process, internal rivalry influences any of the stated objectives of a value chain such as performance and innovation. Internal competition within value chains creates tension that encourages members to come up with innovative ideas. For Porter (1990:117), there is “a strong association between vigorous domestic rivalry and persistence in an industry.”

Furthermore, internal competition motivates greater effort among value chain actors by encouraging agents to set higher goals, challenging the status quo as well as creating flexibility (Birkshaw, 2001; Brown et al, 1998; Tjosvold, 2003). This finding in the study of the textiles industry value chain in Zimbabwe was consistent with the proposed theoretical analytical framework that included internal competition as a significant factor influencing the performance of the value chain. Accordingly, internal competition was also included in the framework of factors affecting the performance of the textiles value chain in Zimbabwe.

**Export scope**

The factor consisted of four variables all related to operational scope. However, the largest factor loading was on the variable to do with international wholesaling and retailing. This pointed to the export dimensions of the value chain operation. Thus, the factor was labelled *export scope*. Various studies on globalization and internationalization of business activities have shown that there are implications for the functioning and competitiveness of a given value chain (See Gereffi, 2014; Gibbon et al, 2008; Kaplinsky & Morris, 2001). Furthermore, the inclusion of the export scope in the analysis of value chain performance rests on the fact that actors in value chains are anchored in different places and multiple scales, that is international, national and the local scales (Trienekens, 2011). It would therefore make sense to draw distant actors such as firms and non-firm institutions into a common analytical apparatus that is sensitive to these multiple scales and power relations.

As regards the performance of a given value chain, the importance of export scope is seen in terms of higher inflows of information and knowledge from the international markets. Such inflows are essential for increasing the diffusion of innovations into the value chain. Therefore, a value chain that has companies with links to the export markets is better positioned for performance improvement. Further, international scope of operations may also expose the value chain to external shocks (Albino et al, 1999) which may ultimately affect performance in a given value chain. The data set from the experts in the textiles industry in Zimbabwe showed that the export scope of the value chain had some influence on the performance of the cotton value chain. As such, the export scope was included in the framework of factors influencing the performance of the cotton value chain in Zimbabwe in this study.

**Diversity**

Four variables loaded on the theme with the item of diversity along the chain commanding the largest factor loading. As such the factor was labelled *diversity* (Gorsuch, 2010). This factor deals with the extent of diversity in the value chain. Diversity in the value chain includes the extent of variance in economic agents (in terms of resources, capabilities and technological bases), functional purposes (what value chain activities the sector plays and governance structures (how firms organize their alliances using different organizing structures). Indeed economic agent differences can assure complementarity in resources resulting in the collaborative effectiveness of value chain (Tao & Santoro, 2010). The authors further claim that a highly diversified value chain provides more options, access to enriched resource pools and at the same time improving performance through more capability development opportunities and synergy. On the other hand, it is observed that increased diversity brings about more complexity, potential conflicts and hence the need for increased coordination costs. This retards the performance of the value chain.

In terms of industrial sector diversity, economic agents existing in different industries bring a plethora of benefits and costs. For example, economic agents in the same value chain segment in most cases engage in internal rivalry which enhances learning due to the overlapping backgrounds, experiences and knowledge and technologies (Robertson, Casali, & Jacobson, 2012). Nonetheless, conflicts of interest may also manifest (Doz & Prahalad, 2013) thereby increasing monitoring and safeguarding costs in the value chain. The factor of diversity and its influence on the performance of a given value chain were acknowledged and included in the conceptual framework of this this study. The dataset
from the textiles industry value chain in Zimbabwe also revealed that diversity was a factor worth noting when discussing the factors that influence the textiles value chain in Zimbabwe. This finding was accordingly included in the framework of factors influencing the performance in the textiles value chain in Zimbabwe. It is interesting to note with hindsight that the discussion of the textiles value chain in Zimbabwe indicated the pervasiveness of diversified economic agents, functions and markets.

**Collective action regimes**

Results presented in Table 5 indicate while four variables loaded on this theme, the variable pertaining to presence of collective action mechanism in the value chain had the largest factor loading. Following the argument of Field (2009) and Gorsuch (2010) that the variable with the highest factor loading resembles and therefore explains the underlying factor, the theme under discussion was accordingly labelled *collective action regimes*. Indeed, it is not enough to only account for the presence of collective action problems along the value chain without seeking to understand whether the value chain was better or ill-placed to deal with such collective action problems. Collective regimes are the collaborative arrangements through which actors assemble the capacity to govern the operation of a value chain. Regimes overcome problems of collective action and secure participation in the governing coalition through the distribution of selective incentives such as contracts, jobs, and facilities for a particular value chain. Collective action regimes are seen as a crucial tool to deal with many of the problems assumed in this literature to impede collective action in value chains.

Thus, regime analysis within the context of a broader framework of value chain analysis is inherently important for identifying how coalition building (Elkin, 2015) and civic cooperation (Owen and Videras, 2006) as informal coordination modes play out in the value chain. The analysis is appealing at least partly because it allows the ability for synthesizing the value chain structure and agency (see Mossberger, 2009). This finding is in line with the typology offered in the literature on value chains performance factors.

**Recommendations**

In order to attain stability and improve in the textiles industry value chain in Zimbabwe, policy makers must look into the identified factors influencing both the performance and the relationships between them. Specifically, on the basis of the results of the study, the following must be done to improve functioning of the textile industry value chain in Zimbabwe:

**Public policy**

The literature review in this study revealed that positive public policy in the value chain has positive consequences on the performance and competitiveness of a given value chain. Empirical findings in the study revealed that the value chain experts thought that increased government action in terms of policies was necessary to increase the export scope, value chain linkages and to reduce collective action problems in the value chain. On other hand reduced government action was accompanied with reduced value chain barriers. On this basis, it is recommended that government policies should be enhanced in order to promote participation of the local textiles value chain in the export value chains, to strengthen the value chain linkages, and the reduction of collective action problems. However, with regard to the encouraging entry into the value chain, the current policies should be revised. This way, the public policy would have the required stability of the value chain and in the process improving the performance of the chain.

**Diversity**

The negative impact of diversity on the wellbeing of a given value chain is well indicated in the literature (Ho &Tekleab, 2016; Uslaner, 2012; Sturgis, Brunton-Smith, Read & Allum, 2011). The empirical results of this study showed the views of the cotton value chain experts indicating that increased diversity in the value chain resulted in the reduction of trust and internal competition. Both these factors are indicated as valuable for the performance and competitiveness of the value chain. Research across industries gives evidence of the positive relationship between trust and performance. Trust is important for enhancing cooperation among the value chain players and their stakeholders whereas internal competition brings with it some dynamism in the value chain. In light of the results
and theory, it is recommended that the textiles value chain in Zimbabwe can benefit from reduced instances of diversity. Reducing instances of diversity along the cotton value chain in Zimbabwe would result in higher cohesion, effective communication and a lower levels of conflict among the value chain incumbents thereby strengthening the value chain linkages. Additionally, the resultant increased internal competition benefit the textiles value chain stages through increased innovation.

**Internal competition**

Basing on the empirical findings and the literature review it is recommended that, increasing internal competition is crucial for the success of the textiles value chain in Zimbabwe. On a theoretical level, intense internal competition stimulates firms in value chains to innovate and upgrade their competitive advantage (Gnyawali & Park, 2011; Chen, 2008; Bengtsson & Kock, 2000). The empirical findings in turn suggest that increased internal competition in the textiles value chain was also accompanied by increased agglomeration effects and trust in the textiles value chain in Zimbabwe. The resulting increased trust would in turn benefit the textiles industry value chain in Zimbabwe through improved interactions among incumbent actors. At the same time, the literature indicates the benefits of agglomeration effects to the performance of a given value chain. However, noting the possible negative effects stemming from too much internal competition and trust effects in the value chain, for the textiles industry value chain in Zimbabwe, it is recommended that a moderate level of internal competition among value chain partners be encouraged. Coopetition, that is, a balance between internal competition and cooperation resulting from trust effects should maintained so that common benefits can be maximized.
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The Factors of Customer’s Satisfaction for Turkish Airlines on their Flights of Northern Cyprus

Behrouz Ghazi Esfahani, Eastern Mediterranean University, North Cyprus

Executive Summary
This study was conducted to investigate the customer satisfaction about Turkish Airlines. This study evaluates the Turkish Cypriot market. To collect data from the market, a questionnaire designed and Distributed to Eastern Mediterranean university students, research assistants and workers, 92 persons participated in the survey.

The questionnaire is consisting of questions about demographics (gender, age group, nationality and income level), some personal questions, level of importance of some issues for people, whether they are agreeing or not about our chosen statements and ordering a number of airline related issues.

After collecting data, they were analyzed using SPSS software. The results showed that people are almost satisfied with Turkish Airlines and its services. But there are some factors like price and security is better to improved.

Key words: Turkish Airlines, customer satisfaction, Northern Cyprus

1. Introduction:
It is the ultimate goal of every marketer in every business that satisfies the customer. Superior passenger satisfaction is one of the best assets for aviation business in today's competitive environment. Passenger satisfaction service occurs when a company can provide passengers with benefits that exceed their passengers’ expectations and this is considered as value added. If the customer is satisfied with the product or service that the company offers, he will buy more and will do so more often. Passenger satisfaction is an essential goal for each airline to provide passenger service. The onboard experience is still something special for the customer. Customers have a wide range of options to choose the right airline product based on their needs. As a result, airlines are constantly striving to differentiate themselves from competitors through in-flight product development and innovation. There are many factors that can help an airline build its customer base, and passenger service and satisfaction can be a determinant of overall operational success in the service environment, customer satisfaction is more difficult than other aspects of marketing because the customer deals with intangible products, so companies have to work constantly to upgrade the quality of services.

Since the establishment of the Turkish Airlines in 1933 is one of the best airlines in the world because of the high quality of services provided to travelers. Through its quality of service, Turkish Air has been able to provide customer satisfaction which has subsequently led to customer loyalty through several factors.

Reliability: is one of the most important factors that Turkish Airlines has focused on to make customers aware of the quality of their services because of their constant commitment to flight schedules and their ability to keep their promises to travelers.

Responsiveness: Define as the willingness and ability to help passengers to find solutions in the event of any problem, which distinguish them locally and make them outperform the rest of the companies that could not maintain this kind of services.

Assurance: Give the customer a sense of absolute confidence for the company as interested in the customer and to the degree of safety and this type of services is very important for people who are afraid to travel by aircraft.
Empathy: The aim of this type of service is to give the customer a lasting feeling that it is unique to the company and that its needs are priorities of the company.

Tangibles: Indicates the physical components of the company such as equipment, personnel and communication equipment through which the quality of services is evaluated.

All these components have helped the Turkish company to become a leader and pioneer in its field in the world.

2. Literature review:

Customer satisfaction may vary from person to person and from product to product. But generally Products are said to satisfy customer needs at least and then customer satisfaction. In case it failed to meet the minimum expectation then it will be turned into dissatisfaction. (Zeithaml & Bittner 2003) [15].

Customer satisfaction is measured on a given time basis. With respect for time Satisfaction level. Dynamic and time-varying factors also need to be considered. In highly engaged decisions, it is critical to meet satisfaction levels. If you do not meet, then the company will lose the customer. There is no second chance. (Zeithaml & Bittner 2003) [15]. the key to delivering superior service is to understand your customer’s expectation (Parasuraman, Berry & Zeithaml, 1991) [14]. Expectation plays a role of forming Satisfaction through service dissatisfaction paradigm and service quality (Oliver, 1980, 1993, 1997; Tse & Wilton. 1988) [19, 20, 21, 22].

Two additional components of service expectations, functional and technical dimensions (Gronroos, 1983) [23] are found. Consumers need to assess the level of technology delivered, and at functional level, determine why, where, and when to deliver (Gronroos, 1983, Hill, 1986; Richard, Allaway, 1993; Walker & Baker, 2000). A passenger, for example, will be provided with a seat (technical) passenger will interact with the cabin crew (functional). There are many areas in the airlines itself where faulty processes are leading to customer complaints and displeasure. Which in return creates a negative word of mouth (Davidow, 2003) [4] (Au, Hui & Leung, 2001) [27]. Complaint handling is very important in the airline industry and is recognized by airlines (Strauss & Schoeler, 2004) [5]. Customers complain only when customers feel something will be done if customers know nothing will be done then customers will not only avoid traveling on the same airline but will create negative word of mouth (Davidow, 2003; Au, Hui & Leung, 2001) [4, 27].

3. Research methodology:

The research study implemented questionnaire design based on quantitative data. The questionnaire data collected from students, research assistants and workers in Eastern Mediterranean University. The researchers in this study use close-ended questions for Sections A and B. In Sections C and D, they use five-points scale (Likert scale) : For Section C (not important- less important- important- more important - the most important ) and for section D (Strongly Disagree-Disagree-neither - Agree - Strongly Agree) and finally ranking scale for Section E.

The researchers distributed 100 questionnaires to the participants and collected 92 correct forms from the participants. The questionnaire form was divided into 5 parts. The first part of questionnaire is demographic survey included 4 questions, the second part of questionnaire is personal questions related to traveling process of the respondents, the third part of questionnaire is stating many factors of costumer’s satisfaction how much it is important . In the last two parts of questionnaire are ranking the factors due to their importance.

Objective of the study:

The purpose of this research is to show what factors affect customer satisfaction on Turkish Airlines flights to Northern Cyprus.

Specifically, this study focuses on:

- Determine the importance of multiple factors to customer satisfaction.
- Determine which factors are the most important for the passengers.
- Determine which factors have the priority to enhance and improve.
- Determine which factors are considered as advantages for Turkish airlines on other competitor airlines.

4. Data analysis and Interpretations:

Table 1:

<table>
<thead>
<tr>
<th>Gender</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>66</td>
<td>71.7</td>
<td>71.7</td>
<td>71.7</td>
</tr>
<tr>
<td>Female</td>
<td>26</td>
<td>28.3</td>
<td>28.3</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>92</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Gender distribution questionnaire results are demonstrated in table 1 were 66 respondents which make about 71.7 percent of respondents were males and 26 respondents which make about 28.3 percent of respondents were females.

Table 2:

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td>18-23</td>
<td>53</td>
<td>57.6</td>
<td>57.6</td>
</tr>
<tr>
<td></td>
<td>24-29</td>
<td>23</td>
<td>25.0</td>
<td>82.6</td>
</tr>
<tr>
<td></td>
<td>30-35</td>
<td>13</td>
<td>14.1</td>
<td>96.7</td>
</tr>
<tr>
<td></td>
<td>Above 35</td>
<td>3</td>
<td>3.3</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>92</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

The table 2 shows the age of participants of the questionnaire. As it is seen on the table, the majority of respondents which were 53 respondents were in age 18 which make about 57.6 percent of respondents. 23 respondents were between 24-29 years of age which make about 25.0 percent of respondents. 13 respondents which make about 14 percent of respondents were between 30-35 years of age. Finally 3 respondents which make about 3.3 percent were above 35 years of age.

Table 3:

<table>
<thead>
<tr>
<th>Nationality</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Turkey</td>
<td>9</td>
<td>9.8</td>
<td>9.8</td>
<td>9.8</td>
</tr>
<tr>
<td>TRNC</td>
<td>9</td>
<td>9.8</td>
<td>9.8</td>
<td>19.6</td>
</tr>
<tr>
<td>International Students</td>
<td>74</td>
<td>80.4</td>
<td>80.4</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>92</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Table 3 illustrates the nationality of the respondents, 9 respondents which are around 9.8 percent are from turkey, respondents from Turkish republic of northern Cyprus also made 9.8 percent with only 9 respondents; the majority of respondents which were 74 respondents were International Students making 80.4 percent of the respondents.
Table 4:  
**Income Monthly.**

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>500-1000 TL</td>
<td>23</td>
<td>25.0</td>
<td>25.0</td>
<td>25.0</td>
</tr>
<tr>
<td>1001-1500 TL</td>
<td>30</td>
<td>32.6</td>
<td>32.6</td>
<td>57.6</td>
</tr>
<tr>
<td>1501-2000 TL</td>
<td>23</td>
<td>25.0</td>
<td>25.0</td>
<td>82.6</td>
</tr>
<tr>
<td>Above 2000 TL</td>
<td>16</td>
<td>17.4</td>
<td>17.4</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>92</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Table 4 demonstrates the income range of the participants of the research. 23 respondents which are about 25.0 percent have income range between 500 to 1000 TL. 30 respondents which are around 32.6 percent have income range between 1000 to 1500 TL. 25.0 percent of the respondents which means 23 respondents have income range between 1051 to 2000 TL. In addition, finally 16 of the respondents have income range of more than 2000 TL.

Table 5:  
**How often travel by air in a year?**

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Once</td>
<td>17</td>
<td>18.5</td>
<td>18.5</td>
<td>18.5</td>
</tr>
<tr>
<td>Twice</td>
<td>32</td>
<td>34.8</td>
<td>34.8</td>
<td>53.3</td>
</tr>
<tr>
<td>three times</td>
<td>11</td>
<td>12.0</td>
<td>12.0</td>
<td>65.2</td>
</tr>
<tr>
<td>several times</td>
<td>32</td>
<td>34.8</td>
<td>34.8</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>92</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

The table 5 shows the number of flights for the respondents of the questionnaire. According to the survey, 17 respondents, or 18.5% of respondents, have one flight a year. 32 respondents have two flights in a year, or 34.8 % of respondents; the same was for the respondents who have several flights in a year with 34.8 % of respondents. Finally, 11 respondents which make about 12 % of respondents have three flights in a year.

Table 6:  
**How do you purchase your ticket?**

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>from agency</td>
<td>40</td>
<td>43.5</td>
<td>43.5</td>
<td>43.5</td>
</tr>
<tr>
<td>online</td>
<td>52</td>
<td>56.5</td>
<td>56.5</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>92</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>
The table 6 shows that the majority of respondents, 56.3%, use online web-pages to book their tickets, while 43.5% of respondents book their tickets by the agents of Turkish airlines.

Table 7:

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td>Yes</td>
<td>21</td>
<td>22.8</td>
<td>22.8</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>71</td>
<td>77.2</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>92</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

The table 7 shows that the majority of respondents do not participate in Airline reward program with 77.2%. 22.8% participate in this type of program.
Table 8:

*Are you willing to travel with Turkish airline for next year?*

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td>Yes</td>
<td>70</td>
<td>76.1</td>
<td>76.1</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>22</td>
<td>23.9</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>92</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

The table 8 shows that the majority of respondents are willing to travel again with Turkish airlines with 76.1%, while 23.9% are not willing to.

Table 9:

*Would you recommend the Turkish airlines to other?*

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td>Yes</td>
<td>84</td>
<td>91.3</td>
<td>91.3</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>8</td>
<td>8.7</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>92</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

The table 9 shows that 91.3% of respondents recommend Turkish airlines to other; on the other hand, there are only 8.7% of respondents who do not.

The researchers found out which areas have to be improved or not in opinion of respondents who are willing to travel again with Turkish airlines (70 respondents), and the results as shown in the tables below:

Table 10:

*Turkish airline should improve price*

<table>
<thead>
<tr>
<th>Are you willing to travel with Turkish airline for next year?</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes Valid not selected</td>
<td>17</td>
<td>24.3</td>
<td>24.3</td>
<td>24.3</td>
</tr>
<tr>
<td>Selected</td>
<td>53</td>
<td>75.7</td>
<td>75.7</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>70</td>
<td>100.0</td>
<td></td>
<td>100.0</td>
</tr>
<tr>
<td>No Valid not selected</td>
<td>2</td>
<td>9.1</td>
<td>9.1</td>
<td>9.1</td>
</tr>
<tr>
<td>Selected</td>
<td>20</td>
<td>90.9</td>
<td>90.9</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>22</td>
<td>100.0</td>
<td></td>
<td>100.0</td>
</tr>
</tbody>
</table>
Table 11: Turkish airline should improve seat comfort

<table>
<thead>
<tr>
<th>Are you willing to travel with Turkish airline for next year?</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes Valid not selected</td>
<td>49</td>
<td>70.0</td>
<td>70.0</td>
<td>70.0</td>
</tr>
<tr>
<td>selected</td>
<td>21</td>
<td>30.0</td>
<td>30.0</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>70</td>
<td>100.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No Valid not selected</td>
<td>21</td>
<td>95.5</td>
<td>95.5</td>
<td>95.5</td>
</tr>
<tr>
<td>selected</td>
<td>1</td>
<td>4.5</td>
<td>4.5</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>22</td>
<td>100.0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 12: Turkish airline should improve safety

<table>
<thead>
<tr>
<th>Are you willing to travel with Turkish airline for next year?</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes Valid not selected</td>
<td>49</td>
<td>70.0</td>
<td>70.0</td>
<td>70.0</td>
</tr>
<tr>
<td>selected</td>
<td>21</td>
<td>30.0</td>
<td>30.0</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>70</td>
<td>100.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No Valid not selected</td>
<td>17</td>
<td>77.3</td>
<td>77.3</td>
<td>77.3</td>
</tr>
<tr>
<td>selected</td>
<td>5</td>
<td>22.7</td>
<td>22.7</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>22</td>
<td>100.0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 13: Turkish airline should improve food and beverage

<table>
<thead>
<tr>
<th>Are you willing to travel with Turkish airline for next year?</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes Valid not selected</td>
<td>51</td>
<td>72.9</td>
<td>72.9</td>
<td>72.9</td>
</tr>
<tr>
<td>selected</td>
<td>19</td>
<td>27.1</td>
<td>27.1</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>70</td>
<td>100.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No Valid not selected</td>
<td>21</td>
<td>95.5</td>
<td>95.5</td>
<td>95.5</td>
</tr>
<tr>
<td>selected</td>
<td>1</td>
<td>4.5</td>
<td>4.5</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>22</td>
<td>100.0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The majority of respondents who are willing to travel again with Turkish airlines selected price (75.7%) as the most area need to be enhanced and improved.

The other areas were selected between 19%-30% for safety, improving food and beverage and improving seat comfortability.

It can be noticed that the majority of respondents who are not willing to travel with Turkish airlines for next year (90%) selected price as something needs to be enhanced.
Table 14:

<table>
<thead>
<tr>
<th>Assurance knowledge, skill and courtesy.</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td>92</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
<tr>
<td>Not important</td>
<td>6</td>
<td>6.5</td>
<td>6.5</td>
<td>6.5</td>
</tr>
<tr>
<td>Less important</td>
<td>8</td>
<td>8.7</td>
<td>8.7</td>
<td>15.2</td>
</tr>
<tr>
<td>Natural</td>
<td>32</td>
<td>34.8</td>
<td>34.8</td>
<td>50.0</td>
</tr>
<tr>
<td>Important</td>
<td>29</td>
<td>31.5</td>
<td>31.5</td>
<td>81.5</td>
</tr>
<tr>
<td>Very important</td>
<td>17</td>
<td>18.5</td>
<td>18.5</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table 14 demonstrate the assurance knowledge of airline company which respondents have travelled or have experience with this company, according to this table the higher frequency is 32 which make 34.8 percent related to natural and 29 frequency which make 31.5 percent is important for respondent and a few customers don’t care about assurance due to survey 6 frequency which make 6.5 for not important.

Table 15:

<table>
<thead>
<tr>
<th>Empathy-individualized attention to costumer.</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td>92</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
<tr>
<td>Not important</td>
<td>1</td>
<td>1.1</td>
<td>1.1</td>
<td>1.1</td>
</tr>
<tr>
<td>Less important</td>
<td>10</td>
<td>10.9</td>
<td>10.9</td>
<td>12.0</td>
</tr>
<tr>
<td>Natural</td>
<td>21</td>
<td>22.8</td>
<td>22.8</td>
<td>34.8</td>
</tr>
<tr>
<td>Important</td>
<td>39</td>
<td>42.4</td>
<td>42.4</td>
<td>77.2</td>
</tr>
<tr>
<td>Very important</td>
<td>21</td>
<td>22.8</td>
<td>22.8</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table 15 illustrate the empathy individualized attention to costumer and base on survey the respondent, empathy is important for 39 frequency which make 42.4 percent and very important and natural has equal frequency as 21 which make 22, 8 percent and for only 1 from 92 frequency is empathy is not important.

Table 16:

<table>
<thead>
<tr>
<th>Responsiveness-provide service to passenger immediately.</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td>92</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
<tr>
<td>Not important</td>
<td>1</td>
<td>1.1</td>
<td>1.1</td>
<td>1.1</td>
</tr>
<tr>
<td>Less important</td>
<td>6</td>
<td>6.5</td>
<td>6.5</td>
<td>7.6</td>
</tr>
<tr>
<td>Natural</td>
<td>18</td>
<td>19.6</td>
<td>19.6</td>
<td>27.2</td>
</tr>
<tr>
<td>Important</td>
<td>33</td>
<td>35.9</td>
<td>35.9</td>
<td>63.0</td>
</tr>
<tr>
<td>Very important</td>
<td>34</td>
<td>37.0</td>
<td>37.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table 16 show, the passengers expect good responsiveness from the company, therefor 34 and 33 frequency which make 37 and 35.9 percent consist of very important and important and for only 7 frequency this part is not important with 7 percentage.
Table 17:
Quality of service in-flight service.

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td>Not Important</td>
<td>1</td>
<td>1.1</td>
<td>1.1</td>
</tr>
<tr>
<td></td>
<td>Less Important</td>
<td>1</td>
<td>1.1</td>
<td>2.2</td>
</tr>
<tr>
<td></td>
<td>Natural</td>
<td>13</td>
<td>14.1</td>
<td>16.3</td>
</tr>
<tr>
<td></td>
<td>Important</td>
<td>31</td>
<td>33.7</td>
<td>50.0</td>
</tr>
<tr>
<td></td>
<td>Very Important</td>
<td>46</td>
<td>50.0</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>92</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

This table shows the quality of services in flight and base on survey respondent make significant part as 46 frequency from 92 which make 50 percent and for 31 costumer which make 33, 7 percent quality is important and only for few costumer make it less or not important.

Table 18:
Quality of food and beverage-meals on board.

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td>Not Important</td>
<td>4</td>
<td>4.3</td>
<td>4.3</td>
</tr>
<tr>
<td></td>
<td>Less Important</td>
<td>5</td>
<td>5.4</td>
<td>9.8</td>
</tr>
<tr>
<td></td>
<td>Natural</td>
<td>20</td>
<td>21.7</td>
<td>31.5</td>
</tr>
<tr>
<td></td>
<td>Important</td>
<td>30</td>
<td>32.6</td>
<td>64.1</td>
</tr>
<tr>
<td></td>
<td>Very Important</td>
<td>33</td>
<td>35.9</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>92</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

This table explains how the quality of food and beverage is important for respondent who participate in questionnaire and about 33 frequencies which make 35.9 percent is very important and for others about 29 frequencies is not important or it’s natural for them.

Table 19:
The punctuality of flights and ground service.

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td>Not Important</td>
<td>5</td>
<td>5.4</td>
<td>5.4</td>
</tr>
<tr>
<td></td>
<td>Less Important</td>
<td>6</td>
<td>6.5</td>
<td>12.0</td>
</tr>
<tr>
<td></td>
<td>Natural</td>
<td>31</td>
<td>33.7</td>
<td>45.7</td>
</tr>
<tr>
<td></td>
<td>Important</td>
<td>25</td>
<td>27.2</td>
<td>72.8</td>
</tr>
<tr>
<td></td>
<td>Very Important</td>
<td>25</td>
<td>27.2</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>92</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table 19 shows the punctuality of flight that respondent give result to this survey and based on this survey, punctuality has a significant part. As this table explain very important and important has same frequency which make 27.2 percent and for 31 frequencies out of 92 which make 33.7 percent and 11.9 percent does not have important part.
Table 20:

<table>
<thead>
<tr>
<th>Reliability - service must be dependable and consistent.</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td>4</td>
<td>4.3</td>
<td>4.3</td>
<td>4.3</td>
</tr>
<tr>
<td>Not important</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less important</td>
<td>11</td>
<td>12.0</td>
<td>12.0</td>
<td>16.3</td>
</tr>
<tr>
<td>Natural</td>
<td>24</td>
<td>26.1</td>
<td>26.1</td>
<td>42.4</td>
</tr>
<tr>
<td>Important</td>
<td>34</td>
<td>37.0</td>
<td>37.0</td>
<td>79.3</td>
</tr>
<tr>
<td>Very important</td>
<td>19</td>
<td>20.7</td>
<td>20.7</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>92</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

This table shows that respondents consider reliability services as important with 37 percent, 20.7 percent of respondents say it’s very important for respondent in addition about 40 frequencies which make present 42 is less or no important, moreover reliability is important because more than 50% of respondents consider this as a significant part for them.

Table 21:

<table>
<thead>
<tr>
<th>Ticket flexibility.</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td>2</td>
<td>2.2</td>
<td>2.2</td>
<td>2.2</td>
</tr>
<tr>
<td>Not important</td>
<td>7</td>
<td>7.6</td>
<td>7.6</td>
<td>9.8</td>
</tr>
<tr>
<td>Less important</td>
<td>19</td>
<td>20.7</td>
<td>20.7</td>
<td>30.4</td>
</tr>
<tr>
<td>Natural</td>
<td>21</td>
<td>22.8</td>
<td>22.8</td>
<td>53.3</td>
</tr>
<tr>
<td>Important</td>
<td>43</td>
<td>46.7</td>
<td>46.7</td>
<td>100.0</td>
</tr>
<tr>
<td>Very important</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>92</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Ticket flexibility is another significant part that costumer consider it as important part, more than 65 respondents pay attention to ticket flexibility which make more than 68% and less than 30 respondents with 30 percent that consider this part as not important for them.

Table 22:

<table>
<thead>
<tr>
<th>Air fare price - is the price reasonable?</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td>6</td>
<td>6.5</td>
<td>6.5</td>
<td>6.5</td>
</tr>
<tr>
<td>Not important</td>
<td>8</td>
<td>8.7</td>
<td>8.7</td>
<td>15.2</td>
</tr>
<tr>
<td>Less important</td>
<td>19</td>
<td>20.7</td>
<td>20.7</td>
<td>35.9</td>
</tr>
<tr>
<td>Natural</td>
<td>25</td>
<td>27.2</td>
<td>27.2</td>
<td>63.0</td>
</tr>
<tr>
<td>Important</td>
<td>34</td>
<td>37.0</td>
<td>37.0</td>
<td>100.0</td>
</tr>
<tr>
<td>Very important</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>92</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

This table shows the price of ticket could be important. More than 55 respondents with 64 percent consider it as important part of airline, 19 respondents are natural with about 20 percent, and moreover for 14 respondents with 15 percent, price is not important.
Table 23:

**Flight safety.**

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td>4</td>
<td>4.3</td>
<td>4.3</td>
<td>4.3</td>
</tr>
<tr>
<td>Not important</td>
<td>3</td>
<td>3.3</td>
<td>3.3</td>
<td>7.6</td>
</tr>
<tr>
<td>Less important</td>
<td>10</td>
<td>10.9</td>
<td>10.9</td>
<td>18.5</td>
</tr>
<tr>
<td>Natural</td>
<td>13</td>
<td>14.1</td>
<td>14.1</td>
<td>32.6</td>
</tr>
<tr>
<td>Important</td>
<td>62</td>
<td>67.4</td>
<td>67.4</td>
<td>100.0</td>
</tr>
<tr>
<td>Very important</td>
<td>92</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

The table of flight safety is the most significant part that respondent consider it as important part of airline company. Based on this survey more than 60 respondents which make 67.4 percent mark it as very important part and less than 10 respondents with about 8 percent shows that flight safety is not important that much.

Table 24:

**Turkish Airlines has a potential to become the legacy airline of Turkey region in the coming decade.**

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td>5</td>
<td>5.4</td>
<td>5.4</td>
<td>5.4</td>
</tr>
<tr>
<td>Strongly disagree</td>
<td>6</td>
<td>6.5</td>
<td>6.5</td>
<td>12.0</td>
</tr>
<tr>
<td>disagree</td>
<td>17</td>
<td>18.5</td>
<td>18.5</td>
<td>30.4</td>
</tr>
<tr>
<td>Neither</td>
<td>43</td>
<td>46.7</td>
<td>46.7</td>
<td>77.2</td>
</tr>
<tr>
<td>Agree</td>
<td>21</td>
<td>22.8</td>
<td>22.8</td>
<td>100.0</td>
</tr>
<tr>
<td>Strongly agree</td>
<td>92</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

This table shows people consensus about the sentence that Turkish Airline has the potential to become the legacy airline of Turkey region in the coming decade. 5 people which make 5.4 percent are strongly disagree with this statement 6 person are disagree. Most of respondents are agreed, with 46.7 percent that is 43 out of 92 people and 22.8 percent mentioned strongly agree. Cumulatively 69.5 percent agree and strongly agree that shows to high extent people believe this statement. 17 respondents had no idea about this.

Table 25:

**Turkish Airlines offers great routes of destinations and connections.**

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td>1</td>
<td>1.1</td>
<td>1.1</td>
<td>1.1</td>
</tr>
<tr>
<td>Strongly disagree</td>
<td>9</td>
<td>9.8</td>
<td>9.9</td>
<td>10.9</td>
</tr>
<tr>
<td>disagree</td>
<td>16</td>
<td>17.4</td>
<td>17.4</td>
<td>28.3</td>
</tr>
<tr>
<td>Neither</td>
<td>47</td>
<td>51.1</td>
<td>51.1</td>
<td>79.3</td>
</tr>
<tr>
<td>Agree</td>
<td>19</td>
<td>20.7</td>
<td>20.7</td>
<td>100.0</td>
</tr>
<tr>
<td>Strongly agree</td>
<td>92</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

This table gives information about whether people agree or disagree about the sentence that Turkish Airline offers great routes of destinations and connections. There is only 1 person strongly disagree
and 9 person disagree with this statement which cumulatively form nearly 11 percent. About 17.4 of respondents neither agree or disagree with this issue. Large amount of respondents are agreeing with this statement with 51 percent and 19 persons which make about 21 percent strongly agree that shows in general people have a positive view about this statement.

Table 26:

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td>3</td>
<td>3.3</td>
<td>3.3</td>
<td>3.3</td>
</tr>
<tr>
<td>Strongly disagree</td>
<td>4</td>
<td>4.3</td>
<td>4.3</td>
<td>7.6</td>
</tr>
<tr>
<td>disagree</td>
<td>11</td>
<td>12.0</td>
<td>12.0</td>
<td>19.6</td>
</tr>
<tr>
<td>Neither</td>
<td>40</td>
<td>43.5</td>
<td>43.5</td>
<td>63.0</td>
</tr>
<tr>
<td>Agree</td>
<td>34</td>
<td>37.0</td>
<td>37.0</td>
<td>100.0</td>
</tr>
<tr>
<td>Strongly agree</td>
<td>92</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

The table reveals information about comparing Turkish Airline with its competitors in term if services. There are negligible 3 and 4 percent of respondents strongly disagree and disagree respectively with this statement and about 11 person or 12% had no idea about it. Many more people showed they agree that Turkish Airlines offers better services than its competitors the figure is 40 respondents which make 43.5% and 37% of them strongly agree that we can interpret that it is accepted that it has better services than their competitors in Turkey.

Table 27:

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td>4</td>
<td>4.3</td>
<td>4.3</td>
<td>4.3</td>
</tr>
<tr>
<td>Strongly disagree</td>
<td>15</td>
<td>16.3</td>
<td>16.3</td>
<td>20.7</td>
</tr>
<tr>
<td>disagree</td>
<td>23</td>
<td>25.0</td>
<td>25.0</td>
<td>45.7</td>
</tr>
<tr>
<td>Neither</td>
<td>32</td>
<td>34.8</td>
<td>34.8</td>
<td>80.4</td>
</tr>
<tr>
<td>Agree</td>
<td>18</td>
<td>19.5</td>
<td>19.5</td>
<td>100.0</td>
</tr>
<tr>
<td>Strongly agree</td>
<td>92</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

This table compares Turkish Airlines with other airlines in the world to see if people prefer it because of its price and variety of destinations or not. The highest percentage is for people who answered they agree, 32 respondents which is 34.8 percent. After that, we have people who are neutral about this issue, they are 25% which is about 23 persons. Next, are those who strongly agree with about 20 percent of all respondents they are 18 persons. Finally, 15 respondents disagree that form 16 percent and about 4.3% of respondents strongly disagree.
Table 28:

<table>
<thead>
<tr>
<th>Descriptive Statistics</th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rate the important of price</td>
<td>92</td>
<td>1.00</td>
<td>8.00</td>
<td>2.5978</td>
<td>2.36764</td>
</tr>
<tr>
<td>Rate the important of security</td>
<td>92</td>
<td>1.00</td>
<td>8.00</td>
<td>3.2609</td>
<td>2.03740</td>
</tr>
<tr>
<td>Rate the important of weight of luggage</td>
<td>92</td>
<td>1.00</td>
<td>8.00</td>
<td>4.5978</td>
<td>1.95689</td>
</tr>
<tr>
<td>Rate the important of transit hour</td>
<td>92</td>
<td>1.00</td>
<td>8.00</td>
<td>4.7065</td>
<td>2.07305</td>
</tr>
<tr>
<td>Rate the important of seat comfort</td>
<td>92</td>
<td>1.00</td>
<td>8.00</td>
<td>4.9478</td>
<td>2.26262</td>
</tr>
<tr>
<td>Rate the important of in flight service</td>
<td>92</td>
<td>1.00</td>
<td>8.00</td>
<td>5.1648</td>
<td>1.89612</td>
</tr>
<tr>
<td>Rate the important of boarding process</td>
<td>92</td>
<td>1.00</td>
<td>8.00</td>
<td>5.2391</td>
<td>2.11935</td>
</tr>
<tr>
<td>Rate the important of baggage retrieval</td>
<td>92</td>
<td>1.00</td>
<td>8.00</td>
<td>5.3370</td>
<td>2.02336</td>
</tr>
<tr>
<td>Valid N [listwise]</td>
<td>92</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 28 shows the importance of the factors on affecting customer’s satisfaction, as it shown on the table above, the lower mean depicts higher importance and vice versa.

The most important factors are price, security and weight of luggage respectively.

5. **Recommendations, implications and limitations:**

**Recommendations:**

1. The survey finding illustrates that 79.3% of respondents selected the price of Turkish airlines tickets as the most area to be enhanced and improved. So enhancing the price should be the first priority in the promotion program of the company.

2. According to the findings of survey, 77.2% of respondents do not participate in reward program of Turkish airlines, as a result for this, Turkish airlines should enhance the advertising of their rewarding program to increase the number of the participants.

3. The survey finding illustrates that 68.4% of the respondents travel twice or more than three times by air each year, so it will be good idea to make discount offers to encourage these respondents to select Turkish airlines as their only airlines and to get their loyalty.

4. According to the findings of survey, 56.6% of the respondents use online web-pages to book their ticket while 43.4% book their tickets by the agencies of Turkish airlines, so Turkish airlines should work on enhancing the agencies of the company to make them more efficient.

5. 31% of respondents who are willing to travel again with Turkish airlines selected seat comfortability and safety as areas to be enhanced and improved. Although it’s not a big percentage but it should be considered by the company.

**Limitations:**

1. The sample size of the study was not sufficient to be a good representation of the population.

2. Some of the respondents answered the questionnaire inaccurately.

3. Time Constraint made it difficult to collect data in greater details.
6. Conclusion:

As a conclusion of the survey, the researchers found that in general, the majority of respondents are satisfied with Turkish airlines but a high percentage of them think that Turkish airlines need to make their ticket’s price more flexible.

Many people agreed that Turkish airlines offers great variety of routes and destinations and also they agreed that Turkish airlines provide better services than their competitors in Turkey region.

The majority of the passengers due to the sample of this survey are international youth passengers and the majority would recommend Turkish airlines to others which lead us to expect more customers in the future.
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[https://www.ukessays.com](https://www.ukessays.com)
[https:// surveymonkey.com](https:// surveymonkey.com)
Use of the Antiplagiat System in the Course of Training in the SPO Programs in Higher Education Institution

Kuzovleva N. V., Gaudpo Lo, Institute of Development of Education, Russia
Samoylov A. A., Fgbou In Egu of I. A. Bunitsa, Russia

Changes of the Russian educational system allowed to create multistage system of continuous obtaining new knowledge in higher education institutions. At the same time the status of vocational professional education as first step of formation of the high quality expert cardinally raised. Therefore, to the first place in methodical searches of the teachers working in the SPO system there is not only a search of the most effective ways of supply of new material of this age category of trainees which for higher education institutions is essentially new, but also the culture of mental labor based on rational algorithms of work in the Internet, formation of effective ways of an assessment and self-assessment of results of the work performed by them work. Let's note that the educational route of the student of SPO differs a little from the nature of assimilation of new knowledge by bachelors and undergraduates of higher education institution as opens additional opportunities for professional, earlier, formation of the competitive, highly cultured professional owning skills of an intellectual assessment of results of the activity including by means of technical means. Recently in the Russian education market there were systems allowing not only to estimate objectively results of intellectual activity of trainees as them, and teachers, but also allow to fight against so-called intellectual piracy. They received the name - electronic systems of check of loans. Let's consider the most known of them:

I. Programs for plagiarism detection:

1. Advego Plagiatus 1.0.1 Beta

- Developer: Advego
- Distribution kit size: 1, 23 MB
- Distribution: free of charge

- The functionality of this program is based on search of the similar text in the special base made by authors of the program. Methods of the analysis of uniqueness of the text – idle time (it is used by the program by default) and deep (runs for search of similar phrases and phrases on the Internet), allow to define authenticity of the text. The procedure of check can borrow from one to several minutes. If in settings to establish threshold value of uniqueness of the text on the basis of which it will be possible to draw a conclusion on author's originality of article then time of check will be reduced. Advego Plagiatus can define value of uniqueness below threshold and then search will be stopped. It is possible to check as the ready text, entering it in the field of the editor, and the reference to already published material. At reference input the program analyzes a page code, automatically defining the text of article. It is possible to look at the text received from the reference on the Blank Document tab. It is possible to look at the text received from the reference on the Blank Document tab. After article according to the reference will be found, it is possible to reap on the Check Uniqueness button, and the program will begin to investigate the received content. After completion of processing of data the program issues the conclusion in which degree of uniqueness of the text is shown, the percent of coincidence is defined, sources from where this material was copied are specified. The program is free for users, does not demand special installation, is systematically updated.

1 It is printed with assistance of a grant of the Russian Federal Property Fund No. 16-07-00870
2. **Double Content Finder 1.2**
   - Developer: TextBroker
   - Distribution kit size: 400 kb
   - Distribution: free of charge
     - Simplicity when using is characteristic of the Double Content Finder program – the text, then the reference to the Internet publication or the text file on the hard drive is entered, then the Further button is pressed. After that automatic search of necessary material on the Internet begins. At detection of similar materials, references to plagiarism sources, the maximum quantity on sources no more than 50 emerge. No additional settings for the program are required. Is suitable for search of the texts copied from the Internet more.

3. **Praide Unique Content Analyser 2**
   - Developer: com-seo.ru
   - Distribution kit size: 3, 9 MB
   - Distribution: free of charge
   Praide Unique Content Analyser 2 cjth; bn ljcnfnjxyj the flexible tool for search of plagiarism which works with one of three options of data input:
     - with reference to the web page with the checked text;
     - with the file in the TXT or HTML format;
     - with the text entered manually or inserted from a clipboard.

Algorithm of work with the program following. For verification of the text the reference to the page is chosen, the program shows all text found on the page and gives to the user the chance to clean unnecessary words. The analysis of the text happens very slowly, longer than all services and the appendix. It is expedient to use this program for check of authenticity of the text in several checked search engines at once: Yahoo, "Yandex", Mail.Ru, Google, having specified in settings to what search engines it is necessary to resort in the course of content research. Has a number of additional options for “advanced users” who considerably increase time of verification of the text. Undoubtedly plus of the program is the possibility of use in settings of protection the IP address for blocking avoiding by various search engines.

II. **Internet-servers:**

4. **Project: Copyscape.**
   - This hi-tech development of the Indigo Stream Technologies Ltd company. is one of the most demanded web servers. Service is free, works by the principle of a search engine. The analytics of plagiarism comes down to search of contents on the Internet.

5. **Project: Miratools**
   - The considered server is development of domestic experts and serves for definition for definition of stolen content. Exists in two versions - npomo (free) and commercial. On the Miratools promo-version the number of checks cannot exceed ten in days, and the quantity of signs in "a trial fragment” cannot exceed 3000. Text processing speed quite low, from the server. The conclusion contains an indicator of percent of reliability of the text, the higher which, the is less than plagiarism in the text. The program allows not only to see the list of the websites from where the text was taken, but also will specify from where what part it was borrowed.
   - Project: FindCopy
The specified Russian server allows to check article placed according to the reference or the text, giving out as result of check - the address of sources. Opposite to each result there is a reference "compare the text" which will allow to open the page where along with the original text (if URL of the Internet page was entered, then service will show only the text on it) in a separate frame the copy of the website where the borrowed text is presumably located will be shown. In the suspected copy by means of illumination identical phrases are selected.

6. Project: AntiPlagiat.ru

- The principle of action of system – checking of all text works, including scientific, demanding confirmation of their originality, with base of sources of system for the purpose of stay in them identical or partially coinciding fragments which is in an open entry to the Internet.

The system supports authorization of users after which the user gets to a private office where receives that set of services which corresponds to its user rights. The main result of work is the report on verification of the document in which the found fragments from system collections with the indication of the borrowed and original text in it are noted. The main diagnostic functionality of system allows to realize the following opportunities:

1. Search of loans in text documents of the most widespread formats (MS Office Word (DOC, DOCx), MS Office PowerPoint (PPT, PPTx), RTF, PDF, TXT, HTML, ZIP and RAR).

2. Allocation in reports on results of check of those fragments of the analyzed text which were found system in base of sources, with a possibility of viewing of the text of these sources.

3. Amount of time of verification of the document from 3rd to 5 seconds.

4. User login through a private office on the Internet.

5. A possibility of work of users with System by e-mail.

6. Connection to a collection of the www.antiplagiat.ru Internet service which is formed of the texts which are posted online in an open entry.

7. Connection to a collection which holder is the Russian state library, containing more than 350 thousand theses and abstracts, for identification of cases of scientific plagiarism.

8. Connection to the collection containing more than 100 thousand laws and other normative documents. The work algorithm in system is simplest and convenient:

   i. Registration of the user in network in system.

   ii. The user loads documents for check in a private office.

   iii. The system forms the report on verification of the document, the reference to which becomes available in the user's office after a while.

   iv. The loaded documents and the constructed reports are stored in private offices of users unlimited time.

   v. The system issues the report constructed on several collections: "a white collection" of legal documents, a collection of documents and abstracts RGB, a collection of the higher education institutions using when checking this system, a collection of the documents collected on the Internet.

   vi. Reliability and information security of system is ensured by use of technology of the digital signature and use of the protected connections at data transmission between components of system and collections; use of the certified equipment and duplication of critical program and hardware components; due to backup of the database of system. Obtaining information on check is carried out through the special protected lock.

   vii. PS or information reference:
a. to systems "Antiplagiat. HIGHER EDUCATION INSTITUTION" and Antiplagiat more than 450 HIGHER EDUCATION INSTITUTIONS are connected today;

b. a main objective of work in system: "Education of culture of citing";

c. the system allows to define admissible limits of citing, but not a deviation from author's standards;

d. the base of the handed-over works makes more than 40 million;

e. the base of normative documents makes more than 30 million;

f. RNB base (National Library of Russia) – more than one million documents;

g. the Rings of HIGHER EDUCATION INSTITUTIONS base makes more than 11 million documents;

h. the base the Internet of sources makes about 120 million resources and pages;

i. the system is capable to analyze sources on: Russian, English, Ukrainian, French, Kazakh, Polish, Kyrgyz, Belarusian, Uzbek, Azerbaijani and other languages;

j. approbation and completion of the system moments of the program is carried out on two experimental platforms which are most demanded on the Russian segment of educational services: RGB and ELIBRARY.

7. Project: Miratools

   o The considered server is development of domestic experts and serves for definition for definition of stolen content. Exists in two versions – promo (free) and commercial. On the Miratools promo-version the number of checks cannot exceed ten in days, and the quantity of signs in "a trial fragment" cannot exceed 3000. Text processing speed quite low, from the server. The conclusion contains an indicator of percent of reliability of the text, the higher which, the is less than plagiarism in the text. The program allows not only to see the list of the websites from where the text was taken, but also will specify from where what part it was borrowed.

   • Project: FindCopy

       o The specified Russian server allows to check article placed according to the reference or the text, giving out as result of check - the address of sources.

In April, 2016 there was a new version of the Antiplagiat program on the basis of which there was perhaps more comfortable virtual interaction of teachers and trainees:

   • modeling and creation of own courses for teachers;
   • вход for students when performing various tasks, as in the research sphere, and practical;
   • possibility of obtaining objective estimated result;
   • creation of a private office for each student;
   • the most acceptable way of the organization of structural interaction of each user with system;
   • comparison of author’s texts on the basis of primary statistical analysis;
   • definition of a share (percent) of scientific lexicon in work;
   • new, convenient design of the program which conforms to modern requirements for a zdorobyesberezheniye;
   • obtaining the full, optimized report for work with thesis documents.

Developers and authors of the program constantly improve the Antiplagiat system, finding the most perspective and urgent positions for convenience of users and increase in technical characteristics of
the program. So, for example, in August, 2016 the following version of system which will create additional opportunities for starts:

- trackings of translated loans from various languages;
- detection of loans without indication of sources;
- expansions of structure of language groups;
- improvements of a system type of reports and convenience of use of the obtained information during the work with them;
- structuring reporting information depending on the work purposes in system, as instrument of check of a resulting effect or its use as exercise machine for improvement of objectives.

  - The Antiplagiat system is one of the most demanded, effective and perfect systems of this sort on the Russian segment of education market, having rather positive dynamics of the development and improvement unlike systems of a similar class which appeared rather recently today and are imperfect copies of last versions of the system considered by us.

Thus, the systems considered above are the significant tool for formation of objective criteria for evaluation of results of the intellectual activity at students of SPO.
Literature


2. Electronic resource: http://www.consultant.ru
The System of Evaluation of the Expert Competence of the Detection of Borrowings in the Documents

Pachina Natalia, Lipetsk State Technical University, Russia
Pachin George, Lipetsk State Technical University, Russia
Pachin Alexander Romanovich, Municipal Budget Educational Institution, Russia

Abstract
The article reveals the essence of the expert competence of the detection of the loans, defines the levels of development of expert competence, proposes to develop a methodology "to determine the level of development of educators expert competence detection of borrowings in the documents."

Key words: expert competence, identifying plagiarism, the level of development, technique.

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Sticky Floor: Identifying Barriers to Promote Women's Managerial Position in Governmental Organizations of Ilam Province with a Qualitative Approach

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Abstract

A small number of women have been assigned in managerial positions of Iranian public sector and their number in high-level managerial positions is very low. Eliminating barriers to women promotion and increasing the number of women in managerial positions at public sector depends on identifying factors influencing the glass ceiling. The aim of this study was to identify the leadership promotion barriers of women in governmental organizations of Ilam Province using a qualitative approach. Methodology used in this study was a qualitative method based on the text bases and subjective data. In this research, the purposive sampling method, including favorable cases sampling was used. Thus, the most important factors and parameters influencing the promotion of women's leadership barriers in Ilam Province were identified through interviews with people who were expert in respective fields as well as individual interviews, and the results of interviews were analyzed. The findings of the study as the qualitative data obtained after performing the process were analyzed; the social, political factors, organizational and individual factors formed the factors affecting the “Sticky Floor” in Ilam Province. Concluding based on the results, assuming women as weak individuals and lack of socialization among the social factors, lack of certain non-governmental institutions and organizations and men colleagues refusal to follow the female managers among the political factors, lack of women's organizations and associations as well as lack of support and encouragement from others among the organizational factors, and the women's fear of failure, lack self-esteem and self-confidence in them among the individual factors had the greatest impact on “Sticky Floor” in Ilam Province.

Keywords: Glass Ceiling, Sticky Floor, Promotion Barriers, Women, Ilam Province.

1. Introduction

Third World countries are now trying to step towards the development of their country by enhancing the development indicators. Given the importance of human resources in the process of sustainable development and that women and men make up the human resources together, it can be said that the women have a crucial role in the development of the country. Women as a half of the population and a half of the human capital available in the country are discussed as the topic and objective of the development. Yet, they do not possess even half of the men's authority. Among the managers of successful companies, few appear to be female managers (Mirghafori, 2007). Current research has established that, women and minorities are less likely than men and whites to hold managerial positions, especially positions at the top (e.g., Bullard and Wright 1993; Fernandez 1998; Baxter and Wright 2000; Elliott and Smith 2004). In organizations histories, women have been appointed to posts where they have been forced to do repetitive tasks, so that it seems their abilities have been ignored. According to Schwartz (1992), organisations can be arranged into a hierarchy of levels according to their support for women and their career aspirations. Zero level organisations are those who take no action in developing women. It is often assumed that the process of authority attainment consists of a series of upward job transitions, with the higher transitions conditional on the lower ones—hence, the analogy to pipelines. Accordingly, many see the shortage of women at the top as a problem of “leaky
pipelines”: women and minorities face a disadvantage at each step of promotion and “leak out” on the way to the top. The pipeline perspective is attractive because it prompts researchers to look into where the “leakage” occurs(zeng, 2011). Based on this, we most identify the inhibiting factors of appointing women to managerial positions in government agencies in Ilam.

2. Glass ceiling and women management

Originally coined by journalists in the 1980s, the “glass ceiling” refers to a specific type of labor market disadvantage encountered by women and minorities in advancing to the top positions in organizational hierarchies(zeng, 2011). The ‘glass ceiling’ is a metaphor which describes the existence of vertical sex segregation in organizations (Guy, 1994). The term has been variously described as a transparent career barrier that keeps women from rising above a certain level in organizations (Morrison, White and Van Velsor, 1987), or an artificial career barrier based on attitudinal or organizational bias that prevents qualified individuals from advancing upward in the organization and from reaching their full potential (United States Department of Labor, 1991). Although a difference of opinion exists as to what criteria should be used to identify the glass-ceiling effect in empirical research, most scholars agree that the essence is the concentration of inequality in the upper echelons, to be distinguished from both the general inequality that exists at all levels and the inequality that is concentrated at the bottom (Morgan, 1998; Baxter and Wright, 2000; Cotter et al., 2001; Albrecht et al., 2003; Elliott and Smith, 2004; Prokos and Padavic, 2005). The gender earnings gap is very likely to be different in the upper and lower tails of the earnings distribution. A “glass ceiling” refers to a greater earnings gap at the top end of the distribution, suggesting that female workers in upper-income brackets have lower pay than their male counterparts. Women were economically dependent upon men in the family unit. They had limited opportunities to influence policies and decisions in the public realm. Their domestic responsibilities and systematic discrimination outside the home sharply limited women's participation in the public sphere(Gerber 1988). In spite of what some researchers term extraordinary progress, female managers frequently find themselves pressing up against a glass ceiling. They also find themselves on display under the glass. Often the lone woman at the top level, the management woman worries not just about job performance but about political viewsand even the jokes she tells or laughs at on the job (Gerber, 1988) (Wickhan, 1993).
In Figure 1, the glass ceiling in the corporate hierarchy in Ilam Province shows the difference between men and women movement toward high levels of organizational positions.

The glass ceiling exists in most countries of the world, either developed or Third World. The ceiling in the developed countries is close to the core of senior management, but in the Third World countries, it is close to the organizational low levels. Since women do reach a point below the glass ceiling but are not promoted above the barrier, the glass ceiling implies a greater female disadvantage at the top of the hierarchy than at lower levels.

3. Sticky floor

This metaphor describes how some jobs prevent women (and some men) from moving out of certain positions (Laabs, 1993). It refers to the largely invisible, unglamorous and low-level jobs in organisations which are essential to their smooth functioning, and which are predominantly occupied by women. Examples include clerical staff, stenographers and data entry operators. Referring to the American situation, Laabs (1993) defines ‘sticky-floor’ employees as administrative-support workers, para-professionals (female dominated) and service-maintenance workers (male dominated). Usually low-paying, these jobs offer little occupational prestige, and have only limited opportunity for promotion. Once a woman is labelled as having a ‘sticky floor’ job, her ability to handle higher level jobs is questioned (Guy, 1994). “sticky floor” refers to the scenario where females at the bottom of the distribution are at a greater disadvantage and the gap is wider at the bottom (Booth et al., 2003; Arulampalam et al., 2007). Thus, the glass ceiling effect exists in developed countries, but not in developing countries. As far as the gender earnings gap in China is concerned. Although Affirmative Action and equal opportunity were, in part, introduced to help remove this type of career barrier, many women find themselves in this situation either through inclination or stereotyping. the ‘sticky floor’ phenomenon, many women never experience either ‘glass ceilings’.

There is some evidence that women face a ‘glass ceiling’—a barrier to career prospects, which precludes them from achieving high-paying positions and having equal wages with men especially in the upper part of the wage distribution (e.g., Albrecht et al., 2003). A particularly visible Arulampalam et al. (2007) examined data from eleven European countries during the period 1995–2001, and found at the glass ceiling effect dominated in most of those countries. Only in a few countries did the sticky floor effect prevail. Using 1998 data for Sweden, Albrecht et al. (2003) found evidence of a glass ceiling in Sweden. Furthermore, De la Rica et al. (2005) and Del Rio et al. (2006) used different empirical methods and found that the glass ceiling existed in Spain for more educated
workers but not for the less educated. Pham and Reilly (2006) found little evidence of either the glass ceiling or sticky floor effect in Vietnam. Del Boca and Vuri (2007), using data for Italy, find that policies that reduce the cost of child care and expand the child care system can have a positive impact on female employment. Viitanen (2005), examining UK data, finds that the price of childcare has a significant, negative, effect on the probability of working as well as on using formal childcare. Mirghafori (2007) conducted a research on the identification and ranking of factors affecting on women not being appointed to managerial positions in government agencies in Yazd Province utilizing views of experts and the Delphi method. The results indicated that cultural and social factors had the most influence on lack of women appointment to managerial positions.

Mattis, 1995 A number of other barriers to impede the career progress of women are the following :

- stereotypes and preconceptions about women’s abilities and suitability for careers in business.
- lack of careful career planning and planned job assignments on the part of both organizations and women.
- women’s lack of access to line positions in organisations.
- the issue of access to power and control of economic resources
- the career aspirations of women themselves.
- the exclusion of women from informal channels of communication.( Mattis, 1995).

This study seeks to answer the following central questions

1. What are the factors affecting non-assigning of women in managerial positions in governmental organizations of Ilam Province?
2. What are the most important factors influencing the sticky floor in Ilam Province?

Research methodology

The method used in this study is a qualitative method based on text bases and subjective data. In this study, we used the purposive sampling method, including favorable cases sampling through interviews with participants (12 subjects) who were expert in the relevant areas as well as individual interviews. We also identified the most important factors and parameters influencing the barriers to women's leadership promotion in Ilam Province by library surveys and research background. After the doing the interviews, all the responds were noted and written on the paper. All of the interviewees’ points were recorded. The results of this part of data analysis process are presented in Tables that show the text of responses as short statements and sentences; the raw data include direct sentences and phrases directly from the respondents. Then, the statements received the most answers from the experts were prioritized and identified as the factors influencing the sticky floor in Ilam Province.
The inhibiting factors of appointing women to managerial positions in government agencies in Ilam Province

<table>
<thead>
<tr>
<th>Factors</th>
<th>Statements</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual factors</td>
<td>Weak incentives for posts and positions</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>Lack of self-esteem and self-confidence</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>Women's fear of failure</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>Women’s lack of planning to reach managerial positions</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>Women’s tendency to accept posts with low liability</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>Lack of interpersonal skills</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>Lack of decisiveness in women</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>Weaknesses in crisis management</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Being moderate, consistent and abiding</td>
<td>7</td>
</tr>
<tr>
<td>Organizational factors</td>
<td>Lack of the atmosphere to use female directors</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>Lack of women's organizations and associations</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>Absence of policies to prevent gender discrimination</td>
<td>9</td>
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<tr>
<td></td>
<td>Men’s tendency to work with their hands</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Lack of support and encouragement from others</td>
<td>12</td>
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<tr>
<td></td>
<td>Shortage of successful women managers model in organizations</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>Unwillingness of men to women's participation in decision-making</td>
<td>8</td>
</tr>
<tr>
<td>Social factors</td>
<td>Lack of socialization</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>Ethnic and tribal attitudes</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>Everyone belief on ensuring the effective management by men</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Assuming women as weak individuals</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>Administrative work interference with housekeeping issues</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>Lack of belief in the ability of women</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>Negative attitudes towards women and their employment outside the home</td>
<td>8</td>
</tr>
<tr>
<td>Political factors</td>
<td>Non-membership of women in political groups</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>Lack of supportive networks for women</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Failure to comply with the working men and women in politics</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>Lack of institutions and NGOs</td>
<td>12</td>
</tr>
</tbody>
</table>

Based on the above table, the inhibiting factors of appointing women to managerial positions in government agencies in Ilam Province are as follows:

1. Individual factors are effective in non-appointment of women in managerial positions in Ilam Province.
2. Social factors are effective in non-appointment of women in managerial positions in Ilam Province.
3. Organizational factors are effective in non-appointment of women in managerial positions in Ilam Province.
4. Political factors are effective in non-appointment of women in managerial positions in Ilam Province.

To answer the second question, i.e., the factors affecting the sticky floor in the government agencies in Ilam Province, the statements received the most responses from the elite people were prioritized and identified as factors affecting the sticky floor in Ilam Province that such factors had not been mentioned in previous research so far. The sticky floor model was constructed as follows:
Conclusions

The research findings showed that in governmental agencies in Ilam Province, all four groups of individual, organizational, social and political factors are considered as the creators of glass ceiling; all these factors have led to non-appointment of women to managerial positions. The findings indicate that women in Ilam province are not only below the glass ceiling, but also are placed at sticky floor, so that the high levels in women’s positions have no place in Ilam Province. Also, in middle and basic levels, only lower than one percent of organizational positions has assigned to them. Management vacuum of women compared to men is now felt everywhere including Ilam Province. Although we can see the presence of a woman as a manager or consultant is some executive organizations positions in Ilam Province, but in comparison with male managers, the statistics appears to be negligible. In fact, at Ilam Province, the educated, empowered and influencing women are not employed at managerial levels. Hence, we need to provide the areas of more participation of elite women in the country’s decision makings by optimal deployment of managerial capabilities of women, including elite women in the decision makings of the country. Globalization now causes the formation of some trends toward transnational political activities that meanwhile, globalization of concepts and discourses of human rights and women's rights as well as the international NGO activities have created a favorable environment for the growth of women's organizations at the national and international levels. On the other hand, increased political participation of women at the management level has become one of the main demands of women in the world, especially the Islamic world.
Reference