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Preface

Dear Distinguished Delegates and Guests,

The Conference Committee warmly welcomes our distinguished delegates and guests to the 2014 International Conference on Economics and Social Sciences (ICESS-2014) held on December 13-14 in Penang, Malaysia.

The ICESS-2014 is organized by International Foundation for Research and Development (IFRD). The conference is aimed at discussing with all of you the wide range of problems encountered in present and future issues in economies and Societies. The ICESS-2014 is organized in collaboration with Yildirim Beyazit University, Turkey, Shinawatra International University, Thailand, PERTRE ANDERI of IASI, Romania and National Academy of Management, Ukraine where researchers from around the world presented their work. The conference committee is itself quite diverse and truly international, with membership around the world.

The proceeding records the fully refereed papers presented at the conference. The main conference themes and tracks are Economics, Business and social sciences. The conference aims to bring together researchers, scientists, engineers and practitioners to exchange and share their experiences, new ideas and research results about all aspects of the main conference themes and tracks and discuss the practical challenges encountered and the solutions adopted. The main goal of the event is to provide a scientific forum for exchange of new ideas in a number of fields that interact in depth through discussions with their peers from around the world.

The conference has solicited and gathered technical research submission related to all aspects of major conference themes and tracks. All the submitted papers have been peer reviewed by the reviewers drawn from the scientific committee, external reviewers and editorial board depending on the subject matter of the paper. Reviewing and initial selection were undertaken electronically. After the rigorous peer-review process, the submitted papers were selected based on originality, significance, and clarity for the purpose of the conference. The conference program is extremely rich, featuring high-impact presentations. The high quality of the program guaranteed by the presence of an unparalleled number of internationally recognized top experts. The conference will therefore be a unique event, where attendees will be able to appreciate the latest results in their field of expertise, and to acquire additional knowledge in other fields. The program has been strutted to favor interactions among attendees coming from many diverse horizons, scientifically, geographically, from academia and from industry.

We would like to thank the program chairs, organization staff, and members of the program committee for their work. We are grateful to all those who have contributed to the success of ICESS -2014 especially our partners. We hope that all participants and other interested readers benefit scientifically from the proceedings and find it stimulating in the process. Finally, we would like to wish you success in your technical presentations and social networking.

We hope you have a unique, rewarding and enjoyable time at ICESS-2014 in Penang.

With our warmest regards,

Conference Committee
December 13–14, 2014
Penang, Malaysia.

ICESS-2014

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PAPERS

E-Government Implementation in South Africa: A Perspective of Actor Network Theory

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Abstract: This paper discusses factors influencing e -Government initiatives by Governments to improve services to their citizens, businesses and among their constituent. It further discusses the degree of readiness of the South African Government in implementing e-Government initiatives toimprove its services. The discussion uses Actor Network Theory (ANT) and in particular the concepts of moments of translation and irreversibility as a lens through which to understand and interpret the social phenomenon. Although a number of e-Government researchers have argued that strong leadership and clear vision is required to implement e-Government initiatives, the view is that Governments have continuously failed to achieve the intended results. E-Government potentials which are well documented in Information Systems and e-Government research literature have not been institutionalised by governments to derive benefits due to limited capabilities in the administration of the public service. ANT as the underpinning theory of the study, the study applied deductive approach where interviews were used for data collection in a selected Provincial Government in South Africa. The outcome is a general framework of readiness for e-Governmentinitiatives in South Africa, and more generally Africa, to guide and to determine the degree of readiness for e-Government initiative to achieve the intended results.

1. Introduction

E-Government projects are often a result of formal and informal interaction of actors which results in complex relationships and forces that impact on the deployment of those projects. E-Government has and is currently receiving global attention because of its ability to make governments more efficient and effective, thus to transform relations with citizens, businesses, and government departments (Walsham & Sahay, 2005). Due to the important role played by e-Government, its implementation calls for strong leadership and clear vision. E-Government contributes towards promotion of development and reduction of poverty while it has potential of strengthening the performance of government administration, by introducing efficiency and effectiveness which comes as a result of, among others, being able to access government services anytime and from anywhere. This is particularly relevant in developing countries where public administration is known to be inefficient, has limited capacity, and with poorly-trained personnel(Schuppan, 2009). The bottom line is that e-Government cancontribute to solving government administrative problems and can greatly benefit the developing countries.E-Governmentis seen as the kind of transformation that is enabled by the information technology (IT). According to Hunnius & Schuppan (2013)e-Government is more than just implementation of IT systems, which would merely transform government to online delivery of services but it is a total reorganization of the public sector through the use of IT. This calls for the rethinking of way public services are delivered and thereby having a transformational impact. In this transformation the whole model of public management, relationships, and behaviours are altered.

Literature indicates that most e-Government projects in developing countries fail (Heeks, 2003a; Lessa, Negash, & Belachew, 2012; Pillay, 2012; Gunawong & Gao, 2010; Lines, 2005).According to Reich (2007) one out of every three information technology (IT) projects fail because they either miss the targets or fail to deliver the required business functionality. Almarabeh&AbuAli (2010) believe that the underlying potential of e-Government initiatives to achieve the envisaged outcomes is through access to a better understanding of the challenges faced by governments. Heeks (2001) indicates that the challenges that confront e-Goverment relate to service delivery strategies in the developing countries having been done in a non-integrated manner leading to more money being spent with very little success to create hope for poorer communities and individuals. This has resulted in ICT for development initiatives in developing counties not making governments effective and efficient in service delivery to citizens, businesses, and employees and among government departments themselves.There are other causes of e-Government project challenges that mostly lead to what researchers have identified and described as failure. In the year 2000 the cause for e-Government project failure was identified to be lack of commitment from political leadership and public managers (Bhatnagar, 2000). Aichholzer (2004) identified poor management of long-term sustainability risks as the main cause of e-Government project failure.The e-

Government challenges have prevented governments from realizing visible improvements despite the fact that billions are spent on ICT. Heeks &Bailur (2007) estimate an expenditure of US$3 trillion on e-Government projects in the years between 2000 and 2010 with a 60% rate of failure. Since there have not been further studies to test or comment on these claims, this research will attempt to investigate with the case study this rate of failure. This is a large amount of money that could have been used to support other services to benefit the citizens.Heeks (2003) states further that e-Government project failure is caused by the amount of change required to move from a current state to the new envisaged state that he refers to as the design reality gap. The bigger the gaps the greater are the chances of failure. According to Lessa, Negash, &Belachew (2012) these causes of project failure have been identified and little hasbeen done to improve the situation.Heeks (2002) identified readiness as a strategic challenge to e-Government in Africa as a whole.In bringing about the e-Government to reality there are a number of predictors (or factors – Heeks (2002)) that can be used to predict the outcome of e-Government implementation or the implementer's readiness thereof. These might not have been considered as serious by implementers of e-Government. Table 2 describes these predictors

Given the stated problem, the paper sought to identify e-Government practices which may have contributed to the e-Government initiatives meeting or not meeting the intended goals and objectives. It seeks to stimulate a discussion on the importance of e-Government strategy review, how to get value from e-Government initiatives and how to determine success criteria for e-Government initiatives. An attempt was made to explore how these can contribute in addressing the issues associated with e-Government. This led to the main research question "how can Governments determine their readiness to implement e-Government projects?" This led other sub-questions adapted from Heeks (2002) which due to space cannot be stated. Given the stated problem and the research questions above, the objective of this paper is to determine the readiness of governments to implement e-Government projects as a socially constructed phenomenon. This was done in relation to the e-Government predictors. The assumption was that the absence of the e-Government implementation predictors would result in failed e-Government projects. The concepts of Moments of Translation and irreversibility of Actor Network Theory (ANT)was used as a lens through which to understand and interpret the social phenomenon (e-Government readiness) and thereby establish a general framework that can be used by governments to assess their e-Government readiness as they plan their ICT strategies and implementation. This will also enable the project team to better understand the impediments that prevail during e-Government implementation and initiatives needed to overcome them. Given the above, this paper is structured as (a)A brief overview of Actor Network Theory (ANT) and the concept of moments of translation (MoT)and irreversibility;(b)A summary of the methodology and the case narrative;(c)Reinterpretation of the case study from the perspective of MoT; and (d) Implications as a general framework.

Theoretical Framework

Overview of Actor Network Theory (ANT): Twum-Darko (2011: 30) argues that ANT is used as a lens to provide an understanding and interpretation of not only the process and interactions between actors but also of the meanings that people assign to the form of interactions between actors to align diverse interests. This process of alignment of diverse interests, when effective, results in the creation of a network of actors linked by associations. To facilitate understanding and interpret the meaning people assign to the form of interactions between actors to align diverse interests, this section describes the Moments of Translation and irreversibility concepts of ANT. In the e-Government context the non-human elements could be policies, technology, government services etc. Actors, whether human or non-human, have interests which they pursue.According to Tatnall& Gilding (1999) actors do not define themselves, but are defined by the relations to other actors in the network. Actors initiate action or can be acted upon. In a heterogeneous network all actors are considered equal with no discrimination on either human or non-human actors (Nijland, 2004b). Despite what Nijland said Stanforth (2006) states that the position of machines in ANT is different to that of humans. They are not possessed of an inherent momentum that allows them to pass through a neutral social medium (Latour, 1987). Instead they are continuously shaped and reshaped by the interplay of a range of heterogeneous forces within the networks (Stanforth, 2006b). Machines are as much actors in the networks as are the humans. According to Callon&Latour (1981) an actor-network exists when human and non-human actors interact and produce some kind of result. Furthermore, ANT sees the world as a network of related elements with no social order. Such a network is formed through moments of translation.

According to Callon(1986) the four moments of translation are: (i) problematisation – where the key actor makes himself indispensable to others by presenting the problem to them by compelling them to see things hisway; (ii) interessement – after successful problematisation, the key actor attempts to lock the others into place by intervening in interactions between other actors and defining the linkages between them; (iii) enrolment–the key actor defines the roles other actors need to play and the way in which they play and (iv) mobilisation–the key actor act as representatives or spokespersons of the rest of the actors.Irreversibility is the final stage of the actor network. Whether inscriptions are followed or avoided depends on the strength inscriptions. The stronger the inscriptions the more irreversible the network becomes(Mpazanje, 2009). The decision to follow or not to follow an inscription is dependent on its strength(Mähring et al., 2004). Irreversibility is the state at which the development of the network has advanced so much that it becomes difficult to revert to the old ways. This is a state where the network is established and strengthened. It may take iterative inscriptions before the actor-network reaches an irreversible state(Mähring et al., 2004).The table below summarises the concepts and definitions of ANT to be applied throughout the paper.

Table 1: Definition of some central concepts of ANT [Source: Sidorova and Sarker (2000:1663)]

Concepts	Definitions
Actor	Any element which bends space around itself makes other elements dependent upon it and translates their will into the language of its own [Callon and Latour, 1981].
Actor-Network	Heterogeneous network of aligned interests [Callon and Latour, 1981]
Problematization	The first moment of translation during which a focal actor defines identities and interests of other actors which are consistent with its own interests, and establishes itself as an obligatory passage point (OPP), thus rendering itself indispensable [Callon, 1986].
Obligatory Passage Point	A situation which has to occur for all of the actors to be able to achieve their interests, as defined by the focal actor [Callon, 1986].
Interessement	A process of convincing actors to accept the definition of the focal actor [Callon, 1986].
Enrolment	A situation when actors accept roles defined for them by the focal actor [Callon, 1986].
Mobilization	A situation where actors choose to become legitimate spokespersons of the groups they claim to represent [Callon, 1991].
Inscription	A process of creation of technical artefacts which would ensure the protection of certain interests [Latour, 1992].
Irreversibility	Degree to which it is subsequently impossible to return to a point where alternative possibilities exist [Walsham, 1997]

The trend that emerged from the literature is that there is a strong relationship between the level of e-Government readiness and the success (or even the improvement) of the implementation of e-Government projects. This implies that the higher the level of readiness the more stable the actor network becomes. The level of readiness is seen as a contributing factor towards the irreversibility of the actor network. From the conceptual framework in Figure 1 below, it can be deduced that e-Government implementations with higher levels of readiness will enable networks of aligned interests to reach strong levels of irreversibility. This means that the higher the e-Government readiness, the more successful the implementation will be.

The Table 2 seeks to deepen the understanding of pre-conditions that come to play during e-Government implementation. There is close alignment between Table 3 and the research questions above. The conceptual framework (Figure 1), which is later refined, was used to tease out the research questions while at the same time determining factors that contribute to the strengthening of the network of aligned interests. Data collection instrument was drawn using the conceptual framework as a guide. Figure 1was used to explain what emerges from the relationships between the actors in the actor network and the extent of the irreversibility of the aligned interest towards the stability of the network.It was certain that as the actors' aligned interest in the network went through the moments of translation (Figure 1) the stronger the alignment of interests in the e-Government project initiation, the higher the level of e-Government readiness and the greater the implementation success due to the irreversibility state of the aligned interests of the actors.

Table 2: Actors and level of orientation (adapted from Heeks, 2002)

Readiness Factor	Description	ANT
Process Infrastructure	Management systems, data standards, records and work processes	OPP
Legal Infrastructure	Laws (policies) and regulations	Problematization
Institutional Infrastructure	To act as a focus for awareness and to act as a means for facilitation of e-Government	Interessement
Human Infrastructure	Attitudes, knowledge and skills required to initiate, implement and sustain e-Government initiatives	Mobilization
Leadership and Strategic Thinking	Leaders with vision who make it happen, senior officials who feel willing or able to champion e-Government	Enrolment
Technological Infrastructure	Telecommunications infrastructure	Irreversibility

Figure 1: The Actor Network Conceptualized (Twum-Darko, 2011: 196-199)
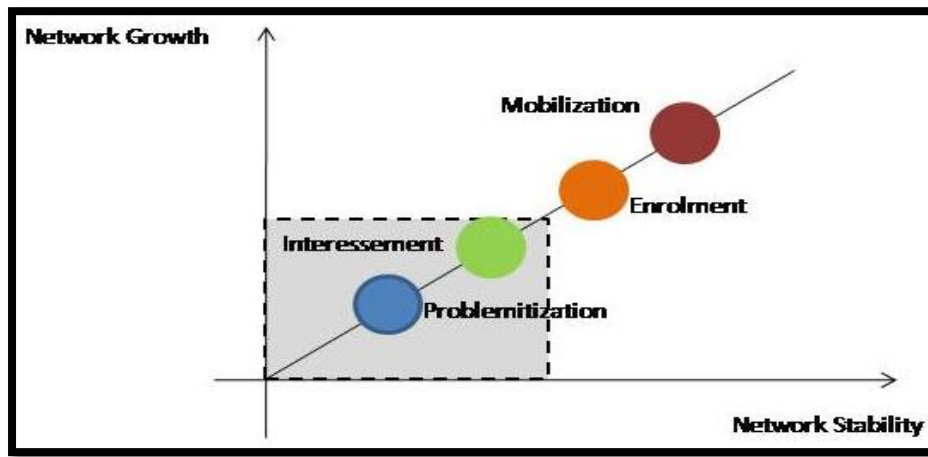
The Case Study

Backgroundof the Government X: The Government X is one of the Provincial Governments of South Africa and has a population of 5 287 863 which accounts for 14% of the total South African population on 129 370 km² of land. The people speak Afrikaans, isiXhosa and English as the main languages. It has the mandate to increase economic empowerment for all the people of the Province, reduce poverty through promoting opportunities for citizens, promote rural development, efficient and effective infrastructure, sustainable human settlements, improve individual and household capacity to respond to opportunity, improve efficiency and effectiveness in health, education, well-being and safety, sustainable resource use through greater spatial integration, effective public and non-motorized transport, responsive and effective governance.It is clear from the mandate that e-Government has a major role to play. The strategy of the Government X is to a large extent informed by the lessons learnt from past service delivery challenges. The key strategic objective "Building the best run regional government in the world" is seen as the foundation for creating an efficient, transparent, responsive and corrupt-free government that delivers cost-effective services to its citizens. This Government X adopts a transversal management system in order to achieve systems integration in their service delivery programmes. Their strategic objectives cut across traditional line functions. Three e-Government projects were investigated and these are:

1. **Department of the Premier (Project 1):** This department provides legal and corporate services to and co-ordinates some of the provincial affairs for the Premier, Director-General and other departments in the Government X. From the Department of the Premier a project which focused on developing a portal which would provide the citizens with online access to government information.
2. **Department of Health (Project 2):** The department of health has a comprehensive package of health services to the people of the province. Among others, they offer emergency health services, mental and women's health services, baby and child and rehabilitation services. The project is an online bursary applications solution to integrate hospital and patient records across the province and for purposes of subsidy allocation and deployment of health care resources.

3. **Department of Education (Project 3)**: The Western Cape Department of Education is responsible for public schooling in the province from grade one to twelve. They provide specialized education services and subsidize and support grade R education. This department further provide further education and training (FET) and adult basic education and training (ABET). The project is to integrate educator recruitment system that seeks to streamline and redistribute educators across the province for strategic decisions and interventions where necessary.

2. Methodology

The methodology is a multiple case study of 3 projects using interpretive paradigm as a philosophical assumption; implying that reality is socially constructed.The underlying objective of this approach is to understand and interpret the social phenomenon, i.e., the e-Government readiness of Governments for successful implementation of e-Government projects. The type of primary data collection instrument used wasinterviews and all interviews were recorded and later transcribed and coded. Project documentation, Government X ICT strategy, Annual Performance Report, official minutes from legislature, public notices, Newspaper articles were used as secondary data. The following were interviewed:

Table 3: Unit of Analysis

Project type	Management Senior (SR)	Middle (MM)	Content (CM)	Team Leaders (TL)	Analysts (BA)	Developer(Dv)	Users	Total
Project 1	1	1	1	2	1	2	1	9
Project 2	2	1	1	1	1	-	1	7
Project 3	1	2	1	2	1	1	1	9
Total	4	4	3	5	3	3	3	25

In terms of ethical consideration in collecting data, permission was granted by Government X to carry out interviews from all participants onthe e-Governmentproject implementation that form the actor network. Special permission was alsogranted bysenior management in order to gain accessto all documents that were required for content analysis as secondary data collection. Consent wasalso sought from all interviewees without any coercion to go through the interviewing process. The intervieweeswere reassured of the purpose, confidentiality and anonymity at the start of each interview. Meaning of contents of the interviews was explained and identities of interviewees were made confidential. The interview schedule went through a standard approval process by the Ethics Committee which scrutinised all the research questions, interview questions, guidelines etc.

3. Results and Discussion

The analysis followed the process recommended by Devlin (2006) as:
- The responses were condensed into a table, arranged by question using an excel spreadsheet. Each interview question was typed into a separate line and each response was labelled according to the project code and respondent code. The coding table also shows the coding of all projects and respondents accordingly. The coding process, involved reading the responses one by one and line by line, highlighting relevant words, phrases or sentences. The list constituted a set of organized, raw data, known as the data set.
- After browsing through the transcripts which were organized in a spreadsheet, the researcher then noted any first impressions and trends the data may have revealed. When categories were developed inductively, explanations, grounded in the data, were developed. As suggested by Berg (2007), the use of excerpts to document the interpretation made by the researcher, were used.
- Responses which could not be linked to a specific question but were relevant to the research were coded and categorised.
- In analysing the data, reference is consistently made to both the literature and the theoretical framework.

(a) **Problematization aslegal infrastructure:** E-Government projects begin by defining project objectives and the selection of actors (Gunawong & Gao, 2010). The same has been with the 3 projects in this study. As already alluded to in this paper, problematization is where the focal actor defines the nature of the problem forcing the other actors to accept a way forward. The ANT as an underpinning theory has been used in this study to show how actors in a network of aligned interests

interact to producee-Government systems that will alleviate problems associated with service delivery. The focal actors have identified their interests by framing the problem. In the case of project 1 the interest of the focal actor was the need for citizen to have access to information relating to services offered by Government X. This interest was in line with the mandate and strategy of Government X already discussed.One senior manager said:

"The problem was that citizens did not really know what services the Government offered. They did not have access to information. Actually my focus is on giving information access to the public via the online and needed to improve communication"

In the case of projects 2 and 3 the common problem was that of having to deal with paper based applications. It became a problem to handle and even track these applications using manual systems. Basically the departments could not handle the amount of work associated with the handling of applications and were compelled to come up with solutions. One of the senior managers said:

"So, first two vacancieswere horrendous for me when I started in this department because we received 17 000 manual applications per vacancy lists which the team had to work through and capture on the database. So it took us two to three weeks to confirm how many applications we received. We used to close at four o' clock in the afternoon. We had long queues so people would be trying to run around to apply on time or post them. The teachers are at school till three o' clock so they had an hour to apply."

The Content Manager and the Business Analyst said:

"It was important to actually understand the kind of information which could be published, by law or as a policy."

(b) **Obligatory Passage Point (OPP) as process infrastructure:** With regards to the project 1, some Departments of Government X were against it. They did not see the need to have their websites redesigned – if not broken don't fix it. The opportunity was that there was not standardizedway of presenting Government information to the public via the websites even if those websites worked well. There was still a need to redesign those websites. To arrive at a point where there was no resistance, focal actors had to establish the OPP. According toCallon, (1986a), the focal actor sets-up an OPP in order to align the interests of different actors. In the case of project 1, there was a mandate that all Government X Departments had to have their websites redesigned to reflect the rebranding of the Government X and the design was to be undertaken by the Department of the Premier of the province. The rebranding was linked to the key strategic objective of the Government X; i.e., "Building the best run regional government in the world." This forced all Departments to comply and become part of the project hence they were compelled to cooperate with the Department of the Premier in making arrangements for centralized portal. By accepting to align interest, actors were, in essence, also accepting that there would be changes to processes (i.e., process infrastructure) to accommodate the interests of the focal actor. In the case of Project 3 they had to reengineer their processes to be able to work under the new conditions. One of the senior managers said:

We had to change the processes as well to change from paper to online application. Phase two was the School Governing Body (SGB) process they had access the online short listing or print them out.

(c) **Interessement asinstitutional infrastructure:** A successful problematization leads to the next stage of the development of the ANT, interessement where the focal actor locks the other actors into place by imposing self and defining the linkages between the others (Gunawong & Ping, n.d.). The aim of the focal actor at this stage is to stabilise the other actors. In the context of e-Government the realignment of interests was to accept the e-Governmentinitiative as necessary to address already discussed in problematization.E-Government is a way of improving government processes, connecting citizens, and building interactions with and within civil society (Heeks, 2001). Activities leading to this outcome are not only engaged when the e-Government system is ready for use. It is imperative to get buy-in from the stakeholders from the beginning of the project. Senior managers were used to introduce the project vision to the rest of the stakeholders. Most of the stakeholders were represented in project meetings where the project objectives were communicated and vision chanted. A middle manager said:

Project meetings were held for all stakeholdersbecause of the benefitsof the project to them and the aim was to make this project an official one. Project teams such as developers, analyst, system controller, managers and directors working on the system were also invited. Management also needed to be there in order for us to know which input was needed.

As Almarabeh(2010) states, e-Government is about how government organises its administration, rules, regulations and frameworks set to carry out service delivery and co-ordinate, communicate and integrate processes. Given this view about e-Government, it is important to ensure that there is awareness of what is happening before it actually happens. One Senior Manager said:

There was some communication, and consultation with stakeholders. There were pamphlets distributed at train stations and the project was made to be a big thing in the Province. There was radio and newspaper marketing that was done. There were also roadshows that were aimed at creating even more awareness about how things were changing.

So the project meetings were part of the standing meetings of the Government X and were a key performance indicator for all managers.

(d) **Enrolment as leadership and strategic thinking:** This stage of the network ensures that the actors are assigned to specific roles and responsibilities so that their inclusion in the network is justified. It is important for actors to understand the significance of their role in the network of aligned interests. Inscription serves to strengthen the enrolment of the actors and to ensure that the actors do not betray the focal actor.Several factors were considered to impact the respondent's decisions to take part in the e-Government projects. These served to define the collective responsibility of the human actor in the e-Government network of aligned interests. Applying the notion of collective cognitive responsibility (Scardamalia, 2002), it became a group effort with all the members and not just centred on the leader. Most managers indicated:

We were playing our roles which we were employed for and coming up with the ideas. I went as far as training the person although it wasn't my job.It was fulfilling knowing I was part of something that would benefit the citizen.We were always encouraged by what we wanted to achieve with the website. We always had the citizen in mind. There was a sense of pride of knowing that we were doing something that will benefit someone out there in the Western Cape. This was encouraging. The project was part of our deliverables which we had to achieve. There were frequent updates on the progress of the project given to stakeholders. They constantly reminded of the benefits of the project.

Self-efficacy which can be seen as one's belief in their ability to complete a task (Bandura, 1994), came out strongly in the project team. The following statement highlights what one manager said:

Yes, the roles were clear. It was a new thing that the government was doing. In some areas of work there are very clear roles because people were doing this for a while. In this project, there were a number of new and innovative things like it was not like a job description could be downloaded from the internet and understood by everybody. Job descriptions for some roles did not exist and had to be defined. There was willingness to learn in the roles because it was quite new that we were doing. People really believed in themselves.

Furthermore, enrollment in a network of aligned interests is one of the ways showing that there is development in the network stability towards irreversibility. Stakeholder buy-in was critical as at this stage even though it had some challenges. One of the managers said:

I think the big picture wasn't understood yet and change management was done well enough. There was a lot of enthusiasm because we could realize the visible outcome of the project. There were few who thought it was extra work and those who thought it was just becoming a burden to thembecause they did not see the big picture.I would say citizens did buy-in because of the growth in numbers and the interaction.

(e) **Mobilization as human and technology infrastructure:** Mobilization was seen as irreversibility and as the final stage of the creation of the e-Government network of aligned interests. It is the desired state to achieve stability of the network and for human actors it is the social factors that strengthen the network of aligned interests so that it does not change in response to changing circumstances. Most senior managers commented as follows:

We now have a lot more sophistication in our relationship with our clients. We are now able to manage relationship very well. The content is maintained extremely well now. Our governance around the portal is very strong. We got the right services grouped together to implement e-Government. Information is readily available for our clients.

Over all it was successful. Overall it was successful, there were glitches here and there but that was all dealt with in post migration. All of those things were looked into in post evaluation and those issues were identified after the migration took place.I would say that that it was a success; this system was adopted to be

a transversal system. All the government departments and bursaries systems are now able to use it. It was successful and good learning area for us.

The handover of the project to the Department of the Premier and all departments was an indication of not return to the old ways of doing things. Some of the Managers commented as:
There was a big launch function. The CIO spent a lot on the fancy dinner where there speeches etc. This was for the internal staff. We also demonstrated to the schools, the department of health, head of departments (HODs), the management of the department up to the director of human recourses.We launched it with all the directors and chief director to make them aware of it. As well as on our application form and website it is on there. Also when the students signed the bursary contracts they had to capture their details online they also experienced it themselves.

Recommendations: Like any Government whose main mandate is to deliver basic services to the public, the e-Government initiatives are to enable Governments is to improve service delivery to integrate and manage relationships with the public. Therefore, the readiness of any developing country or Government to successfully implement e-Government initiatives can be studied using the concepts of moments of translation and irreversibility (MoT) of ANT. MoTtherefore can be used as a lens through which to understand and interpret the readiness of Governments to successfully implement e-Government projects to improve services to its citizens. Moments of Translation and Irreversibility (MoT) used as a general framework, further demonstrates over time and space the degree of readiness (see Figure 3) for successful implementation of e-Government projects. The outcome of the study recommends the following:

(a) **Legal and Process infrastructure:** It became evident that the changes that were brought about by the *e-Government* projects required development of new policies or revision of existing ones. Apparently this is an exercise that needs to be done quite early in the project as policies are a form of agreements on how things are done. There should be no gap between what the policy says should be happening and the e-Government project plan (Trusler, 2003). These gaps in policy are considered as inhibitors of success in e-Government implementation. Policies are an important component in determining performance. The study also showed that actors understood policy as a component of e-Government which had to be addressed at early stages of the planning of the initiative hence it came up at problematization stage of the development of the network. Furthermore, policies were seen as tools that were used to get actors to a common ground and understanding of the project. This was the case with the projects 1 and 3. The study also showed that the ultimatum that came from the Department of the Premier to redesign the websites to create a centralised portal for all Departments across the Provincial Government was the strength for the aligned interests. In view of e-Government projects, the project must be linked to a key strategic objective of the Government and should be the basis for rebranding the Government's service delivery strategies. The latter initiates changes to align processes. Thisis the formalization of the OPP – a means by which the focal actor is able tointegrate and manage relationships with actors into one vision.Given Figure 2 and 3, it is clear that acceptance of the focal actor's interest must be irreversible and therefore all stages of MoT must be followed, iteratively, to complete problematization before interessement.

(b) **Institutional Infrastructure:** The main objective of interessement is to develop acceptance of changes that the e-Government projects will bring i.e., awareness as a means to facilitate change for e-Government which serves as a glue that holds all other components of the e-Government project together - the establishment of a new institutional infrastructure. The awareness and the buy-in for the e-Government initiative was driven from the rebranding of the Government service delivery strategy using the phrase "Building the best run regional government in the world" to align diverse interests. Table 2 and 3 also illustrate the need to go through all the stages of MoT iteratively, before the next major stage (i.e., enrolment) of MoT to ensure all diverse interests are aligned to the focal actor's interest of building the best run regional government in the world.

Figure 2: Readiness at each stage of MoT
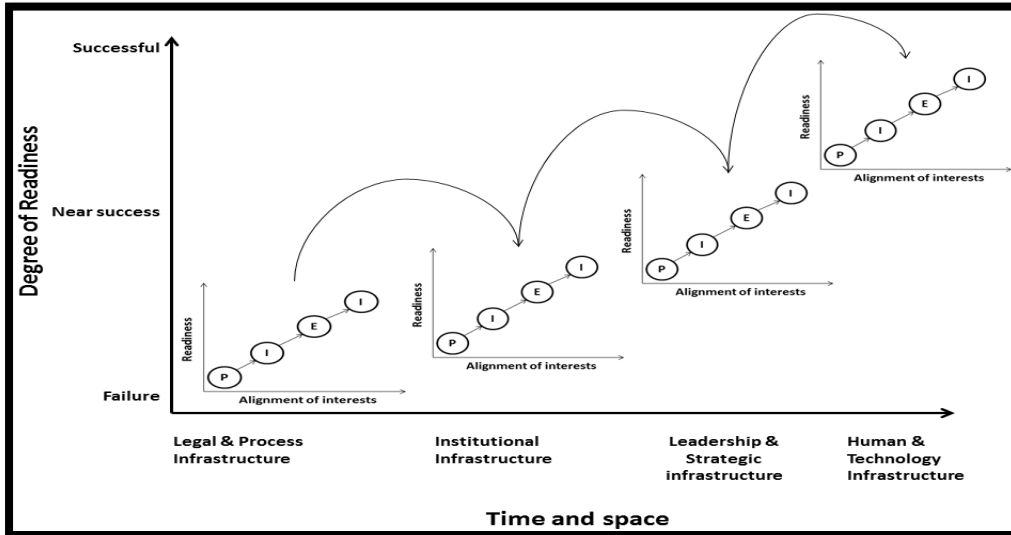
Figure 3: Degree of readiness for successful e-Government Projects

(c) **Institutional Infrastructure:** The main objective of interessement is to develop acceptance of changes that the e-Government projects will bring i.e., awareness as a means to facilitate change for e-Government which serves as a glue that holds all other components of the e-Government project together - the establishment of a new institutional infrastructure. The awareness and the buy-in for the e-Government initiative was driven from the rebranding of the Government service delivery strategy using the phrase "Building the best run regional government in the world" to align diverse interests. Table 2 and 3 also illustrate the need to go through all the stages of MoTiteratively, before the next major stage (i.e., enrolment) of MoT to ensure all diverse interests are aligned to the focal actor's interest of building the best run regional government in the world.

(d) **Strategic leadership infrastructure:** Much as Government bureaucracy is seen as a means to ensure corporate governance, many employees saw bureaucracy to have effect one-Government as initiative. In the view of this study, the use of policies and specific guidelines and where necessary to suspend or do away with existing policies and regulations like to impact the e-Government initiative as an issue of strategic leadership. Therefore given the results of the interviews, the ability of senior management to review existing policies and regulations to align with the key strategic objectives of the Government mandate and that of the objectives of the e-Government was critical for the success of e-Government initiatives. Furthermore, making the objectives of the e-Government project a key performance indicator (KPI) of all managers strengthened the strategic leadership infrastructure. The KPI empowered senior management (Stanforth, 2006) to drive project meetings at all levels to ensure understanding of the benefits of the project, acceptance of and participation in the project by all stakeholders. Given figure 2 and 3, different project meetings at different levels which embraced all stakeholders helped to obtained extensive buy-in across government and users.

(e) **Human and technology infrastructure:** Irreversibility is a state of stability of network of aligned diverse interests. In the context of e-Government initiative and in particular this study, e-competency (i.e., IT related skills and knowledge) was critical. Also, change in processes to align with focal actor's

interest by other departments led to change in non-standard technology platforms and design principles to one enterprise architecture. The new e-competencies and enterprise architecture constituted the human and technology infrastructure. The recommendation is that the success of e-Government projects depends on redefinition of e-competency needed and the establishment of an enterprise architecture strategy. This identification, redefinition and establishment are done iteratively i.e., the state of stability of the e-Governmentnetwork or state of irreversibility is achieved through its own MoT as illustrated by figures 2 and 3 above.

4. Conclusion

Contribution: The theoretical contribution of this paper is the application of the concept of Moments of Translation and irreversibility (MoT) of ANT as a lens through which one can study the interplay between role players or stakeholder of a socially constructed phenomenon such as e-Government readiness. The approach which encapsulates the entire research effortcould serve as a guide for the implementation of e-Government projects to improve service delivery to the public. It is not a "silver bullet" per se and as such does not guarantee successful implementation of e-Government initiatives, but demonstrates the likelihood of increased success. Interpretive philosophy was adopted as a research strategy using multiple case studies where interviews were used as data collection method. MoTguided the findings and discussions of data collected from conceptualization to implementation. The contribution therefore is the way in which the concept of MoTwas applied to study the socio-technical processes in the case studies of e-Government projects. It is arguable that this paper provides a different dimension to understanding and interpretation of failures of e-Government projects to other researchers involved in similar projects. It is exciting and very developmental for Government ICT related projects that seek to improve service delivery to its citizens to use underpinning theories instead of just relying on literature. It must be noted that these underpinning theories do not come with a method of how to make use of them. The practical contribution is one of a normative approach which could inform the process of initiating e-Government projects from conceptualization to implementation and post-implementation support. However, despite the in-depth and rich social theories and literature available on ICT related projects success and failures and in particular e-Government, this could facilitate a new process. Hence it is envisaged that this study will address this limitation. It must be emphasize that the application of MoT as a normative approach cannot and will not guarantee success of e-Government projects, but it is expected that its use as a lens could increase the likelihood of success. Another practical contribution is the detailed insight provided by the case study which revealed that e-Governmentinitiatives in developing countries should be linked to rebranding of key strategic objectives/mandate that all stakeholders can relate to – drive integration and manage relationships across all parties to be affected by the project. According to Twum-Darko (2014:518), "this will then help increase the social integration of technology initiative and, hopefully, its institutionalization."

Limitation and further research:
One major limitation is the fact that there is very little application of MoTas a lens in studying the challenges impacting on e-Government related projects in Africa. This has implications for further research work. Although three (3) extensive e-Government projects were used to provide a general view of degree of readiness by governments to conceptualize and implement e-Governmentinitiatives successfully, it requires further research to validate it with more e-Government projects and in different regions. A second limitation is the temptation to transfer these results into other contexts or countries. Although, this study was conducted in a region or province of South Africa that won the best design city in the world in 2013 and as such has certain economic development fundamentals, the methodology and the lessons learnt cannot just be transferred or replicated. Drawing from Twum-Darko's (2014:519) argument, using such a normative approach requires architects of e-Government projects to be flexible in their thinking and action to make them to identify challenges or the unexpected to improve the iteration process at various stages of the network of aligned diverse interests. As a final limitation, it must be noted that MoT was applied in retrospect. It would have been useful to have followed or observed the e-Government project conceptualization and implementation of Government X and how the interplay between the actors as role players or stakeholder evolved.Furthermore, capacity and skills problems will continue, Governments will continue to reform, and strategic objectives or mandates will be amended to create different pictures. The normative approach to determine the degree of readiness of Governments to e-Government projects is a continuous development and will require minor adjustments to the application of MoTas a lens to increasethe understanding and interpretation of likelihood of success.

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Nations, Nationalism and National Enhancement

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Abstract: The apparent phenomenal proliferation of, and increase in, incidents of state abnormality (implying state failure, among other things) and underdevelopment in most countries, especially the developing countries of the so-called South, with their attendant negative fallouts, call into question the prevalence of nationalism and its constituent ingredients in the enhancement of nation- states. Using content analytical approach with reference to the social contract theory, this paper examines the components of nation, nationalism and nationality. It explains how national purpose, values, interests and objectives impact on national enhancement. The paper posits that no nation ever attains development and prominence in the comity of nations without practically expressed, definite and identifiable core values, national interest and affiliated national objectives. It concludes that it is these ingredients of nationality and nationalism that determined her past, propel her present and shape her future. The paper, further, suggests that there is need for nation- states (particularly developing states) to articulate and actualise their nationalism, as is the case with some advanced and rapidly-developing nations, in order to have sustained and stable polities devoid of retrogressive, parochial cleavages which are anti-thetical to national development and enhancement.

Key words: *Nation, Nationalism, National values, National interest and National objectives*

1. Introduction

The evolution of the concepts of nation, nationalism and nationality could be traced to the social contract which explains the origin of the state or nation and the relationship between the government and the governed (Hobbes, Locke & Rousseau in Gauba,2005; Elahi(nd); Rousseau,1947&2014).Right from the era of the civilised man, the concepts of nation, nationalism and nationality have always featured in the intentions and actions of states and individuals. Since these concepts have fundamental character based on human organisational capabilities, sophistication and dexterity, it could then be asserted that the uncivilised man was neither a statesman nor a nationalist at least consciously. If this is so, then nationalism and nationality could be viewed as perceptions of the civilised man, manifesting civilised human behavior in a civilised age. Features and expressions of nationhood, nationalism and nationality are common in political entities such as empires, kingdoms, chiefdoms, nation-states, dependencies and colonial territories. The dramatis personae have always included the leaders as well as the led; governors as well as the governed; and rulers as well as the ruled. Nationalist attitudes have been expressed in state houses, stadia, places of worship, streets, parade grounds, legislative buildings as well as in schools and colleges. Media utilised include verbal declarations, preaching, popular rallies, newspaper and magazine publications, pamphlets, posters, flyers, bill boards, government publicity agencies, radio and television broadcasts and in contemporary times, the internet, among other communication and information outlets.

Reasons for expression of nationalistic feelings and propensities have always included, among other things, (a) people's desire for independence, (b) desire to whip-up popular sentiments in support of government's policy such as going to war or competing in sports, (c)desire by a government to boost its status and standing in the comity of nations, (d) spontaneous reaction by the populace against undemocratic (and by implication un-nationalistic) government, (e) calculated design by a subsisting governmental regime to divert popular attention from the internal failures of government; or even (f) a noble and positive design by government to de-emphasise and downplay divisive propensities among the governed and possibly weld them into a coherent and united governable entity. Nationalism and national consciousness have been expressed over ages, centuries and years in nations of pre-colonial chiefdoms, kingdoms and empires in Africa, the Americas, Asia, the Middle East, the Caribbean and the Pacific, as well as post-colonial entities such as the United States, China, Malaysia, Nigeria, Guyana, India, Taiwan Singapore, Egypt, South Africa, Ghana and Kenya, to mention just a few. Fallouts and consequences from nationalistic thoughts and actions include: attainment of independence, (especially in previous colonial territories), building and sustaining relatively strong economies (as is the case in the G8 countries, China, Malaysia, Singapore, Taiwan etc), and establishing powerful nations such as the United States, Britain, France, former Soviet Union, (present-day Russia) China and to some extent India, Turkey and Brazil.

National consciousness has also acted as a centripetal (unifying) force in national integration as well as in the attainment of small, medium, big or super-power status by countries of the world. It has led to a refocusing or re-orientation of a nation towards self realisation and actualisation as was the case in the famous War Against Indiscipline (WAI) during the short-lived Buhari-Idiagbon military regime (1984 – 1985) in Nigeria. Nationalism and national consciousness have also been used either positively or negatively to trigger- off wars as witnessed in the original 13 colonies of America (1776), the German Third Reich (in the 1930s and 1940s), the Nigerian – Biafran War (1967 – 1970), the Zimbabwean independence war prior to 1981, the guerrilla war that brought President Musoveni to power in Uganda and even the current revolts in the Middle East and the Levant (eastern shores of the Mediterranean). It is within the context of the afore-mentioned highlights that this paper will attempt to examine the concept of nation, nationalism and nationality and the way in which the trio translate into, or relate to, national purpose, national values, national interests and national objectives which, in turn, influence national development and enhancement.

Analytical Framework: A proper analysis in this paper may not be exhaustively done without reference to the theory of social contract. As the nomenclature connotes the "social contract" is an assumed bargain between the governed and the state in which the individual citizens of the state agreed to submit to the authority of the state sovereign on the proviso that the state governed wisely and justly, taking care of it citizens. (Rousseau, 1947&2014;Ward, 1972). Aristotle, (in Ward, 1972) had earlier asserted that the state (nation) comes into existence to provide the basic needs of the people (the governed) and that it continues to subsist "for the sake of good life" of the people. By implication, that every community of people must organise itself into a state or nation with an institution of government and a process of governance if such a community is to survive; and that whichever government emerges from the state evolution should make the life of the citizens – the governed, worth living – a task which individual citizens may not be able to accomplish respectively for themselves. Derived from this assumed contractual relationship between the state and its citizens is the national purpose for the subsistence of the state or nation. In other words, the purpose for which the state comes into being is for the well being of the people of the state. From the ancient to the medieval and then to the modern times, this social contract has been a prevalent phenomenon in nation – states all over the world. Before going into the specifics of this paper, it may be necessary to make a synoptic expository of the concepts of nation, nationalism and nationality from where national values, interests and objectives, which enhance nations, are derived.

Nation: The word "nation" is often used interchangeably with "state" in political analysis with lexical and operational connotations. Consequently, a state could be described as a nation, or a nation could be stigmatised as a state depending on the prevailing circumstances, issues or arguments involved (Raphael, 1970). Raphael (1970) specifically maintains that "the state, in the modern world, is usually a nation – state; that is a nation organised as an association. The nation is a community, a group with all the conditions for a common life and giving rise to natural sentiments of loyalty and identification." He goes on to posit that: "the nation is a community; the state, an association; membership of the nation is a matter of sentiment, depending on common experience and history, while membership of the state is a matter of legal status." In his definition, Eugene (1990) maintains that the word "nation" refers to "a group of people with a common culture, a common language and common standards of value". He goes on to define a state as "a population occupying a definite territory and subject to a government which is recognised by other states and has monopoly over the use of legitimate force". Furthermore, he asserts that whenever a national group occupies the same territory and is under one sovereign government, such an entity could be called a "nation- state". Chartuvedi (2006) in his Dictionary of Political Science, conceives a nation as a collection of people bound together by cultural factors, sharing values and traditions, a common language, religion, history and usually occupying the same geographical area and perceiving common heritage as something of great significance. There are as many definitions of the term 'nation' as there are scholars. However, in contemporary international relations, nation- states are often referred to as "state – actors" (Spanier,1978) and in recent decades, the term nation – state" has dominated the lexicon of political expression with reference to national or state actors in the comity of nations. Malaysia, Nigeria, the US, Ghana, Brazil, Britain, India, China and Ethiopia, among others, could then be regarded as nation-states.

Nationalism: Nationalism is a derivative from the word "nation" and signifies having a disposition in thoughts, words and actions towards identifying with, defending and projecting the image of a nation. It could be defined as

a perception of common unity, common identity and common aspirations existing among a group of people who share…common territory, ethnic unity, language, history, religion, race, government and culture ….(Harold Laski, quoted in Eugene, 1990).

Gauba (2005) in his expository maintains that "nationalism denotes a sentiment as well as an ideology. As a sentiment, it involves an individual's attachment to his nation. A nationalist in this sense, accords primacy to his country's national interest over all other interests…in short nationalism pays highest importance to one's loyalty and commitment to one's nation". Morgenthau (1978) perceives nationalism from a different but related angle by stating that it is "an invisible spirit that breathes through a whole people and is participated by all, though not by all alike … a spirit which gives colour and character both to their voices and virtues". Another definition of nationalism by Chartuvedi (2004) sees it as: a force born of the fact that a people are bound together by a common stock of thoughts and feelings acquired and transmitted during a common history and a common set of loyalties.

Nationality: Nationality in a related vein is derived from nation as well as from psychological and sentimental undertones. To corroborate this assertion, Chartuvedi goes on to opine that nationality, derived from nation, is "the collective name given to that complex of psychological factors which furnishes the cohesive principles uniting a nation…a form of cooperate sentiment of peculiar intensity, intimacy and dignity related to a definite home country." stating that "the consciences of nationality make a nation"(Chartuvedi,2004). Implied in the above positions is that it is the consciousness of nationhood that begets both nationalism (which is both a thought and an act) and nationality which is a psychological, sentimental, as well physical disposition. For example a Malaysian, conscious of and committed to his nation, is a nationalist believing in Malaysian nationalism and is of Malaysian nationality. He should be ready to serve his nation in any capacity with the spirit of Malaysian nationalism as a citizen of Malaysian nationality. The visionary political leaders as well as personnel of the armed forces of nations (even though in military garbs) for example, could be said to represent this description as operational arms in democratic governance. A nationalist adheres to national ethics/values, defends the national interest and strives to achieve national objectives. Having explained the respective but related concepts of nation, nationalism and nationality, it is pertinent to examine aspects of national purpose, national values, national interest as well as national objectives in national enhancement using a handful of selected countries as examples.

National purpose: In theory and in practice, formally or informally, the nation- state is designed for a purpose. As earlier indicated, national purpose (the intent, or aim of establishing a nation) is a concept which could be perceived as evolving from the assumed bargain between the government and the governed- that is the sovereign of the nation-state and the citizens/peoples therein. As previously indicated the government or sovereign of the state is a legal authority presiding over the state (that has legal character) with its authority and powers of coercion and legal enforcement. Among the components of a nation-state are: 1. a defined territory, 2.a definite population, 3. a government and 4. sovereignty. In the social contract between the sovereign (in charge of government and state affairs) and the people, the assumption and expectation is that governments are instituted among men deriving their just powers from the consent of the governed (the people) and that the aim of government is to ensure happiness and welfare of the citizens of the nation - state. The national purpose of states are often contained in the supreme law governing countries (i.e. the constitution). For example, the Constitution of The Federal Republic of Nigeria 1999 (As Amended 2011) in its preamble, contains the purpose of the Nigerian nation thus;

We the people of the Federal Republic of Nigeria.., provide a constitution for the purpose of promoting the good government and welfare of all persons in our country on the principles of freedom, equality and justice and for the purpose of consolidating the unity of our people do here-by make and give to ourselves the following constitution….

The United States, as a sovereign nation, also has its national values reflected in the American Declaration of Independence as well as in the pre-amble to the U.S. Constitution. The two documents have their bases on the rights of man as enunciated by Paine (1775, 1942), among others. The American Declaration of Independence for instance, reads thus;

We hold these truths to be self evident that all men are created equal and that they are endowed by their creator with certain unalienable rights, that among these are life, liberty and the pursuit of happiness; that to secure these rights, governments are instituted among men, deriving their just powers from the consent of the governed … laying its foundations on such principle and organising its powers in such form as to them shall seem most likely to affect their safety and happiness. (Maier,1997; Ward; 1972).

Evidently, there is emphasis in this document on guaranteeing good life, liberty, safety and happiness for the citizens of the country. The pre-amble to the U.S. constitution which has a similar (though not identical) content reads as follows;

We the people of the United states, in order to form a more perfect Union, establish justice, ensure domestic tranquility, provide for the common defence, promote the general welfare and secure the blessings of liberty to ourselves and our posterity, do ordain and establish this Constitution for United States of America. (www.uscis.gov; Ward, 1972).

In this preamble, emphasis appears to be laid on promoting the general welfare and securing the blessings of liberty to the people of the United States and their posterity. Here again, the welfare and well being of the governed constitute the main purpose of the nation as enshrined in the constitution. However, it should be noted that statutory national documents are subject to implementation by politicians in government. Whether there is a correlation between the provisions of these national documents and their practical realisation is a different issue altogether. The fundamental point is that the purposes for which nations subsist are captured in their provisions. It can then be posited that national purpose is predicated to the fact that nations should subsist with the primary aim of instituting governments that govern the people well, taking care of their welfare and fulfilling their interests. The all important question in this regard is: In national enhancement, are subsisting nations, in theory and practice, guided by the purpose for which nations exist?

National Values: Values are those cherished traits and perceptions, beliefs about what is right or wrong; things that are important, appreciated, and regarded so much for human enhancement. Considering the fact that most, if not all, developing countries are abnormal (Eugene, 2013) and that they depict symptoms of abnormality in which case they are either (1)threatened (2)failing (epileptic/mal functioning) or (3) failed or (4) collapsed and in some cases defunct, could it be said that they lack national values necessary for progressive subsistence, development and enhancement? Can a nation be normal and developed without articulated national values? Is the prevalence of national values pivotal to the developed and enhanced status of the industrialised and rapidly - developing nations? Has the observance or non-observance of national values any role to play in a nation's development or underdevelopment? These questions appear to be yawning and yearning for answers; and few examples of the role played by national values in the progressive metamorphosis of nations could suffice.

China, for instance, has witnessed a phenomenal influence of national values in its progressive development. Accordingly, the Chinese nation established a value synthesis representing a hybrid of a socialist value system with Chinese characteristics (Fu-jie, 2003). The system features the interweaving of the old and new, as well as the co-existence of the endogenous and the exogenous. While, Maxism was introduced into China in 1919, Chinese culture and values have been in existence for several thousands of years. Embedded in the emergent Chinese value system are the following; (a) the perception of the people as the value subjects; (b) the conception of labour as the basis of value; (c) science with a human face and (d) last but not the least, modern civilisation as the value objective. In Fu-jie's opinion China's value system is to

make people in their daily lives think of righteousness at the sight of profits, and take things according to the principle of righteousness; and that only through this integration can the Chinese continuously enhance to a higher level, the human value pursuit, the people's living standard, the human constitutive quality and social civilization, in addition to accelerating the full development of both human being and society. (Fu-jie, 2003).

In contemporary 21st Century, the progressive transformation of the Chinese nation from a primitive, rural agrarian society to the 2nd largest (and fastest growing) economy in the world apparently is an attestation to the role of Chinese's national values in the process of its growth, development and enhancement.

In colonial India, Mahatma Ghandi enunciated what could be perceived as India's core values in his Seven Deadly Sins (Covey, 1990) whose diametric opposites, constitute India's core national values. The deadly sins are: wealth without work, pleasure without conscience, knowledge without character, commerce (business) without morality (ethics), science without humanity, religion without sacrifice and politics without principle (mkghandi.org). In Ghandi's view, the avoidance of these 7 deadly sins by Indians and observing their direct opposites, constitute the core values of the Indian nation. These values not only laid the foundations for home-grown Indian nationalism which actualised India's independence, they appear to have influenced India's rapid socio- economic development as one of the 20 most industrialised nations on earth and a member of BRICS - an association of the fastest growing economies of the world

made up of Brazil, Russia, India, China and South Africa. Malaysia (previously under Mahathir Mohammad and now under Najib Razak) also depicts a scenario where national values are articulated and manifested in the course of the country's remarkable development. Thanks to the visionary leadership of its successive Prime Ministers. Mahathir Mohammad, one of the former Prime Ministers who ruled Malaysia from 1981 to 2003, for instance, was of the view that Malaysian perception of national values centered on a blend of Malay and Islamic cultures which should be shielded against pollution by western values. His position was that the three fundamental components of "Malayness" (namely feudalism, Islam and traditional customs "adat") should be accepted and adapted to modern needs (Sani, 2008)

Mahathir's model, according to Sani (2008), rejected universalism or the western liberal value which he regarded as a threat to Malaysian values. His national value model emphasised 3 main constituents namely (a) strong authority (b) prioritising the community (the nation) over the individual and (c) strong family based society. In his apparent independent course, Mahathir submitted that "the groundless sense of superiority prevents the West from seeing the rationality in Eastern values" (Sani, 2008). The submission in his value aggregation is that the nation takes precedence over the individual; and that much as freedom of individuals is permitted, too much of it to the detriment of state interest is dangerous. Implied in this was the fact that there was need to limit certain individual excessive, and potentially negative freedoms to a rational extent, in order to achieve political stability and economic prosperity of the Malaysian nation. Conclusively he posited thus:
For the Asians, the community (that is the nation), comes first. The individual and minority must have their right but not at the unreasonable expense of the majority. The individual and the majority must conform to the mores of society. A little deviation may be allowed but unrestrained exhibition of personal freedom which disturbs the peace or threatens to undermine society is not what Asians expect from democracy.(Quoted in Sani, 2008).

Where genuine nationalism prevails, there is relative internal stability and development; but where it is lacking, instability and underdevelopment tend to prevail. Presently, Malaysia is the 2nd largest exporter of palm oil in the world, and the 3rd largest economy in South East Asia (GOVERNMENT/2014). It may not, therefore, be an overstatement to say that Malaysian nationalism is partly responsible for Malaysia's geometric rise in development and enhancement within the Asia-Pacific region. The American Declaration of Independence, and the Preamble to the U.S. Constitution, as earlier indicated, embody not only the purpose for the establishment of the nation but the national value of the United States based on fundamental human rights.(GOVERNMENT/2007) These value provisions were given a boost in President Roosevelt's 4th inaugural message to the U.S. Congress on the 6th of January, 1941 in which he stated that the U.S. was founded on , and looked forward to, a world of 4 essential human freedoms namely: (1) Freedom of speech and expression everywhere in the world. (2) Freedom of religion- right of everyone to worship God in his /her own way everywhere in the world. (3) Freedom from want –that is economic wellbeing for every nation's inhabitants everywhere in the world and (4) Freedom from fear -that is security for lives and property of people everywhere in the world.

Roosevelt's 3rd successor in office, J. F.Kennedy, in an address to the US Congress in 1961, echoed his predecessor's reference to American values when he declared: "America would be prepared to pay any price, bear any burden, meet any friend and oppose any foe in the cause of freedom." Nothing could be more apt in unveiling U.S national values than the afore – mentioned documentations on a nation that transited from an obscure power in the First World War to a big power in the 2nd World War, to one of the superpowers during the Cold War and then ultimately to a lone global hegemon in the 21st century. Nigeria's national value components, in another instance, could be seen in the pre-amble to its 1999 Constitution based on the principles of "freedom, equality, and justice as well as unity of our people." Chapter 23 of the said Constitution specifically states that "the national ethics" (the conduct of behavior expected to maintain the national values) "shall be discipline, integrity, dignity of labour, social justice, religious tolerance, self- reliance and patriotism". The issue of national values, especially in "abnormal" nations of the world (one of which is Nigeria for instance) appears to have raised more questions than answers.

Characteristics of an Abnormal (Dysfunctional, not disfunctional) Society Or Nation: A dysfunctional nation, not prone to enhancement, has characteristics which (though not exhaustive) could be said to include the following: 1.No prevalence and no influence of national values. 2.Corruption is pervasive and profligacy is rife (corruption is widespread and money sqandering common). 3. Mediocrity is, in some cases, hailed and meritocracy relegated. 4. Prejudices and stereotypes supervene (dominate).

5. Human talent and productivity sometimes, is not adequately recognised and rewarded. 6. Centrifugal (divisive) instead of centripetal (unifying) propensities prevail. 7. Cacogenes (ill-willed and negative-minded persons) dominate government and governance. 8. Positive national focus is either non-existent or lost. 9. The state is either threatened, or failing (epileptic/mal- functioning) or failed or collapsed or in some cases, defunct. 10. The nation is endemically conflictogenic (prone to conflicts).

Nations, National Values and National Enhancement: A Myriad of Questions: The following fundamental questions on national values need to be critically addressed in order to appreciate the reality of a nation's subsisting character:(1) Are national values prevalent in the nation; if they are, are they "right" or "wrong", positive or negative, progressive or retrogressive, egocentric (self-serving) or eccentric(not self-serving)?(2) Is the design to be in government or public service motivated by the desire for selfless national service or is it for personal/selfish or self-centered interest?(3) Are words and/or promises of "service to society" matched by actions, or are they mere verbal expressions?(4) Can national values prevail in a dysfunctional educational system?(5) Is it possible, for instance, to have positive national values in a bastardised educational system of a bastardised academia with bastardised graduates, masquerading with bastardised degrees in a bastardised value society?(6) In a functional and value-oriented society should possession of an academic certificate or degree (regardless of how it was obtained) be the sole determining factor in academic recognition and capacity utilisation?(7) Is there any correlation (close connection or link) between (a) academic qualifications certified and claimed by some individuals and the level of cognitive academic/intellectual knowledge which they possess? (b) wealth possessed and legal/legitimate source of such wealth? (c) divinity (godliness) professed and moral standard – or conduct exhibited? (d) the geometric increase in religious denominations and groups on the one hand and the high level of crime on the other in some societies? (e) increase in the level and abundance of material resources in the society and high level of poverty and destitution in such a society? (f) increase in the number of educational institutions and rapid turnout of "certified" graduates and academics on the one hand, and the prevailing low level of cognitive, naturally developed(not technically manipulated) literacy, low level of education and low level of positive knowledge on the other hand in some societies? (g) self-arrogated status and the actual innate being of the individual? (h) titles taken/possessed and merit earned? (i) Political rhetoric (propaganda) and actual popular governance, in other words, political expression and actual delivery of democratic dividends to the citizens of the nation?(8) Why have some countries lost some of their best brains to other nations?(9) Why is it that only about 20 out of the 193 countries of the world are categorised as "developed" or "most developed"?Finally,(10) with abundant natural and human resources, why are some countries not developed nations after many decades of their independence?

These questions are best directed for answers to those unpatriotic national politicians in some abnormal countries of the world who promise building bridges where there are no rivers; academics in such societies who peddle degree certificates with hollow brains; citizens in epileptic societies that join the military for selfish interests not national service; bureaucrats in failed states that parade corridors of government ministries as incubators of corruption; clergy men in failing states who sign up to divinity for immoral and material gains; doctors and health workers in abnormal countries who run "glorified abattoirs" as hospitals; security agents in failing societies who compromise (instead of uphold) national security; traditional/religious rulers in threatened nations who fan the embers of inter- ethnic and inter-religious hatred instead of harmony; and citizens of secular states who place their personal, ethnic and geopolitical interests above the nation's interest. These individuals, apparently, have no national ethics, no national values, no nationalistic character and very often are a threat to their host nations' stability, development and enhancement. In the midst of probable efforts by subsisting governments around the world to improve both the standard and quality of education of their citizens, how are the academia (charged with teaching national values) of some threatened countries, in character and learning, executing this policy? This is one of the cardinal questions for national enhancement in some developing nations of the world.

National Interest: National interest or "raison d'etat" as the French call it, is simply the interest of a state usually as defined by its government. The origin of the concept could be traced to the 16th Century when Niccolo Machiavelli mentioned about sovereign princes pursuing "national interest (Machiavelli,1515&1943). By the 19th Century Jean Jacques Rousseau conceived the idea that the well-being of nations and their people should be the primary goal and value to be pursued by states.(Rousseau,2014) In his view, it is a secular value. For example US support for Western European countries or China's support for President Al-Bashir of Sudan. National interest makes a nation go to war

or sue for peace depending on the prevailing scenario and available policy options. The concept of national interest is usually applied in international relations under the realist theory in which the conduct of states among themselves is determined by their respective individual national interests. It is a concept used by political realists who tend to differentiate their policies from those of the idealists who try to inject moral principles into foreign policy and international relations. It need also be stated that national interest could be explained at 3 levels of analysis namely: the aspirational level in which case nations aim at achieving and fulfilling certain ideas or values whether feasible or not; the operational level which represents the actual policies pursued by the nation in the comity of nations and the polemical level in which political arguments propaganda and debates are employed to explain, evaluate, rationalise or even criticise international behavior. National interest could be said to be a reflection of the interest of the ruling elite at a particular time, depending on who is in authority. An executive President or Prime Minister, or executive monarch, using the institutions of government and governance, could articulate and propagate a nation's national interest by determining what constitutes the nation's values and priorities. These values and preferences can only be defended and enhanced through the pursuit of the nation's objectives.

National Objectives: National objectives are those articulated aims which nations strive to achieve in defence of their national interest. They could be political, social, economic, educational, foreign policy or even environmental objectives. For instance, Sections 13 to 24 of the Constitution of the Federal Republic of Nigeria, 1999 which deals with the Fundamental Objectives and Directive Principles of State Policy, highlights the national objectives of the nation. A similar situation, presumably, exists in the constitutions and other statutory documents of most other nations as well.

2. Summary/Conclusion

No country ever attains remarkable development and prominence in the comity of nations without practically expressed, definite and identifiable core values, defined national interest and affiliated national objectives. It is these indispensable ingredients of nationalism and nationality that determined her past, propel her present and shape her future. When nations fail to write their own history (by not having well-articulated national values, interests and objectives) history is likely to write their story of failure in national enhancement. The 'social contract' (according to theorists of government) begets the nation; the nation articulates and aggregates national values; national values determine the national interests which in turn, are defended through the pursuit and realisation of national objectives. National values, national interest and national objectives are supposed to be well articulated and thought within the educational system of nation-states. The question is: Is this situation prevalent more especially in the countries of the Third World? It could be conclusively further said that if the education/orientation system in nations is got right, the society gets right. If it is got wrong, the society gets wrong. If national values and ethics are got right, every other thing, including national interests and objectives, is got right; if not, the opposite is the case. Presently, only about 20 nations, out of 194 countries of the world (about10% only) are categorised as developed/rapidly developing. What has happened to national consciousness, development and enhancement in the rest of the countries? In order to allow values of nationalism and nationality to prevail, the recommendations below, though not exhaustive, could suffice.

Recommendations: Nation-states, in order to actualise national enhancement should note the following recommendations:
- Make the nation-state, the object and centre of loyalty and total submission by the citizens of the nation, regardless of their membership of state or local government or geopolitical zone, or political party or ethnic group, or club or association.
- Citizenship of, and identification with, a nation should be based on a country's nationality even if there is "residency" provision in the nation's constitution to accommodate skilled and talented aliens temporarily before citizenship is granted them.
- Ethno-religious, cultural, geopolitical and other affiliated attachments could be allowed but not to the detriment of state interest.
- A national lingua-franca should be established, where there is none, and strengthened, where there is one, since it is a unifying factor for the country and apparently the leading medium of communication and instruction.
- There should be national re-orientation programmes in needy countries by establishing national re-orientation agencies charged with introducing subjects or courses on Nationalism into the educational curricula of those nations from primary to university level and any citizen, who fails to

pass the subject or course in an examination should not be allowed to proceed to higher levels. In addition, regular national re-orientation and sensitisation sessions for citizens, in and outside government service, should be organised. This is because education without national orientation is a danger to the nation and society.

- Where necessary, there should be a review or redraft or amendment of the constitutions of nations to, among other things,(a) reflect the actual values, interests and objectives of the nation and (b) make it more people- oriented and popularly – derived. This is because most of the constitutions of states, especially the developing ones, are products or derivatives from predecessor "praetorian democrats" – previous military regimes.

The purpose of the state is achieved through the manifestation and prevalence of national values; these values determine the national interest which, in turn, determines the specific national objectives to be pursued by the state in its national enhancement; and experience has shown that aspiring nation-states, consciously or unconsciously, are either influenced or guided by the above reality in their intra -national and international conduct within the comity of nations. Experience has also proved that national development and enhancement may not be achieved where national values, national interest and national objectives are not articulated and do not prevail; and this is a historical lesson which should guide every nation-state in the subsisting international system.

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Demand for Broad Money and Expenditure Components in Nigeria: A Bounds Testing Approach

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Abstract: The demand for money and estimation of the stability of its function has received increasing attention because of its role in designing and implementing appropriate monetary policies. This paper empirically investigates the long-run relationship of money demand function for Nigeria. The study employed and disaggregated the scale variable of real income into three macroeconomic components – final consumption expenditure, expenditure on investment goods, and exports, plus the opportunity cost variable of interest and exchange rates for the period 1970-2011. To investigate the long run relationships between the variables and M2, the autoregressive distributed lag (ARDL) bounds testing procedure suggested by Pesaran et al (2001) was used. The estimation results show there is a long run equilibrating relationship among the variables used in the study. The findings of the CUSUM and CUSUMSQ test statistics indicate stability in the Nigerian money demand function. However, empirical evidence shows that consumption and investment expenditure significantly increases the demand for money function in Nigeria. In the short run exchange rate and consumption expenditure impact positively on money demand while interest rate exacts a negative influence on money demand in Nigerian economy. This result has important monetary and fiscal policy implications.

Keywords: *Demand for money, Expenditure components, Bounds test, unrestricted error-correction model*

1. Introduction

The demand for money and estimation of the stability of its function has received increasing attention from researchers and policy makers because of its role in designing and implementing appropriate monetary policies (Sriram, 1999; Judd and Scalding, 1984). In Nigeria, a lot of studies have been carried out on demand for money; starting with the pioneering study conducted by Tomori (1972) and the ensuing discussion known as "TATOO debate" in the Nigerian monetary economic literature, (named after the study of Tomori, 1972; Ajayi, 1974; Teriba, 1974; Ojo, 1974a, 1974b). Odama (1974) and other follow-up studies (like Iyoha (1976), Ajayi (1977), Fakiyesi, (1980). Arinze et al (1985), Ajewole (1989), Jimoh (1990), Essien et al (1996), Anoruo, (2002), Nwaobi (2002) and Busari (2003) demonstrate the determinants and stability of demand for money. A major strand in these studies is that the traditional theory of money demand is based on a closed economy framework that suggest that money demand function is determined by a scale variable such as income and an opportunity cost variable like interest rate. In addition, most of these studies were estimated within a partial adjustment framework.

However, with the globalisation of financial markets and the financial liberalisation in many developing countries like Nigeria, there is the need to incorporate the open economy factors into the specification of the demand for money (Tang, 2002). This involves the disaggregation of real income components into final expenditure components, expenditure on investment goods, and exports; and the inclusion of the opportunity cost variables like interest and exchange rates in the specification of money demand. Against this background, the introduction of expenditure components as a separate determinant in the specification of money demand function and the estimation of the stability of the function using the bounds testing approach developed by Pesaran, Shin and Smith (2001) are the significant departure from previous studies. The objective of this study therefore, is to empirically investigate the long-run relationship of money demand function and its determinants in Nigeria. The rest of this paper is structured as follows: section two presents a brief review of literature on money demand function and its expenditure components. Section three describes the model specification and methods of estimation. Section four discusses the empirical results and section five concludes the study.

2. Literature Review

The literature is replete with studies on the demand for money functions; in this section we review selected studies which disaggregated the scale variable of real income into final consumption expenditures, expenditure on investment goods and exports. Tang (2002) incorporated expenditure

components in the estimation of the money (M3) demand function for Malaysia for the annual period 1973 to 1998. The bounds test suggested by Pesaran *et al.* (2001) was used to investigate the long-run relationship in the money demand function. The estimated model included the domestic interest rate and the nominal exchange rate together with the expenditure components as determinants of money demand. The findings of the study indicated a co-integrating relationship among the variables, in addition demand function of M3 in Malaysia was found to be stable. It could be implied that different components of real income have varying impacts on the demand for M3 in Malaysia. In a similar study for Japan, Tang (2004) included both the government bond yield rate and the deposit rate alongside expenditure components in specifying the demand function for broad money for Japan. A cointegrating relationship was also existent among the variables in the Japanese money demand function. The estimated long-run coefficients are higher than in the short run as expected. The estimated sign of the long-run coefficient of deposit rate and the government bond-yield rate are positive and negative respectively. In the short-run, all determinants were significant but some had reverse signs for the long-run. This was attributed to indirect effects on broad money demand through various transmission channels and to the fact that the monetary authorities set interest rate exogenously.

Bahmani-Oskooee and Karacal (2006) used the bounds testing approach in their estimation of the money demand function in Turkey. They estimated the demand for both M1 and M2. Their model did not disaggregate the real income variable but includes inflation as one of the determinants of money demand. The findings of the study showed that although both M1 and M2 are cointegrated with their determinants, income and interest rates do not belong to the cointegrating space in the M2 formulation. Multiple country studies also check for the stability of parameters estimated after long run relationships among the determinants of real money demand are situated. Tang (2007) investigated the money demand function for Malaysia, Thailand, Singapore, Philippines and Indonesia using the ARDL modelling approach. In addition to using the traditional determinants of money demand (exchange rate and interest rate variables), the study also incorporates the major components of final expenditure -final consumption expenditure, expenditure on investment goods and exports as scale variables. The cumulative recursive sum of recursive residuals (CUSUM) and cumulative sum of squares of recursive residuals (CUSUMQ) tests were carried out to evaluate the stability of the estimated parameters for the South-East Asian countries. The money demand functions were found to be stable. The analysis showed that real broad money aggregate, real expenditure components, exchange rate and inflation rate are co-integrated for three of the countries.

Given the above background, it is evident that there is a general consensus in the literature that a money demand equation should contain a scale variable to the level of transactions in the economy and a variable representing the opportunity cost of holding money. However, with substantial number of studies on the demand for money function using expenditure components in developed countries, Asia and newly industrializing economies. To our knowledge there are few studies on this crucial investigation in Western Africa. Ziramba (2007) examined the long-run relationship of money demand and its determinants in South Africa. The author considered the various components of real income in its analysis, viz, final consumption expenditure, expenditure on investment goods and imports as well as domestic interest rate, yield on government bonds and exchange rate. Using bounds testing, the study established the presence of long-run equilibrium relationships between the demand for real money and their determinants. The various components of real income were found to have differing impacts on the demand for money in South Africa. There are few studies on the African context that recognize the potential impact of investigations regarding money demand determinants and its stability on the formulation of monetary policy.

Model Specification, Data and Estimation Technique: The traditional money demand function suggests that real money demand function may be represented as following:

$$M_t^d = f(y_t, i_t) \tag{1}$$

Where:

M_t^d = is the nominal value of money divided by price level

y = is a scale variable reflecting the level of transaction in the economy such as income

i = is the opportunity cost of holding money such as interest rate or the rate of inflation,

Following Tang (2002, 2004, and 2007) and Zirimba (2007), the demand for money is specified as follows:

$$M2_t = f(FCE_t, EIG_t, EX_t, RE_t, i_t) \qquad\qquad (2)$$

Where:

$M2$ = the demand for Money

FCE = final consumption expenditure

EIG = expenditure on investment goods

EX = expenditure on exports

ER = exchange rate

R = interest rate.

The long-run money demand equation can be specified as:

$$InM2_t = \beta_0 + \beta_1 FCE + \beta_2 InEIG_t + \beta_3 InEX_t + \beta_4 InER_t + \beta_5 i_t + U_t \qquad (3)$$

Where In is the natural logarithmic transformation and U_t is a random error assumed to be white noise. The interest rate is not in logarithmic form. According to Friedman and Schwartz (1982), the absolute rather than the logarithm form of interest rate matters for money demand. Based on economic theory propositions, it is expected that the signs of the coefficients $\beta_1, \beta_2, \beta_3$ be positive, β_4 can be positive or negative, and β_5 be negative.

Data Description and Sources: Time series data spanning the period 1970 through 2011 is employed for the analysis in this study. Annual data on final Consumption Expenditure *CE* (proxied by household consumption expenditure), expenditure on investment goods *IE* (proxied by gross fixed capital formation), and exports (EX) were collected from International Financial Statistics. Broad money measured as M2 consists of currency in circulation, demand deposits in scheduled banks, time deposits, savings deposits, and foreign currency deposits other than time deposits held by the Central Government. Annual data on broad money aggregate (*M2)*, exchange rate *ER* and interest rate R (proxied by domestic lending rate) were collected from the Central Bank of Nigeria Statistical Bulletin. All the series are in natural logarithmic form except interest rate.

Estimation Technique: Most studies have employed the Johansen cointegration technique to determine the long-term relationships between variables of interest. As a matter of fact, this remains the technique of choice for many researchers who argue that it is the most accurate method to apply for I(1) variables. Recently, however, a series of studies by Pesaran and Shin (1996;); Pesaran and Pesaran (1997); Pesaran and Smith (1998) and Pesaran et al. (2001) introduced an alternative cointegration technique known as the 'Autoregressive Distributed Lag (ARDL)' bounds test. This technique has a number of advantages over the Johansen cointegration technique. First, the ARDL model is a more statistically significant approach to determining the co-integration relation in small samples (Ghatak and Siddiki, 2001), while the Johansen co-integration techniques require large data samples for validity. A second advantage of the ARDL approach is that while other cointegration techniques require all the regressors to be integrated of the same order; the ARDL approach can be applied whether the regressors are I(1) and/or I(0). This means that the ARDL approach avoids the pre-testing problems associated with standard cointegration, which requires that the variables be already classified into I(1) or I(0) (Pesaran et al, 2001).

Whenever the unit root properties of data cannot be discerned, applying the ARDL procedure is a most appropriate model for empirical analysis. As Bahmani- Oskooee (2004: p. 485) explains, the first step in any cointegration technique is to determine the degree of integration of each variable in the model but this depends on the choice of unit root test conducted, consequently varying unit root tests could yield contradictory results. For example, when applying unit root tests such as the Augmented Dickey Fuller (ADF) and Phillips-Perron (PP) tests, one may incorrectly conclude that a unit root is present in a series that is actually stationary around a one-time structural break (Perron, 1989; 1997). The ARDL approach is useful as it avoids these problems. With respect to a choice of the number of endogenous and exogenous variables (if any) to be included, the treatment of deterministic elements, the order of VAR and the optimal number of lags to be used, the ARDL approach avoids the difficulty Johansen techniques are faced up with. The estimation procedures are very sensitive to the method used to make these choices and decisions (Pesaran and Smith 1998). Also, with the use of the ARDL approach it is possible that

different variables have different optimal numbers of lags, while in Johansen-type models this is not permitted.

According to Pesaran and Pesaran (1997), the ARDL approach requires two steps. In the first step, the existence of any long-term relationship among the variables of interest is determined using an F-test. The second step of the analysis involves an estimation of the coefficients of the long-run relationship and determination of their values, followed by the estimation of the short-run elasticity of the variables with an error correction representation of the ARDL model. By applying the ECM version of ARDL, the speed of adjustment to equilibrium will be determined. According to Pesaran and Pesaran (1997), the ARDL model is represented by the following equation:

$$\phi(L,p)y_t = \sum_{i=1}^{k} \beta_i(L,q_i)x_{it} + \delta' w_t + u_t \qquad (4)$$

Where

$$\phi(L,p) = 1 - \phi L - \phi_2 L^2 - \dots \phi_p L^p$$

and

$$\beta_i(L,q_i) = 1 - \beta_{i1}L - \beta_{i2}L^2 - \dots - \beta_{iqi}L^{qi}, \qquad i = 1, 2, \dots, k$$

In equation (4), y_t is the dependent variable, X_{it} denotes the independent variables, L is a lag operator, and W_t is the S x 1 vector of deterministic variables, including intercept terms, dummy variables, time trends and other exogenous variables. The optimum lags are selected in this methodology according to the well-known Akaike Information Criterion (AIC) and Schwarz Bayesian Criteria (SBC). The long-run coefficients and their asymptotic standard error are then computed for the selected ARDL model.

The ECM version of the selected model can thus be obtained by writing equation (4) in terms of the lagged levels and the first difference of y_t, x_{it}, x_{2t},…,x_{kt} and w_t as follows:

$$\Delta y_t = -\phi(1,\hat{p})EC_{t-1} + \sum_{i=1}^{k} \beta_{i0}\Delta x_{1t} + \delta'\Delta w_t - \sum_{j=1}^{\hat{p}-1} \varphi^* y_{t-j} - \sum_{i=1}^{k}\sum_{j=1}^{\hat{q}_{i-1}} \beta_{ij}^*\Delta x_{i,t-j} + u_t \qquad (5)$$

In equation 5, φ^*, δ' and β_{ij}^* are the coefficients related to the short run dynamics of the model's convergence to equilibrium, and $\phi(1,\hat{p})$ is the speed of adjustment.

The asymptotic distribution of the F-statistic is non-standard under the null hypothesis of no co integrating relationship between the examined variables, irrespective of whether the explanatory variables are purely *I*(0) or *I*(1). On the null hypotheses of $b_7 = b_8 = b_9 = b_{10} = b_{11} = b_{12} = 0$ (indicating no co-integrating relationship), a joint significance test will be performed. The bounds testing approach is appropriate in small sample studies. The data span for this study is from 1970 to 2011. For the decision rule at 1 per cent, 5 per cent and 10 per cent level of significance, if the computed F-statistic is higher than the upper critical 'bounds' value, then the null hypothesis of no co-integration may be rejected. On the other hand, if the F-statistic is lower than the lower critical 'bounds' value, then the null hypothesis will be accepted, indicating no long run relationship among the variables. Whereby the F-statistic falls in between the upper and lower critical bounds, an inference will be inconclusive. Thus, the order of co-integration for the explanatory variables must be ascertained before any meaningful conclusions are drawn.

The bounds test starts with the estimation of an unrestricted error-correction model (UECM) of the form:

$$\Delta InM2_t = b_0 + \sum_{i=0}^{n} b_{1i}\Delta InCE_{t-i} + \sum_{i=0}^{n} b_{2i}\Delta InIE_{t-i} + \sum_{i=0}^{n} b_{3i}\Delta InEX_{t-i} + \sum_{i=0}^{n} b_{4i}\Delta LnER_{t-i} +$$

$$\sum_{i=0}^{n} b_{5i}\Delta R_{t-i} + \sum_{i=0}^{n} b_{6i}InM2_{t-i} + b_7 InM2_{t-1} + b_8 InCE_{t-1} + b_9 LnIE_{t-1} +$$

$$b_{10} InEX_{t-1} + b_{11} InER_{t-1} + b_{12}R_{t-1} + e_t \qquad (6)$$

Where Δ is a first difference operator and e is the stochastic disturbance term assuming white noise are normally distributed.

3. Discussion of Empirical Results

Time series data Properties: Table 1 below shows the unit root test result for the stationarity of the variable using Augmented Dickey Fuller (ADF) test at constant, constant and trend for levels and first difference. It is observed that most of the variables (log of money supply, (M2), consumption expenditure, (LCE), investment expenditure (IE), export expenditure (EXP), and exchange rate (ER)) contain unit root at levels except for interest rate (R) which contained a unit root at constant and trend. This result further reveals that not all the variables were integrated at order one i.e. I(1). They were integrated at levels and first difference as shown in Table 1. Hence, Johansen co integration method would not be appropriate in testing for the co integration of the above series since all the variables could not be regarded as order one series. The study therefore employs the auto distributed lag model (bound testing) proposed by Pesaran et al (1996) in testing for the co integration of the model for money demand in Nigeria

Table 1: Augmented Dickey-Fuller Test for stationarity

Variables	Level		First Difference	
	Constant	Constant and Trend	Constant	Constant and Trend
LM2	0.4307	-1.2924	-3.6778*	-3.5899
LCE	-0.4275	-2.2184	-4.3411*	-4.2792*
LIE	0.1410	-1.7453	-3.8573*	-3.8678
LEX	-0.3521	-2.2981	-7.7364*	-7.6352*
LER	0.1249	-2.1626	-5.0231*	-4.9952*
R	-2.3447	-7.2371*	-7.2371*	-7.3039*

N/B: * denotes stationarity of the series at 1 per cent level using MacKinnon (1996) critical values. This implies the rejection of the null hypothesis that the series contains a unit root while accepting that it is trend stationary.
.

In this test the Wald test is first carried out to determine whether there is a long run relationship among the variables of the model. Here the F-statistic is compared with the Pesaran et al (1991) critical value at 5 per cent. A higher F-test result compared to the corresponding Pesaran value implies a co integrated series while a lower F-test result accepts the null hypothesis of no co integrated series. Given the Wald test result (11.585) and the Pesaran critical upper bound value (4.974) at 5 per cent level of significance and k=2 (where k is the lag length based on minimum AIC value) there is a strong evidence of co integration and thus a long run relationship for the money demand function in Nigerian economy as shown in Table 2 below.

Table 2: Bound Testing Approach

Critical value	Lower Bound	Upper Bound
5%	3.661	4.974
10%	3.086	4.262

NB: Wald test (F-statistic) = 11.585 significant at 1 per cent level. Critical values based on Pesaran et al (2001).

The result of the bound test provides evidence of the co integrating relationship between CE, IE, EXP, ER, R and M2. The estimated coefficients of the long run relationship for the money demand model could be expressed as;

$$InM_2 = -12.64* + 1.42*InCE + 0.313*InIE - 0.059InEX - 0.654InER - 0.037R + \mu_t \qquad (7)$$

Table 3 Long run Estimates of money demand function in Nigeria

Variable		Coefficient	T-statistic	Probability	
LCE		1.420462	9.501475	0.0000	
LIE		0.313216	2.583666	0.0149	
LEX		-0.059552	-0.450635	0.6555	
LER		-0.654090	-4.369049	0.0001	
R		-0.036745	-3.118365	0.0040	
C		-12.64218	-5.781252	0.0000	
R-Squared	0.989124	Adjusted R²	0.987311	F-stat	545.6487
Prob (F-stat)	0.000000	Durbin-Watson Stat 1.63			

The long run relationship for money demand in Nigeria shows a higher level of explanatory strength as the model explains over 98 per cent of the variations in money demand as captured by the included variables. The F-test also revealed that the included variables were statistically different from zero and relevant in explaining the variations in the model. The absence of auto- correlation was established by the result of the Durbin Watson statistic. Specifically consumption expenditure shows a significant impact on money demand. Increasing consumption expenditure will directly increase demand for money in the Nigerian economy. This implies that the consumption pattern in Nigeria plays a significant role in determining the demand for money function in the economy. Another important determinant of demand for money in Nigeria is the investment expenditure. The money demand function could be positively increased by increasing investment expenditure within the economy. This could be enhanced through increased savings with the financial institutions so as to provide more credit facilities for prospective investors to have access to investment funds. Expenditure from the export sector indicates a negative relationship with money demand in the long run even though not statistically significant. In the long run, exchange rate and interest rate were observed to be inversely related with money demand- this suggests that exchange rate fluctuations and the endogenously determined interest rate could actually affect the demand for money function in Nigeria.

Having established the long run relationship for the money demand function, the study proceeds further and estimated the adjustment process from the short run equilibrium. The result shows a slow adjustment speed at 14 per cent indicating a considerable period of time to achieve an equilibrium state from external shock effect. The Breusch-Godfrey serial LM test, Ramsey specification test, Jarque-Bera normality test, ARCH test for Heteroskedasticity, CUSUM test and CUSUM of squares test for structural stability (fig.1 in appendix) all suggest the robustness of the model which indicate no serial correlation of the variables, correct functional form of the model specification, normally distributed residual estimate, no heteroskedasticity and a stable model estimate respectively. Therefore, the model satisfy all the diagnostic test carried out, indicating a highly reliable model estimation with efficient result.

Table 4: Short-run representation of the ARDL model

Variable		Coefficient	T-statistic	Probability	
D(LM2)		-0.336801	-1.772619	0.0915	
D(LCE)		0.375302	2.891732	0.0090	
D(LIE)		0.055630	0.645509	0.5259	
D(LEX)		-0.034717	-0.863765	0.3980	
D(LER)		0.146965	2.128824	0.0459	
D(R)		-0.011255	-3.029251	0.0066	
ECM(-1)		-0.161252	-2.159167	0.0432	
C		0.184684	4.196140	0.0004	
R-Squared	0.561642	F-stat	3.203102	Durbin-Watson Stat 1.845	
Adjusted R²	0.386299	Prob (F-stat)	0.016490		

Note: ARDL (5, 1, 1, 1, 1, and 1) selected based on AIC, RSS, AIC, LL, and DW are residual sum of squares, Akaike Information Criteria, log likelihood, and Durbin Watson statistics respectively.

The short run dynamics of the ARDL money demand model is as presented in table 4. The estimated equation captures the parsimonious error correction coefficient for ARDL model. The result shows that in the short run consumption expenditure (CE) and exchange rate (ER) has significant impact on demand for money in Nigeria. A percentage increase in consumption expenditure positively influence demand for money by 0.375 per cent while exchange rate appreciation by 1 per cent will impact on money demand by 0.146 per cent. We also observed that interest rate (R) in the short run significantly affects money demand function by 0.011 per cent. This signifies that high interest rate generally do not favour the demand for money in Nigeria.

4. Summary and Conclusion

The study investigated the long run relationship for money demand function in Nigeria for the period 1970 to 2011 using time series data. Owing to the nature of the time series properties of the data the study utilizes the bound testing approach to this effect. Thus, in this study, we employed the Pesaran et al (2001) bounds testing approach to investigate the effect of aggregate demand components on money demand function using data on Nigeria. Starting with the standard money demand model, we augment these with aggregate demand variables such as consumption expenditure, investment expenditure, exports volume as scale variables and complemented with as opportunity cost variables -exchange rate and interest rate. Amongst other things, the exchange rate variable was also included in the estimation of the money demand function due to the effects of international currencies on the Nigerian economy as a facilitator of transactions and as a store of value. The study differs from the use of the Johansen cointegration techniques and avoids its pitfalls and shortcomings. The estimation results show there is a long run equilibrating relationship among the variables used in the study. In concluding, we test the stability of the regression coefficients by evaluating the cumulative sum of recursive residuals (CUSUM) and the cumulative sum of squares of recursive residuals (CUSUMSQ).

The findings of the CUSUM and CUSUMSQ test statistics indicate stability in the Nigerian money demand function. Evidence from the study shows that consumption and investment expenditure significantly increases the demand for money function in Nigeria by 1.42 per cent and 0.31 per cent respectively in the long run while exchange rate and interest rate shows a reverse effect at 0.65 per cent and 0.04 per cent respectively. In the short run exchange rate and consumption expenditure impact positively on money demand while interest rate exacts a negative influence on money demand in Nigerian economy. It is therefore evident that exchange management and interest rate fixation by the government has far reaching implications in the determination of money demand function in Nigeria apart from consumption and investment expenditures. Hence, it becomes very important that the monetary authorities carry out an appraisal of the current monetary policies with special consideration to the management and administration of exchange and interest rate policy effect and at the same time allowing for innovation and proactive measures to be effected in this respect. This would also help to improve on the current trend on money demand function in Nigerian economy

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Appendix

Figure 4: Plots of CUSUM and CUSUMSQ Statistics for Coefficient Stability
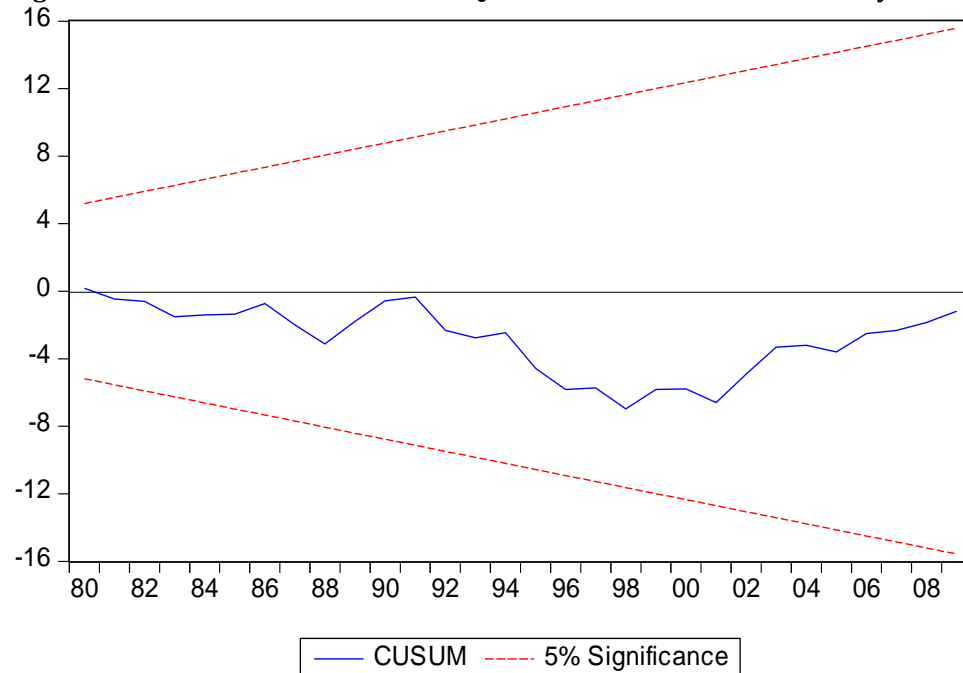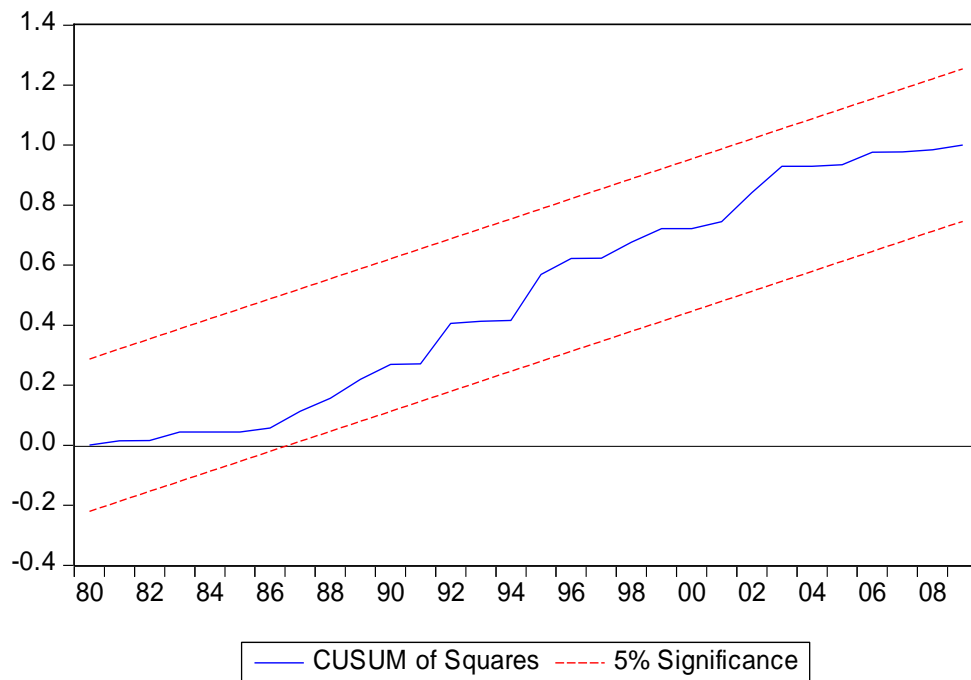
Normality of the residuals (JB)
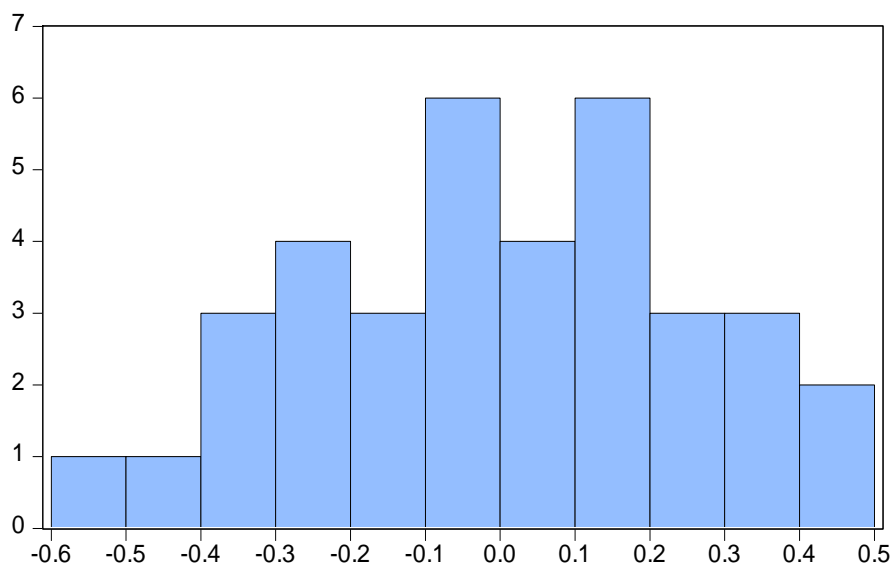
Series: Residuals	
Sample 1974 2009	
Observations 36	
Mean	9.33e-15
Median	0.003988
Maximum	0.428132
Minimum	-0.526228
Std. Dev.	0.252800
Skewness	-0.215777
Kurtosis	2.213518
Jarque-Bera	1.207190
Probability	0.546842

Securitizing University Educational Loans in Malaysia: A Global Shariah-Compliant Framework

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Abstract: Securitization is the transformation of illiquid assets into marketable long-term debt securities that may have the ability to provide cheaper financing to issuers and higher return to investors in Malaysia, particularly for Islamic asset-backed securities. For the past 10 years, the securitization process and its continuous innovation have contributed in terms of resolving problems and managing risks such as lease, corporate loans, auto loans, credit cards receivables and property mortgages. Interestingly, Malaysia has show a remarkable growth in securitizing commercial and residential mortgages, but less on securitizing educational loans. Education loan problems have recorded an alarming amount of USS10 billion as at December 2013 since it was introduced in 1996. Therefore, this preliminary study will particularly focus on the educational loan problem, which has not yet been applied the securitization process in Malaysia. This research investigates a structure for student loan securitization, identifies the potential of the asset backed securitization processes and subsequently proposes an Islamic framework of securitization that complies with the global shariah. The findings of the study are expected to benefit both the students for cheaper cost of funding their university studies and the government for continuous source of educational loans. As the idea for framework and expected cash-flows are taken up to create its structure and consequently be able to issue highly graded and marketable securities that comply with global shariah principles, this initiative will entice global fund managers to obtain better return for their Islamic long-term portfolios. As such, this will help the Malaysian government to turn Kuala Lumpur into a hub forthe Islamic securitization market. Only then will Malaysia achieve its objective of becoming a high income nation by 2020 due to the country's initiative in investing systematically in human capital development, which is necessary for sustainable growth in a predominantly Muslim country.

Keywords: *securitization; illiquid assets; marketable securities; educational loans; sustainable growth*

1. Introduction and Significance of Study

Student loan-backed securitization (SLBS) has been applied worldwide, in developed countries and recently in some developing countries. This is considered by many as a way to help many people achieve higher education (HE) , as documented by Fried and Breheny (2005), Hartung Laterza ,and Mcgarvey. (2006) and Larrain and Zurita (2007). They believe that education loans are important to provide an opportunity for students to further their studies in higher institutions of learning (HE), particularly students who come from low and middle income backgrounds. The function of educational loans is to reduce the government's expenditure on higher education, which is attributed to the growing demand for HE and due to the increasing educational cost incurred per student entry into HE institutions. However, there is a variety of challenges, in terms of the financing of HE worldwide, andl the administration of educational loans to students (Atuahene, 2006). At the same time, as education is considered a route to economic development and progress (Woodhall, 2002; Salmi, 2005), educational loans are becoming a major feature of financial support for students, particularly in developing countries (Ziderman, 2004) as Malaysia.

Most countries have their own systems as well as programs to finance their HE students (Chapman and Harding, 1993; Barr, 2003), which comprise both government and private loans. By setting up specific bodies or organizations to manage them (Chapman, 2006), the government can offer loans to a wide variety of students. For example, Malaysia formed the National Higher Education Fund Corporation (NHEFC) in 1997 to organize and provide loans for HE students (NHEFC, 2008). NHEFC offers loans representing the federal government to enable selected students pursue their studies in the Malaysian universities and colleges. Similarly to the corresponding bodies in other countries, NHEFC is funded directly by the government by using the government's budget. Most countries, however, have realized that they cannot rely continuously on the government's income, including Malaysia. Economically, governments have limited resources to play around as they also have responsibilities to cater to other social needs such as public healthcare, housing, and primary education (Ziderman, 2005).

In addition, a review of literature on student loans indicates that the problem is not a research priority in Malaysia (Ismail, Serguieva and Singh 2011) as opposed to such investigations have taken place in the United States (Hartung et al., 2005). On this motivation, this paper thus attempts to investigate whether student loan-backed securitization is suitable as an alternative financing in the Malaysian higher education (HE), in order to relieve the pressure currently imposed on the government's budget. We will analyze and examine possible effects of introducing student loan securities as a type of asset-backed securitization. Student loan securities have been implemented successfully in developing countries, namely South Korea and Chile. For Malaysian HE, this is a new financing instrument; hence the Islamic student loan-backed securitization that this research proposes as a framework will be the first in the world to be operationalized (Ismail and Serguieva, 2009).

The Malaysian government is identified as a generous contributor to higher education funding (Ismail, Bakri, Ali & Azman, 2014). For instance, public higher education institutions in Malaysia receive 90 per centof their funding from government sources, with the remainder derived from students' fees (National Higher Education Action Plan 2007-2010, p. 18). The government of Malaysia—under the Ministry of Higher Education (MoHE), as well as various other funding bodies—provides various types of loans and scholarships to students. Students can receive either a scholarship or a loan, but not both at one time. In addition, loans and scholarships differ from one to the next in terms of their implications to therecipients. Scholarship recipients need not repay the money awarded to them, but are instead bonded to work in jobs approved by the funding bodies for a number of years following graduation. In the case of loan recipients, there is no commitment between the recipients and funding bodies, although the amount of money borrowed must be repaid.

As of May 2012, the National Higher Education Fund Corporation (NHEFC) has approved loans for some 1.98 million students amounting to RM 44.18 billion, with the actual dispersed amount stood at RM30.44 billion, (The Star, 2012, p. 3). While the total sum owed to NHEFC is RM 6.83 billion from 1.09 million borrowers, the corporation has so far only managed to collect RM 3.31 billion. Further statistics by the Corporation indicated that although many NHEFC borrowers are showing their interest to pay, the actual sum collected still remains low. In fact, 31,606 borrowers owing RM 1.06 billion were allowed to postpone their payment due to factors such as illness or pursuing higher degree. Surprisingly, around 30 per cent of loan distributed went to those enrolled in private higher education institutions (IPTS) but the sum borrowed by those in IPTS represented almost half of the total allocation. As out of the total loan disbursed amounting to RM 36 billion, only RM 3 billion get repaid. Thus, the aim of the study is to develop a conceptual framework of Islamic student loan-backed securitization for educational loans in Malaysia. The next section presents success stories of students' loan asset backed securities in South Korea and Chile. The following section will further discuss the benefits of securitization. Lastly, the proposed framework of Islamic student loan-backed securitization will be presented, followed by conclusion and recommendations.

Success Stories of Students' Loan Securitization in Chile and South Korea: Chile's higher education system stands out as being one of the most privatized and open to the market in the world. The Chilean Congress passed Law # 20.027 of 2005, which provides the legal framework for the creation of a student loan system guaranteed both by the State and by higher education institutions (HEIs), financed by the private capital market through the securitization of the loans (Ismail and Serguieva, 2009). The system operated for the first time in 2006, where approximately 21,000 students were able to access financing of their higher education for the remainder of their careers. It is expected that as the system matures, more and better information will be available, which will benefit the students and the HEIs; and it is highly likely that the current number of students being able to secure financing for education could grow significantly in the next few years. The old model covers tuition fees alone but the new model as suggested by Larraın and Zurita (2007) whereby the student loan must extend coverage of the loans to include not only registration, but also reasonable cost of living. Eventually, this will further improve access to higher education. Likewise, in examining the student loan policies in Korea, Hong and Chae (2011) found the presence of evolution, opportunities and challenges that contribute to the success of its student loan securitization. They testify that the role of reforms in its student loans policies has managed to contribute to the expansion of higher education from a historical perspective. Interestingly, they conclude that since 2005, the student loan-backed securities have played a major role in promoting affordability of higher education for all in Korea. However, they cautioned that there is a growing need to secure sustainability in the funding mechanism, of which this study attempts to structure student loans-backed securities, based on Islamic principle in the Malaysian higher educational institutions.

Description of the proposal framework Islamic Student Loan Backed Securities (i-SLBS) in Malaysia: The new i-SLBS system contemplates the participation of six key agents throughout the process: students, higher education institutions (HEI), government, capital market, financial system and the Managing Commission for the whole system (see Figure 1).

Students: Apply to the system through the Internet, and provide proof of their socioeconomic status. Once they obtained approval, they must go to the bank to sign the legal documents. Deduct monthly payment after 6 months of working.

Fig. 1: Proposed Conceptual Framework of i-SLBS

MOHE - Ministry of Higher Education   AKPK – Counselling Credit Agency
BNM – Central Bank Malaysia   KWSP – Employees Provident Fund
Angkasa–National Cooperative Society in Malaysia   SSM –Registrar of Malaysian Companies
JPJ –National Road Transport Department   LHDN – Inland Revenue Board
JPN – National Registration Office

Federal Government/MOHE : They provide guarantees during the study period. They select students whom they will support by means of those guarantees and they submit them to the Originator. In the annual budget law the Government determines the amount of resources available for guarantees and the amount of cash resources available to repurchase loans from NHEFC. The Government assumes the cost of the unemployment contingency and contributes to financing the NHEFC for the first 3 years.

Originator: The National Higher Education Fund (NHEFC) centralizes all applications in a single system and orders them from the poorest to the richest. NHEFC will setup Special Purpose Vehicle to determine the maximum number of students that can receive the benefit based on the resources assigned in the fiscal budget law. It organizes the bank tender process. It acquires the loans that the NHEFC are not

willing to maintain in their portfolio (those loans continue to be administer by the NHEFC that originated them). It securitizes the loan portfolio acquired from the NHEFC and receives and maintains custody of MOHE loan guarantees.

Trustee: The trustee's primary duty is to protect the interests of the investors who purchase the securities issued pursuant to the securitization and administer the duties of the SPV under the requisite agreements. The nature of the trustee's duties is specifically set forth in the trust agreement, and frequently require more intensive involvement by the trustee if covenants made by the Originator as part of the transaction are breached.

Merchant Bank/Financial system: Merchant bank receive tender and prepare documents and evaluate and present their offers. They grant loans to students with direct disbursements and select the loans to be sold to the NHEFC. They also manage the loans in the adjudicated portfolio (including the loans they sell back to the NHEFC).

Investors/Capital Market: Long-term investors such as pension funds, takaful companies, and mutual funds acquire the securitized portfolios, both that are owned by the National Higher Education Fund and the banks that decide to securitize them.

Takaful: The student will cover by Takaful to cover student loan if anything happen to student.

Collection Agency: NHEFC will tie up with many collection agencies to improve collection from students, such as financial institution, government agency which is linked to the student database.

Proposed Cashflow of Islamic Student Loan-Backed Securitization (i_SLBS): In view of this, as a creative debt financing that acts also as a risk management tool, Sukuk ABS can attractinvestors from the Middle-East countries. In fact, according to IIFF Europe that was held in Geneva in 2013, it was estimated that Arab investors have more than US$ 1.3 trillion on deposit in overseas banks, much of which is secured in Swiss banks. Previously, these Arab investors repatriate their wealth following 9/11 incident, sluggish western stock markets and attractive Middle-East property investment opportunities. These have resulted in, many hundreds of millions of dollars return to the Middle East. Nevertheless, this is reiterated by the launching of Malaysia Sukuk ABS in 2005. Its global acceptance provides evidence thatMalaysian companies undertake issuance via the mechanism of creative and cheaper debt financing option for the future.

To reflect the global credit crisis, Islamic bond market was without exception when its issuances in 2008 dropped to US$7.3 billion equivalent to a 54% decline of UD$15.7 billion in 2007. However, it makes a strong comeback in 2010 with a whopping value of US$51.5 billion, representing a superb rise of 54% compared to 2009. Likewise, it is interesting to note that Malaysia still maintains number one issuer for Islamic global bond by dominating about 54% in 2008, 60% in 2009 and superbly at 78% in 2010 with a whopping value of US$40 billion as monitored by Zawya (2011). Since Islamic securitization is part of Islamic bonds or sukuk in Malaysia, the study is strongly motivated to propose the cash flow for Islamic Student Loan Securitization as follows based on forecast made by Department of Statistic on Table 1. The proposed cash flow on table 2 shows that Sukuk will be issued in 5 series.

Table 1 : Proposal Cash flow for Islamic Student Loan Back Securitization

Sukuk Wakalah	Rating/Outlook	Issue Amount (RM million)	Average Expected Profit Rate (%)	Issue/Maturity year for each serie
iLMU-iSFABS		50 000 (2014-2037)	-	-
Serie 1		10,000	3.50	2014/2035
Serie 2		10,000	3.75	2016/2037
Serie 3		10,000	4.00	2018/2036
Serie 4		10,000	4.25	2020/2038
Serie 5		10,000	4.50	2022/2037

Table 2 : Proposal Self Funding for Islamic Student Loan Back Securitization

Future	Self Funding						
	Dec -38 Loan Repayment	Dec -38 Outstanding Loan	Dec -38 Sukuk Wakalah	Dec -38 Expected Output (Student)	Dec -38 Investment	Dec -38 Cash in Hand	Dec -38 Next Disburse
2038	45,800,000,000	0	0	4,600,000	0	11,765,905,096	8,042,186,247

2. Conclusion and Recommendations

Overall, the Malaysian case shows the complex dynamics between reforms in the loans system and expansion of higher education in Malaysia. The interaction among the various factors, the relationship between the funding structure of higher education and private HEIs, the regulation on university establishment and deregulation of student quota, education fever, and economic conditions such as the Ministry Education Blueprint 2013, have influenced the role of student loans policy to be expanded for higher education opportunities to be taken up by many.Malaysia's experience has several policy implications for developing countries looking to increase higher education opportunity in the midst of financial austerity to build the human capital needed for knowledge economy. First, it is important to link the expansion of student loans with economic development of the nation. When a nation needs unskilled labor for the rapid industrialization of the economy, it should invest more in basic and vocational education than in higher education as Malaysia did when the government change Vocational school to Vocational College. As the nation progresses towards a knowledge-based economy, however, it should increase investment in higher education to produce high-skilled human resources by means of student loans system. By effectively linking strategies for economic development and student loans policies, both the financial efficiency of student loans and higher education accessibilities can be improved.

Second, it is necessary to expand loans based on the supply and demand of higher education graduates. With the tertiary enrolment rate increasing every year in Malaysia, the growth in loans funds has led to an over-supply of college graduates, producing a rise in the number of unemployed graduates. Therefore, while the loans system has contributed to a surge in the number of beneficiaries, its efficiency has gradually been declining. In conclusion, the Malaysia case demonstrates that the government need new sources to fund student loan, so the introduction of i-SLBS is a timely initiative. Islamic finance has received wide attention as an alternative form of global financing and investment, particularly the asset-backed securities. Therefore, the successful launching of Malaysian Sukuk ABS in 2005 for its global Shariah acceptance will become a strong testimony for big Malaysian companies to issue this form of security as a creative and cheaper debt financing in the near future (Ali, Ismail, Bakri & Azman, 2013). Since Islamic securitization is part of Islamic bonds in Malaysia, the study is strongly motivated to propose the framework for Islamic Student Loan Securitization in Malaysia, for both markets that may benefit related parties. Therefore, with this proposed framework, originators have the opportunity to issue cheaper cost of long-term financing; the portfolio managers have a better return on investment for their long-term debt; the Malaysian government will have lesser obligation on financing university loans; and university graduates will enjoy much lower monthly repayments.

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Designing Talent Management Framework to Manage Banking Talent Crisis in Malaysia

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Abstract: This paper testifies to the use of talent management framework as a business strategy that works to manage banking talent crisis in the Malaysian banking sector. As such, this study picks on Talent Management Practices (TMP), Employee Value Proposition (EVP) and Talent Brand Strategy (TBS) as three variables against 12 indicators of Malaysian banking talents to testify on direct and indirect relationships. The five research objectives and questions of the study were answered by employing the Structural Equation Modelling (SEM). The five hypotheses of the study revealed that there are significant positive relationships between Talent Management Practices, Employee Value Proposition and Talent Brand Strategy for Malaysian banks. Additionally, this study found that Employee Value Proposition partially mediates the relationship between Talent Management Practices and Talent Brand Strategy for Malaysian banks. With these significant relationships, the findings of this study suggest it is timely for Malaysian local banks to use their own integrated talent strategy as a business strategy. This means the banks should not only develop, but also retain their talented bankers with attractive salary packages. Motivated by the fact that there is an acute shortage of banking talents in Malaysia, there lies a strong need to use talent strategy in managing banking talent crisis. In this way, Islamic finance professionals in Malaysian banks can be retained; hence immune banks from rising turnover rate and assurance of sustainable competitiveness and profitability..

1. Introduction

Talent strategy in human resource planning is generally regarded as a business strategy that is implemented by way of identifying, recruiting, developing and retaining talented employees in the organisation. As defined by Blass (2007), talent management is the additional management process and opportunities that are made available to people in the organization whom are considered as talented people. As businesses today exist in a borderless global environment, talent is seen as a source of competitive advantage. Despite this important message, many big organisations seem to spend much time on selecting and developing talented employees but less time in retaining them (Malaysia Productivity Corporation, 2009). Therefore, it is timely for Malaysian banks to have their own talent programs (Syed et.al, 2012), the main agenda of which to resolve the acute shortage of banking talents (Taing, 2010). The talent programs are important as the end products involve the intangible assets of the organisation (Zeti, 2008), whom are people. According to Morton (2005) , in order to effectively recruit and retain scarce labor, organizations need to create and thereafter perpetually refine employee value proposition. For this to progress, researchers will initially identify the level of employee value proposition of talented people in the Malaysian banking sector. Moving forward, Blass (2007) went on to define talent management as the additional management process and opportunities that are made available to people whom are considered to be talented in the organization. To keep the best and the brightest workforce, companies will need to optimize human capital through human resource and organization development strategy (Sweem, 2009); hence, the upgradation of talent strategy as a business strategy (Ong, 2009). In the context of financial resource planning, business strategy is regarded a hedging strategy, which acts to idenfy, measure and evaluate the the financial impacts in the underlying markets. By hedging with futures (commodity or finances), any loss in the underlying market will be compensated by a gain in the futures market (Rosalan et.al, 2007). As such, the undertaking firms will have quality time with their core businesses, concentrating on growth and profits. This sounds practical for the banking business as they are a multi product (and/or services) firm.

To uphold the importance of talent management, its interrelationships with talent brand strategy and employee value proposition will have to be considered, in the Malaysian banking industry. In this regard, the aim of this paper is to examine the impact of talent management practices on talent brand strategy, with the mediating effect by employee value proposition, in the Malaysian banking industry. Based on a study by Bhatnagar (2007), talent management was initially designed to improve the process of developing people with the required skills and aptitude to meet current organization needs. The high

performing organizations are more likely to have a formalized employee value proposition. As employee value proposition helps to identify, engage and retain critical workforce segments, it has probably contributed to the organization's success (Deloitte, 2010).On these premises, this research attempts to highlight the evolution of talent brand strategy (banking institutions) and employee value proposition (banks' employees) and subsequently the impact of talent management (talent system) on talent brand strategy in the Malaysian banking industry. These three underlying variables have a link with strategic human resource that facilitate to improve the business value of identifying, developing and retaining banking talents (Dewi, 2013). In other words, we are turning talent strategy as a hedging strategy, for strong growth and better profits (Ong, 2009).

Objectives and Hypotheses of the Study: The general objective of this study is to examine the relationship between organizational differences (Talent Management Practices) and individual (or employee) effectiveness (Employee Value Proposition and Talent Brand Strategy).

Specifically, this study attempts to:

1. Examine the level of Talent Management Practices, Employee Value Proposition and Talent Brand Strategy in the Malaysian banking industry.
2. Examine the relationship between Talent Management Practices and Employee Value Proposition.
3. Examine the relationship between Talent Management Practices and Talent Brand Strategy.
4. Examine the relationship between Employee Value proposition and Talent Brand Strategy.
5. Ascertain the mediating effect of Employee Value Proposition on the relationship between organizational differences (Talent Management Practices and Talent Brand Strategy.

As the above are testable, this study involves the following hypotheses:
H1: There is a positive relationship between Talent Management Practices and Employee Value Proposition
H2: There is a positive relationship between Talent Management Practices and Talent Brand Strategy.
H3: There is a positive relationship between Employee Value Proposition and Talent Brand Strategy.
H4: The relationship between Talent Management Practices and Talent Brand Strategy is mediated by Employee Value Proposition.
H5: There is a relationship between Talent Management Practices and Talent Brand Strategy, which is mediated by Employee Value Proposition.

2. Literature Review

Generally, the most effective talent management practices are organization-specific, which respond to the organization's unique business and the human capital context. This is the finding of D'Annunzio-Green et al (2008) which suggests that in ensuring individuals are given opportunities to develop skills and enhance their careers, the talent management practices should encompass the whole of the talent management pipeline. The concept of talent management practices additionally implies to a level of strategic integration, notably as a set of talent management activities. Next, the TMP is integrated and aligned with the internal organizational system and external environmental factors, as suggested by Hughes and Rog (2008). Therefore, the effective Talent Management Practices aims to advance business strategy, drive competitive advantage and strengthens the long term viability of an organization. Talent Management Practices also must be completely aligned with the organization's mission, vision and values, and fully integrated into the organization's long term strategic planning. These aims are suggested by Hannum, Martineau and Reinelt (2007), in an in-depth review of designs for evaluating leadership development and using the evaluation itself to increase business impact.

The above needs are reinforced by a subsequent statement in a report produced in August 2008 by McKinsey Malaysia & Co, quoted as saying that an important Malaysian corporate resource over the next 20 years will be talent. In this relation, as demand goes up and supply of talent goes down, more and more Malaysian organizations will realize the importance of talent strategy and planning as part of the management strategic focus for Talent Brand Strategy and Employee Value Proposition. This is particularly important in resolving the acute shortage of banking talents in Malaysia, Taing (2010), and as noted by Zeti (2008) on the need for talent development in the Malaysian banking sector. In the context the Malaysian financial institutions, Suffian (2009) discovers that the higher the credit risk is, the higher the loan exposure for lower profitability for Malaysian banks. In fact, Suffian (2010) stated further that

the higher the supervision in the Malaysian banking system, the lower the profitability will be for Malaysian commercial banks.

Based on the above premises, it is clear that Talent Brand Strategy and Employee Value Proposition within an organization will remain to be operationally and strategically important for organizational success. As postulated by Michaels, Handfield-Jones and Axelrod (2001), talented people will work hard to fulfil their needs; otherwise, they will be inclined to leave the organization. Likewise, in their study of intention to leave towards employment engagement or Employee Value Proposition, Hussain et.al (2013) found that young bankers in Malaysia are constantly having the intention to leave due to lack of integrated talent programs and less attractive salary packages for them. This is a justifiable remark as they propose that Malaysian banks have a human resource strategy with attractive employment package in order to reduce young bankers to leave their respective banks. As such, it is noteworthy to mention that talent management needs to be a critical success factor on its human resource strategy, which is actually a business strategy as it develops and retains talented young bankers with attractive employment packages. Hence, this becomes the thrust of this study. According to the Asia Pacific Global Data Regional Practice Leader of Towers Watson (2013), Malaysian financial services industry has recorded a significant increase of turnover rate from barely 7.4 per cent in 2012 to an alarming 13.3 per cent in 2013. As such, the survey also reported that Malaysian banks are taking concerted efforts to improve their Employee Value Proposition (EVP) to attract, develop and retain their top banking talents by offering their talented employees with higher salaries and better promotions.

The researchers are therefore motivated to study on Talent Management Practices' issues in the Malaysian banking industry by examining the Employee Value Proposition (EVP) within an organization. This needs to be a focal discussion point via observations and experiments. Talent Management Practices thus forms a powerful and systematic framework for understanding why employees differ in their effectiveness in the banking industry; (Boudreau & Ramstad, 2007; Lewis and Heckman; 2006and O'Donnell; 2002). Since Talent Management Practices is a business strategy not a human resources strategy as proposed by Ong (2009), it can be generalized that the aim of Talent Management Practices is to identify the people in the organization who have more talent than others, and then to develop these people so that they become more experienced and competent. Hence, they are able to play a greater part in the success of the organization, notably competitive environment of banking sector. This may imply that Malaysian banking institutions should build rather than buy talents as banking talents are facing acute shortage (Taing, 2010) in the competitive and changing global banking environments (Dewi, 2013).

3. Research Framework and Methodology

The research framework of the study comprises of Talent Management Practices (TMP) as the independent variable, Employee Value Proposition (EVP) as mediating variable and Talent Brand Strategy (TBS) as dependent variable. TMP consists of five dimensions; namely talent acquisition, competency management, leadership development, succession planning and performance management. TBS consists of three dimensions; namely leadership brand, employee brand and working environment. Meanwhile, EVP consists of four dimensions; namely EVP task, EVP contextual, EVP assignment specificand EVP sustainability. As a mediating variable, Employee Value Proposition is expected to mediate the relationship between Talent Management Practices and Talent Brand Strategy. In the Malaysian financial services industry, EVP is required for improvements to attract top banking talents with attractive remuneration packages (Hussian et.al, 2013) and faster growth opportunities (Towers Watson, 2013).

The population of interest of this study consists of 1413 bank employees in the Malaysian banking industry. The population of bank employees will then be divided into I) Commercial Bank II) Development Financial Institution, and III) Islamic Bank. The differences between banks' employees and banks' category will determine the effects of Talent Management Practices on Employee Value Proposition in the Malaysian Banking industry. For this reason, 82 questionnaires were mailed to 1400 respondents, with a return of 342 responses. As this study employs the survey method, for data analysis, the authors use Structural Equation Modelling (SEM) as a model testing for direct and mediating effects, followed by Confirmatory Factor Analysis (CFA) to test for reliability and validity of the model. After the data for the survey questionnaires were collected, a running number was assigned for each individual respondent before the data were entered into the computer for analysis. The running number functions as an identification code for each respondent for the purpose of checking their responses if there is a

problem with the quality and validity of data collected. The collected data are analyzed using the Statistical Package for the Social Sciences (SPSS) 17.0 program and Structural Equation Modeling (SEM).

4. Results and Discussion

The constructs of Talent Management Practices (TMP) and Employee Value Proposition (EVP), the definition for level of significance for regression weight, the probability of getting a critical ratio as large as 11.389 in absolute indicate a p-value <0.0001. This highlights that the regression weight for TMP in the prediction of EVP is significantly different from zero at the 0.05 level (two-tailed test). The definition for level of significance for regression weight for TMP and Talent Brand Strategy (TBS), the probability of getting a critical ratio as large as 6.955 in an absolute indicate a p-value <0.0001. In other words, the regression weight for TMP in the prediction of TBS is significantly different from zero at the 0.05 level (two-tailed test). EVP in the prediction of TBS is also significantly different from zero at the 0.05 level (two-tailed test). This refers to the definition for level of significance for regression weight, and the probability of getting a critical ratio as large as 3.023 in absolute indicates a p-value <0.0001. The results reveal that the three variables of Talent Management Practices, Employee Value Proposition and Talent Brand Strategy are significant, and this implies that that the convergent validity is therefore achieved.

The results of hypotheses are discussed as follows:

Hypothesis H1: There is positive relationship between talent management practices (TMP), employee value proposition (EVP) and talent brand strategy (TBS).
H1: The Beta is not zero (the regression relation of TMP, EVP and TBS is significant). The hypothesis testing for causal effect of (TMP-EVP), (TMP-TBS) and (EVP-TBS) is also significant as there is a positive relationship between TMP, EVP and TBS.
Hypothesis H2: There is a positive relationship between Talent Management Practices (TMP) and Employee Value Proposition (EVP).
H2: The Beta is not zero (the regression relation of TMP and EVP is significant). The hypothesis testing for the causal effect of TMP and EVP is significant as there is a positive relationship between TMP and EVP.
Hypothesis H3: There is a positive relationship between Talent Management Practices (TMP) and Talent Brand Strategy (TBS).
H3: The Beta is not zero (the regression relation of TMP and TBS is significant). The hypothesis testing for the causal effect of TMP and TBS is significant as there is a positive relationship between TMP and TBS.
Hypothesis H4: There is a positive relationship between Employee Value Proposition (EVP) and Talent Brand Strategy (TBS).
H4: The Beta is not zero (the regression relation of EVP and TBS is significant). The hypothesis testing for the causal effect of EVP and TBS is significant as there is a positive relationship between EVP and TBS.
H5: There is a relationship between Talent Management Practices (TMP) and Talent Brand Strategy (TBS) as mediated by Employee Value Proposition (EVP).

According to Lacobucci (2008), a theoretical premise posits that a mediating variable is an indicative measure of the process by which an independent variable is to have effect on a dependent variable. The researcher needs to assess the extent to which the effect of the independent variables on the dependent variables is direct or indirect via the mediator. The findings of this study reveal that TMP is positively related to TBS effectiveness of EVP. This implies that greater the TMP level, the greater the EVP and TBS level will be. Specifically, the findings of this study suggest that improving the creativity and human skill in TMP's dimension on talent acquisition, competency management, succession planning, leadership development and performance management will help to improve on all three dimensions of EVP; contextual, assignment specific, task and sustainability of EVP, and hence it represents a quality of employee experience. In addition, improving on the talent acquisition, competency management, succession planning, leadership development and performance management as dimensions of TMP will help individuals to perform in a quality manner or experience specifically on the contextual, assignment-specific, task and sustainability of EVP.

The results of this study also suggest that improving the EVP will help to improve the TBS. Specifically, the findings of this study imply that improving on the quality of employees' experience will also help to improve all three dimensions of TBS; namely employee brand, working environment and leadership brand. This study also reveals that EVP has significant mediating effect on the relationship between TMP

and TBS. Interestingly, the results of this study found that EVP partially mediates the relationship between TMP and TBS, testifying that TMP represents a talent system, TBS represents employers' commitment and EVP represents employees' development; and hence, suggesting that Malaysian banks, notably the Islamic finance-service industry, to build rather than buy banking talents. In other words, the banks should not only focus on talent development but also on talent retention to sustain themselves in competitive banking environments.

5. Conclusion

Talent Management Practices' (TMP) factor was found to be significant predictors of Employee Value Proposition (EVP) and Talent Brand Strategy (TBS).This implies that TMP is the vital creativity of human skill to facilitate EVP and TBS in the Malaysian local banks. In addition, EVP in this model is also found to mediate the relationship between TMP and TBS. In other words, EVP carries the influence of the TMP on the TBS. This indicates that TMP will predispose bank employees in the Malaysian local banks to have effective EVP, which in turn will help to have their TBS in terms of their significant relationships for the talent system, employers' commitment and employees' development. This study also provides critical insights by emphasizing and reinforcing on the importance of talent system for successful accomplishment of talent programs. This is actually a business strategy for Malaysian local banks in this era of financial globalization.. Therefore, with integrated talent programs, the Malaysian banking institutions could immune themselves against unexpected banking talent crisis, by attracting, developing and retaining their talented young bankers. This proves as a successful business strategy for repeated annual growths and profits; hence, paving the healthy landscape for global Islamic financial services industry to seize and manage opportunities, and face challenges in terms of changing preferences for financial products and services.

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The Determinants of Interest Rate Spreads in South Africa: A Cointegration Approach

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Abstract: This study empirically identifies the determinants of interest rate spreads (IRS) in South Africa over the period 1990 to 2012. The study uses the Johansen Cointegration Approach and Vector Error-Correction techniques to identify the variables in explaining the interest rate spreads in South Africa. It considers the inflation rate, reserve requirements, Treasury bill, discount rate, money supply (M2) and gross domestic product per capita variables as they explain the movement of interest rate spreads. A significant short-run relationship between IRS and its explanatory variables was observed. These macroeconomic variables are significant in explaining the behavior of the South African IRS in the long-run. This paper has focused on illuminating on how the interest rate spreads are impacted by both exogenous and endogenous variables. If controlled, these variables are most likely to have the largest effects on reducing such spreads. In addition, it suggests that the reduction in the reserve requirements prescribed by the South African Reserve Bank would help to reduce the interest rate spreads. Based on the results of the study, policy implications and suggestion for future research are made.

Keywords: *interest rate spread, cointegration, Vector error correction, South Africa*

1. Introduction

Interest rate spreads represent an important element for financial stability. They form a substantial part of bank growth. Even though there has been an increase in interest rate spreads, little research has been done on the determinants of interest rate spreads based on South African data. Hainz, Horvath & Hlavacek (2014) noted that most previous studies conducted on interest rate spreads used yearly frequency, implying a need to fill this gap by using quarterly data. Despite their prominence in the bank performance, interest rate spreads have several important implications for growth and development of any economy. High interest rate spreads tend to discourage potential savers and thus limit the quantum of funds available to potential investors (Akinlo & Owoyemi, 2012). Structural, informational and institutional inefficiencies characterises financial systems in many of the developing and underdeveloped countries, thus leading to high margins between commercial banks' lending and borrowing rates (Afzal & Mirza, 2010:3). In South Africa, like many of the developing countries, high interest rate spreads are still an issue of concern despite the liberalization of the financial sector. Elevated and volatile lending rates are cited as main causes of higher interest rate spreads, which also leads to higher costs of capital for borrowers. Higher interest rate spreads tend to favour and promote only those short-term high-risk ventures, thereby reducing the potential for long-term investment opportunities. Banda (2010) also reports that higher banking spreads can have a devastating impact for businesses with less financial flexibility and in particular small and medium enterprises. It can therefore be said that sustained high spreads are a vital indicator of the poor performance of a financial system and *inter alia* the inadequacy of banking regulations, and can ultimately retard economic growth.

Therefore, the main objective of this paper is firstly to investigate the determinants of interest rate spreads in South Africa; secondary to analyse the relationship between macroeconomic variables and IRS. This paper also seeks to ascertain how macroeconomic and banking sector indicator affects interest rate spread in South Africa and offer few suggestions for improving the IRS in South Africa if needed. Mettle (2013) defines the interest rate spread in terms of the market microstructure characteristics of the banking sector and the policy environment. However, Ho & Saunders (1981) evoke at it in terms of the difference between the pure and the actual spread. They observe that pure spread is a microstructure phenomenon, influenced by the degree of bank risk management, the size of bank transactions, interest rate elasticity and interest rate variability. Taking in consideration risk management by the bank, Zarruk (1989) found that risk-averse banks operate with a smaller spread than risk-neutral banks. But Paroush (1994) explains that risk aversion raises the bank's optimal interest rate and reduces the amount of credit supplied. On the other hand, actual spread, which incorporates the pure spread, is in addition influenced by macroeconomic variables including monetary and fiscal policy activities. Hanson and Rocha (1986) emphasize the role of direct taxes, reserve requirements, cost of transactions and forced investment in defining interest rate spread. However, Banda (2010) cites exchange rate instability and high and variable

inflation as potential constraints to corporations' and households' ability to meet their loan obligations, if it adversely affects their balance sheets. This is supported by empirical studies for developing countries, which found a positive relationship between inflation and spreads by Brock & Rojas-Suarez (2000) and Demirguc-Kunt & Huizinga (1999).

Financial reform emphasizes the abolition of interest rate and credit ceilings and the promotion of a competitive environment with reduced government control and ownership. Although achieving competitiveness does not imply non-existence of interest rate spreads, Ho & Saunders (1981) note that the size of the spread is much higher in a non-competitive market. This calls for strengthening the regulatory and legal framework to enhance the stability of the market. Caprio (1996) warns of weak legal systems in which there is no prompt enforcement of contracts and characterised with ill defined property rights. This can thus lead to increased credit riskiness and with banks having no incentives to charge lower rates. Cho (1988), in addition, observes that the liberalization theory overlooks endogenous constraints for efficient allocation of resources by the banking sector, where, in the absence of a well functioning equities market, efficient allocation of capital is not realized even with financial liberalization. Fry (1995) explains that in the absence of direct financial markets and an equity and bonds market, financial institutions absorb too much risk, as business enterprises rely excessively on debt finance. Indeed, the interest rate spread fluctuations, reflecting the substitution between debt and equity financing. As the equity market expands, offering competitive returns, banks increase their deposit rates to compete for funds from the public (Demirguc-Kunt & Huizinga, 1997).

The expanded market also reduces the risk absorbed by the banking sector. Consequently, banks charge competitive lower lending rates, reducing the interest rate margin. But as Fry (1995) remarks, even in an oligopolistic banking system, there is need for competition from the direct financial market. Indeed, empirical results show that market imperfections widen the interest rate spread. Ho & Saunders (1981), approximating market power with bank size, found a significant difference in spread between large and small banks, where smaller banks had higher spreads than the large banks. Barajas et al. (1996) also show a significant influence of loan market power on the interest rate spread; and this was observed by Elkayam (1996), in a competitive banking system. The interest rate spread derives solely from central bank variables (including the discount window loans, reserve requirement and interest on liquid assets on deposit with the central bank), while under a monopolistic (or oligopolistic) structure the interest rate spread is in addition affected by elasticity of demand for credit and deposits. He also found that there was more market power in the credit market than the deposit market. In addition, considering monetary policy, Elkayam (1996) found that an increase in money supply under elastic demand reduces the spread more in a monopolistic than in a competitive market. Embedded in the spread, is the information on the efficiency of financial intermediation, profitability, monetary policy impact, among others. An analysis of bank interest rate spreads is therefore central to the understanding of the financial intermediation process and the macroeconomic environment in which banks operate.

2. Methodology

In the light of what discussed above, to achieve the empirical findings the following are the mathematical (1) and econometric (2) models formulated to determine the interest rate spreads and its explanatory variables in South Africa.

$$IRS = f(GDP, INF, DISRATE, RR, TBILL, M2)..[1]$$

$$IRS = \lambda_0 + \lambda_{1t}GDP + \lambda_{2t}INF + \lambda_{3t}DISRATE + \lambda_4RR + \lambda_{5t}TBill + \lambda_{6t}M2 + \varepsilon_{1t}.....................[2]$$

where IRS = Interest rate spreads, GDP = Log of GDP/capita, INF = Inflation rate, DISRATE = Discount rate, RR = Reserve requirements, TBill = Treasury Bill and M2 = log of Money supply.

The secondary data used in the empirical examination covers quarterly data for the period from the third quarter of 1990 to the fourth quarter of 2012; which give a sample size of 90. It is believed that the results from a sample size of time series equal to or greater than 30 make more sense than the ones from a small sample size (<30) (Keller & Warrack, 2003) and (Mann, 2004). Beside Inflation which was collected from Statistics South Africa, other variables are collected from South African Reserve Bank. The coefficients of all variables are expected to be positive. To examine the nature of any long-run relationship between interest rate spreads and its determinants suggested in the model, one should first investigate whether the series are cointegrated implying that any deviations from any long-run equilibrium relationship that exists between them will themselves be stationary (Aqeel & Nishat, 2005:5). The theory of cointegration

was developed in the 1980s and 90s by several researchers such as Engle & Granger (1987), Johansen (1988) and Engle & Yoo (1987) and others. Similarly, Robinson & Marinucci (2003: 334) reconfirm that cointegration analysis has been developed as a major theme of time series econometrics and generated much applied interest, prompting considerable methodological and theoretical developments during the 1990s. Therefore the cointegration method is considered as a useful econometric tool (Johansen & Juselius, 1990:192). According to Harris (1995:22), "if a series must be differenced *d* times before it becomes stationary, then it contains *d* unit roots and is said to be integrated of order *d*, denoted *I(d)*." This means that inference is worthless only when there is a long-run equilibrium relationship between variables. In other words only when variables are cointegrated (Brook, 2008). Therefore, the presence of cointegration between dependent and independent variables ensures that an ordinary least square (OLS) regression in levels yields consistent parameter estimates (Engle & Granger, 1987). In addition, according to Aqeel &Nishat (2005: 5) "discovering that variables are cointegrated, allows for the use of error correction models which allow for separation out of long-run and short-run impact."

According to Muzindutsi & Sekhampu (2013)'s study, the dependent variable (IRS in this case) may be related to its own lag values and to those of independent variables; a Vector Autoregressive (VAR) model is used in modelling the multivariate relationships between IRS and its macroeconomic determinants. The VAR is a form of starting point for different analysis such as co-integration analysis, causality test, stability test, and impulse response (Chan, 2010 & Maddala, 2001). The VAR model for this paper is as

$$IRS_t = \alpha_1 + \sum_{J=1}^{K} \beta_{1j} IRS_{t-j} + \sum_{j=1}^{k} \lambda_{1j} GDP_{t-j} + \sum_{j=1}^{k} \gamma_{1j} INF_{t-j} + \sum_{j=1}^{k} \psi_{1j} DISRATE_{t-j} + \sum_{j=1}^{k} \theta_{1j} RR_{t-j} +$$
$$\sum_{j=1}^{k} \varsigma_{1j} TBill_{t-j} + \sum_{j=1}^{k} \delta_{1j} LM2_{t-j} + \varepsilon_{1t} \dots\dots\dots\dots\dots\dots [3]$$

$$GDP_t = \alpha_2 + \sum_{J=1}^{K} \beta_{2j} IRS_{t-j} + \sum_{j=1}^{k} \lambda_{2j} GDP_{t-j} + \sum_{j=1}^{k} \gamma_{2j} INF_{t-j} + \sum_{j=1}^{k} \psi_{2j} DISRATE_{t-j} + \sum_{j=1}^{k} \theta_{2j} RR_{t-j} +$$
$$\sum_{j=1}^{k} \varsigma_{2j} TBill_{t-j} + \sum_{j=1}^{k} \delta_{2j} LM2_{t-j} + \varepsilon_{2t} \dots\dots\dots\dots\dots\dots [4]$$

$$INF_t = \alpha_3 + \sum_{J=1}^{K} \beta_{3j} IRS_{t-j} + \sum_{j=1}^{k} \lambda_{3j} GDP_{t-j} + \sum_{j=1}^{k} \gamma_{3j} INF_{t-j} + \sum_{j=1}^{k} \psi_{3j} DISRATE_{t-j} + \sum_{j=1}^{k} \theta_{3j} RR_{t-j} +$$
$$\sum_{j=1}^{k} \varsigma_{3j} TBill_{t-j} + \sum_{j=1}^{k} \delta_{3j} LM2_{t-j} + \varepsilon_{3t} \dots\dots\dots\dots\dots\dots [5]$$

$$DISRATE_t = \alpha_4 + \sum_{J=1}^{K} \beta_{4j} IRS_{t-j} + \sum_{j=1}^{k} \lambda_{4j} GDP_{t-j} + \sum_{j=1}^{k} \gamma_{4j} INF_{t-j} + \sum_{j=1}^{k} \psi_{4j} DISRATE_{t-j} + \sum_{j=1}^{k} \theta_{4j} RR_{t-j} +$$
$$\sum_{j=1}^{k} \varsigma_{4j} TBill_{t-j} + \sum_{j=1}^{k} \delta_{4j} LM2_{t-j} + \varepsilon_{4t} \dots\dots\dots\dots\dots\dots [6]$$

$$RR_t = \alpha_5 + \sum_{J=1}^{K} \beta_{5j} IRS_{t-j} + \sum_{j=1}^{k} \lambda_{5j} GDP_{t-j} + \sum_{j=1}^{k} \gamma_{5j} INF_{t-j} + \sum_{j=1}^{k} \psi_{5j} DISRATE_{t-j} + \sum_{j=1}^{k} \theta_{5j} RR_{t-j} +$$
$$\sum_{j=1}^{k} \varsigma_{51j} TBill_{t-j} + \sum_{j=1}^{k} \delta_{5j} LM2_{t-j} + \varepsilon_{5t} \dots\dots\dots\dots\dots\dots [7]$$

$$TBill_t = \alpha_6 + \sum_{J=1}^{K} \beta_{6j} IRS_{t-j} + \sum_{j=1}^{k} \lambda_{6j} GDP_{t-j} + \sum_{j=1}^{k} \gamma_{6j} INF_{t-j} + \sum_{j=1}^{k} \psi_{6j} DISRATE_{t-j} + \sum_{j=1}^{k} \theta_{6j} RR_{t-j} +$$
$$\sum_{j=1}^{k} \varsigma_{6j} TBill_{t-j} + \sum_{j=1}^{k} \delta_{6j} LM2_{t-j} + \varepsilon_{6t} \dots\dots\dots\dots\dots\dots [8]$$

$$LM2_t = \alpha_7 + \sum_{J=1}^{K} \beta_{7j} IRS_{t-j} + \sum_{j=1}^{k} \lambda_{7j} GDP_{t-j} + \sum_{j=1}^{k} \gamma_{7j} INF_{t-j} + \sum_{j=1}^{k} \psi_{7j} DISRATE_{t-j} + \sum_{j=1}^{k} \theta_{7j} RR_{t-j} +$$
$$\sum_{j=1}^{k} \varsigma_{7j} TBill_{t-j} + \sum_{j=1}^{k} \delta_{7J} LM2_{t-j} + \varepsilon_{7t} \dots\dots\dots\dots\dots\dots [9]$$

follows:

Where α is the intercept; β, λ, γ, ψ, θ, ς and δ are the coefficients; k is number of lags and ε's are the stochastic error terms (known as shocks in a VAR model). Before estimating the above equations, the Augmented Dickey Fuller (ADF) test was used to test for the unit root in the variables. If the variables have a unit root, a co-integration test is generally undertaken to establish whether non-stationary variables move together over time and have a linear combination (Brooks, 2008). This study used the

Johansen's multivariate co-integrating VAR approach to identify whether there is a long run relationship between the variables. If the co-integration test indicates that variables are not co-integrated, then the VAR model will be the one to be used. Alternatively, the following VECM will be estimated if variables are

$$\Delta IRS_t = \alpha_1 + \sum_{J=1}^{K}\beta_{1j}\Delta IRS_{t-j} + \sum_{j=1}^{k}\lambda_{1j}\Delta GDP_{t-j} + \sum_{j=1}^{k}\gamma_{1j}\Delta INF_{t-j} + \sum_{j=1}^{k}\psi_{1j}\Delta DISRATE_{t-j} + \sum_{j=1}^{k}\theta_{1j}\Delta RR_{t-j} +$$

$$\sum_{j=1}^{k}\varsigma_{1j}\Delta TBill_{t-j} + \sum_{j=1}^{k}\delta_{1j}\Delta LM2_{t-j} + \Omega_1 u_{2t-1} + \varepsilon_{1t}\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots[10]$$

$$\Delta GDP_t = \alpha_2 + \sum_{J=1}^{K}\beta_{2j}\Delta IRS_{t-j} + \sum_{j=1}^{k}\lambda_{2j}\Delta GDP_{t-j} + \sum_{j=1}^{k}\gamma_{2j}\Delta INF_{t-j} + \sum_{j=1}^{k}\psi_{2j}\Delta DISRATE_{t-j} + \sum_{j=1}^{k}\theta_{2j}\Delta RR$$

$$\sum_{j=1}^{k}\varsigma_{2j}\Delta TBill_{t-j} + \sum_{j=1}^{k}\delta_{2j}\Delta LM2_{t-j} + \Omega_2 u_{2t-1} + \varepsilon_{2t}\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots[11]$$

$$\Delta INF_t = \alpha_3 + \sum_{J=1}^{K}\beta_{3j}\Delta IRS_{t-j} + \sum_{j=1}^{k}\lambda_{3j}\Delta GDP_{t-j} + \sum_{j=1}^{k}\gamma_{3j}\Delta INF_{t-j} + \sum_{j=1}^{k}\psi_{3j}\Delta DISRATE_{t-j} + \sum_{j=1}^{k}\theta_{3j}\Delta RR_{t-j}$$

$$\sum_{j=1}^{k}\varsigma_{3j}\Delta TBill_{t-j} + \sum_{j=1}^{k}\delta_{3j}\Delta LM2_{t-j} + \Omega_3 u_{3t-1} + \varepsilon_{3t}\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots[12]$$

$$\Delta DISRATE_t = \alpha_4 + \sum_{J=1}^{K}\beta_{4j}\Delta IRS_{t-j} + \sum_{j=1}^{k}\lambda_{4j}\Delta GDP_{t-j} + \sum_{j=1}^{k}\gamma_{4j}\Delta INF_{t-j} + \sum_{j=1}^{k}\psi_{4j}\Delta DISRATE_{t-j} +$$

$$\sum_{j=1}^{k}\theta_{4j}\Delta RR_{t-j} + \sum_{j=1}^{k}\varsigma_{4j}\Delta TBill_{t-j} + \sum_{j=1}^{k}\delta_{4j}\Delta LM2_{t-j} + \Omega_4 u_{4t-1} + \varepsilon_{4t}\ldots\ldots\ldots\ldots\ldots\ldots\ldots[13]$$

$$\Delta RR_t = \alpha_5 + \sum_{J=1}^{K}\beta_{5j}\Delta IRS_{t-j} + \sum_{j=1}^{k}\lambda_{5j}\Delta GDP_{t-j} + \sum_{j=1}^{k}\gamma_{5j}\Delta INF_{t-j} + \sum_{j=1}^{k}\psi_{5j}\Delta DISRATE_{t-j} + \sum_{j=1}^{k}\theta_{5j}\Delta RR_{t-j}$$

$$\sum_{j=1}^{k}\varsigma_{51j}\Delta TBill_{t-j} + \sum_{j=1}^{k}\delta_{5j}\Delta LM2_{t-j} + \Omega_5 u_{5t-1} + \varepsilon_{5t}\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots[14]$$

$$\Delta TBill_t = \alpha_6 + \sum_{J=1}^{K}\beta_{6j}\Delta IRS_{t-j} + \sum_{j=1}^{k}\lambda_{6j}\Delta GDP_{t-j} + \sum_{j=1}^{k}\gamma_{6j}\Delta INF_{t-j} + \sum_{j=1}^{k}\psi_{6j}\Delta DISRATE_{t-j} + \sum_{j=1}^{k}\theta_{6j}\Delta RR_{t}$$

$$\sum_{j=1}^{k}\varsigma_{6j}\Delta TBill_{t-j} + \sum_{j=1}^{k}\delta_{6j}\Delta LM2_{t-j} + \Omega_6 u_{6t-1} + \varepsilon_{6t}\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots[15]$$

$$\Delta LM2_t = \alpha_7 + \sum_{J=1}^{K}\beta_{7j}\Delta IRS_{t-j} + \sum_{j=1}^{k}\lambda_{7j}\Delta GDP_{t-j} + \sum_{j=1}^{k}\gamma_{7j}\Delta INF_{t-j} + \sum_{j=1}^{k}\psi_{7j}\Delta DISRATE_{t-j} + \sum_{j=1}^{k}\theta_{7j}\Delta RR$$

$$\sum_{j=1}^{k}\varsigma_{7j}\Delta TBill_{t-j} + \sum_{j=1}^{k}\delta_{7J}\Delta LM2_{t-j} + \Omega_7 u_{7t-1} + \varepsilon_{7t}\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots[16]$$

co-integrated.

Where Δ is the first difference operator, $u_{1t-1}...u_{7t-1}$ are error correction terms and $\Omega_{1...7}$ are error correction coefficients. These error correction coefficients are expected to capture the adjustments of change in the variables towards long-run equilibrium, while the coefficients, β, λ, γ, ψ, θ, ς and δ are expected to capture the short-run dynamics of the model (Muzindutsi & Sekhampu, 2013). The number of lags (k) is selected based on Akaike Information Criterion (AIC), or Schwarz-Boyesian Information Criterion (SBIC) (Brooks, 2008). Before interpreting VCM results, diagnostic tests such as autocorrelation, hetroscedasticity, normality and parameter stability tests are conducted to check whether the stochastic properties of the model are met (Maddala, 2001).

3. Empirical Results

Table 1 show results of correlation analysis. A correlation coefficient is a number between -1 and +1 which shows the magnitude of a relationship between two variables. The higher the absolute value of the coefficient, the stronger the strength of the relationship is. Correlation between IRS and other 5 variables

(GDP, INF, DISRATE, RR and M2) is significant at the 5% level of significance. However, the correlation between IRS and TBill is not statistically significant. This suggests that there is a high level of association between ISR and the other variables except the TBill.

Table 1: Pairwise Correlations

	IRS	GDP	INF	DISRATE	RR	TBill	M2
IRS	1.000						
GDP	.627*	1.000					
INF	.612*	.597*	1.000				
DISRATE	.819*	-.002*	-.462	1.000			
RR	.726*	-.254	.296	.564*	1.000		
TBill	.491	.356	.388*	.821	.369*	1.000	
M2	.206*	.621*	.044*	.213*	.021*	.238*	1.000

*Correlation is significant at the 0.05 level

Augmented Dickey Fuller unit root test results are shown in Table 2. The coefficients compared with critical values at 1%, 5% and 10% show that variables were not stationary at their level but they become stationary at first difference. Meaning, statistical evidence concludes that all variables become stationary in their first differences. Therefore, the null hypothesis of non stationary is rejected implying that the variables are integrated of order one at the 1% level of significance. Thus, the next step is therefore to test for co-integration.

Table 2: Augmented Dickey-Fuller Unity Root Test

Variables	Level		First Difference	
	t-Statistic	P-values*	t-Statistic	P-values*
IRS	5.3110	0.0876	7.23569	0.0000
GDP	3.5926	0.1234	5.95621	0.0000
INF	2.6290	0.1692	3.26140	0.0012
DISRATE	4.2187	0.8751	6.14258	0.0000
RR	4.9532	0.2641	4.9532	0.0000
TBill	0.97623	0.7234	2.31258	0.0209
M2	2.1245	0.3261	4.35891	0.0000

Using Johansen co-integration test, this paper found two cointegrated equations, as shown by trace statistics and maximum eigenvalue statistics in Table 3. According to the probalities (P-values) in Table 3, the null hypothesis that there is no cointegrated vector (None), there is at most 1 and at most 2 are rejected. In other words, all three p-values under trace test and maximum eigenvalue are statistical significant the 0.05 level of significance; meaning that there are two cointegrating equations. Therefore, there is existence of association between explanatory and dependent variables used in this paper. This is in line with most previous findings of a long-run relationship between IRS and its determinants. These two cointegrating equations are also confirmed in the results presented in table 4 where short-run relationship is discussed.

Table 3: Summary of Johansen Co-Integration Test Statistics

H0: No of cointegrating equations	Trace Test		Maximum Eigenvalue	
	Trace statistics	P-values*	Max-Eigen Statistic	P-values*
None	165.9236	0.0213	68.0189	0.0000
At most 1	96.8910	0.0087	46.3987	0.0000
At most 2	64.5124	0.0323	32.3458	0.0057
At most 3	40.0218	0.1692	11.0079	0.0812
At most 4	25.2134	0.8751	9.45873	0.1249
At most 5	12.6934	0.2641	7.34578	0.3984
At most 6	9.00244	0.7234	6.62350	0.8659
At most 7	6.96373	0.3261	4.2365	0.6804

* MacKinnon-Haug-Michelis (1999) p-values

In general, the existence of a co-integrating relationship between the IRS and the combination of selected macroeconomic variables suggests that these variables explain the long run equilibrium in the IRS.

However, this does not shed any light on short-run dynamics (Niyimbanira, 2013). Therefore, VECM (Equations 10 to 16) is undertaken in order to establish the adjustment towards long-run equilibrium, and the short-run dynamics between the variables. VECM results in Table 4 show that the first co-integrating equation (CointEq1) has five significant coefficients (IRS, GDP, INF, DISRATE, RR, M2). However, only two variables (IRS and RR) have the correct sign (negative). Among these two variables IRS is the most significant coefficient; with a t-value of -6.1120 as compare to -4.3126 for RR. This suggests that IRS constitutes the true co-integrating relationship in the first co-integrating equation. In the second equation, there three coefficients (IRS, DISRATE, RR) that are statistically significant at the 0.05 level of significance; but only two of them (IRS, RR) have the correct sign. The most significant variable in the equation 2 is RR; suggesting that RR constitutes the true co-integrating relationship in the second co-integrating equation. Furthermore, this first equation is better than the second one as the second one has only three significant variables. This suggests that IRS shows strong evidence of error correction to the first co-integrating equation. The interpretation of the two co-integrating equations is that the second equation explains the long run equilibrium in reserve requirements (RR), while the first equation explains the long-run equilibrium in interest rate spreads (IRS). After conducting LM tests, it revealed that there are no autocorrelations, nor hetroscedasticity in the VECM residuals. Thus results of VECM are presented in table 4.

Table 4: Vector Error Correction Model Results

Error Correction	ΔIRS	ΔGDP	INF	ΔDISRATE	ΔRR	ΔTBill	ΔM2
CointEq1	-0.2315*	0.0016*	0.00158	0.0056*	-0.170023*	0.09632	2.3659*
	[-6.1120]	[4.1267]	[1.2354]	[2.641]	[-4.3126]	[1.4536]	[3.9687]
CointEq2	-0.0607*	0.0023	0.00191	0.9051*	-0.1240*	0.0369	0.03579
	[-2.1780]	[1.2359]	[0.2178]	4.3244	[-5.1730]	[0.9689]	[0.8567]
ΔIRS(-1)	0.2361	0.0297	0.00472	0.0252	1.1477*	0.0382	0.9075
	[2.9861]	[0.2364]	[1.2497]	[0.0365]	[5.2398]	[1.2031]	[0.2369]
ΔIRS(-2)	-0.3215	0.0031	-0.1245*	0.068821	0.094572	0.077556	0.014521
	[-0.0112]	[1.8525]	[-2.9524]	[0.58874]	[0.0549]	[0.8150]	[1.9713]
ΔGDP(-1)	0.0414*	0.2557	1.01247*	0.2291	0.7528	0.0106	0.1227
	[4.0596]	[0.6364]	[3.4831]	[0.0346]	[1.4115]	[0.1225]	[0.4979]
ΔGDP(-2)	0.0003	0.01548	0.00428	1.0112	0.4870	0.7191	0.6612*
	[0.09623]	[0.0008]	[0.9572]	[1.0970]	[0.2365]	[0.0036]	[3.1260]
ΔINF(-1)	0.003784	0.00845	0.2317	0.07891	1.0842	0.3561	0.04168
	[0.9568]	[0.6897]	[1.4235]	[0.0812]	[0.1985]	[1.3570]	[0.9452]
ΔINF(-2)	0.00724	0.00416	0.08435	0.08437	0.00942	0.03721	1.0041
	[0.9721]	[1.0145]	[0.8467]	[1.4217]	[0.9218]	0.008246]	[0.17214]
ΔDISRATE(-1)	0.425663*	0.002324*	0.02846	0.28564	0.030944*	0.00589	0.026951
	[6.0235]	[3.92651]	[0.00457]	[0.00695]	[6.23564]	[0.000568]	[0.004789]
ΔDISRATE(-2)	0.00823	0.09856	0.00149	0.00654	0.2014	0.05984	0.0213
	[0.0845]	[0.0089]	[0.84239]	[0.0124]	[2.0652]	[0.00546]	[0.58971]
ΔRR(-1)	0.9546*	0.00569	0.00781	0.434844 *	0.000174*	0.0005	0.09687
	[4.0578]	[0.004572]	[0.07492]	[3.2651]	[3.26329]	[0.008476]	[0.94542]
ΔRR(-2)	0.387631	0.014246	0.00158	0.015836	0.059121	0.069257	0.0096
	[1.4562]	[0.0015]	[0.09421]	[0.00078]	[1.8561]	[0.00659]	[0.00784]
ΔTBill(-1)	0.00014	0.8752	0.02531	0.32654	0.04628	0.149281*	0.00145
	[1.0025]	[0.00784]	[0.07195]	0.89452]	[2.08742]	[3.1268]	[0.00678]
ΔTBill(2)	0.0012589	0.87659	0.007942	0.0589470	0.05362	0.52978	0.00954
	[0.0012847]	[0.05123]	[0.71549]	[0.005487]	[0.4286]	0.06482]	[0.03624]
ΔM2(-1)	0.84561*	0.00390	0.08410	0.701245	0.00085*	0.000914	0.1487
	[3.0462]	[0.08215]	[0.8249]	[0.074521]	[5.9062]	0.04578]	[0.000174]
ΔM2(-2)	0.124572	0.0045879	0.07194	0.00145984	0.7456891	0.005894	0.48792
	[1.49741]	[0.94044]	[0.07267]	[0.63410]	[2.97969]	[0.09842]	[1.00454]

t-statistics in [ ], *significant at the 5% level, 2 lags were selected based on AIC

4. Conclusion

One of the most important sources of funding for economic decisions related to consumption and investment is financial system. Therefore, financing capital accumulation and technological innovations, aimed at medium-term productivity growth and more dynamic and sustainable rates of economic growth. Consequently, the price of borrowing from financial institutions and its efficiency which is measured by interest rate spreads are essential for the possibility of allocation additional financial potential in the economy, and thus for the acceleration or sustainability of economic growth (Georgievska et al., 2008). Therefore, narrowing the interest rate spread which is the difference between the interest rate charged to borrowers and the rate paid to depositors would be the expected benefits of financial liberalization and deepening of the financial sector (Mettle, 2013). This is predicated on the understanding that liberalization enhances competition and efficiency in the financial sector. Thus, a wide deposit lending interest rate spread could be symptomatic of banking sector inefficiency or a reflection of the level of financial development (Tennant & Folawewo, 2008).

The aim of this paper was to investigate the determinants of interest rate spreads in South Africa. A cointegration approach and VECM tests were used to assess the relationship between the IRS and a set of macroeconomic variables (GDP per capita, Inflation, discount rate, reserve requirements rate, Treasury Bill and M2). The ADF test reveal that all variables are stationary at first difference and Johansen co-integration test revealed that there is a long-run association between the variables. The cointegrating equation indicated that all variables used in this study have a positive long-run effect on interest rate spread as was expected. Thus, this paper emphasised that there is a long-run relationship between the IRS and a combination of the selected macroeconomic variables except Treasury Bill which was not found statistically significant. In the short run, there was a significant relationship between the IRS and GDP, inflation, discount rate, reserve requirement rate and M2. However, Treasury Bill was not significant in predicting changes in IRS. This was confirmed by variance decomposition analysis which revealed that shocks in the IRS are not explained by shocks from Treasury Bill. In other words, there was no evidence on the effect of Treasury Bill changes on IRS in the short-run. The general conclusion of the study is that there is a long-run relationship between macroeconomic variables and the IRS in South Africa. This confirms previous findings that the effect IRS is observed in the long-run and in short-run. These findings suggest that policymakers especially monetary authorities in South Africa should consider the implications of macroeconomic policies on the Interest rate spreads and how it affect consumers.

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Development of foreign competitor identification index (FCII) in Malaysia

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Abstract: Most previous studies have dealt with foreign competitors in host country by considering how the contractors compete in international environment. The purpose of this study is to develop a foreign competitor identification index (FCII) by assessing the global orientation of international contractors in Malaysia using various characteristics. The exploratory study is based on the secondary data from Engineering News Record (ENR, 2013) and Construction Industry Development Board (CIDB, 2013) Malaysia. The sampling frame was from the ENR top 250 international contractors operating in more than 100 countries worldwide. Their involvement in international projects includes general building, manufacturing, power, water supply, sewerage/solid waste, industrial process, petroleum, transportation, hazardous waste and telecommunications. Six (6) measurements were used to develop the FCII mode which were based on number of years of experience and number of consecutive years operating in Malaysia, number of countries they are working outside Malaysia, number of projects and number of diversity of projects undertaken in Malaysia, and ranking in ENR. The data was analysed descriptively to make the comparison and establish the findings. Thirty eight (38) out of 250 top international contractors listed by the ENR have been operating in Malaysia. It was observed that that the most competitive contractor with the highest FCII score has more than 12 year of consecutive years working in Malaysia working on 99 projects, operating in more than 20 countries outside Malaysia and ranked at 17th place by the ENR (2013). The study used a sampling frame of population based on ENR. Therefore, the proposed measurements shall be further validated by the subject matter experts. The study will assist local contractors to recognize the foreign competitors in Malaysia and a competitive index model will be further developed to guide the local contractors to prepare themselves to compete with the foreign contractors in Malaysia. Neglecting to properly assess the foreign contractors' characteristics can lead to poor performance in their local business ventures. This study intends to contribute to an improved understanding foreign contractor's competitiveness in relation to the local contractors towards the development of the FCII model. Although there have been various models related to competitive index, there is currently no model that attempts to show the effects of foreign contractors on the local contractors.

Keywords: *Competitor Index, Competitive Strategy, Foreign Contractors, Local Contractors, Malaysia*

1. Introduction

The Malaysian construction industry is an important sector in the Malaysian economy beside mining, agricultural, manufacturing and services sector. Construction industry become one of the sector that contribute to the Malaysian economic growth and it related to other sector as it become part of their partner which they are rely on each other (Chia *et al*., 2014). As shown in Table 1, the percentage share by sector in annual percentage changes in gross domestic product (GDP) from 2006 until 2014. In 2013, the annual percentage changes contribution of the main sector to GDP by agricultural, mining, manufacturing, construction and services is 2.1, 0.5, 3.4, 10.9 and 5.9 percent, respectively. It shows that construction has the highest annual percentage changes of contribution to GDP. In 2014 by forecast which the contribution of agricultural, mining, manufacturing, construction and services sector to GDP are 3.8, 1.6, 3.5, 10.0 and 6.2 annual percentage changes each. Construction industry in Malaysia has strongly growth in the economic although the construction industry output is smaller than other's sector output as studied by Ibrahim *et al*., (2010). In Figure 1 also show changeability in the annual percentage change growth of construction industry. The construction industry has a higher rate than GDP of growth and it flow parallel to GDP growth. Khan *et al*. (2014) find out once the economic downturn, it goes as well to construction sector growth will decreasing. Government is the main player in guiding local contractors to perform in the Malaysian economic industry. Among government agencies involved in the Malaysian construction industry are Construction Industry Development Board (CIDB), Ministry of Work (KKR), Public Work Department (JKR), Contractor Service Centre (PKK), Board of Engineers Malaysia (BEM), Master Builder Association Malaysia (MBAM) and Board of Architect Malaysia (BAM). All of these government agencies has their own role in guiding the contractors in Malaysia (Kamal *et al*., 2012).

Table 1: Annual percentage changes sector contribution to GDP

| Sector	Share of GDP (%)								
	2006	2007	2008	2009	2010	2011	2012 [p]	2013 [p]	2014 [f]
Agriculture[1]	5.8	1.4	3.8	0.1	2.4	5.8	1.3	2.1	3.8
Mining	-1.2	2.1	-2.4	-6.5	-0.3	-5.4	1.0	0.5	1.6
Manufacturing	7.4	3.1	0.8	-9.0	11.9	4.7	4.8	3.4	3.5
Construction	-0.5	8.5	4.4	6.2	11.4	4.7	18.6	10.9	10.0
Services	7.2	10.0	8.6	2.9	7.4	7.1	6.4	5.9	6.2
Add: Import duties	-11.0	4.7	26.7	-7.1	9.6	13.0	15.6	5.8	16.5
GDP	5.6	6.3	4.8	-1.5	7.4	5.2	5.6	4.7	4.5-5.5

[1] Include livestock and horticulture

[f] forecast

[p] preliminary

(Source: Department of Statistics, Malaysia and Central Bank of Malaysia, 2014)

Economic Planning Unit (EPU) under the Prime Minister Department has outline 10th Malaysian Plan (10MP) which can support and give benefit to the construction industry through the fund facilitation from the government. Government come out with Economic Transformation Program (ETP) to boost economic transformation and achieve higher income status country (Muhamad, Sulaiman, & Sanusi, 2012). Under ETP there are two plans which are National Key Economic Area (NKEA) and National Key Reformation Area (NKRA). CIDB also launched Construction Industry Master Plan (CIMP) 2006-2015. As reported by Sundaraj (2006), there are 7 strategic thrusts were identified in CIMP which are integrate the construction industry value chain, to enhance productivity and efficiency, strengthen the construction industry's image, strive for the highest standard of quality, occupational safety and health, and environmental practices, develop human resource capabilities and capacities in the construction industry, innovate through research and development and adopt new construction methods, leverage on information and communication technology in the construction industry and benefit from globalization including the export of construction products and services.

Figure 1: Annual change of GDP and construction activities in Malaysia (2006-2014).
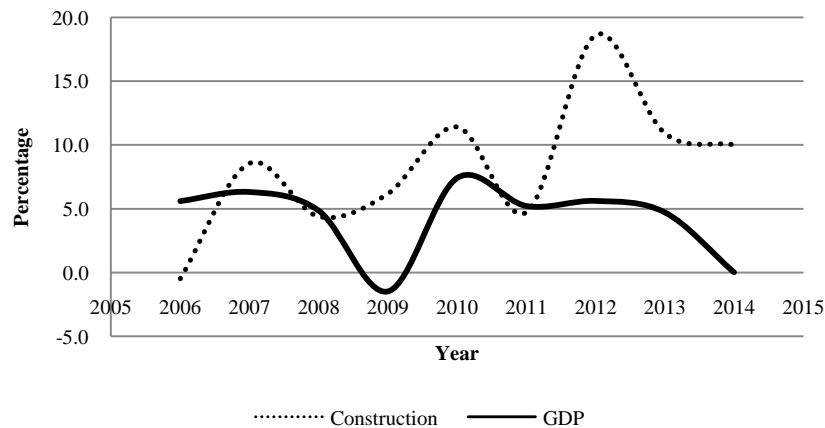
(Source: Department of Statistics, and Central Bank of Malaysia, 2014)

the Malaysian construction industry. In Malaysia, registration of the contractors has to go through with two agencies which are CIDB and PKK. In CIDB registration, there are seven registered grade from G1 to G7 and G7 is the largest construction company with paid-up capital RM 750,000 and no limit of tendering capacity. Contractor registered in G6 also under a large construction company with paid-up capital RM 500,000 and tendering capacity not exceeding RM 10 million. Until Jun 2014, there 5,331 contractors registered under G7, while 1,522 contractors registered under G6. These large construction companies have intensity and capacity in bidding projects in the domestic market. In conjunction with the upcoming free trade market, local contractors have to strongest their competitive advantage to compete with the foreign contractors coming in. The aim of this study is to develop the foreign competitor identification index (FCII) in Malaysia. From this index, local contractors can identify who is their competitor in targeted market. The data from Engineering News Record (ENR) report is used as the based because the

foreign contractors working in Malaysia and also listed in ENR ranking are the most competence competitors to local contractors.

2. Literature Review

The literature that related in this study included competitiveness, years of experience in Malaysia, consecutive year in Malaysia, number of countries, number of projects, diversity of projects and contractor's ranking in ENR.

Competitiveness: Competitiveness can be define as having advantage and capabilities than the competitor and important for the future performance (Orozco *et al.*, 2014). This is important because with the strong capabilities can help the contractor to compete in the future environment challenges as mentioned by Green *et al.* (2008). Qureshi et al., (2014) claimed that upcoming liberalization trade in construction industry such as Trans-Pacific Partnership Agreement (TPPA) will lower the barrier for foreign contractor to enter domestic market and increased foreign direct investment (FDI). So, it is very important for local contractors to intensify their competitive strategies. Local contractors' competitive strategy is determined by the firm's speed relative to competition, specialization, and how it uses its advantages (Chaiprasit & Swierczek, 2011).

Years of experience in Malaysia: Construction companies that have high or strong experience can be considered to have a competitive advantage. Because from this experience, the contractors can get ready to whatever problem or same problem in finding the solution (Gunhan & Arditi, 2005). In identify the key competitor of foreign contractor in Malaysia, it is very important to calculate their years of experience in Malaysia. The longer they are working here, the more experience they have in knowing our culture and environment.

Consecutive years in Malaysia: Consecutive year is where the foreign contractors keep winning the project and projected to their sustain years in Malaysia. This is because foreign contractors in Malaysia have to register according to their project based. If the years of experience and years of consecutive year of the foreign contractor are long, the foreign contractors are high competitor to local contractors. In one study using ENR's list of the top 225 international contractors, only 34 contractors still in four consecutive years from 1998-2001, from 64 contractors in 1998, 74 in 1999, 73 in 2000 and 79 in 2001 (Gunhan & Arditi, 2005). It shows that not all contractors have strong track record in sustain their business in construction industry.

Number of countries: When the contractor is entering international markets, they will be performing if they can widen their business into other countries or region. The more country they are working, the high competitor they will be to another contractor. In Figure 2, Asian and Australia is the highest value of projects in international regional analysis. It shows that foreign contractors are focusing working in these regions and give high competition to local contractors.

Figure 2: International region analysis
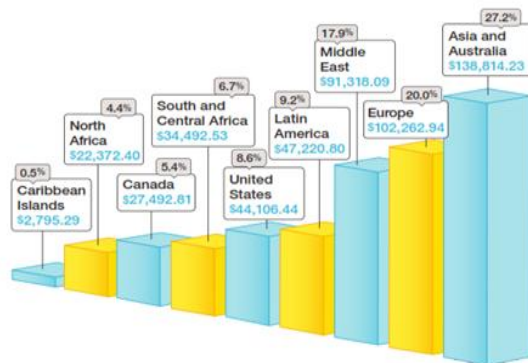
(Source: ENR, 2013)

Figure 3: International market analysis
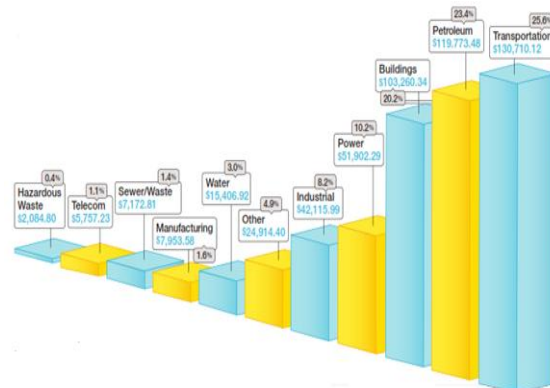
(Source: ENR, 2013)

Number of projects: In competing with other contractors, winning a large number of projects can show the construction company can compete with others. In Figure 3, transportation has the highest value of projects, followed by petroleum and building in international market analysis (ENR, 2013).

Diversity of projects: Project diversity is how many types of projects or core business that the company has. For those with same business core or project type will compete strongly according to their competitive advantage (Ye *et al.*, 2014). In Table 2, there is type of projects and their description as stated in ENR.

Table 2: Type of projects and description

No	Type of Project	Description
1	General Building	General Building includes commercial buildings, offices, stores, educational facilities, government buildings, hospitals, medical facilities, hotels, apartments, housing, etc.
2	Manufacturing	Manufacturing comprises auto, electronic assembly, textile plants, etc.
3	Power	Power comprises thermal and hydroelectric power plants, waste-to-energy plants, transmission lines, substations, cogeneration plants, etc.
4	Water Supply	Water Supply includes dams, reservoirs, transmission pipelines, distribution mains, irrigation canals, desalination and drinking-water treatment plants, pumping stations, etc.
5	Sewerage / Solid Waste	Sewerage / Solid Waste includes sanitary and storm sewers, treatment plants, pumping plants, incinerators, industrial waste facilities, etc.
6	Industrial Process	Industrial Process comprises pulp and paper mills, steel mills, non-ferrous metal refineries, pharmaceutical plants, chemical plants, food and other processing plants, etc.
7	Petroleum	Petroleum includes refineries, petrochemical plants, offshore facilities, pipelines, etc.
8	Transportation	Transportation includes airports, bridges, roads, canals, locks, dredging, marine facilities, piers, railroads, tunnels, etc.
9	Hazardous Waste	Hazardous Waste includes chemical, nuclear-waste treatment, asbestos and lead abatement, etc.
10	Telecommunications	Telecommunications comprises transmission lines, cabling, towers / antennae, data centres, etc.

(Source: ENR, 2013)

Contractor's ranking in ENR: In ENR data, the ranking of international contractors is based on their annual revenues outside their home countries as mentioned by Reina & Tulacz (2012) and Lu (2014). Contractors that have high ranking in ENR are the main competitor to the other contractors, especially for local contractors where the international contractors are working.

3. Methodology

In the ENR reports on year 2013 show 66 international companies that are operating in Malaysia but only 38 companies that matched in CIDB records from 1996 until 2013. The year of experience and consecutive years in Malaysia will be analyzed with data from CIDB while for another four measurements which are the number of countries they are working outside Malaysia, a number of projects, diversity of projects, and contractor's ranking in ENR will be analyzed using the ENR data record. Six measurements which are the years of experience in Malaysia, consecutive years in Malaysia, the number of countries they are working outside Malaysia, a number of projects, diversity of projects, and contractor's ranking in ENR listed in Table 3. The contractors are ranked based on the FCII score and their mean value and standard deviation of each dimension also will be calculated. Measurement of FCII is adopted from the secondary data in ENR reports and CIDB also discussion from experts in the construction business. The actual value of years of experience in Malaysia, consecutive years in Malaysia, the number of countries they are working outside Malaysia, a number of projects, diversity of projects, and contractor's ranking in ENR then calculated using the 5 point scale for each dimension as shown in Table 3. The formula of FCII as follows:

$FCKII = 6W_{ym} + 2W_{cm} + 4W_{com} + 3W_p + 2W_d + 3W_{renr}$

Where:

FCII   = FCII score
W_{ym} = weighted measure for years of experience in Malaysia
W_{cm} = weighted measure for years sustained consecutive in Malaysia
W_{com} = weighted measure for country operated outside Malaysia
W_{p} = weighted measure for a number of projects completed in ENR record
W_{ed} = weighted measures for a number of diverse projects undertaken
W_{renr} = weighted measure for ranking in ENR

Table 3: Scale of each measurement

Weightaged Measure	Scale				
	1	**2**	**3**	**4**	**5**
W_{ym}	< 2	2 - 4	5 – 7	8 – 10	> 10
W_{cm}	< 2	2 - 4	5 – 7	8 – 10	> 10
W_{com}	< 20	21 – 40	41 – 60	61 – 80	> 80
W_{p}	< 20	21 – 40	41 – 60	61 – 80	> 80
W_{d}	< 5	5 – 7	8 – 10	11 - 15	> 15
W_{renr}	201- 250	151 – 200	101 - 150	51 – 100	1 – 50

There are many types of weighting method of the measurement and one of that is the expert weighting system. However, Du *et al*., (2014) mentioned that this method is subjective and can lead to different results because different experts have different opinions. In this study, equal weighting cannot be used because the measurement cannot be equal in weight. The six measurements to identify the foreign competitor index in Malaysia have a different measurement scale and importance level.

Table 4: Six measurements with details of foreign competitors in Malaysia

No	Company	Year in M'sia	Consecutive year in M'sia	Country outside M'sia (ENR)	No. of project (ENR)	Diversity of project (ENR)	Ranking in ENR
1	Balfour Beatty plc	12.58	12.58	22	99	5	17
2	Bauer AG	10.50	9.75	35	97	8	100
3	Bechtel	2.58	2.58	28	100	2	3
4	Beijing Construction Eng'g Group Co. Ltd.	5.08	5.00	19	100	4	133
5	China National Machinery Industry Corp.	3.50	3.50	37	99	6	25
6	Chiyoda Corp.	3.67	3.67	9	97	1	65
7	CTCI Corp.	2.00	2.00	9	100	5	109
8	Daewoo E&C Co. Ltd.	5.00	5.00	14	100	4	40
9	Foster Wheeler AG	1.50	1.50	65	98	2	44
10	Hyundai Engineering & Construction Co. Ltd.	0.67	0.67	34	99	5	15
11	International Co. of Yanjian Group Co. Ltd.	2.00	2.00	15	100	5	216
12	Ircon International Ltd.	4.00	4.00	7	98	2	158
13	Jacobs	1.58	1.58	45	98	5	55
14	JGC Corp.	3.75	3.50	13	100	1	32
15	Kajima Corp.	1.50	1.50	16	100	6	50
16	KBR	3.50	3.50	41	98	5	29
17	Kinden Corp.	0.58	0.58	15	100	8	178
18	Leighton Holdings Ltd.	1.17	1.17	18	71	6	31
1	Lend Lease Group	1.75	1.75	15	100	5	33

No	Company						
920	Lotte Engineering & Construction Co. Ltd.	1.92	1.92	7	100	4	187
21	McConnell Dowell Corp. Ltd.	0.83	0.83	12	80	5	105
22	Nishimatsu Construction Co. Ltd.	12.83	10.83	6	85	6	166
23	Obayashi Corp.	11.67	9.08	13	100	6	47
24	Penta-Ocean Construction Co. Ltd.	0.67	0.67	6	99	6	80
25	Petrofac Ltd.	1.08	1.08	11	100	1	18
26	Salini SpA	3.42	3.42	31	99	5	27
27	Samsung Engineering Co. Ltd.	7.08	1.83	19	100	4	13
28	Shimizu Corp.	14.08	14.08	15	99	6	67
29	Sinohydro Group Ltd.	7.75	7.75	49	97	4	20
30	Ssangyong Engineering & Construction Co. Ltd.	4.83	2.25	8	100	3	132
31	Sumitomo Mitsui Construction Co. Ltd.	8.33	4.42	8	99	5	156
32	Taikisha Ltd.	12.17	7.00	20	100	2	75
33	Taisei Corp.	9.75	4.00	17	72	5	76
34	Takenaka Corp.	14.58	14.58	22	97	3	70
35	Technip	2.50	2.50	60	100	2	11
36	Toyo Engineering Corp.	1.17	1.17	16	100	2	57
37	Toyo-Thai Corp. Public Co. Ltd.	1.92	1.92	3	38	2	233
38	VINCI	4.25	3.58	97	91	7	4

Analysis and Discussions

Measurement of FCII Score: Measurements of FCII score for each foreign company as shown in Table 5. The example of calculating the FCII score for Balfour Beatty PLC as below:

FCII score = $6W_{ym} + 2W_{cm} + 4W_{com} + 3W_p + 2W_d + 3W_{renr}$
  = 6(5) + 2(5) + 4(2) + 3(5) + 2(2) + 3(5)
  = 82

Table 5: Measurement of FCKII score

No	Company	Weightage of Measurement						FKCII score
		Wym	Wcm	Wcom	Wp	Wd	Wrenr	
1	Balfour Beatty plc	5	5	2	5	2	5	82
2	Bauer AG	5	4	2	5	3	2	73
3	Bechtel	2	2	2	5	1	5	56
4	Beijing Construction Eng'g Group Co. Ltd.	3	3	1	5	1	3	54
5	China National Machinery Industry Corp.	2	2	2	5	2	5	58
6	Chiyoda Corp.	2	2	1	5	1	2	43
7	CTCI Corp.	2	2	1	5	2	3	48
8	Daewoo E&C Co. Ltd.	3	3	1	5	1	5	60
9	Foster Wheeler AG	1	1	4	5	1	5	56
10	Hyundai Engineering & Construction Co. Ltd.	1	1	2	5	2	5	50
11	International Co. of Yanjian Group Co. Ltd.	1	2	1	5	2	1	36
12	Ircon International Ltd.	2	2	1	5	1	2	43
13	Jacobs	1	1	3	5	2	2	45

14	JGC Corp.	2	2	1	5	1	5	52
15	Kajima Corp.	1	1	1	5	2	5	46
16	KBR	2	2	3	5	2	5	62
17	Kinden Corp.	1	1	1	5	3	2	39
18	Leighton Holdings Ltd.	1	1	1	4	2	5	43
19	Lend Lease Group	1	1	1	5	2	5	46
20	Lotte Engineering & Construction Co. Ltd.	1	1	1	5	1	2	35
21	McConnell Dowell Corp. Ltd.	1	1	1	4	2	3	37
22	Nishimatsu Construction Co. Ltd.	5	5	1	5	2	2	69
23	Obayashi Corp.	5	4	1	5	2	5	76
24	Penta-Ocean Construction Co. Ltd.	1	1	1	5	2	4	43
25	Petrofac Ltd.	1	1	1	5	1	5	44
26	Salini SpA	2	2	2	5	2	5	58
27	Samsung Engineering Co. Ltd.	3	1	1	5	1	5	56
28	Shimizu Corp.	5	5	1	5	2	4	75
29	Sinohydro Group Ltd.	3	3	3	5	1	5	68
30	Ssangyong Engineering & Construction Co. Ltd.	2	2	1	5	1	3	46
31	Sumitomo Mitsui Construction Co. Ltd.	4	2	1	5	2	2	57
32	Taikisha Ltd.	5	3	1	5	1	4	69
33	Taisei Corp.	4	2	1	4	2	4	60
34	Takenaka Corp.	5	5	2	5	1	4	77
35	Technip	2	2	3	5	1	5	60
36	Toyo Engineering Corp.	1	1	1	5	1	4	41
37	Toyo-Thai Corp. Public Co. Ltd.	1	1	1	2	1	1	23
38	VINCI	2	2	5	5	2	5	70
Mean		2.39	2.16	1.58	4.84	1.61	3.79	Average
Weighted Mean		14.34	4.32	6.32	14.52	3.22	11.37	54.11
Standard Deviation		1.50	1.29	0.98	0.55	0.59	1.38	

Year of Experience in Malaysia: Years of experience by foreign contractors in Malaysia are calculated starting from their year of establishment in Malaysia by year 2013. In Figure 4, most of foreign contractors working in Malaysia have less than 2 years of experience with 14 contractors, followed by 2 to 4 years of experience with 11 contractors, more than 10 years with 7 contractors, average 5 to 7 years of experience with 4 contractors and from 8 to 10 years of experience with 2 contractors. It shows that many of the contractors still new working in Malaysia but there are also foreign contractors that have long experience in Malaysia.

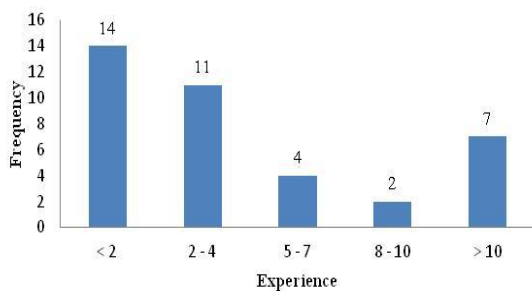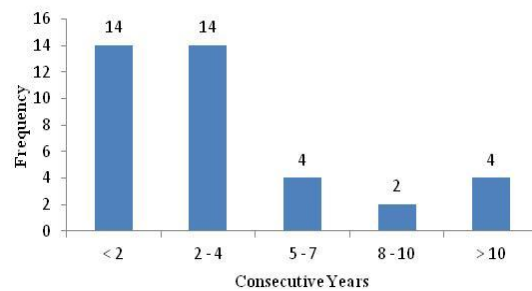**Figure 4: Years of experience foreign contractors in Malaysia**

Figure 5: Years of consecutive year by foreign contractors in Malaysia

Consecutive Years: Consecutive years of the company depend on their continuing in gathering the projects. In Malaysia, foreign contractors are registered by projects. Once they have completed the project, they have to go back to their home country. From Figure 5, most of foreign contractors have consecutive years less than 2 years and also 2 to 4 years with 14 companies each. Then 4 companies have 5 to 7 consecutive years and more than 10 years while 2 companies have 8 to 10 consecutive years. Not so many foreign contractors that can continue getting projects in Malaysia because of the term and regulation for foreign company registration or by project based.

Country outside Malaysia: In ENR data, the operating country of each international contractor can be list down by looking at where they worked with country. In Figure 6, the most preferred working country of foreign contractors is Asia/Australia with 297 projects, the second highest is Europe with 182 projects and third highest is Middle East with 136 projects. Other country are Central and Southern Africa with 96

projects, Latin America with 64 projects, North Africa with 62 projects, North America with 39 projects, Caribbean Islands with 11 projects and Antarctic/Arctic with one project.

Figure 6: Working countries of foreign contractors outside Malaysia with projects in ENR
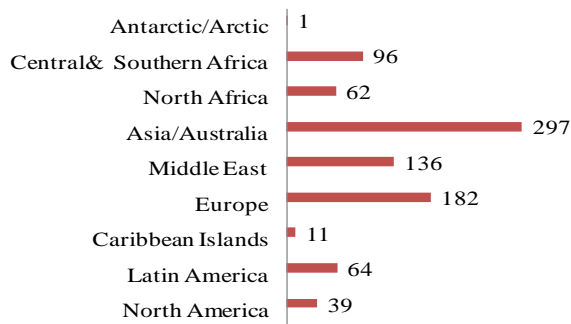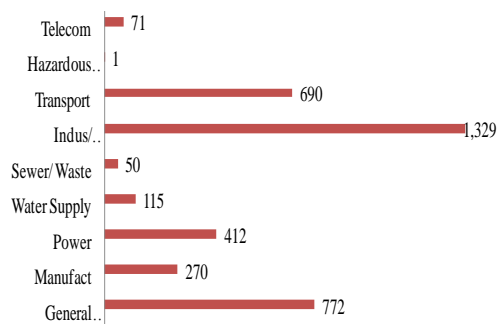

(Source: ENR, 2013)

Foreign companies that venture in the Malaysian construction market also working in other Asian country. These show local contractors have to strong their competitive advantage to compete with these foreign contractors. In the future, they will focus working in Asian countries for example, in Malaysia because in developing countries, development of the countries is demanding. The need to build infrastructure and basic facilities such as houses, schools, roads and hospitals will demand the construction works and more opportunity to contractors (Majid *et al.*, 2004).
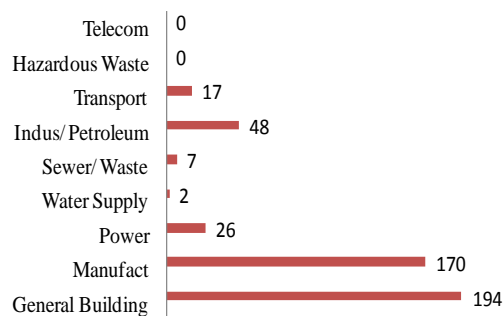
Number of projects with type of projects
In Figure 7, industrial process/ petroleum have the highest number of projects with 1329 projects, followed by general building with 772 projects and transportation with 690 projects. Another type of projects such as power with 412 projects, manufacturing with 270 projects, water supply with 115 projects, telecommunications with 71 projects, sewer/ solid waste with 50 projects and hazardous waste with one project.

Figure 7: Number of projects by foreign contractors in Malaysia (1996-2013)

Figure 8: Number of projects by foreign contractors in ENR

(Source: ENR, 2013)

(Source: CIDB, 2013)

In Figure 8, the highest number of projects by foreign contractors is general building with 194 projects, manufacturing with 170 projects, industrial process/ petroleum with 48 projects, power with 26 projects, transportation with 17 projects, sewer/ solid waste with 7 projects and water supply with 2 projects. However, none of foreign companies have projects in telecommunication and hazardous waste. Local contractors that have a core business in industrial process/ petroleum, transportation and power have to strongest their expertise to compete with foreign contractors because they might have projects in those types of work based on their achievement bidding projects in international market as in Figure 7.

Diversity of projects: The highest number of diversity of projects by foreign contractors is 5 diversity by 11 contractors, followed by 2 and 6 diversity by seven contractors each, 4 diversity by five contractors, 1

and 3 diversity by three contractors each, 8 diversity by two contractors, 7 diversity by one contractor and none of foreign contractors have 9 diversity of projects as shown in Figure 9.

Figure 9: Number of diversity of projects by foreign contractors in ENR
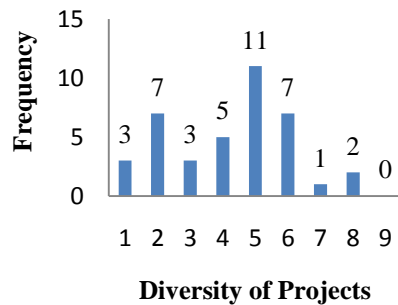
Figure 10: Number of diversity of projects by foreign contractors in Malaysia (1996-2013)

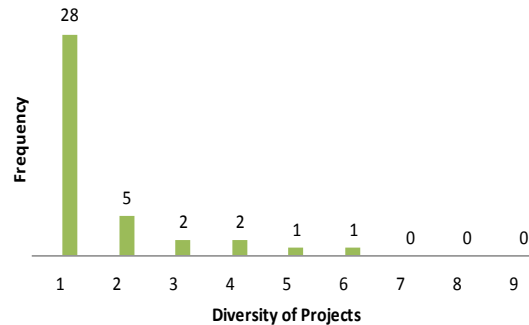*(Source: ENR, 2013)*

(Source: CIDB, 2013)

It is different with the diversity of projects by foreign contractors in Malaysia as shown in Figure 10 above with the highest number is one diversity by 28 contractors, followed by 2 diversity by five contractors, 3 and 4 diversity by two contractors each, 5 and 6 diversity by one contractor each. None of the contractors have 7, 8 or 9 diversity of projects in Malaysia. In future, they might increase their diversity of projects in Malaysia and local contractor may be able to merge with other local contractors to increase their diversity of projects or add their core business. High competition in same diversity of projects will push contractor to discover other potential market (Ye et al., 2014). This decision can help local contractors to compete with the foreign contractors.

Contractors ranking: In Table 6, the company is listed according to their ranking and also stated their origin country. The top company in the ranking is the Balfour Beatty PLC, which in ENR 2013, the core business of the company is general building, 48 projects, transport 32 projects, telecommunications 12 projects, power 4 projects and sewer/waste is 3 projects. But in Malaysia, the company only works in transportation with 5 mega projects in Malaysia. It can give high competition with the local that has core business in transportation. Balfour Beatty PLC also might have another type of projects in Malaysia in the future.

Table 6: Foreign contractors ranking in FCKII

Ranking	Company	Origin
1	Balfour Beatty plc	London, U.K.
2	Obayashi Corp.	Tokyo, Japan
3	Takenaka Corp.	Osaka, Japan
4	Shimizu Corp.	Tokyo, Japan
5	Bauer AG	Schrobenhausen, Germany
6	VINCI	Rueil-Malmaison, France
7	Sinohydro Group Ltd.	Beijing, China
8	Taikisha Ltd.	Tokyo, Japan
9	Nishimatsu Construction Co. Ltd.	Tokyo, Japan
10	KBR	Houston, Texas, U.S.A
11	Daewoo E&C Co. Ltd.	Seoul, S. Korea
12	Technip	Paris, France
13	China National Machinery Industry Corp.	Beijing, China
14	Salini SpA	Rome, Italy
15	Bechtel	San Francisco, Calif., U.S.A
16	Foster Wheeler AG	Hampton, N.J., U.S.A.
17	Samsung Engineering Co. Ltd.	Seoul, S. Korea
18	Sumitomo Mitsui Construction Co. Ltd.	Tokyo, Japan

19	Taisei Corp.	Tokyo, Japan
20	Beijing Construction Eng'g Group Co. Ltd.	Beijing, China
21	JGC Corp.	Yokohama, Japan
22	Hyundai Engineering & Construction Co. Ltd.	Seoul, S. Korea
23	CTCI Corp.	Taipei, Taiwan
24	Lend Lease Group	Millers Point, New South Wales, Australia
25	Kajima Corp.	Tokyo, Japan
26	Ssangyong Engineering & Construction Co. Ltd.	Seoul, S. Korea
27	Petrofac Ltd.	Jersey, Channel Islands, U.K.
28	Penta-Ocean Construction Co. Ltd.	Tokyo, Japan
29	Jacobs	Pasadena, Calif., U.S.A.
30	Ircon International Ltd.	New Delhi, Delhi, India
31	Chiyoda Corp.	Yokohama, Kanagawa Pref., Japan
32	Toyo Engineering Corp.	Chiba, Japan
33	Leighton Holdings Ltd.	St. Leonards, New South Wales, Australia
34	Kinden Corp.	Tokyo, Japan
35	International Co. of Yanjian Group Co. Ltd.	Yantai City, China
36	Lotte Engineering & Construction Co. Ltd.	Seoul, S. Korea
37	McConnell Dowell Corp. Ltd.	Hawthorn, Victoria, Australia
38	Toyo-Thai Corp. Public Co. Ltd.	Bangkok, Thailand

4. Conclusion and Recommendations

This study will help local contractors to know who their foreign competitors in the Malaysian construction industry are. Although in Malaysia the foreign company just working in one or two types of works than their core of business, they might grab the chance in the future to have more diversity of projects. Local contractors must strengthen their competitive advantage and know their competitors' diversity of projects so that they can have the chance to bid more projects in the domestic market. With the upcoming liberalization and globalization, the local contractors will be more prepared and can be secure in their own country. In the future research, foreign contractors who are working with other Asian countries, in Far East countries and also outside the Far East also should be identified. This is because those contractors might work in Malaysia in the future when the Malaysian government sign up that free trade market agreement.

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International Emigrants as Co-Developers in Their Hometown (A Case Study: South of Iran, Larestan Region)

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Abstract: Based on a theoretical approach in which many specialists and politicians are concerned about negative effects on the origin and destination because of the international migration growth rate, there are other theorists which concentrate on the positive effects of this issue on the origins and destinations of migrations' corridor. In the early of twenty first century, this perspective has focused on remittance and its positive role in the origins. This paper represents the net effects of migration and remittance on the development of migrants' birthplace. Since the mid-twentieth century, many people in south of Iran, particularly from the region of Larestan have migrated to Gulf Cooperation Council (GCC) countries. Remittance issue caused by emigrants has been considered as a key role in the development of Larestan. Available evidences show that many emigrants called co - developers, have established several public places and institutes with various functions such as education, sanitation, transportation, economy, sports, religious affairs, etc. In this research an analysis of several aspects of migrants' effects is performed by interviewing with 127 Lari people through a questionnaire using random sampling. At the end of the questionnaire, interviewees compared the developmental role of the emigrants and local government. Generally this study will conclude that international migration has an important role in hometown development.

Keywords: *International migration, remittance, co-developmental migrant, Larestan, Iran*

1. Introduction: Migration and Remittance (concepts and statistics)

The world is on the move: more than 232 million people are counted as migrants.(Wilmoth, 2013) Migration has become an important socioeconomic factor in almost all countries of the world. Some socialists have known migration, especially international migration to be the main concern of social researchers since the beginning of the 21st century in a way that this issue has produced important and radical challenges among international statesman and scholars (Maloney & Korinek, 2011, p. 1). In 1988, United Nations proclaimed as soon as the length of an individual's stay in another country exceeds one year, that person is called an international emigrant instead of international visitor(Kritz, 2007, p. 3019). Among these migrants, we are interested in migrants who moved for economic reasons. Economic migration has traditionally been explained as a result of cost/benefit analysis in which the main element is the earning differential between the countries of origin and destination (Naiditch & Vranceanu, 2010). At the beginning of the 21st century, attitudes towards the significance of migration phenomenon and its efficient role in the development of less-developed communities underwent a remarkable revolution. The key basis of this attitude is the discussion about remittances moving in the opposite direction of migrations. Remittances are allowances and goods sent by internal or international emigrants to their families and communities in their hometowns(Blackwell, 2011). The main remittance corridors also represent emigrants' capital returns (or North-South remittance flows) very well. In all these corridors, the sender is a rich developed country and the receiver is a developing country.

World Bank shows that most of the remittance-receiving countriesare undeveloped or developing countries. Based on W.B statistics, Tajikistan, Tonga, Lesotho, Moldova, Nepal, Lebanon, Samoa, Honduras, Guyana, and El Salvadorare the first 10 remittance-receiving countries (percent of GDP)(World bank, 2011). In this list, all the first 10 countries are seen among the undeveloped countries. In addition, the first 10 remittance-sending countries are United States, Saudi Arabia, Switzerland, Russian Federation, Germany, Italy, Spain, Luxembourg, Kuwait, and Netherlands. According to the statistics, these countries are known as the richest or the most developed countries in the world.Therefore, the main remittance flows occur from the rich and developed countries. The remittance of money and goods by migrants to their communities of origin can have important impacts on the distribution of household income and welfare (Barham & Boucher, 1998, pp. 307-308). This is specially the case in the developing economics, where household earnings are low, inequalities is often pervasive, and domestic or international migration of family members can provide a major source of income through the remittance of wage earning (Ibid). However there are some more challenges involved: first, remittance costs are high. These costs of 6-20 of the remitted sum (depending on the amount)should be reduced by

supporting and promoting alternative banking structures. Second, most of remittances go directly in to consumption, only something private housing is financed, but seldom, the money is invested(Heilmann, 2006).

Nonetheless recent evidence reveals the significant economic potential of remittances that are invested in original community. In particular, migrants' remittances may finance investment in the country of origin in the form of land and housing aquision, financial assets and microenterprises(Osili, 2007, p. 447). Likewise migrants who are members of 'hometown association' are likely to be interested in environmental problems of their region and are therefore potential partners in this process. In fact they already contribute to development projects with donations as the case of hometown shows(Heilmann, 2006). Patrick Gonindeclaresmany of migrant-sending regions such as Mexico, Kerala, Morocco and Senegal River Valley, a dynamic development of migrants has been observed. Hundreds of projects have been launched, thanks to the savings of a few, the support of diverse organizations, and the will of those who have migrated. These projects include purchase groups, dispensaries, maternity clinics, village pharmacies, schools, electrification, hydraulic and domestic systems, kitchen gardens, and irrigated areas(Gonin, 2010, p. 174).

Gonin suggests three stages that separate migrants and their remittances from the migrant who has become a development entrepreneur in his country of origin. The first stage would be that of the acceptance of the economic, social, cultural, and political changes by the concerned societies, which was introduced by their mobility and circulation. The second stage calls for the multiplication of exchanges between the different poles of the migratory field. Holiday stays of the migrants and the movement of families and relatives in the opposite direction contribute to the establishment of such a dynamic migratory field. When the bonds between the countries of origin and destination are strengthened, collective investment for the country of departure may be envisioned. At the third stage we observe developmental projects created by the households. (Ibid) It would be able to figure a model which shows us the influence of international migration on living and work at departure countries. This issue take places in four stages as shown is following model:

Figure1: Migration and home town development
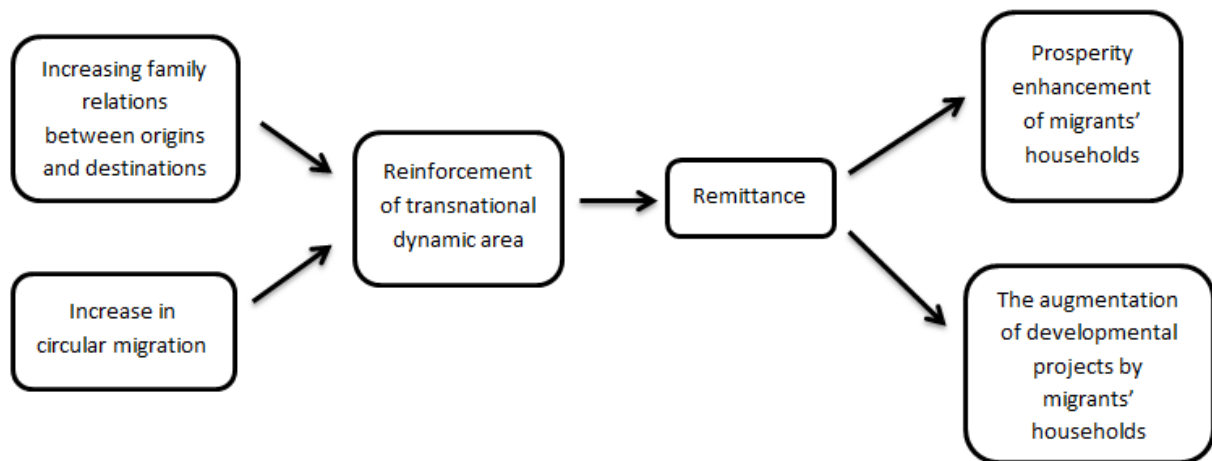
2. Research aim and methodology

We attempt to re-establish the link between a part of the Iranian empirical reality and the broader migration and development debate. It aims at analyzing the impact of international labor migrations on social and economic developments in one particular migrant-sending region located in Southern Iran: Larestan region. Because of the importance of remittance and its role on the regional development and also lack of access to relevant data, we had to use both qualitative and quantitative methods. Thus, a mixed method is the relevant path to achieve our aim. First, we used qualitative method (in-depth interviews) and second, a quantitative method (questionnaire).

Due to lack of clear official statistics about remittance inflow from GCC countries, and also unclear information about several activities which done by emigrants in Larestan we had to search for the number of Iranian immigrants in GCC countries, while knowing their income ranges and public and

altruistic activities. In this respect we had several in-depth interviews with migrants, their families and also their representatives in their hometown. Our main aim was to assess how migrants participate in the development of their hometowns. Consideringa subjective understanding, a household survey was conducted among 127 households. Household is defined as a group of people, who live under the same roof and normally eat together. Through this questionnaire, we studied public perspective about the roles of migrants in several aspects of the region. The survey took place in Lar district with a more homogeneous and literate population.

Iran: migration and remittance: Iran with a population of 78 million people is the 17th most populated country of the world and the 18th largest country of the world based on area. According to Iran's geographic position, the IOM has reported this country plays a role as the origin, transit, and destination of migrants andrefugees.(IOM, 2010, p. 89) Iraq and Afghanistan as the two of the biggest countries that send refugees to other states,(UN, 2011)have large borders with Iran in the east and west. On the other hand, Turkey which providesone of the most important ways towards Europe is located in the northwest of Iran with a land border. In addition, Arabic countries as the most immigrant-receiving countries in the world locate in the southern part of Persian Gulf and are southern neighbors of Iran. The World Bank announced the number of migrants entering Iran was 2,128 million people in 2011, which is equal to 2.8% of Iran's population. In addition, 45% of these immigrants are refugees and thus this will put Iran in the 5th place for receiving refugees(World bank, 2011). On the other hand the number of migrants, who have left Iran for other countries in 2010, has been announced to be 1.295100 million people and this makes 1.7% of the whole population of this country1. Destinations of these migrants have been mostly developed and rich countries of the world, i.e. USA, Qatar, Canada, Kuwait, Germany, Israel, England, Sweden and UAE.

Estimatingthe numberof Iranian immigrantsin theGCC countries: Today's migrants from the Iranian coastal region are predominantly men who leave their families behind and commute between their home villages and their workplaces. The decision to stay long-term or for several years only develops when the migrants have sampled various jobs and can then evaluate the effect of their absence on their homes. The migrants frame their perception of everyday life in the Arab countries within the dichotomy between host country and home village. They view the Arab countries as modern and wealthy, but without natural space. In contrast, they see the coastal villages in Iran as undeveloped and poor, but rich in nature. Despite the modernity and wealth of the Arab cities, the migrants' lives are usually confined to narrow living quarters, hard work, and limited leisure time. What leisure time they do have they spend almost exclusively with their Iranian room or flat mates(Nadjmabadi, 2010). Lack of obvious official figures of Iranian migrants was our major problem in this study.Although wefound the numberofinstitutions, including Ministry ofForeignAffairs and High Council ofIranian Affairs abroad, no significant results were obtained. Nevertheless, considering several references, we were able to estimate that approximately 520,000 Iranians arein Kuwait, Bahrain, Qatar and UAE as merchants, shopkeepers, and labors.

According to the representatives of Iranian labors in Kuwait and UAE, more than 80 percent of the immigrants are from south of Iran. Thus,our estimation shows a number of 416,000 immigrants from the southern part of the country. Evidence suggests that before the oil era causing widespread changes in GCC countries, traditional economy has been founded by Iranian migrants from the south. For instance. Mohammad BagherVosoughi claims traditional market in Dubai has been established by the people of Larestan, Evaz and Bastak(Vosooghi, 2010). Merchants'shattered economic conditions led to vast emigrations of the southern strip of Iran from south-west to south-east. This process intensified to such an extent that the Iranian government assigned a team to investigate the cause of this issue.

Remittances and incomes of emigrant's' households: According to statements from some cognizant people of Larestan, annual range of Iranians income in GCC countriesvariesfrom 8000 USD to 26000 USD.Incomes differ by occupations relatively. Shop workers, business partners, partners of capital and shopkeepers earn different incomes or wages. It is useful to compare this range of incomes with the Iranian current average. Center of Iranian Statistics has estimated the average incomes of urban and rural areas in 2012.Due to the results of this analysis, average income of urban householdswas5075 USD and

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1 But state statistics show different data. For instance, the National Organization for Civil Registration announced Iranian migrants in some countries as follows: USA: 1,400,000; UAE:800,000; Britain and Canada: 410,000; Germany: 210,000; France: 155,000; Sweden: 110,000. Accordingly, we can estimate 4million Iranian migrants in the world(Isna, 2012)

average income of rural householdswas 3040 USDin 2012. Accordingly, the lowest income of emigrants' households is more than estimated rural and urban average incomes. It would be notableto know that most of the migrants' families live in rural regions. So,incomes of these families are at least 2 times ofthose ofIranian rural families. Economists of Iran's Central Bank said that Iranian currency has been decreased in value since The Islamic Revolution in 1979. Accordingly at the time of the revolution,every dollar valued 70 Rials, and it is equal to 33000 Rials now in 2014. Thus, Iranian national currency value has been reduced about 470 times. In addition, considering currency stability of the GCC countries, the devaluation of Iranian currencyledmigrants' households to become wealthier. Therefore, in the deprived areas of southern Iran, we see some modern villages and cities accommodating families with high standard of living.

Emigrants and their roles in the development of Larestan from public viewpoint: Our observations in Larestan haveproved the model in figure1. Inour survey, which took place in Lar (center of Larestan), we realized that 86% of the respondents have close relatives in some of GCC countries. In addition, 30% of the respondents have traveled to these countries. These cases show us a high movement of Lari people to Arabic countries,which leads to uprising of the remittances to the northern regions of Iran and enhancing welfare of migrants' householdsover the average incomes of Iranian families (noted above). Considering thesefeatures and the model, we can also analyze this behavior of migrants' households as a co-development. We have investigated some aspects of the social communion. Emigrants have played some roles in different fields in the development of their hometowns. Accordingly, since there was no particular and classified data accessible from the areas of their cooperation, we decided to first gather information by conducting "in-depth interviews" with them. Finally, their functions were divided into five areas:

• Field of education including construction of schools, nurseries, kindergartens, universities, and higher education centers

• Field of sanitation including construction of hospitals, healthcare centers, maternity clinics, emergency centers, and provision of treatment equipment

• Field of transportation including construction of passenger terminals and airport

• Field of economy including the role of emigrants to Arab countries in the growth of markets and urban economic transactions, and establishment of factories, workshops, and manufacturing companies

• Social field including a wide scope of sports, religion, support of susceptible social classes, support of social associations

• Field of sports (construction of sports clubs and complexes, and formation of gyms and sports teams)

• Field of religion (contribution to holding religious ceremonies, construction of mosques, Hosseiniehs, holy shrines of Imams' offspring, and Islamic seminaries)

  • Supporting susceptible social classes (poor people, handicapped persons, orphans, the elderly and special patients)
  • Supporting social associations (including cultural and religious institutes, and public-based formations)

In the following, we got people's viewpoints about these widespread fields of cooperation through a survey (questionnaire) and polled their strong and weak points on Likert Scale.

Field of sports and the role of emigrants: In this field, people's opinions were polled based on two components: the role of emigrants in the construction of sports places and formation of sports teams. People's responses were as follows:

Figure2: The role of emigrants in the field of sports
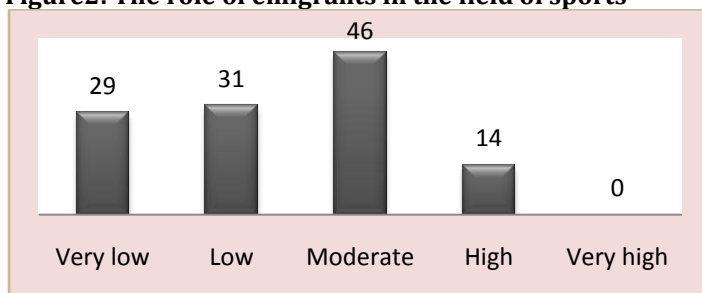
Source: Respondents' views

It seems that people consider emigrants' roles in the field of sports to be average to low degree. 50% of people regard the role of emigrants to be lower than average level. Therefore, the score given to them in the field of sports was 2.38.

The role of emigrants in the field of education: In this field, 3 components are involved: construction of nurseries, kindergartens, schools, universities, higher education institutes, and libraries. People's responses in this field are shown in the following figure:

Figure 3: The role of emigrants in the field of education
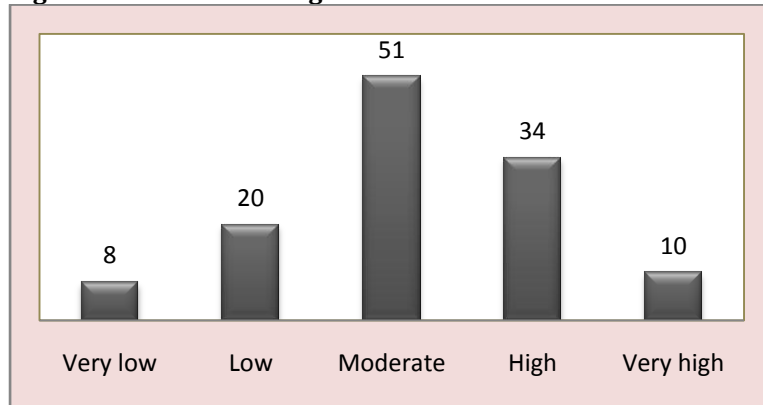
Source: Respondents' views

As the secondary analysis statistics indicated, people had a positive attitude towards the activities and roles of emigrants to Arab countries in the field of education. Average of people's viewpoints in this field was 3.15, i.e. higher than average.

The role of emigrants in the field of religion: This section includes the 2 fields of constructing religious places and conducting religious ceremonies. Results of polling are as follows:

Figure 4: The role of emigrants in the field of religion
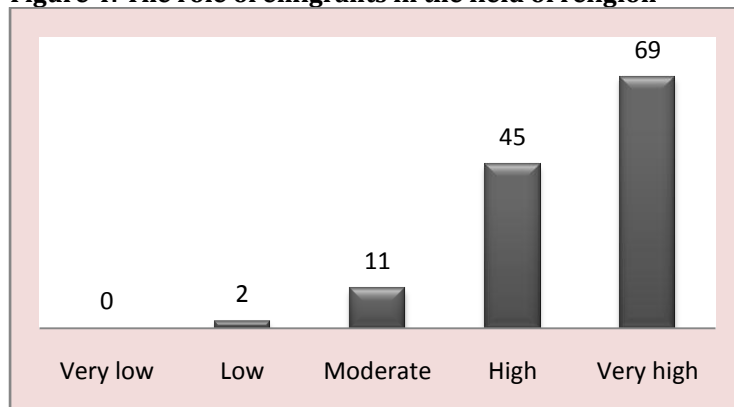
Source: Respondents' views

Perhaps, it can be said that the field in which most activities of emigrants has been done is religious affairs. People also maintained the same opinion and almost 90% of the respondents chose higher than the average choices, which is a considerable number. Moreover, average of their responses demonstrated a remarkable number of 4.43. Accordingly, Emily Wells also considered one of the methods of charities conducted by emigrants who wished to promote their social status and positions in Lar to be through contributing to religious and traditional activities such as holding ceremonies in which people spend nights awake on particular occasions, religious festivals, and various other occasions (Wells, 1983)

[4] Emily Wells was an American lady present at Lar as an English teacher who used to teach English between 1969 and 1971. People from Lar knew her under the name of Mack. She is a teacher at Howard University now.

The role of emigrants in the field of sanitation: People's viewpoints were indicative of their agreement with emigrants' functions. Only 17% of respondents believed in choices lower than the average and 65% of them selected average to high choices. Also, average of responses in this field displayed a number of 3.82, which is close to a high degree.

Figure 5: The role of emigrants in the field of sanitation
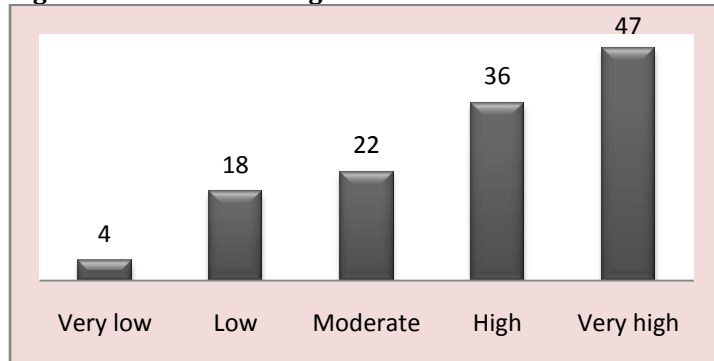
Source: Respondents' views

The role of emigrants on social grounds: With regard to the statistics and talks with the cognizant of the city affairs and emigrants, social field was considered to be consisted of 4 components: contribution to holding religious ceremonies, support of public-based institutes, societies, and formations, support of susceptible social classes, formation of sports clubs and teams. Almost half of the respondents selected choices higher than the average and thus they maintained a positive attitude towards emigrants' social activities. Besides, average of people's responses showed a score of 3.39. Therefore, we can identify emigrants to Arab countries as decision makers and the determinant and influential class in Lar community. Nevertheless, this fact demands for further professional and widespread researches.

Figure 6: The role of emigrants on social grounds
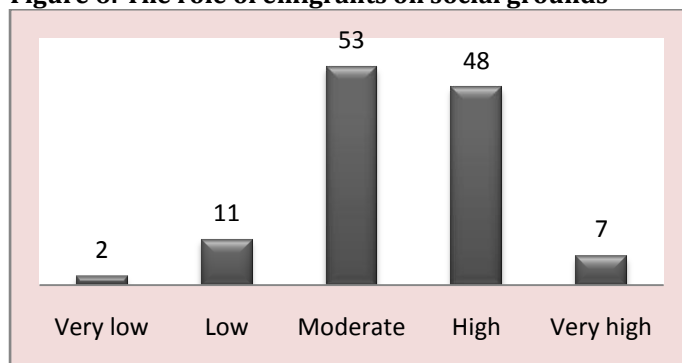
Source: Respondents' views

Field of economy: Two components were considered in this field: one is investment in the establishment of factories and manufacturing companies and the other is emigrants' roles in the growth of markets. Results indicated almost 80% of people selected choices of average and higher. Moreover, average of people's viewpoints was 3.2, which shows people's approximate agreement in this field. However, it is worthwhile to assess both components utilized in this field. It can be seen that there are two completely different attitudes to these two components. On the one hand, nearly 80% of respondents expressed an average to high perspective in the growth of market by emigrants and on the other hand, almost 90% of them showed their average to low attitudes in the field of emigrants' roles in the establishment of manufacturing companies. In sum, a relatively positive attitude was noticed in both fields.

Figure 7: The role of emigrants in the growth of market
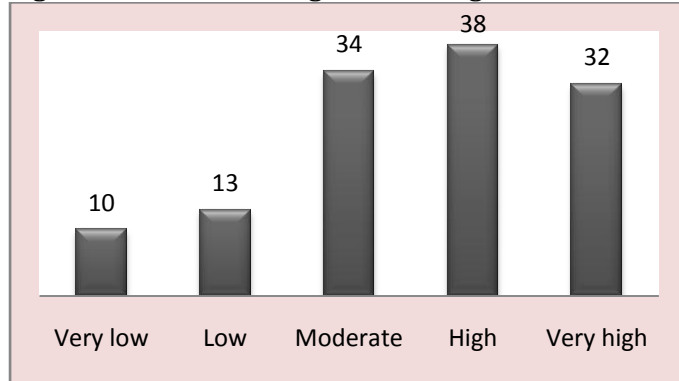
Source: Respondents' views

Figure 8: The role of emigrants in the development of manufacturing companies and factories
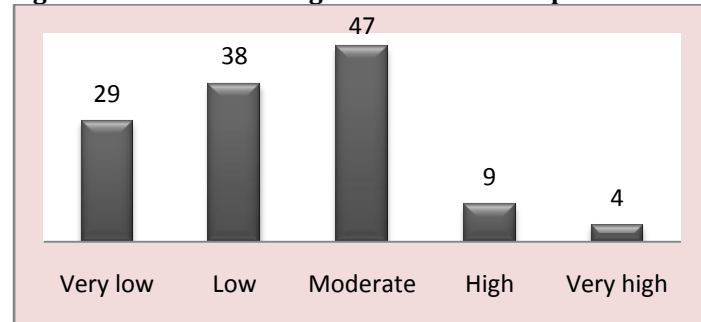
Source: Respondents' views

This orientation is also evident in the study of several attitudes towards emigrants from Larestan. In her demographic analysis in the field of investment conditions and increase of emigrants from Lar, Emily Wells states: "the Lar region bears some resemblances to other labor exporting areas. Larestan has become increasingly less productive in the agricultural and craft sectors of the economy, and more dependent on cash remittances. Goods for household consumption are no longer produced locally. Between 1956 and 1966 the percentage of men engaged in agriculture in Larestan declined from 57% to 38%. The decline in traditional agriculture and industries is not necessarily negative, but it does reflect declining employment opportunities in Lar. However much Laris may want to stay home, there is little work" (Wells, 1983). Moridi as one of Lari sociologists also claims regional investors still have not played an efficient role in the field of industry although they have proved themselves to be benefactors of such public services as constructing airport, mosques, schools, and roads (Moridi, 2012)He suggests formation of hometown associations to remove this difficulty.

Field of transportation: This field which includes construction of passenger terminals and airport has also attracted almost average (2.74) of people's attitudes. Of course, nearly 76% of respondents maintained an average to low viewpoint.

Figure 9: The role of emigrants in the field of transportation
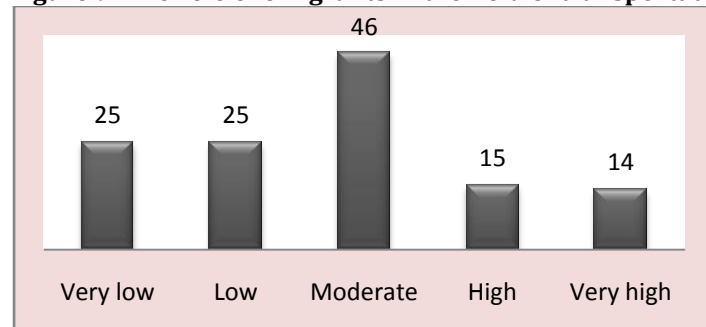
Source: Respondents' views

Developmental role of government and emigrants: Generally, two issues occupied the author's mind: people's attitudes towards the role of government and that of emigrants in the development of their hometowns. Notable results were obtained on this ground. 74% of the respondents evaluated the role of government in the development of Lar City to be low and only 7% of them considered governmental activities in this field as successful. Finally, half of the respondents believed emigrants to Arab countries have played a significant role in the development of their city. Yet, 22.8% of the respondents expressed their role to be weak in this development. This result also demands contemplation on how they think about the role of government in the development of their city. With regard to table 1, it is clear that those who see emigrants' role in the development of Lar City also reflect a very negative attitude towards the role of government in this field. Thus, their viewpoints about emigrants are not influenced by their eagerness for the role of government, but because they generally see Lar as an undeveloped city.

Table 1: The role of emigrants in development of Lar

The role of migrant in development	The role of government in development					
	Very low	Low	Moderate	High	Very high	sum
Very low	4	3	0	0	0	7
Low	9	7	5	1	0	22
Moderate	8	14	14	4	0	40
High	11	17	2	0	0	30
Very high	14	7	4	1	2	28
sum	46	48	25	6	2	127

Source: Respondents' views

Table 2 also displays that people would give a score of 3.39 (higher than average) to emigrants in the development of their City and a low score of 1.98 to the government, i.e. a choice between low to very low. Therefore, people maintain a very negative attitude towards the role of their government and its low working in their hometown.

Figure 10: The role of emigrants in development of Lar
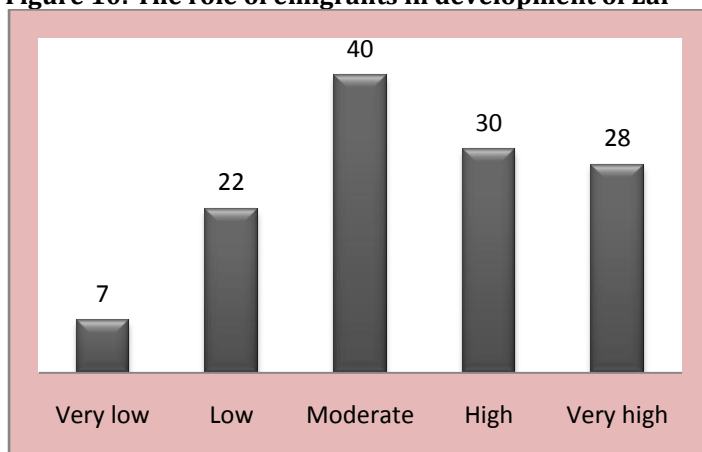
Source: Respondents' views

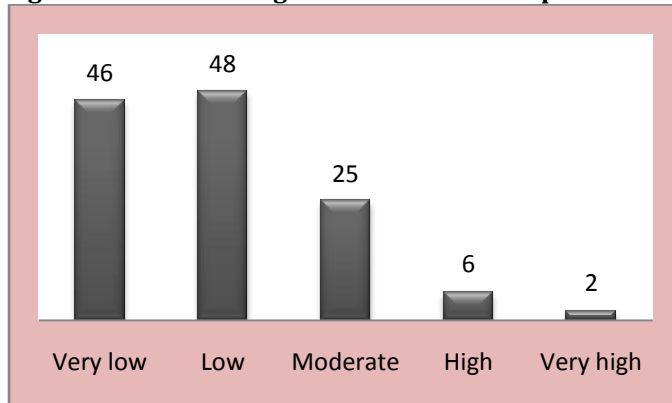**Figure 11: The role of government in development of Lar**

Source: Respondents' views

Table 2: Role of government and emigrants in development

	average	Standard deviation
Role of government	1.98	0.947
Role of emigrants	3.39	1.169

Source: Respondents' views

3. Conclusion

This study tries to show that a migrant can have positive effects on the development of migrant sending regions. His impacts might be as follows: first, those who migrate to Arab countries in hope of finding a more suitable job and income provide a considerable raise of their family's earnings by sending them remittances in such a way that at least their annual income goes higher than the average urban and rural annual incomes in Iran. This way, families of these emigrants would lead a suitable life. Interviewees confirm the fact that the whole markets of southern areas of Iran have been developed by the families of these emigrants. Second, by migrating to affluent Arab countries and observing their developments and understanding shortages and drawbacks of their hometown, emigrants would feel a concern for the development of their own hometown. Therefore, those who attain to a remarkable wealth and support their families spend part of their incomes for public-based activities in their hometown and thus they are known as contributors to the development of their hometown. Accordingly, Larestan region can be considered as a valuable model on the basis of bottom-to-top development. In conclusion, it is worthwhile to point out a deep concern was posed by the cognizant of the city during in-depth talks with them. They complain the governors of Arab countries have restricted the project of Iranian workforce attraction to a high degree and this has led to a conspicuous reduction of Iranian workforce and a problematic condition for those employed in these countries. They claim the main reason for this matter could be recognized in the weakening of political ties between Iran and GCC countries. With regard to emigrants' developmental influences on the southern part of Iran, it seems that this issue will impose a great harm to the welfare of emigrants' families, people's lives, regional markets and generally economy in these areas.

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International Migration and IncreasingAltruistic Activities in Hometown: Evidence from Larestan Region, Iran

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Abstract: One of the issues that have been interesting for many migration and development theorists especially in the last decade is international migration and its effects on hometown development. During last decades people in southern parts of Iran, especially in rural regions of Larestan in Fars province, have had excellent movement experience. They have started migrating to GCC countries to attain a better income. Hence, migrants' households exploit these high incomes in their hometown via remittance. This paper investigates that how migration and the receipt of remittances have affected income distribution in the south based on authentic evidences. The consequence is reached by comparison between the mean income of migrants' households in rural regions and the average income of those regions' people in whole country. Furthermore, some migrants or their families who enjoy welfare and high standards of life, tend to provide help to charitable organizations. These activities are taking place by establishing charity institutes in various functions, which we will mention, some of them in this paper. In this regard, we have had semi-structured interviews with several persons who are responsible in charitable institutions. Supporting deprived people is another activity which is carried out by emigrants due to their social customs and religious beliefs. We intended to conduct in-depth interviews with some emigrants' acquaintances in Larestan to obtain information about their humanitarian aids. Results showed that international migrations and remittances significantly reduce the level, depth, and severity of poverty in rural regions of southern parts of Iran.

Key words: *International Migration, Remittance, Development, Larestan Region, Iran*

1. Introduction

The process of the globalization coincided with the open and swift flow of information and further ease of transportations and communications have led to the formation of international migration phenomena on a worldwide level. Although adoption of strict laws by different countries for issuing people's entrance and exit permissions has caused migration growth to pave a constant trend compared to the global population growth, the degree of migration significance among other social phenomena has never decreased while this phenomenon has changed into one of the most important and efficient social events worldwide. In 11 September, 2013 UN reported that the formal number of international migrants is 232 million people(Wilmoth, 2013). Thus, the imaginary country migrants occupy can be considered as the fifth most populated country in the world after China, India, America, and Indonesia. At the beginning of the 21st century, attitudes towards the significance of migration phenomenon and its efficient role in the development of less-developed communities underwent a remarkable revolution. Widespread researches raised in the field of the role of migration in the development of societies in world's different universities. The key basis of this attitude is the discussion about remittances moving in the opposite direction of migrations. Remittances are allowances and goods sent by internal or international emigrants to their families and communities in their hometowns (Ritzer, 2007). Remittances are an incentive to migrate in the first place and–given their sheer scale–can be seen as a possible source of sustainable development(Heilmann, 2006). In addition remittance differs much from other financial resources of developing countries like foreign direct investment, trade revenues or ODA.

The remittance of money and goods by migrants to their communities of origin can have important impacts on the distribution of household income and welfare (Barham & Boucher, 1998, pp. 307-308). This is specially the case in the developing economics, where household earnings are low, inequalities is often pervasive, and domestic or international migration offamily members can provide a major source of income through the remittance of wage earning (Ibid).

Figure 1: Remittances Compared with Other Resource Flows
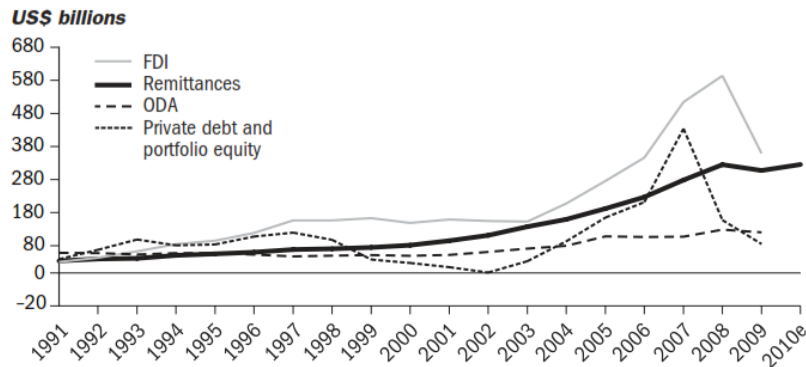
Source: (World bank, 2011)

Developmental activity: In the context of the transfer of social and human capital, remittances can foster local development, when linked with small enterprise development or microfinance(Heilmann, 2006, p. 235). Environmental projects could play a crucial role in this context, since local investment opportunities are attractive for returning migrants, but often, such projects are not available and the money is consumed or invested elsewhere (Ibid). Migrants remit to their families and communities in their country of origin for several reasons. Rapoport and Docquier (2006), drawing on an early study by Lucas and Stark (1985), list the following motives for remittances: altruism, exchange, strategic motive, insurance and investment. In general, a combination of all these motives is the driver of remittances in real life. However, it is difficult to mix several motives in the same model (Naiditch & Vranceanu, 2010).Chimhowu and others describe use of remittance and its motivationin to 4 parts as you see in a table.

Table1: Remittance Motivation and Use

Motivation	Consumption	Productive investment
Risk sharing	• Remittances help household cope with risks. • Cash receipts are used to purchase daily food and luxury consumables or to purchase locally available essential services (Health, education). • Ensures the household functions day to day (Dreze and Sen 1989).	Remittances help households manage idiosyncratic risks. • Investment in liquid assets such as livestock, agricultural implements, and new technologies help households to cope better in future (Lucas and Stark 1985).
Altruism	Goods and gifts are sent to the household to fulfill altruistic obligations to the family (Agrawal and Horowitz 2002).	• Remittances are used to expand available capital assets. • Indirect benefit to the household, but long term benefit to the wider community (Adams 1991; Martin 2001; Skeldon 2002).

Source:(Chimhowu, Piesse, & Pi, 2005)

In this paper we attempt to re-establish the link between a part of the Iranian empirical reality and the broader migration and development debate. Evidence proves that migrants have a determinant roe in their hometown. The present study investigates the effects of migration on reducing poverty in south of Iran especially through charity institutes. Iranian immigrants, who work in the Arab countries of south side of Persian Gulf, tend to send back remittance for their families and their birth place. The remittances effect on reducing poverty in two ways: direct way and indirect way. In direct way, the money is sent bank to households and families in birth place while in indirect way, emigrants allocate their money in some affairs such as entrepreneurial activity, constructing public places and also establishing charity institutes. These institutes identify poor people and help them with their education, health, marriage and so on.

South of Iran: Larestan region: According to Iran's geographic position, the IOM has reported this country plays a role as the origin, transit, and destination of migrants and refugees. (IOM, 2010, p. 89)Evidences confirm this statement. We see Iraq and Afghanistan as the two of the biggest countries that send refugees to other states, (UN, 2011) have large borders with Iran in the east and west. On the other hand, Turkey which provides one of the most important ways towards Europe is located in the northwest of Iran with a land border. In addition, Arabic countries as the most immigrant-receiving countries in the world locate in the southern part of Persian Gulf and are southern neighbors of Iran. Being neighbor with GCC wealthy countries can be an important issue which encourage people in south of Iran to migrate to this region. Currently these Arab countries are significant pole of migration and remittance in the world. Migrant density of GCC countries is 13th time of that in the world. Naturally many of Iranians have migrated to this region in order to get money. According to variety sources, around 520 thousand of Iranian are living in 4 Arab countries include UAE, Bahrain, Qatar and Kuwait.

Table 2: Number of Iranian immigrants in GCC countries

Bahrain	**Qatar**	**Kuwait**	**UAE**
56,000 (2002)	195,000 (2012)	140,000 (2010)	130,000 (2010)

Sources: *Iranian Labor Agency in UAE (2012),* (Kuwait Green Book, 2011),(Bahrain, 2002)(Qatar, 2012)

The transnational space connecting the Iranian coastal region and the Arab countries resembles other cases of "border migration." However, in the Iranian case the transnational spaces of migrants' lives have to be situated within the long historical relationships and shared culture between Iran and the Arab countries.(Nadjmabadi, 2010). Today's migrants from the Iranian coastal region are predominantly men who leave their families behind and commute between their home villages and their workplaces. The decision to stay long-term or for several years only develops when the migrants have sampled various jobs and can then evaluate the effect of their absence on their homes. The migrants frame their perception of everyday life in the Arab countries within the dichotomy between host country and home village. They view the Arab countries as modern and wealthy, but without natural space. In contrast, they see the coastal villages in Iran as undeveloped and poor, but rich in nature. Despite the modernity and wealth of the Arab cities, the migrants' lives are usually confined to narrow living quarters, hard work, and limited leisure time. What leisure time they do have they spend almost exclusively with their Iranian room or flat mates (Ibid).

The earning conditions of migrants' households: Since the Islamic Revolution of Iran together with its numerous events, the value of Iranian monetary unit, Rial, has approximately decreased 471 times. Although Iranian people's subsistence has sustained a heavy stroke caused by the related phenomena, this issue has completely played a reverse role on behalf of emigrants' families. Accordingly, the more the monetary value of the country of origin decreases, and more increase occurs to emigrants' incomes and those of their families inside the country. In an interview with Larestani people traveling to the Persian Gulf countries, it was designated that the usual range of Iranian people's earnings in Arabic countries has been between $8400 $26,300 nowadays. Moreover, such incomes vary during the year with regard to their different occupational levels and periods of stay annually. Hence, the earnings of shop boys on different levels are different from those of business and capital partners. According toLarestani emigrants toArabic countries southern people generally dedicate nearly 10% of their incomes to their routine chores in those countries and the rest is sent for their families' subsistence as remittance. Thus,the leastamount of money receivedby the emigrants' familiesin Iranis almost $7560 per year. Thesecomparisonsenable usto arrive at a much betterunderstanding and evaluation ofour surrounding phenomena.

Comparison ofthe incomes of emigrants' familieswith averageurban and ruralincomes inside the country: Here, it is useful to mentionthe overall average incomes ofall the Iranian peoplewithin cities andvillages.StatisticalCenter of Iranhas offeredstatistics ofthe incomes of urban and rural families in 2013.Accordingly,earningsofurban and rural familieshave been estimatedto be$6580 and $4190 in 2013in Iran, respectively. Now, it can be concluded that minimum incomes of emigrants' families provided through remittances in the southern parts of Iran exceed the average rural and even urban incomes inside the country.It should be noted thatminimum incomes appear on the one hand, whileaverage incomesoccur on the other hand.It was favorable to account for the average incomes of emigrants. However, we preferred to compare their minimum incomes with the average of the total

incomes of Iranians since the assessment was not easily possible and we had to evaluate various occupational groups of emigrants as well as their incomes. This way, the minimum incomes of the emigrants' families were obtained to $1000 higher than the average income of an Iranian urban family and nearly twice the average income of a rural family. It is noteworthy to know that most of the emigrants of the southern parts of Iran staying in Arabic countries include those who live within small and deprived villages and cities. Nevertheless, if we are to compare their minimum incomes with the average rural income in Iran, we arrive at a twice difference of incomes.

A difference from absolute poverty line: Based on the statistics, the absolute poverty lines have been determined $3560 and $2700 for Iranian cities and villages, respectively, in 2013 (Reporters Club, 2013). Meantime, it can be calculated that Southern emigrants' families, the most of whom live within small villages or cities, have an earnings of $4860 higher than the poverty line. This number is 1.6 times an urban family's income and 3.2 times that of a rural family in Iran. Certainly, this discernible difference has provided a better life opportunity for the emigrants' families to be able to approach standard of living or even a prosperous life.

Table3. Comparison of annual incomes of Iranian urban and rural families with those of emigrants' families of the southern part of the country

Annual income	Annual poverty line	Difference of incomes from annual poverty line
Urban residents $6580	$3560	$3020
Rural residents $4190	$2700	$1490
Emigrants' families $7560	$2700	$4860

Sources: (center, 2013)**and** (Club, 2013)

Contribution to the needy and charity affairs: the role of emigrants from Larestan: After in-depth interviews with some of the emigrants' communicators of Larestan as well as semi-structured interviews with several persons responsible in charitable institutions, we found out that most of the rich emigrants to Persian Gulf countries show a high tendency for investing in charity affairs and contributing to the deprived people. Migrants have generally dedicated their financial contributions in the form of money or food supply and other necessary items for living after identifying poor families with the help of their family members specially their wives or their own communicators at particular times. Since these contributions are conducted in widespread areas in the southern part of Iran, their numbers are predicted to be highly striking. However, because contributions are not recorded formally and legally and most of them are done anonymously, no statistics in this field could be reckoned.

On this ground, we point out a tradition called "tithes", which is prevailed among Sunni people in the southern part of Iran. In this way, men dedicate 1/10 or 1/8 of their annual income to their relatives specially those who are poor. In this direction, the wealthy resided in Arab countries send particular amounts of their money to their communicators in the south of Iran annually and appoint them to distribute the listed items among deprived and non-deprived families. It is interesting to know that deprivation of families is not considered in this custom and all of them drive a benefit. For instance, in a talk with one of the trusties of Larestan and Bastak regions who was considered as a communicator of several Sunni emigrants and their hometowns, it was announced that at the beginning of Ramadan month, some emigrants to Arab countries had appointed him to purchase such goods as a 40-kg bag of rice and 4 tins of vegetable oil for all their hometown families after sending him a remittance and determining sorts of goods to be distributed among them.

Also, many of emigrants donate their money to deprived people through several trustees who are active in charitable institutions. In practice, these institutes offer their services like many other institutes all over the country except that costs of their constructions are also provided by those emigrants. The majority of these institutes were established formally or informally in the 90s. In addition, in most of these charitable institutions, 70% of contributions are offered by these migrants. Even the main part of the employees' monthly salaries of these institutes is provided by the migrants. Some of them anonymously favor their millions to these institutes. For example, an anonymous person has given 1 million dollars to his trustee to establish an orphanage in Lar. It is worthwhile to mention some of these charitable institutions with their activities and the role of migrants in this respect. A complex has been established for keeping 60 handicapped persons under the age of 14 in Fars Province the constructional cost of which has been undertaken by migrants. Furthermore, more than 50% of the expenditure of this complex has been provided by migrants and only 25% of the mentioned expenditure has been supplied

by the government. This complex has got the first rank on behalf of receiving public contributions in the south part of the country.

Another institute has supported 300 orphans in the form of 180 families and undertaken expenses of their treatment, education, marriage, house repairs, and necessary utilities by giving loans or grants. More than 60% of contributions to this institute relates to migrants. This institute has been regarded as the superior charitable institution cooperating and interacting with Imam Khomeini Relief Committee in the southern part of the country (Khezri, 2008). A Seniors Complex with an area of 13,000 m^2, substructure of 4000 m^2, and the constructional cost of $1 million was established by an emigrant to Arab countries in 1996. In this complex, 55 elderly people from all over the country are maintained. From among its interesting facilities, we can mention a nursing room, 3 nursing stations, drug room, physiotherapy room, and a green space with 1000 trees. The whole medicinal, nursing, and therapeutic expenditure is provided by the center. Of the interesting activities of this center are trip and fun, live playing of music, watching television during different hours of the day, and holding Koran classes. This complex is under the supervision of Welfare Organization, which undertakes only one fourth of its expenditure while the rest except a small amount of it that is provided by the elderly families is supported by the migrants. As the chairman of Welfare Organization of Fars Province has asserted, this center possesses the second rank after Tehran Kahrizak Seniors Center based on offering its facilities(Sohbatenow, 2010).

Another institute facilitates marriage conditions for the deprived people and has already provided financial support for nearly 500 cases of marriage. Its financial support is conducted by providing dowries, holding wedding ceremonies and renting necessary equipment. Already, 70% of the expenditure has been provided by emigrants to Arab countries. Another institute has attempted to gather deprived female householders and prepare a ground on which they can provide their cost of living by their own possible activities. On this basis, such activities as cleaning, drying, and packaging vegetables, and preparing different kinds of pickles, jams, local sweets, bread, and foods for ceremonies as well as providing workforce for home services, babysitting, and elderly nursing are conducted by these deprived women in this center. This institute would pay them on a daily basis. As the manager of the center declares, their products and services have obtained a very high credit all over the city and most of female employees who have not got sufficient opportunity to work at home are their main customers. A very important point to be mentioned in this research is the fact that a building with an area of 720 m^2 and complete necessary equipment with the cost of approximately 300,000,000 Tomans was established by the financial support of one of the emigrants from Larestan in 2000 and at present 40 female householders are working in it and almost 60 to 70 families are supported under the supervision of this center indirectly.

Another institute is busy in the field of supporting thalassemic patients and has got the second rank in this field after Tehran in Iran. This institute which is constituted of several doctors and some of the trustees of the region has been able to provide important facilities for hematic patients by making agreements with some institutions of the capital city and even international institutions. For example, after an agreement with a pharmaceutical company in Emirates, it has been able to support 50 thalassemic patients by providing them expensive medicines in such a way that 50% of the medicinal expenditure of these patients is paid by this charitable institution. In addition, based on another agreement with one of the charitable therapeutic centers in Tehran, Bone Marrow Transplantation, which costs patients over 60 million Tomans is carried out free of charge for the patients of the region. Patients of this institute include those living in different parts of Fars and Hormozgan provinces. Financial support of this institute is undertaken by emigrants from Larestan. Some of them settle their amounts of money into the account of this institute and it makes use of its monthly profit for its supportive affairs. As the responsible people of this charitable institute have reported, 120 million Tomans has been already donated to them. And finally, the biggest charitable institute of Larestan, which may be regarded as one of the biggest charitable institutes in Iran has been established by the financial support of a Lari family resident in Dubai and the help of a prominent trustee of the region and at present, almost 90% of the capital of this center is provided by emigrants. Of the main objectives of this center is assessing major needs of this township and conducting benefactors' contributions towards more necessary places and requirements. This has led to the prevention of wasting contributions and reworking the projects. Another main purpose of this center is to communicate with the second generation of emigrants from Larestan who have been born in Arab countries and have had very little connection with their hometown. Most of them have never seen their homeland and feel no attachment to it by nature. Therefore, tendency

towards conducting activities to the public benefits in Larestan region is waning in this generation. This center is to provide a proper communication with some of them in different ways.

This center has divided its activities into different sections. In one section, it has aimed at establishing constructions to the public benefits, which mainly include cultural, educational, sanitary, welfare centers, etc at different parts of Larestan and Fars Province. It has already completed 96 projects to the public benefits. It is interesting to know that 40 projects have been conducted by a Larestani tribe resident in Qatar. In another sector, this charitable institute has provided support for school and university students and scholars. It has planned to support them based on their previous term average and thus the higher their averages are, the more financial support they receive. Also, their degrees are considered as a determinant factor. Therefore, an amount of 100,000 to 250,000 Tomans are dedicated to them for each semester. Besides, they can receive loans if they wish. 220 students have been already supported this way. In its sanitary sector, this institute has supported 130 patients with cancer, thalassemia, and MS, while approximately one third of registered thalassemic patients and those with MS have been supported throughout the township. The center is attempting at providing them some of rare medicines from Tehran. Loans also belong to these special patients from the charity fund of the institute. In another sector, it is attempted at finding suitable jobs for the students sponsored by this institute. Many other charitable institutes are active formally and informally all over Great Larestan region, the detailed assessment of which craves for further time. Yet, assessments and talks with some responsible persons who are formally employed in the charitable institutes of Larestan illustrate the following general results:

Table 4: Statistics of susceptible social classes under the support of charitable institutes

Social classes under the support	Number of people under the support
Handicapped	60
elderly people	65
Students	290
Patients	170
Marriage of deprived people	500
deprived female householders	40
Employees in these institute	65
Sum	1190

Source: Interview with charitable institute

As it can be seen, 1200 deprived people are supported or obtain daily bread through these charitable institutes.

2. Conclusion

Definitely, Larestan region and Lar city is a unique model based on its developmental role in the field of international migration. In addition to providing a suitable life quality for their families and increasing regional level of welfare, emigrants as capable cooperators have been able to play a key role in the development of their hometowns. They constantly identify their hometown shortages and difficulties through common people, trustees, and their own communicators and attempt to remove them. These acts of emigrants could be recognized as obvious evidence of bottom-to-top development. With regard to the developmental impacts of the emigrants of south of Iran, it is necessary for the Iranian government to direct its policies towards reinforcement of workforce deployment. These policies can be applied as temporary guidelines for the decrease of poverty and inequality, increase of employments, and continuation of public collaborations within these deprived regions. Furthermore, governmental institutions and at the top, Ministry of Foreign Affairs, must acquire particular statistics of the number of Iranian workforces, resident Iranians, and the individuals working in Arabic countries via Visitor visas (illegal) with the cooperation of Iranian embassies as well as representatives of Iranian Department of Labor in those countries since having correct information is the first step towards a true decision-making.

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The Effects of Religious Identity on the Relationship between Workplace Stress and Inner Meaning Fulfillment

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Abstract: Modern-day working environment is often characterized with numerous and dynamic challenges for workers due to high expectation from the management, competition, and a host of other factors. This brings about the possibility of workers experiencing some emotional and psychological abyss (like stress, anxiety, and irritability) which calls for existential and psychological intervention in the workplace. Hence, this study examines the effects of religious identity on the relationship between workplace stress and inner meaning fulfillment (IMF). 148 non-academic staff from a public university in Peninsula Malaysia participated in the study. Data were collected with some quantitative set of questionnaires. Results reveal there is a significant negative correlation between workplace stress and IMF which means that workers with high inner meaning fulfillment experiences less stress at work. Also, it was found that workers with higher religiosity do experience inner meaning fulfillment. Implications from this study reveals the necessity of incorporating religiosity and existential constructs into any intervention approach for organizational and workers wellbeing. Suggestions and directions for future research were also discussed.

Keywords: *Religious identity, Workplace stress, IMF, existentialism, Intervention*

1. Introduction

Workplace stress often occurs when there is dissonance between a person's physical and emotional states in terms of handling job demands, limitations and even opportunities (Leka, Griffiths, and Cox, 2004). In other words, the higher the imbalance between work demands and the worker's abilities, the higher the stress to be experienced (Jamal, 2005). The psychological implication of workplace stress is often seen as an emotional reaction (like depression, anxiety, frustration, irritability, etc) and often experienced as a result of being exposed to unfavourable workplace environment (Millward, 2005; World Health Organization, 2005). In addition, in a situation where workers fail to control or cope with the stress they experience at work, it is mentioned that they are often vulnerable to negative work attitudes and behaviours like low commitment and productivity in the workplace (Seaward, 2005; World Health Organization, 2005). Workplace stress is also counted to be a difficult and dynamic phenomenon in which high levels of work stress weaken workers' well-being (Doyle & Hind, 1998). Psychologically, workers with increased level of stress may experience symptoms like anxiety, depression, fear, frustration, reduced life satisfaction, and lower self-esteem (Thompson, 2002; Utsey, Payne, Jackson &. Jones, 2002). Considering the nature of today's' organizational work setting, it could easily be said that stress is commonly experienced among staffs due to high demand of service quality and profit maximization, as there are serious concerns as to how it affect psychological well-being (Swee, Anza,, & Noor Hassim, 2007). Categorically, there is another argument that the basic factors in the working environment identified to be linked with stress are those related to the social and organizational context of work and the content of work itself (Michie, 2002).

In a periscope to the work environment within the university setting in Malaysia, it is becoming evidently clear that Malaysian institutions of higher learning are experiencing increased numbers of not only international students, but also academic staffs from other countries. This latest trend puts some challenges to local staffs who are forced to relate with students and staffs from complete different cultural backgrounds. Consequently, work-related stress has become a growing concern to these non-academic staffs. In addition, these workers are often exposed to increased competition, cross-cultural differences, increased use of sophisticated information and communication technology and sometimes, changing working style (Kompier, 2006). Despite the huge challenges these workers are exposed to, there are reports revealing that there have been limited studies on work-related stress among Malaysian office workers (Jamal, 2008; & Kumaresan, Nasurdin, Ramayah, 2004). This is part of the main reasons why this study is focusing on examining workplace stress experienced by non-academic workers in higher learning institutions. Langle (2003) links the root of stress experienced in the workplace to the concept of existential vacuum and lack of fulfillment which is characterized by lack of initiative, loss of interest and

emotional exhaustion. In addition, Tomic, Evers and Brouwers (2004) mention that workers with burnout problems for instance, and lack a sense of inner fulfilment tend to misinterpret the necessities for thriving human existence. In a wider existential sense, burnout is related to existential vacuum that is characterized by boredom and loss of interest in previously pleasant activities. Moreover, it has been mentioned that people with symptoms of existential vacuum experience high degrees of emotional exhaustion and depersonalization (Karazman, 1994).

Furthermore, a goal or a project that exceeds the individual's life is also an important factor to be considered. Steger (2009) mentions that sensing that one's life matters is one of the theoretical characteristics of the comprehensive component of meaning. However, the failure to arrive at things that makes one's life meaningful or living without this perspective may facilitate the experience of psychological distress which may affect social and occupational functioning. Isaksen (2000) also observes that people who give meaning to their work are able to cope with stress better than their colleagues. Furthermore, some of the unpleasant work-related factors that is based on the studies on work-related stress include job security (in terms of the future of one's employment) and workload such as working hours, part-time status, etc., which invariably if unfavourable, can affect a worker's ability to work efficiently (Karasek and Theorell, 1990). Consequently, attaining that sense of fulfillment, purpose in one's existence and the pursuit of meaningful goals are what a meaningful life entails according to (Reker & Wong, 1988). Existential meaning can said to be of two dimensions: the ability to possess the necessary structure for developing life goals (framework), and the ability to which these goals are fulfilled (fulfilment) (Battista and Almond, 1973). Thus, this study operationally adopts Battista and Almond's fulfillment concept of meaning. In addition, it is clear that life has meaning under all circumstances in which every individual faces the challenge to find that unique meaning for himself(Frankl, 1984). Thus, one basic motivation is to find a purpose and meaning for one's personal existence that distinguishes one from others (Crumbaugh, 1963).

Therefore, finding inner meaning fulfillment (IMF) remains a fundamental human aspiration and the basic motivating force of life that may ease a person's unpleasant experience and any form of stress in the workplace (Frankl, 1984, 1988). On the other hand, Frankl's ideas also reflect that suffering in life can be a means of attaining inner meaning fulfillment based on the credence that one is able to see meaning and purpose in the suffering. Thus, one can view personal meaning as a network of understandings and interpretations that facilitates how an individual comprehends experiences and directs his strength towards achieving his life desires. Invariably, it is an essential element for a worker to maintain coherence between his personal and communal life in order to attain meaningfulness. Frankl (1984) and Yalom (1980) assert that part of what leads to living a meaningful life includes life patterns that allow him to understand and interpret his experience through his life events and to find meaning in them. However, Frankl believes that individuals do find meaning in life when they are confronted with difficult life events, suffering or hopeless situations. To him, what matters is how a person transforms that personal tragedy into achievement (Frankl, 1984). Thus it is hypothesized that there will be a significant relationship between workplace stress and inner meaning fulfillment (IMF). According to Wong (1997), an individual must have a set of positive beliefs about his life, pursue what he really wants in life and uphold a positive feeling about his experiences as life events unfold. Since a person's cognition and actions remain the functions of what are inherent in cultural norms and values, the goals that people often choose to attain in life tend to be dependent on values and belief system. However, it is quite obvious that researchers have shown little interest on how religion affects human behaviour and culture. This assertion is closely related to some experts view that there are few studies with a direct and clear interest in religious variables (Tarakeshwar, Stanton & Pargament, 2003).

Furthermore, in some attempts to provide reduction-enhancing approaches to stressed workers, it is argued that upholding a connection to a Supreme Being is one of those cogent factors through which workers possess a strong focus on the purpose in one's life and maintaining a strong social support among co-workers (Taylor, Chatters, & Levin, 2004) . Thus, religious faith and practice is understood to help workers with much needed social and spiritual support and sense of inner meaning fulfillment (Taylor et al., 2004). Over the years, some studies have explained many positive outcomes that are often related to religious beliefs and practices like the relationship between religiosity and mental health (Taylor et al., 2004). This is why some researchers encourage that some organizations vividly encourage workers to express their faith and religiosity in the workplace (Kutcher, Bragger, Rodriguez-Srednicki, & Masco, 2010). Furthermore, as religion gains momentum in psychological research, it is now evident that researchers are largely concentrating on relating religion and psychology from the perspective of mental

health issues (Ali, Liu, & Humedian, 2004; Sheridan & North, 2004). Over the years, some psychologists have probed the importance of religion in mental health and categorized religion as detrimental (Freud, 1961; Skinner, 1953). On the other hand, other psychologists have posited that religion has a positive role to play in client's mental health (James, 1985; Shafranske, 1996). Now, psychological research has commonly found a positive relationship between religiosity and physical human functioning and mental health (Koenig, McCullough, & Larson, 2001).

Conceptually, Abu-Rayya, Abu-Rayya, and Khalil (2009) posit that religion, through the concept of religious identity has a composition of three key spheres which include: religious faith and practices (RFB), religious affirmation and belongingness (RAB), and religious identity achievement (RIA). Saroglou (2011) suggests four basic dimensions that are related, but moderately distinct of religion and individual religiosity: believing, bonding, behaving, and belonging. He posits that these religious elements are universal across various religions and cultural contexts on one hand, and are psychological, in terms of cognitive, emotional, and social processes in nature on the other. For this study, religion will be seen as an integration of religious beliefs and practices, local practices, and customs which may be linked to a group, and a system that often spell out guidelines for human life and practices (Vergote, 1997). Several studies have shown the impact religion has on human physical and psychological health. For instance, religious faith and practices often helps people in lessening the physical manifestations of stress, depressive symptoms and improved immune system functioning including reports of greater happiness and life satisfaction ((Koenig, McCullough & Larson, 2001; Myers & Diener, 1995; Yi, Luckhaupt, Mrus, Mueller, Peterman, Puchalski & Tsevat, 2006). In practice, it is becoming more alarming that psychologists have posited that integrating religiosity into therapy may have important effects on outcome as it is often very important to individuals and supportive in matching therapy to the religious beliefs and values of clients (Wade, Worthington, & Vogel, 2007; Worthington, Kurusu, McCullough, & Sandage, 1996; Worthington & Sandage, 2002). Likewise in research, there have been findings correlating religious faith and psychological problems. However, some of these studies are based on how Christian cognitive therapy showed improvement in depressive symptoms (Johnson, Devries, Ridley, Pettorini, & Peterson, 1994; Propst, Ostrom, Watkins, Dean, and Mashburn, 1992). Thus, this study seeks to add to the archive of religiousity and mental health research among Muslim participants.

In a study, the relationship between religious faith, spirituality, and mental health outcome among 236 individuals recovering from substance abuse was examined. It was found that patients tend to report high levels of religious faith and religious attachment. Results also revealed that among improving individuals, higher levels of religious faith and spirituality were correlated with a more positive life orientation, greater perceived social support, higher resilience to stress, and lower levels of anxiety (Pardini, 2009). Among Muslims where participant's levels of religiosity were examined, it was hypothesized that religious therapy would be helpful for highly devout Muslims, but it would not be helpful for those who were not very religious. Findings revealed as hypothesized in which participants who are religious showed more improvement in anxiety symptoms than did participants in the control condition at 1 month and 3 months intervals (Razali, Aminah, & Khan, 2002). Khan and Achour (2010) carried out a study examining religiosity and social support as coping strategies and their influence on reducing job stress and employee' well-being in administrative staff of Universiti Malaya. Participants include 70 Administrative staffs. Job stress determinants include workload pressure, homework interface, and performance pressure, and a set of questionnaires were used to collect data. Results revealed that coping strategies positively related with social support and religiosity and negatively related with job strain. Findings also revealed that religiosity positively significantly correlated with social support and coping strategies and negatively correlated with job strain. Though, with the use of a small sample size, it is possible to say that religiosity plays important role in coping with stress within the university environment.

From the above studies, it is clear that the limited number of studies integrating religiousity and psychological problems are centered on anxiety and depressive clients, while the countable number of Muslim-related studies is more imminent. The purpose of this study is to examine the effects of religious identity on the relationship between workplace stress and inner meaning fulfillment (IMF) among non-teaching staff of a public university in Malaysia.

Figure 1: Conceptual Framework
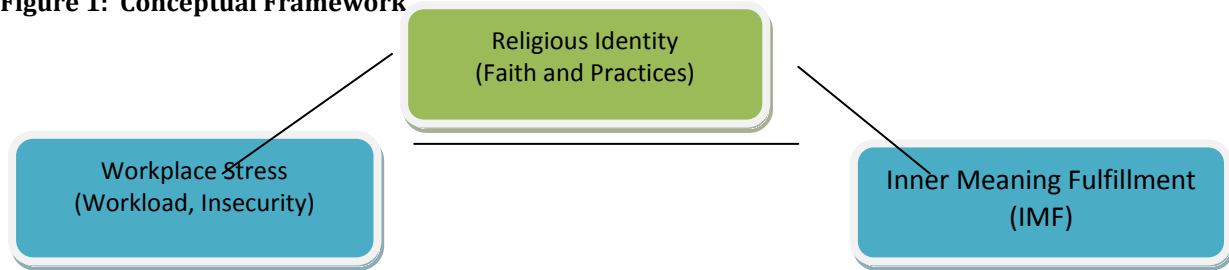
Based on this religious-mental-health relationship, it is quite evident that workers' stress level are tend to be influenced by their level of religiousity. For instance, it has been found that religious beliefs and practices serve as a moderation variable on the relationship between job stressors and job satisfaction, while the former is said to have a negative effect on job attitudes among workers with low levels of religiosity (Jamal and Badawi, 1993). Thus, it is also hypothesized that there will be a significant relationship between workplace stress and religious identity.

2. Methodology

Participants: The main focus of this study is to examine the effects of religious identity on the relationship between workplace stress and inner meaning fulfillment. The target population is a group of individuals with some common defining characteristic that research can identify and study (Creswell, 2009). So, a sample is a target population sub-group which the researcher plans to study to make a generalization regarding the target population. The target population of the study consists of non-teaching staffs working in a public university in Malaysia. In the process, a snowball sampling method was adopted. This is a type of purposive sampling in which sample sizes may or may not be fixed prior to data collection as it depend on the resources, time available, as well as the study's objectives. Patton (1990) mentions that it is important to select samples from which one can learn a great deal about issues of central importance to the purpose of the research. Thus, out of the 200 sampled populations given a set of questionnaires, 148 participants (74%) responded to all the questions. Details of the demographic data are shown in the table below;

Table 1: showing the demographic information of participants

Demography		Frequency (F)	Percentage (%)
Age	20-29	55	37.2
	30-39	74	50.0
	40-49	13	8.8
	50 & Above	6	4.1
Gender	Male	52	35.1
	Female	96	64.9
Years in Service	1-5 years	63	42.6
	6-10 years	44	29.7
	11-15 years	17	11.5
	16 & Above	24	16.2
Job Status	Full time	135	91.2
	Part time	13	8.8
Marital Status	Married	106	71.6
	Single	38	25.7
	Divorced	1	.7
	Others	3	2.0

Measures

Religious Identity: Religious identity was measured with the third dimension of the Multi-Religion Identity Measure (MRIM) (Abu-Rayya, et, a.2009). The five item sub-scale or dimension assesses affective responses to characteristics of religious faith and practice known to be common to all religions which involves God, prayer and place of worship. Some of the items in this sub-scale include, "*My belief in God is important to me*", "*the place of worship of my religion is important to me*" "*I believe prayer is an inspiring*

practice" Items were rated on a 7-point Likert scale from 1 (not at all) to 7 (absolutely). Cronbach's alpha coefficients were within adequate ranges. It was reported that overall reliability of the MRIM was .83 for the high school sample and .89 for the college sample, while the reliabilities for Religious Faith and Practices subscale is at .86 and .92 for each sample respectively (Abu Rayyah et. al., 2009).

Inner Meaning Fulfillment (IMF): The Life Regard Index (Battista & Almond, 1973) was used to measure inner meaning fulfillment. It is a 28-item scale comprising of two subscales, a Fulfillment Scale (FU) and a Framework Scale (FR). This study made use of the 14-item fulfillment subscale. Some of the items includes, *"life is deeply fulfilling", "I do not really value what I am doing", "When I look at my life I feel the satisfaction of really having worked to accomplish something"*. The participants were asked to indicate, on a three point Likert scale, ("I agree", "I have no opinion", "I disagree") which may best describe their own opinion. The Life Regard Index has an internal consistency of .86 (Debats, 1990), and the test-retest reliability ranges from .80 to .94 (Battista & Almond, 1973; Debats, van der Lubbe, & Wezeman, 1993).

Procedure: Prior to the administration of the tests the researcher had explained the purpose of the study to the participants, as rapport was developed during the process. Based on ethics, participants were assured that their responses would be kept confidential and will be utilized only for the purpose of this research. Each respondent was given a set of four questionnaires including that of the demography described above. Data collection span for a period of six weeks, and the participants were approached at their various offices across the university, and each participant used an average amount of seven minutes to complete answering the test items. As mentioned earlier, only questionnaires that were fully answered were considered as the researcher subjected the data to keying-in into SPSS for analysis.

Data Analysis: The purpose of this study is to examine the effect of religious identity on the relationship between workplace stress and inner meaning fulfillment. Three hypotheses were under study. Firstly is that there will be significant relationship between religious identity and inner meaning fulfillment. Secondly, it is also hypothesized that there will be a significant relationship between workplace stress and religious identity. Thirdly, it is also hypothesized that there will be a significant relationship between workplace stress and inner meaning fulfillment. The table below shows the correlations among the variables;

Table 2: showing the correlations Religious identity, Workplace stress and IMF

Correlations		Stress	Rel Idty	IMF
Stress	Pearson Correlation	1	-.070	-.064**
	Sig. (2-tailed)		.401	.436
Religious identity	Pearson Correlation	-.070	1	.273**
	Sig. (2-tailed)	.401		.001
IMF	Pearson Correlation	-.064**	.273**	1
	Sig. (2-tailed)	.436	.001	
	N	148	148	148
**. Correlation is significant at the 0.01 level (2-tailed).				

From the above table, it was shown that results revealed as hypothesized. There was a significant positive relationship between religious identity and IMF ($r = .273$, $\rho = < .01$). This further means that those who are more religious in terms of their faith in God and practice are higher in inner meaning fulfillment. Also, results also showed that there was no significant relationship between religious identity and workplace stress ($r = .070$, $\rho = < .01$). This means that workers high religious faith and religious practice does not necessarily mean they will experience less stress at work. Moreover, results revealed that there is significant negative relationship between workplace stress and IMF ($r = -.064$, $\rho = < .01$). This is to mean that workers with higher inner meaning fulfillment do experience less stress at the workplace. It is also revealed that workers there is a significant positive relationship between IMF and work experience ($r = .225$, $p = < .01$). This is to mean that workers with higher number of years of working experience do have higher levels of IMF. The same results was found for the relationship between workplace stress and

working experience (r =.180, p =< .05). This is to mean that workers with higher years of working experience do experience more workplace stress than others with lower years of working experience.

Discussion: The purpose of this study is to examine the effect of religious identity on the relationship between workplace stress and inner meaning fulfillment. Results revealed that there is a significant positive relationship between religious identity and IMF. This is in line with the view that religious faith and practice is understood to help workers with much needed social and spiritual support, and sense of inner meaning fulfillment (Taylor et al., 2004). In addition is was found that there was a significant negative correlation between workplace stress and IMF meaning that workers with high meaning fulfillment experiences less stress at work. Isaksen (2000) also observes that people who give meaning to their work are able to cope with stress better than their colleagues. Though, there was no significant correlation between religious identity and workplace stress, the negative relationship reflects that there is every tendency that staffs that are religious tend to experience lower level of workplace stress. This correlates with the finding that religious faith and practices often helps people in lessening the physical manifestations of stress and depressive symptoms (Koenig, et, al. 2001; Yi, et, al. 2006),

While this study opens a new window into issues related to organizational intervention most especially in regards to workers wellbeing, it is highly necessary for managerial bodies and government institutions to pay great attention and emphasis on how to improve the psychological and existential wellbeing of their human resource. Furthermore, one implication to research is that there is greater need for more empirical research on workplace and workers wellbeing most especially, as to how intervention can foster reduced stress at work and how workers can attain inner meaning in their life including the working environment. This is also related how religious faith and practices do lead to a reduction in stress. Despite there are some ample number of studies pointing to the positive effect of religiosity on depressive and anxiety symptoms, there is a great need for such empirical study as to it also help workers in the everyday work in higher institutions.

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Knowledge Management Frameworks in the Public Sector: Commonalities and Differences

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Abstract: In response to the pressing needs for better and improved public service delivery, public sector is continuously exploring and discovering new innovative measures in addressing these concerns. In the era of knowledge-based economy where knowledge is fast becoming one of the most important organizational resources, there has been a significant increase in the number of public organizations that are adopting knowledge management with high hopes of improving organizational performance. Nevertheless, it is important to highlight that knowledge management is not a straightforward task. It is, therefore, critical to develop a well-thought out plan and strategy at the onset of the initiative in order to ensure its success. This paper explores the various knowledge management frameworks developed for the domain of the public sector and subsequently analyze the commonalities and differences found in them. The research is undertaken through a critical document analysis on the literature. Findings highlight the theoretical nature and rigidness of these frameworks which may not be flexible enough to be applicable in variable settings. The authors conclude that there is a need to develop an integrated and comprehensive knowledge management framework in a more operational form for practical application to ensure effective knowledge management implementation in public sector

1. Introduction

In the era of K-economy and globalization, the importance of managing knowledge in organizations cannot be underlined enough. Knowledge is fast becoming a strategic organizational resource, overtaking capital and labor as the key dominant factor to survival and competitive advantage. This has lead to a growth and popularity in knowledge management over the last two decades. Given its potential benefits, more and more organizations are jumping on the bandwagon, in hopes of attaining organizational excellence. Nevertheless, knowledge management is highly contextual and there is no "one size fits all" solution in managing organizational knowledge. It is critical therefore for organizations to develop a sound and robust knowledge management framework at the onset to guide the overall process (CEN, 2004; Wong & Aspinwall, 2004). The framework serves as a good starting point in providing the much required directions in moving forward. In establishing such framework, since every organization is unique, any consideration to formulate the framework must be based on a careful and thorough deliberation organizational context which includes elements of people, process, technology and environment (Cong & Pandya, 2003; Heisig, 2009).

In addressing the increased demand for improved public service delivery to meet the complex needs of the stakeholders and public in general, there is a pressing need for public sector to better manage its knowledge resources (Chong, Salleh, Ahmad, & Sharifuddin, 2011). Nevertheless, a review of the extant literature reveals that there tends to be a lack of research on knowledge management in the public sector domain, in particular the design and development of an effective and integrated knowledge management framework (Salavati & Ebadi, 2010). Against this background, the next section of the paper discusses on the literature review of knowledge management frameworks. The subsequent section examines the existing knowledge management frameworks developed for the public sector and follows by the identification of commonalities and differences in elements found in the frameworks. This is followed with a discussion on a proposed conceptual knowledge management framework for public sector. Each elements of the conceptual framework is discussed in the concluding chapter of the paper.

2. Research methodology

The research is conducted through a critical document analysis on the extant literature covering on the topic of knowledge management frameworks developed for public sector. Several knowledge management frameworks developed for the public sector organizations are chosen to be examined for the study. In operationalising the research, content analysis method has been adopted and the findings are analyzed using the ATLAS.ti, a qualitative data analysis application.

Knowledge management frameworks

Background: Knowledge management framework can be defined as a holistic and a concise description of the major elements, concepts and principles that explains the world of knowledge management by naming the ma jor knowledge management elements, their interdependent relationships and the principles of how these elements interact and subsequently provides the reference for decisions about the implementation and application of knowledge management (Weber, Wunram, Kemp, Pudlatz, & Bredehorst, 2002). Heisig (2009) posits a robust knowledge management framework contributes and promotes a harmonized understanding of the relevant organizational elements and offers guidance to facilitate organization in systematically plan its knowledge management strategies. Wong & Aspinwall (2004) highlight five main reasons on why a knowledge management implementation framework is important to organizations:
1. To improve the awareness and understanding of the knowledge management domain
2. To provide a more holistic view of knowledge management that helps people within the organization to consider all the aspects from a broader perspective
3. To facilitate the communication of knowledge management across an organization
4. To help in determining the scope of knowledge management projects and initiatives
5. To help manage and practitioners to assess whether they have considered all the relevant issues pertaining to knowledge management implementation
6. To facilitate the management of the implementation process and helps to coordinate organizational efforts in a more systematic and controlled manner

A review of the existing knowledge management frameworks suggests that their applicability may be restricted to certain fields and disciplines due to the uniqueness and individuality of each of them (C. W. Holsapple & Joshi, 2002). Most of the frameworks only address certain knowledge management elements and do not describe the full scope of knowledge management phenomena. In addition, Metaxiotis, Ergazakis, & Psarras (2005) highlight the ongoing disputes among scholars and practitioners relating to knowledge management frameworks. According to the authors, there are at least four major streams of disagreements identified namely elements that should be included, the ordering or structuring, the terminology used and the emphasis that is given in the different knowledge aspects.

Knowledge management frameworks for public sector: For the purpose of the research, the authors have selected six knowledge management frameworks which have been developed for the public sector domain to be examined. Each of the frameworks is then analyzed, with particular attentions given to their underlying elements and composition.

Framework for Knowledge Management in Government: Building on the findings of a study which investigate the implementation of knowledge management in the public and private sector, Ha & Zenebe (2008) proposed a general conceptual framework for carrying out knowledge management in public sector domain (Figure 1). The knowledge management framework reflects the commonalities between the government and business in implementing knowledge management. From a system perspective, the conceptual knowledge management framework outlines government knowledge management initiatives in terms of inputs, processes, outputs and feedback within an environment. The inputs element consists of knowledge management drivers and enablers.

Knowledge management drivers are defined as forces that drive the knowledge management initiatives in the public sector such as the increasing demand by public to have better services while the second set of inputs consist of enablers which includes technology, organization, environment and critical success factors. Processes which made up the second element help public institutions to achieve their goals behind the knowledge management drivers and such activities include generating, capturing, sharing and utilizing knowledge. The third element is the outputs and impacts resulting from the knowledge management processes such as the expected efficiency and effectiveness in service delivery. The fourth element is feedback that comes into place to ensure the continuous improvement of the knowledge management processes which is represented by knowledge management assessment and reward and change management.

Figure 1: Framework for Knowledge Management in Government (Ha & Zenebe, 2008)
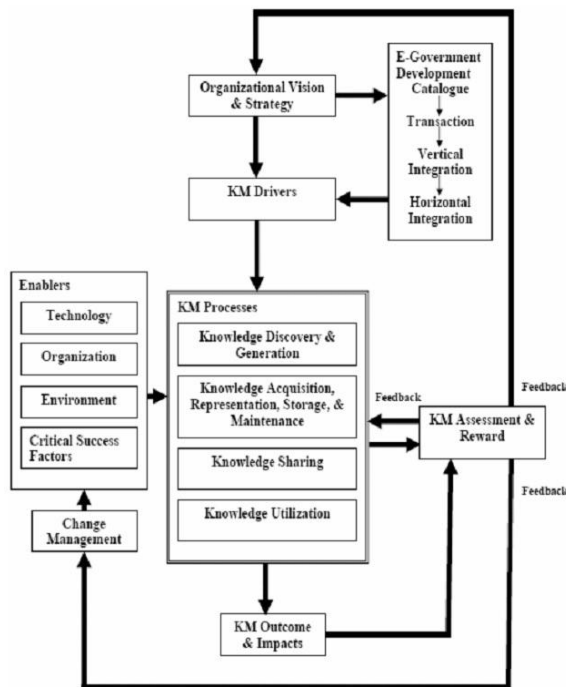
Overall Public Sector Knowledge Management Framework: MAMPU (2010) developed an overall public sector knowledge management framework which covers the building and managing of the knowledge management initiative in the public sector comprises of three major elements namely content, supporting elements and governance (Figure 2). The core of the knowledge management framework is the content management which is essential to ensure the right and accurate knowledge assets are captured, shared and disseminated for the public sector knowledge management. The government sectoral framework is divided into four main content categories based on business environment sectors namely economic, social, security and general administration whilst the content management consists of four main components; standards, components, medium and sources. The framework's governance element consists of four main sub elements namely organizational structure, policies and guidelines, governance methods and change management. The supporting element which includes technology and tools and security and access management are the pillars to support the formulation of the conceptual approach and the foundation to aid the successful implementation of the overall knowledge management framework.

Figure 2: Overall Public Sector Knowledge Management Framework (MAMPU, 2010)
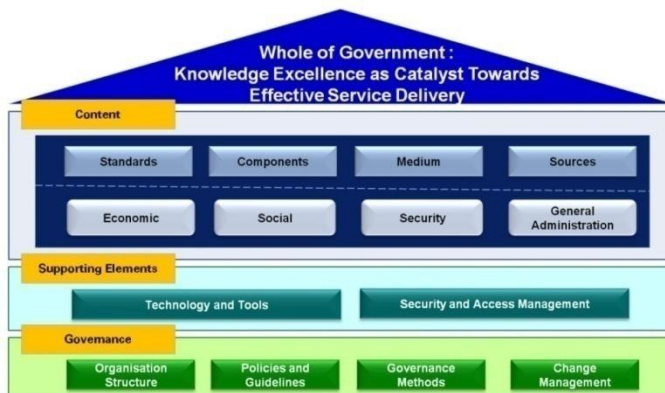
Best Practice Knowledge Management Framework: Asian Productivity Organization (APO)'s knowledge management framework was developed based on findings of the practical experience of knowledge management implementation gathered from several countries in Asia, including the best practices from America, Australia and Europe (APO, 2013). The framework provides a common

understanding of knowledge management among its member countries and emphasizes its value for organizational success (Figure 3). Understanding the vision and mission of the organization provides the starting point and the strategic direction of the organization. In a nutshell, there are three levels in the framework namely accelerators, knowledge process and outcomes. The accelerators comprise both the drivers and enablers of knowledge management. Leadership is being identified as the driver that propels knowledge management initiative in the organizations while processes, people and technology are the enablers for the organization to accelerate the knowledge management initiative and implementation. As far as the knowledge processes are concerned, there are five knowledge processing activities being included; identify, create, store, share and apply knowledge that represent the second layer of the framework by forming an integrated process. The third layer highlights the outcomes of knowledge management including enhancing learning and innovation that build individual, team and organizational capabilities resulting in increased societal capacity. This will lead to improvement in the quality the products and services, productivity and growth.

Figure 3: Best Practice Knowledge Management Framework (APO, 2013)
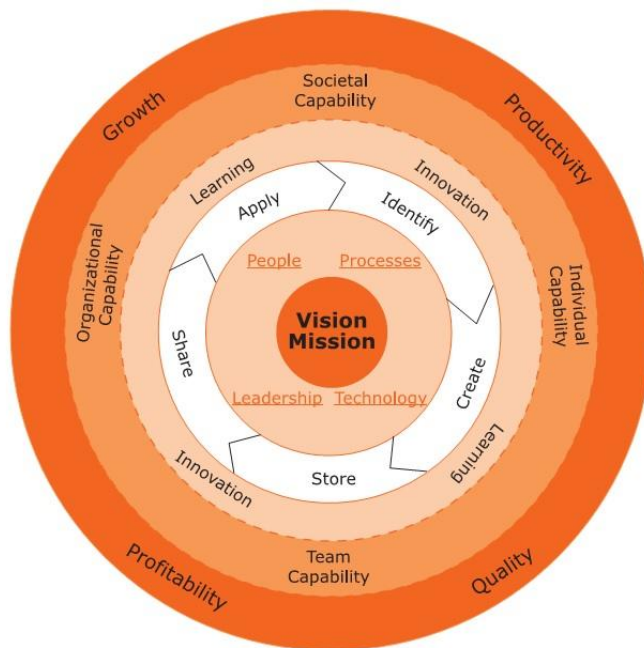
Generic Public Sector Knowledge Management Framework: The development of a generic public sector knowledge management framework developed by Abdullah & Date (2009) takes into account the contextual differences that exist between the public and private sector (Figure 4). The authors posit that based on the differences in business models, values and motives, there is a need to develop a knowledge management framework specifically for the public sector rather that adopting it from the private sector models. The proposed knowledge management framework is made up of three main elements which are parameter (policy, culture and politics); process consisting of ICT, knowledge work and people and the outcome element that comprises of four main perceived benefits including efficiency, innovation, learning and quality.

Figure 4: Generic Public Sector Knowledge Management Framework (Abdullah & Date, 2009)
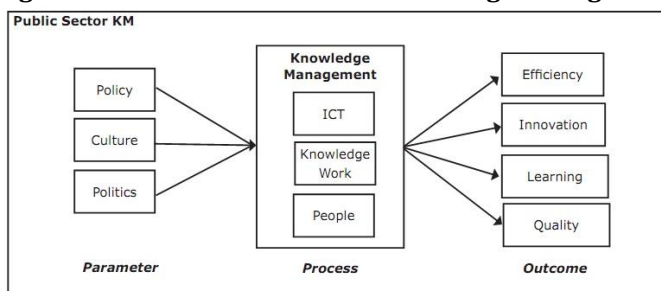
Model for Application of Knowledge Management: In their study of the practice of knowledge management in public sector in Iran, Salavati & Ebadi (2010) have proposed four main elements to be included in their knowledge management framework (Figure 5). The first element is organizational factors that consist culture of creative knowledge, knowledge leadership, resources of knowledge, knowledge portal, knowledge based structure and knowledge based process. This is followed by the second element which is citizens as the most important contextual stakeholders. The third element consists of contextual factors which include political factors, culture factors and technological factors while the fourth factor is knowledge management dimension itself that integrate the technical (processes related to explicit knowledge) and social aspect (processes related to tacit knowledge).

Figure 5: Model for Application of Knowledge Management (Salavati & Ebadi, 2010)
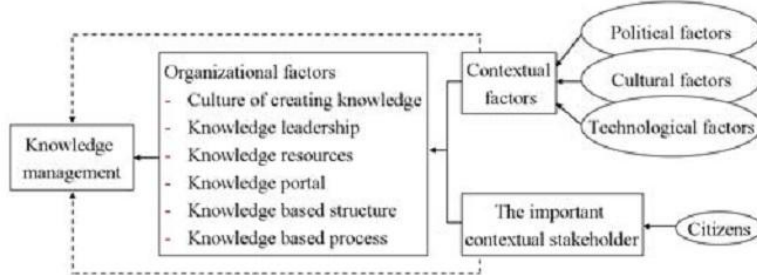
Model of Knowledge Sharing: Yusof, Ismail, Ahmad, & Yusof (2012) in their study of the aspect of knowledge sharing in Malaysia propose a holistic knowledge management model to help improve the workers' performance and subsequently enhance the service delivery to the stakeholder (Figure 6). The framework consists of three main elements known as exogenous variable (enablers), endogenous variable (process) dan dependent variable (output). This theoretical framework comprises of two main parts namely an exogenous variable that affects the endogenous variable and secondly, the effects of the endogenous variable on dependent variables. The former examines the effect of the individual, the organization and technology on the quality of knowledge sharing which is considered one of the most critical elements in knowledge management activities. The second part of the framework focuses on investigating the three relationships namely a) the relationship between the quality of knowledge sharing and service delivery; b) the relationship between the quality of knowledge sharing and worker's performance and c) the relationship between worker's performance and service delivery.

Figure 6: Model of Knowledge Sharing (Yusof et al., 2012)
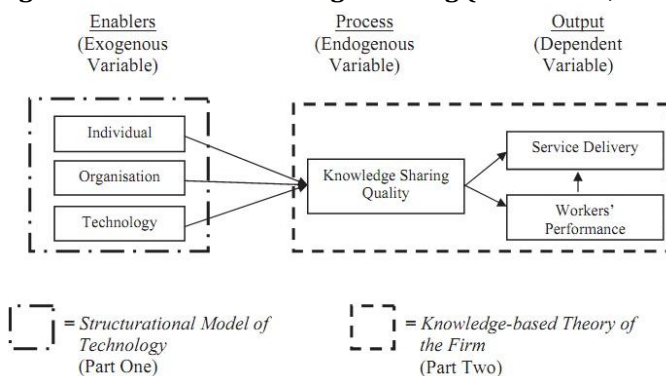
Discussion: A general overview of all the frameworks suggests that all of them exhibit a hybrid type of knowledge management framework which is a combination of a prescriptive framework that provide direction on the types of knowledge management procedures and a descriptive framework that characterize knowledge management by identifying attributed of knowledge management important for their influence on the success or failure of knowledge management initiatives (Rubenstein-Montano et al., 2001).

Commonalities in Elements: Based on the three knowledge management's content dimensions identified by C W Holsapple & Joshi (1999), the authors undertake a rigor process of identifying and comparing all the elements found in the six frameworks to identify the commonalities and differences that exist between them. The three dimensions are knowledge resources, knowledge manipulation

activities and knowledge influences or enablers. Knowledge resources represent the types of resources that store, embed or represent knowledge in an organization such as individual, knowledge artifacts and infrastructure. Meanwhile, knowledge manipulation activities comprise of activities or processes involved in the knowledge management initiative and knowledge influences represents organizational elements that have direct impact on the effectiveness on knowledge management implementation in organizations.

One of the noticeable features of each framework is the outcomes and output elements. Four out of the six frameworks being examined explicitly mentioned descriptions associated with outcomes and output in their frameworks. For example, Yusof et al. (2012) suggest in their knowledge sharing model that effective knowledge sharing would contribute towards an increase in workers' performance and subsequently a significant improvement in service delivery. Meanwhile, APO (2013) posit four main output that can be achieved through their knowledge management framework such as increased in productivity, profitability, quality and growth. This is similar to the framework proposed by Abdullah & Date (2009) where the authors highlight four main output including increased in efficiently, innovation, learning and quality while the framework developed by Ha & Zenebe (2008) identifies an increase in efficiency and effectiveness in service delivery to the stakeholders as the output of their knowledge management framework. According to them, in addition to the direct outcome and impacts of knowledge management, public organizations will also gain indirect outcome and impacts such as organizational learning and process innovation.

Focusing on the aspect of knowledge manipulation activities, almost all of the knowledge management frameworks explicitly identify the types of activities involved. For instance, APO (2013) highlights five main knowledge related activities such as identify, create, store, share and apply. Abdullah & Date (2009) also suggest the similar processes namely acquisition, organization, utilization, disposition and sharing. Although, there is an inconsistency that exist among academicians and practitioners on the number and types of knowledge management activities, the authors believe the types of activities mention by APO (2013) and Abdullah & Date (2009) provide a general representation of the common activities involved in the knowledge management processes.

The third commonality identified from the frameworks is that all of them incorporate knowledge influencers or enablers in their knowledge management frameworks. Salavati & Ebadi (2010) suggest three types of knowledge influencers; organizational factors consisting of culture of creating knowledge, knowledge leadership, knowledge portal (ICT) and knowledge based structure; contextual factors which include political, cultural and technological factors and contextual stakeholders which are the citizens. Similarly, Yusof et al. (2012) grouped the knowledge influencers in their framework into three main categories namely individual, organization and technology. Under individual, four elements are deemed critical including awareness, trust, personality and job satisfaction while under organization, organizational culture, organizational structure, reward and recognition, work process and office layout are the main enablers. As for the technology element, software, infrastructure and literacy are included. Interestingly, of all the knowledge influencers suggested by the authors in their frameworks, only technology is found in each framework. This helps to highlight the importance of technology in facilitating public organizations in implementing their knowledge management initiatives.

Differences in Elements: Amid the commonalities that exist between the frameworks, it is also apparent that there is a lack of consistency amongst each of them since their constituents as well as their emphases tend to vary. This supports the view of Rubenstein-Montano et al. (2001) and Wong & Aspinwall (2004) that there is a lack of consensus and common ground about the necessary elements that should be covered in a knowledge management framework. This is most likely caused by the nature of knowledge management itself that is very contextual and dynamic. Looking at the factors that differentiate the elements in the analyzed knowledge management frameworks, two distinct differences that can be highlight are the number and type of knowledge influencers suggested by each authors in their frameworks. For instance, Yusof et al. (2012) identify at least 12 knowledge influencers in their knowledge management framework while APO (2013) suggest four main knowledge accelerators. Ha & Zenebe (2008) meanwhile highlight the need to list some of the influencers such as culture and structure separately on top of the proposed three as critical success factors to emphasize their importance. The next main differentiator is the inclusion of knowledge resources as part of the knowledge management frameworks. Out of the six frameworks, only two explicitly identify the need to incorporate knowledge resources in their frameworks. Salavati & Ebadi (2010) suggest knowledge resources consisting of

knowledge workers and knowledge managers while MAMPU (2010) categorizes its knowledge resources into four types namely standards, components, mediums and sources.

THE CULMINATED New Knowledge Management Framework for Public Sector: Whilst the authors acknowledge the importance and value of the knowledge management frameworks examined in this study, a closer look at these frameworks suggests that a majority of these frameworks are theoretical in nature and are not flexible enough to be applicable to organizations in variable settings during the actual implementation. Thus, the authors conclude that there is a need to develop a new integrated and comprehensive knowledge management framework in a more operational form for practical application which links all the critical organizational elements to facilitate effective knowledge management implementation in public sector organizations. In conceiving the proposed framework, the authors subsume three main construct dimensions commonly found in knowledge management frameworks namely knowledge resources, knowledge related activities, and knowledge management influences as guiding principles (C W Holsapple & Joshi, 1999)

Figure 7: 4-Quadrant SCLI Knowledge Management Framework for Public Sector
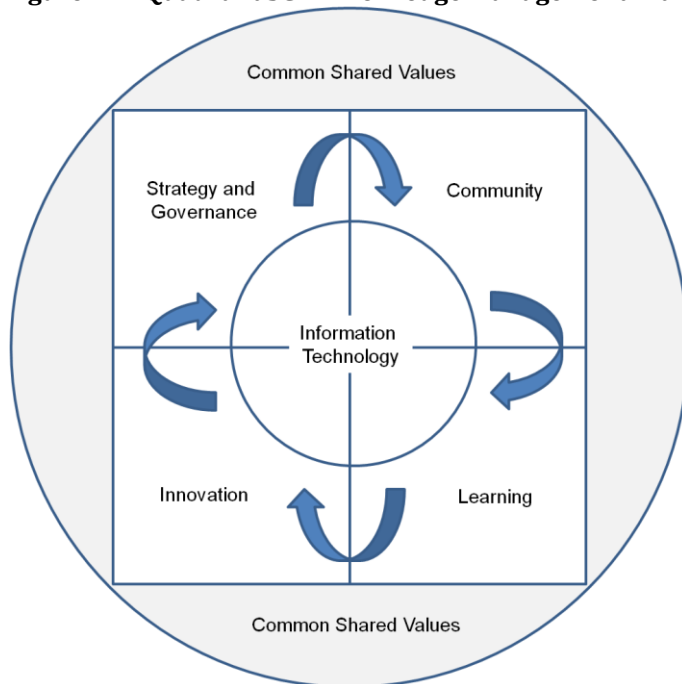
Review on the existing knowledge management frameworks reveals that the main theme emerging from the analysis of these frameworks is the significance of a number of key organizational elements namely strategy and governance, community, learning, innovation, information technology and common shared values and their interrelated relationships with effective knowledge management (Figure 7). A brief explanation of each element is presented as follows:

A. **Strategy and Governance:** Strategy and governance quadrant highlights the importance of establishing a sound and robust knowledge management approach that connects with the overall business goals and objectives. Both knowledge management and business strategy must be in tandem and work interdependently where knowledge should drive the strategy and subsequently knowledge management should be driven by business goals and objectives. In addition, equal emphasis should be placed to other important organizational elements such as leadership, organizational structure, organizational culture, rewards and recognition and performance measurement.

B. **Community:** Knowledge management is known to be a deeply social process. Hence, in order to ensure the objectives set forth during the onset of the initiative are attainable, the knowledge-related activities organized by the public sector organization must be embraced by employees at all levels. One of the best possible solutions to accomplish this is by developing intentional Communities of Practice (CoPs) within the organizations. CoPs is a group of passionate and dedicated individuals with a common interest, beliefs and understandings of a particular topic. This highly-motivated like-

minded group is focused on joint collaboration and mutual sharing of knowledge and experience among members in a friendly environment. In ensuring continuous employees' participation, it is critical to establish a high level of employee empowerment and involvement.

C. **Learning:** Based on the continuous interaction activities occurring in the community quadrant, it will eventually result in a learning process to take place, both individually and collectively as a group. Learning often starts at individual levels and it involves the process of acquiring new knowledge or skills. Nonetheless, it must be highlighted that from the organization's point of view, it is critical for the individual and group learning to be translated into organizational learning. Organizational learning requires a social and collective process through continuous interactions and relationships between employees. These activities will then lead to the formation of shared values and collective understanding that contributes to organizational knowledge.

D. **Innovation:** As a direct consequence of the learning processes that take place in the previous quadrant which included knowledge databases, best practices, lesson learnt and reports, all these knowledge assets will contribute towards a considerable knowledge base for the organizations to leverage upon. By having the advantage of a substantial diverse knowledge base and expertise possessed by the employees, these would inevitably lead to an organization's capacity to innovate.

E. **Information Technology:** IT provides a coherent and cost-effective way of systematically capturing, disseminating and accessing information and real-time communication across geographical distances, as well as serving as effective repositories of knowledge warehouses. Although there is some concern over the capability of IT to manage tacit knowledge, as compared to its proven ability in handling explicit knowledge, organizations can make use of IT tools such as online forums and social network applications to bring employees together and make the interaction and collaboration processes that occur among them easy and immediate. Nonetheless, it must be emphasized that IT is just one of knowledge management enablers and not the silver bullet for knowledge management. Overemphasizing on IT may only lead to negative consequences to the initiative if it is not properly controlled.

F. **Common Shared Values:** Past studies have shown that organizational culture plays an important role in ensuring the success of knowledge management initiatives. Without the common shared values, mutual trust and beliefs that underpin the organizational culture, the initiative eventually will be short-lived. Furthermore, in facilitating organizations to manage the tacit dimension of knowledge, the diffusion of knowledge among the employees would require some level of trust, shared meaning and understanding that allows a person to understand and apply another's insights in their own context.

3. Conclusion

Findings from the research reveal that knowledge management is quintessentially multifaceted, encompassing various key organizational elements which can be categorized into six main dimensions; strategy and governance, community, learning, innovation, information technology and common shared values. Taking this into consideration, it illustrates the need for sufficient emphasis to be placed on each specific organizational dimension to support various types of knowledge related activities involved whilst concurrently seeking the right balance between the integration of "hard" and "soft" aspects of the discipline. From an operational perspective, the authors envisage the proposed framework which links all the critical organizational elements can help to facilitate effective knowledge management implementation in public sector organizations.

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Striking a Balance between People and Technology: A Case Study of Knowledge Management in a Large Multi-Disciplinary Public Technical Organization

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Abstract: realizing the important role played by knowledge management in today's challenging environment, in recent years, many public organizations have begun to embrace the discipline as part of their key strategic thrusts in pursuit of attaining organizational excellence. Notwithstanding the threat of various issues and challenges that may arise during the process, given the appropriate strategies and approaches, knowledge management can deliver a number of significant benefits to organizations including improved decision making, increased productivity and enhanced innovation. This paper highlights a case study of a knowledge management initiative in a large multi-disciplinary public technical organization, initiated as part of its ongoing efforts to become a world-class service providers and centers of excellence in the fields of asset management, project management and engineering services. Primary data for the research are derived from document analysis and interview sessions conducted with key personnel involved in the knowledge management initiative. Findings reveal that in ensuring effective knowledge management implementation, it is vital for organizations to achieve the right balance between people and technology in their knowledge management endeavor

1. Introduction

Whereas in the past, public organizations have long been associated with inefficiency and incompetence, in today's challenging economic environment, these adverse sentiments must be contained and eradicated before it is too late. As calls for better public service delivery continues to be demanded by the public, public organizations are left with no other options but to thrive and progressively continue moving forward in searching for better solutions and innovative ways to meet the growing and complex expectations. Furthermore, persistent public pressure for better public service accountability and transparency, albeit at the expense of fewer and limited public resources, has eventually further necessitates the need for public organizations to re-evaluate their existing policies, strategies and procedures (Riege & Lindsay, 2006). In seeking new ways to assist them in becoming more operationally efficient and productive, it is critical for public organizations to concentrate their energies on harnessing their collective organizational intellectual capital that is embodied in standard operating procedures, manuals and technical guidelines, products and employees. This can be achieved through better management of the valuable knowledge assets, undertaken in a more efficient and comprehensive manner.

This paper highlights a case study of a knowledge management initiative implementation by a large multi-disciplinary public technical organization, initiated as part of its ongoing efforts to become a world-class service providers and centers of excellence in the fields of asset management, project management and engineering services. The paper discusses the strategies and approaches adopted by the organization in implementing the initiative and followed by the issues and challenges that arise during the process. Against this background, the next section of the paper will discuss on the aims and methodology of the research. This is then followed by a literature review of knowledge management, its applicability and the benefits it brings to public organizations. The subsequent section describes the initiative taken by the case study organization in managing its organizational knowledge followed by issues and challenges faced by the organization in implementing the initiative. The next section discusses the impact of the approaches adopted by the organization before the last section concludes the paper.

Aims and objectives: The aims of the research were to study a knowledge management implementation in a large multi-disciplinary public technical organization, to examine the knowledge management strategies used and to identify the issues and challenges faced by the organization in carrying out the program. In line with the aims, research questions developed for the study were:

1. Why knowledge management is considered critical to public organizations?
2. What are the issues and challenges faced by the organization in implementing its knowledge management initiative?
3. What are the steps that can be taken to ensure effective knowledge management implementation?

2. Research methodology

This paper is part of a broader research project which investigates knowledge management in public organizations. The concept of knowledge management and its applicability in public organizations were first assessed through a critical review of the extant literature. Primary data were based on documents analysis and interviews sessions conducted with key personnel that are involved with the knowledge management initiative in the case study organization.

3. Literature review

Knowledge Management: Despite the recent growth in popularity of knowledge management over the past two decades, the process of managing knowledge in organizations is, in fact, not something new. Prior to the introduction of a formal knowledge management that is known by many today, organizations worldwide have been long managing their knowledge resources, albeit arbitrarily and in unstructured manners, often with the absence of any proper strategy and guidelines (APO, 2013; Wee & Chua, 2013). However, due to the rapid changes in the global environment, this practice is deemed no longer effective and relevant in today's world as it will only leads to inefficiency and waste which eventually may jeopardize the viability of any organization, regardless of types and sizes. Notwithstanding the ubiquitous of knowledge management, surprisingly there is still a lack of consensus among academicians and practitioners in arriving to an acceptable universal definition of the discipline. This scenario is evidenced by the prevalence of various definitions which appears in literature. This in a way reflected the different perspectives, contexts, and disciplines that knowledge management is being applied to (Beesley & Cooper, 2008). For the purpose of this study, knowledge management is defined as a deliberate and structured process of identifying, creating, storing, sharing and utilizing knowledge which if undertaken successfully will lead to enhanced performance, improved competencies and sustainable competitive advantage (Wei, Choy, & Chew, 2011). Generally, there are two commonly adopted approaches to knowledge management; codification and personalization (Jasimuddin, 2008). The former focuses on making knowledge explicit, by viewing knowledge as an object which can be manipulate, transferred and stored (Alavi & Leidner, 2001). Under this approach, technology especially ICT plays an important role in capturing, storing and disseminating knowledge. On the other hand, personalization is more concerned with connecting people, emphasizing on the aspects of social interaction and knowledge flow between people. Technology is mainly use as a tool for communicating and not for gathering knowledge (Fong & Kwok, 2009).

Knowledge management in the public sector: As demand for improved public service delivery continues to keep on growing each day, public sector is continuously pursuing new and innovative ways in meeting the stakeholders' expectations. In the quest of identifying lasting solutions to better serve the public, it requires public sector to effectively harness intellectual capital and knowledge resources that are ubiquitously embedded in organizational culture, process, products and employees (Chong, Salleh, Ahmad, & Sharifuddin, 2011). This accordingly highlights the importance of knowledge management in public organizations. Riege & Lindsay (2006) postulate four key reasons that help to explain the motivation behind the adoption of knowledge management among public organizations:
1. To drive efficiencies across all public services by connecting silos of information
2. To develop new or consolidating outdated systems to improve overall performance
3. To improve accountability and mitigating risk by making informed decisions and resole issued faster
4. To deliver better and more cost-effective constituent services such as enhancing partnerships with, and responsiveness to the public

Nonetheless, despite the potential benefits knowledge management brings to the public sector, it is rather worrying to learn that knowledge management is still in its infancy among public organizations. Furthermore, public sector is well behind the private sector in the overall knowledge management implementation (Abdullah & Date, 2009; Cong & Pandya, 2003). MAMPU (2010) in its study of knowledge management implementation in Malaysian public sector reveals that out of the 94 government agencies being reviewed; only 12% of them have a knowledge management strategy in place. Studies reveal that the lack of competitive edge in the public sector is partly responsible for the lack of interest and slow adoption of knowledge management within the sector (Cong & Pandya, 2003; Yao, Kam, & Chan, 2007). Taken into consideration some of the inherent characteristics of public organizations including rigid organizational structure and bureaucratic policies, these conditions allow little room for innovation or

creativity to flourish (Abdullah & Date, 2009). This trend is causing lots of concern and anxiety among the stakeholders and public in general over the civil servants' capabilities in performing their duties and responsibilities effectively and efficiently.

Kknowledge management in a large multi-discplinary public technical organization

Background: As part of its ongoing effort to become a world-class service provider and center of excellence in asset management, project management and engineering services, Agency X, a large multi-disciplinary public technical organization, has developed a long-term strategic framework which focuses on four organizational key aspects; internal process, stakeholder and customer, learning and growth and financing. In achieving the objectives set forth, the framework places significant emphasis on the development of human capital and competent workforce, the use of innovative and advanced construction technologies and leveraging of technology. Among the many initiatives that were introduced under the strategic framework includes a knowledge management program, established as an effort to help the organization to better manage, share and utilize its knowledge assets. Prior to its implementation, a preliminary study was undertaken with the main purpose of identifying the current knowledge management landscape in the organization. Based on a knowledge audit process which has been carried out during the study, the organization has identified at least six key challenges that may serve as barriers to the success of the program namely knowledge silos, inconsistent best practices and processes, brain drain, lack of employees morale, lack of instant access and lack of knowledge asset management. These findings are considered very useful as it helps the organization to be aware and cautious of the potential issues that may arise as the organization embarks on its own knowledge management journey.

Knowledge management initiatives: Under the knowledge management program, several activities and projects have been identified and implemented. In order to maintain a smooth and efficient operation of the program, a dedicated knowledge management unit was set up with the main responsibilities include to monitor and coordinate the activities. The list of related activities and projects are as follows:

Knowledge Management Handbook: To kick start the program, the organization has decided to produce a Knowledge Management Handbook with the main intentions of raising awareness and generating interest among its employees at all level about the initiative. Among the contents of the handbook include a comprehensive introduction to the concept of knowledge management and its value proposition, its critical success factors and a knowledge management strategy developed specifically for the program. The hardcopy version of the handbook was later distributed to each unit within the organization whilst the softcopy is uploaded to the agency's portal for easy access and retrieval.

Project Site Supervision Wiki: Soon after the publication of the handbook, a pilot project which focused on one critical aspect of a project life cycle, project site supervision, was developed, using wiki technology as its platform. The main objective of this project was to serve as a collaborative tool for technical personnel in particular the supervisory team members to discuss and share technical knowledge and best practices related to project site management. Subject matter experts, identified based upon their experience and expertise, were drafted in to be part of the wiki's moderators. They were being assigned to manage and monitor the wiki content. Trainings sessions were organized periodically to facilitate the wiki users in utilizing the features and contents available in the wiki portal.

Communities of Practice: Realizing the importance of establishing a conducive and enabling environment for the employees to share their experience and expertise with others, Agency X later introduced the concept of Communities of Practice (CoPs) to its employees as a mean for them to be actively involved in knowledge domains that interest them the most. For a start, five CoPs domains that are related to five different project's core activities were established. Employees were invited to be part of any CoPs domain. Participation was based on voluntary basis. Face to face meetings and workshops were organized regularly on monthly basis. In order to complement the existing physical CoPs domains, a CoPs' web portal was also developed to extend the discussions virtually.

Lesson Learned: As a technical organization that is involved in delivering infrastructure projects, the amount of knowledge that is being created and generated in any given project at various stages can be overwhelmed at times. Unless conclusive actions are taken to capture and codify this valuable knowledge, it would lead to waste and inefficiencies. Therefore, to prevent this issue from occurring, Agency X

produced lesson learned documents which contain useful technical information relating to various stages of a project life cycle. For this purpose, each unit in the organization was required to compile and collect as many best practices and lesson learned to be published in the reports. These documents were considered by many to be very helpful, as they serve as good reference points and moreover, they help to eliminate the occurrence of similar errors and mistakes in future projects.

Exit Interview: As a large number of baby boomers employees were expected to reach their retirement age over the next few years, initiatives were taken to conduct exit interview sessions especially with those who were holding various senior management posts. During the sessions, employees were asked questions relating to their experience in managing projects which were gained over the many years they were with the organization. Each session was recorded and transcribed, and then was made available for all via the organization's website in the forms of reports and video clips.

Issues and Challenges in Implementing Knowledge Management: On the onset of the knowledge management program, in particular, the project site supervision's wiki portal, it was very well received by many, especially during the first few months of its inception as active participation by employees could be observed. The growth in users' engagement was measured based on a large number of hits and feedback received from the users relating to the wiki. The trend looked very promising and the management was confident of the overall program's long term longevity and sustainability. However, as time progressed, much to the dismay of knowledge management unit, the initial interest began to fade away as the number of visits started to decline. Based on a series of interview sessions conducted with several key personnel involved in the program, findings show that there are a number of factors that contributed to the problem. For instance, users were complaining about the lack of human interaction as one of the major factors that dissuaded them from visiting the portal. A majority of the employees especially the baby boomer generation were more comfortable with asking their colleagues face to face rather than searching the content of the wiki for solutions to their problems. Next, there were issues relating to the usability and accessibility aspects of the wiki portal. Although the wiki was designed to enable users to maximize their online experience, there were still a number of users who were having difficulty in utilizing the portal due to lack of technical and online skills. Apart from the usability issues, users highlighted their concern over the privacy and security of the wiki. Furthermore, many users found that some of contents were not updated regularly. This eventually led to a lack of motivation among users to visit the portal on a regular basis. In addition, due to heavy workload and lack of time, users were also prevented from using the portal more often.

In addition to issues relating to the wiki portal mentioned above, findings also reveal that there are a number of key challenges that are impeding the success of the knowledge management initiative in the organization as follows:

i.   **Lack of awareness and understanding:** As a relatively new initiative, a majority of employees were still not aware of the knowledge management program. Although a series of road shows and workshops have been regularly organized to create awareness and understanding, however, due to financial and time constraints, the activities couldn't be carried out agency-wide. This consequently led to a widespread confusion and misunderstanding among employees with regards to their expected roles and responsibilities relating to the program. As a result, many were reluctant to participate actively in the activities as they perceived these activities to be trivial and secondary to their daily routines.

ii. **Lack of knowledge sharing culture:** As a result of lack of awareness and understanding towards the initiative, there were a significant numbers of employees who refused to share the knowledge that they posses with colleagues. This predicament can be attributed to a number of reasons. For instance, people in general, view knowledge as a source of power. Therefore many are unwilling to impart or share their knowledge with others, out of fear that by doing so, it may jeopardize any career advancement opportunities as well as compromising their job security.

iii. **Lack of time:** For those employees who were aware of the importance and the advantages offered by knowledge management, however. due to the time constraint that stem from their day-to-day busy schedules, such as attending meetings, conducting site visits and so on, they could not allocate more time to engage in the knowledge related activities such as CoPs domains.

iv. **Lack of communication and interpersonal skills:** There were cases where a number of employees lack in the abilities and skills to communicate and interact effectively with others. Employees with such issues often found themselves unable to contribute or gain any significance benefits from the knowledge management activities.

v. **Lack of top management support and commitment:** At the beginning of the program, the level of support and commitment from the top management was highly visible. However, as time passed by, due to other work-related activities that required their immediate attention, the lack of interest was apparent. As a consequence, the responsibility for promoting and managing the knowledge management program was left to the knowledge management unit to deal with.

vi. **Absence of rewards and incentives:** Since there was no provision in the organizational policies which allow those involved in the program to be remunerated for their inputs and time spent on the activities, this has affected the motivation for them to participate actively. The absence of such rewards and recognition system either in the forms of extrinsic (financial) or intrinsic (peer recognition or self satisfaction), which can be deployed as part of the strategies to encourage employees involvement in knowledge management activities, may jeopardize the overall success of the program.

vii. **Staff Turnover:** In view that the success of the program is contingent upon the level of commitment provided by a number of key personnel known as subject matter experts in providing expert advice and views, when this group of employees were transferred or retired, it posed a major problem to the organization. Identifying qualified replacements can be difficult and time consuming.

viii. **Reliability of the ICT infrastructure:** Given the constraints in securing sufficient financial support to procure higher and better ICT infrastructure facilities, there were complaints received from the employees concerning the difficulties in accessing the information on the portal due to accessibility and connectivity issues.

Discussion: At the early stage of the program, Agency X decided to launch a wiki portal as a pilot project to kick start the program. Much efforts and time were invested in the wiki project in order to ensure its success. Nevertheless, despite the strong commitment given by subject matter experts and the key personnel involved in the project, the over emphasis placed on the technological aspect of the project has inadvertently led the organization to overlook the people element that is much required in knowledge management. Although in general, employees benefitted from the content available in the portal, due to a number of factors as mentioned in the previous section, visits to the portal have continued to drop in numbers and the initial motivation and enthusiasm slowly ebbed away. A closer looks at the factors mention earlier in sub-section 5.3, reveals that they can be classified into two main categories; technological and people/organizational, as illustrated in Table 1.

Table 1: Issues affecting Agency X's Project Site Supervision Wiki

Category	Issues
Technological	Lack of human-interaction
	Contents were not updated regularly
	Usability and accessibility issues
	Privacy and security concern
	Lack of skills in using the wiki
People/Organizational	Lack of time to visit the wiki
	Lack of motivation in using the wiki

In addressing this problem, the organization established a number of CoPs domains which among other things aimed to address the lack of interactivity and engagement aspects that was crucially missing in the wiki portal project. In CoPs, employees with similar interests were provided with a conducive environment for them to jointly discuss and share their experience and technical expertise face to face. By allocating this collaborative avenue for the employees to meet and interact on a regular basis; it helps to break knowledge silos and overcome the culture of knowledge hoarding by instilling trusts, respect and camaraderie among them. In addition, the introduction of the CoPs portal is considered timely and appropriate as it helps to ensure continuity and it caters well for employees who are lacking in the abilities and skills to communicate and effectively. A study by Oluikpe (2012) which explores the

development of knowledge management strategy in a financial instruction fittingly demonstrates the benefit gained by the organization in striking a balance between the utilization of technology and people approach through communities of practice and a functional portal which together successfully drove the implementation and managed to increase the knowledge flows across the organization.

With regards to the problems faced by Agency X in implementing its knowledge management program, they are in tune with the list of issues and challenges that impede effective knowledge management in the public sector which have been reported previously in the literature (Al-Athari & Zairi, 2001; Biygautane & Al-Yahya, 2011; Luen & Al-Hawamdeh, 2001; Seba & Rowley, 2010; Syed-Ikhsan & Rowland, 2004). This suggests that the problems faced by Agency X in implementing its own knowledge management program are not unique as many public organizations have faced similar obstacles before. A closer inspection of these barriers to knowledge management also reveal that they can be categorized into three main categories; people, organization/process and technology.

Table 2: Agency X's Knowledge Management Issues and Challenges

Category	Issues
People	Lack of awareness and understanding
	Lack of sharing culture
	Lack of time
	Lack of communication and interpersonal skills
Organization/Process	Lack of top management support and commitment
	Absence of rewards and incentives
	Staff Turnover
Technology	Reliability of the ICT infrastructure

What matters most now is for the organization to address the issues accordingly whilst continuously seeking to find the right balance between people and technology in ensuring successful knowledge management endeavor. Contrary to popular beliefs, knowledge management is not just about technology alone. The use of technology in knowledge management acts as one of the key enablers to the initiative rather than a silver bullet solution in managing organizational knowledge. Past studies reveal that excessive emphasis on technology will only present an undesired effect to the initiative (Chua & Lam, 2005). It is thus important for organizations to place equal emphasis on the "soft" aspects of knowledge management which includes the role of people and culture in the initiative.

Limitation of the study: The case study was based on one knowledge management initiative implemented in a single organization relating to the public sector, thereby limiting the generalizability and may not be representative of those in other organizations. The list of issues proposed in this study may not be exhaustive and future research could explore other factors that are deemed critical.

4. Conclusion

The importance of managing organizational knowledge in the era of globalization where only the fittest will thrive cannot be taken lightly. Organizations, private and public sectors alike, which fail to recognize the significant role played by knowledge management, will find themselves to be left behind and struggle in obscurity. In the hustle and bustle to embark on a knowledge management initiative, equal emphasis should be given to finding a right balance between people and technology aspects. Once the dynamic balance is achieved, organizations will be able to realize value of knowledge to facilitate them in achieving organizational excellence.

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Trust, Transaction Costs and Networks: The Case of Malaysia

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Abstract: Malaysia's rapid development and its comprehensiveness differ from other Asian countries. Due to its heterogeneity, religious and political movements, as well as modernization Malaysian society underlies the very concept of culturally embedded values that influence economic activity and evaluate moral obligations in the entrepreneurial context. While economic welfare is a purpose of social relations, its mechanism is fully dedicated to build trust and avoid intermediary costs. This paper puts the emphasis on idea of trust and transaction costs in regards to Malay networks and their current state. The logical result confirmed that trust is the fundamental element binding social and economic relations.

1. Introduction

High level of social capital seems to be a desired and necessary condition for a long-term economic development. While specified norms of behavior and expected attitudes may change over time, both individual marginal utility and the groups of interest strive to better their economic performance and increase their welfare. Hence the chance for effective collective actions rises, as every individual has a role in a society. The functional elements for any cooperation are therefore conditioned by the relations between individuals. Based on a strong theoretical and empirical ground one can therefore assume that complex social relations, norms and shared values are the binding elements to reduce transaction costs and increase the possibility to cooperate in more effective ways. Among the binding values that enhance economic activity and reduce the occurring transaction costs, trust is the most commonly discussed. Trust is the base of the social capital, it reduces the need for information and express mutual assumptions of good will of the counterparty. In this context I follow Fukuyama (Fukuyama, 1996) and his definition of trust as the expectation that arises within a community of regular, honest and cooperative behavior, based on commonly shared norms of other members of that community.

There are generally two ways that institution of trust can enhance economic performance. The first way is as discussed based on lowering transaction costs, whereas trust is both a quantifiable and qualitative causative factor for commencing any activity. Low level trust increases the expenses related to the monitoring, information gathering and constant adapting to changing obligations. Simultaneously low level of trust disrupts control over the partnership and where predictability for innovation and risky investments is desirable, counterparties may seek for less profitable, but certain outcomes. In high trust societies, the idea of spontaneous cooperative behavior and network capital is evident and emphasize common strive to reduce formal institutions (Delhey & Newton, 2003). Trust can also be seen from the perspective of the government performance and believe in its efficient functioning. Where the public opinion (and the entrepreneurs) believes in honest and just policies being implemented, as well as fair and businesslike approach, it commences to reduce the need to possess all the information. While believe in the government performance brings indispensable for economic activity predictability and stability, transaction costs can be transferred on formal institutions and formal arrangements. Thus trust in economic policies facilitates cooperation among entrepreneurs, the spending on obtaining information as well as monitoring costs decrease substantially (Putnam, 1993).

In the paper I have extracted two institutional dimensions which construct the modern concept of networks. Thereby by joining trust and transaction costs in the framework of the New Institutional Economics, I strived to present the idea of trust as a source of potential social and economic benefits. The explanatory framework consists of main elements characterizing trust and transaction costs from the common perspective. While presenting the ground and their understanding, I seek to underline elements determining the unexpected growth of Malaysia. Hence by evaluating trust in the context of Malay networks I pursued to extract main determinants of their existence. Taking into consideration core values and rapidly expanding Malaysian economy, disparities between Malay (and broadly understood Asian economics) and western socioeconomic temporary weakness might be the result of culturally-embedded values.

Trust and transaction costs: To understand the importance of the institution of trust one has to acknowledge the idea of transaction costs. A brief history of its development underlies the workings of Ronald Coase and Robert Williamson. Introducing the concept by Coase was motivated by the need to set a theoretical framework for predicting specific economic outcomes. Although initially the framework was designed to prove actions performed by the firms and their direct results visible on the market, the real meaning lied behind. The price mechanism profoundly described in the *The Nature of the Firm was* attracted by monetary economics literature (Coase, The Nature of the Firm, 1937). Simultaneously the common needs to strip and minimalize indirectly related costs started to move slowly to immaterial costs of production and by the early 1950's the idea of transaction costs was coined (Coase, 1960). It was Oliver Williamson and his most widely known paper on *Transaction Costs Economics* that was considered as a breakthrough in the understanding of transaction costs. With the immaterial, socially framed and non-quantifiable costs, transaction costs became the subject of more intense studies and the broader area of discussions. Accordingly to Williamson the major determinants of transaction costs are limited rationality, frequency, specificity and the opportunistic behavior. The explanatory framework for the transaction costs differs through the time. Commencing as "the costs of running the economic system" (Arrow, 1974), through "costs associated with the transfer, capture and protection of rights" (Barzel, 1997) to "the costs to make an exchange, to transfer the property, to start an activity, to protect one's own business, to gather information, to change or to preserve the actual framework, etc" (Tridico, 2004).

Kenneth Arrow (Arrow, 1974) defines transaction costs as "the costs of running the economic system." Yoram Barzel (Barzel, 1997) defines transaction costs as "the costs associated with the transfer, capture, and protection of rights." Thrainn Eggertsson (Eggertsson, 1990) observes that transaction costs are the costs that arise when individuals exchange ownership rights to economic assets and enforce their exclusive rights. The more comprehensive definition of transaction costs is brought out by North (North, 1990), he described transaction costs as "the costs of measuring the valuable attributes of what is being exchanged and the costs of protecting rights and policing and enforcing agreements". Whereas the idea of transaction costs lies in the heart of the New Institutional Economics, the very common model of perfect market with the fully rational players suggest no external costs related to the informal elements in any of the negotiation and decision process. In the model of a perfect market, transactions are both costless and instantaneous. Transaction costs tend to be zero if information is perfect and symmetrical among parties. However in the real world where transactions occur between various parties, one should expect bounded rationality, opportunism and asset specificity (Williamson, 1985). To differentiate particular elements of transaction costs, we define them as follows:

- Bounded rationality – behavior perceived as rational, common and expected, however only in a limited dimension. It involves cognitive limitations and limitations arising from the wrong or subjective anticipation and belief in good will of the counterparty (Williamson, 1975).
- Opportunistic behavior – covers incomplete information or subjective disclosure of important information that leads to disturb the view of the counterparties. It focuses on mislead to gain advantage over the partner (Williamson', 1994). Opportunistic behavior assumes moral hazard and adverse selection as rational, because "contractual man" (both in the case of an individual and company) is self-interested and profit seeking.
- Asset specificity – regards the non-fungible assets that are the subject of specific transactions. Defined by the agreement by parties, asset's value derives from its usage and therefore organizations seek for cooperative relationship.

The above mentioned elements of the transaction costs occur before and after the contract is signed and the parties are obliged to follow certain agreements. While the opportunism and bounded rationality are mainly the subject of the initial costs, they do also include searching and gathering the necessary information and the negotiation phase costs. It is widely accepted view that before establishing a partnership, parties spend relevant resources to find project advantageous for them and therefore they need to commence with the market research and choose from the variety of alternatives. When the research phase is over, parties start to negotiate. They commit with the agreement design and schedule of course of the transaction. Legal costs, benefits and potential losses might be included in the agreement, while the comparative advantage of the partnership becomes a subject of another costs analysis. After the agreement is signed and the parties except the conditions to be respected, additional transactions costs arise. The primary of them include monitoring, enforcement and insurance. Whereas legal costs can be attributed to the phase in between recognizing the market and signing the contract, uncertainty is the main determinant of ongoing need to monitor and collect data. While the refinements are necessary, the

mutual control of adhering to previously agreed options force parties to constant verification and the compliance of the terms.

Regarding the idea of transaction costs and the relevant outcomes, one should perceive commencing a partnership in the form of mutual gains and therefore strive to gain "a belief that the other agents would act in a predictable way and fulfil their obligations without special sanctions" (Radaev, 2002). Both trust and trusting behavior depending on the social structure should be the basis of any partnership. Therefore trust as a base of the social structure and the pillar of the informal institutions hierarchy is considered desirable. Thus social capital in the form of social networks, informal frameworks, existing norms and eligible outcomes is inevitably related. Underlying factors lead to higher trust and enable its transferability among individuals and companies. While trust enhances social structures, one can divide social structures into two broad categories, one where people help each other and another where individuals strive for self-sufficiency (Coleman, 1994). What factors lead to such diversification is often a matter of institutional framework with the prevalence of trust. However it is the result of the role trust plays in the particular society. It can therefore divided two-fold, as a conscious substitute for the formal control in governing transactions and facilitation of networks enhancing economic transactions.

In the context of the institution of trust, I follow Höhmann and Welter and their distinction. Split into four categories, trust undergoes a broad categorization and hence shows its application:

- Personal – trust between individuals that forms long-term relationships. Bilateral relation and kinship characterize personal trust and thus prove the importance of informal institutions in the form of norms and rules. These informal institutions create therefore a framework where individuals are aware of potential outcomes and become more eager to commence a venture with each other (Höhmann i Welter, 2004).
- Collective – trust of a group, transferable and within particular framework. Individuals trust each other because of the same background, similar attitude and often the same interests. Collective trust can mislead with the personal trust, due to very flexible boundaries.
- Institutional – trust based on the institutional framework, whereas formal and informal institutions mutually create a code of conduct and therefore set the prerequisite for commencing economic activities. Institutional trust reduces the need for personal or collective trust, due to the formal guarantors and possible sanctions if the conditions of an agreement are not fulfilled (Radaev, 2002).

Table 4 Types of trust
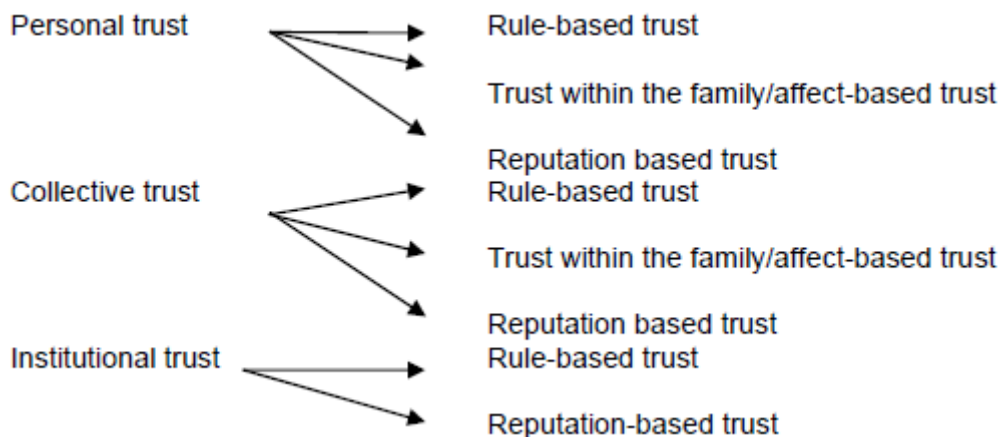
Source 1 Pauline E.F. Poel, *Informal Institutions, transaction costs and trust. A case study on housing construction by migrants in Ashanti-Mampong, Ghana*. Master thesis presented for the study International Development Studies at the University of Amsterdam. August, 2005, p. 22

Regarding the initial distinction of how trust can affect economic performance, one can acknowledge theoretical links suggesting its importance. Lowering transaction costs by limiting resources on information gathering, monitoring, control and violation from the agreed conditions or legal costs can be achieved with the rising level of trust (or trust already possessed as a good will of the counterparty). With the rising level of trust, resources can be spent on additional rent seeking activities, exploring new mutual areas of interest or to increase the competitive advantage over other entities on the market. Simultaneously more risky activities towards innovation and less formally structured areas of

cooperation are the results of growing confidence and therefore bring the possibility of spontaneous cooperative behaviour.

Looking for the perspective of government performance as well as the quality of economic policy we can claim that more trusting societies where belief in government effectiveness is relatively high lead to substantial stability. As an effect, reduced uncertainty in political decisions impacting material welfare entails possible investments in both innovative investments and human capital, where the outcomes cannot be measureable. Whereas political stability might be the result of its achievements in the field of measurable economic benefits, long term trust is necessary to maintain its effectiveness (Putnam, 1993). On the moral ground however the main question regarding its mutual and often ambivalent relationship arises. Trust as a result of internal values and the environment leaves the matter of pay offs relatively untouched. Therefore considering that trustworthiness can be either the fundament for efficient cooperation or be its result, we therefore ought to seek for explanatory framework. As we come across the idea of spontaneous order, we perceive current state of matter as an inevitable and constant. Thus the trust we possess in others (as well as ideas) is a cause and result of shared social norms and common attitudes, the spontaneous cooperative behaviour becomes an outcome of social relations and any economic decisions are based on the belief in honest pursuits of mutual welfare (Gambetta, 2000). In the understanding of the shared norms and mutual trust one might follow Ostrom who advocates for the "indirect evolutionary approach" as a substantial idea of cooperative behaviour in the collective decision – action relations (Ostrom, 2000). We do therefore assume the trust and trustworthiness already shared are the evolutionary developed need for collective work. It simultaneously leads to enhance the concept of trust not only in the context of transaction costs, but also as a form of cooperative norm. We thus can follow Granovetter and his concept of a generalized commodity' in the understanding of norms and social networks that use trust as a binding element to grow and secure its members for any self-interested agents (Granovetter, 1985).

The rationality of trust and impact on transaction costs: We lessen our cognitive demands by following mental shared models. And we form constraints that "restrict the dimensions of [their] problem situations and thereby reduce the cognitive demands placed on individuals" (Lowenberg, 1990). However looking at the growing importance and understanding of how trust works, we can claim that both payoffs and moral values underlying them lead to form cooperative behaviour. Unless it persists, it is beneficial for parties and show that trust as a value is based on moral standards, social expectations and rational calculation.[2] The common turning point in the contemporary studies on trust and transaction costs is the tautological and relatively easy to accept generalization of trust and its positive effects on economic performance. While we apply the idea of common pursuits and honest relationships, we strive to explain the successive outcomes by already existing patterns (Portes, 1998). Thus only by applying the idea of trust and trustworthiness and generalize it on the societal level we are able to see the consequences of relations and networks on simultaneously honest and beneficial ground.

Collaboration and networking in Malay context: Open and based on moral internal norms networks emerge in every society. Based on the learning experience of the emerging economies of South-East Asia however one might acknowledge their existence and expansion differently than in the developed markets. The pursuit of wealth in the case of Malaysia, the most heterogeneous country in the South-East Asia proves that networks are simultaneously main outcome and a source of wealth. In fact they commence due to the common purpose of wealth. The idea of networks in Malaysia has its long history. Expressed by the historical roots, where Malay in order to advance their position had to follow the bumiputera-ism, regarded as the know-who attitude and therefore seek for a patronage, intuitively transferred to collaboration and networking common for the capitalistic and democratic economies. Malay networking based on the power of collective, where the community of highly skilled entrepreneurs is gathered and follows a very modern and meritocratic attitude, socialize in order to parallel the concept of *ummah*. Malay networks brought up not only to provide business opportunities, but also to create a channel to share and distribute information are a product of both historically formed small communities that focus on egalitarian growth and distribution and NEP redistributive and pro-Malay economic policies. However Malay networks based on trust and set to reduce transaction costs of possessing new information, monitoring or control are not only based on the brotherhood idea of helping each other.

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[2] More on rationality and moral constraints, please see Raja, P., Boundedly rational or intentionally driven by moral constraints?

They are a fully rational, conscious and a long-term process of building a group based on discrete and ethnic features. Despite its creativeness and viewed from a side the perceived loose-knit relations, Malay networks are comprised of entrepreneurs that have to trust each other, because it is often the network that contains the value and not the real outcomes. Sharing knowledge, extending ties and expressing trust among each other should be then seen as the very egalitarian (and demonstrative) and widely discussed way to grow while fulfilling the moral and religious obligations.

To generalize the functioning networks I follow the explanatory framework suggested by Fukuyama. The necessary openness and the generalized trust stress the importance of ties and the ability to form mutually beneficial partnerships. Complex partnerships that lead to networks and organizations are essentially a result of shared (or transferred) trust. The most common and natural network considered as a very fundament on any society is the family. Bonds are close, help is unconditional and trust is generally built-in. Spontaneous sociability or generalized trust is the second form of network (Fukuyama, 1995). Contributing and expanding Malay networks while being a ground of anticipation, rational calculation and moral obligations regard to the most culturally and socially embedded value – the constant expectation to help one another. Mutually trustworthy with visible (or potential) payoffs Malay networks partially concerned on Islamic concept of community and therefore brotherhood, prove the need for sociability in order to achieve economic welfare (Pemberton, 1994). As often regarded just a source to help and enhance other entrepreneurs and resources, networks might be interwoven with the religious ideas of special, privileged position towards people outside the group. Hence to integrate the ideas of networks, trust and transaction costs with "privilege politics" seems too elaborated, the Malaysian society proves its complexity on various grounds.

2. Conclusion

Existing and rapidly expanding networks are treated with the egalitarian approach and mostly open to new entrepreneurs who possess similar attitude and enhancing others ideas. While socializing and bringing together various individuals, networks might be perceived as eclectically and highly condensed groups. However mirroring the *ummah*, networks in Malaysia have become a source of unconditional trust. Whereas open, random and spontaneous, they work as circles of mutual acceptance and common perspectives. Therefore reducing transaction costs as well as the associating costs which seem to be inherent in the modern western world, are the sole purpose of networks in Malaysia. Alliances, connections and associated endless possibilities, bring often complex ventures, goal-oriented communities and co-joints needs to increase both economic and social welfare.

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Television effects on Young Peoples Cultural Identity

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Abstract: The present study aimed at describing the effects of Ardabil on improving cultural identity of young generation. The sample consisted of all the youth living in Ardabil Province. Using cup city related sampling method 384 people were chosen as sample. The question is was two sections: demographic features and indexes according to the research topic. It was validated with the help of expert and also its reliability was 87% alerting to Cronbach ratio. In order to analyze the data descriptive fests (mean and standard deviation) freedman in perennial tests one variable variance analysis were used. Sabalan channels programs on improving the youth's cultural identity and local arts was in average (3.04) and in attention to cultural heritage was above average (3.04) aspects of demo graphic variables with regard to sex age universality degree occupation and marital status the respondent's average responses were not meaningfully different.

Key words: *identity, cultural identity, cultural heritage*

1. Introduction

Identity which the association of self with one's essence (Jamshidi, 2004) has found different stratifications of individual and society. According to (Bagful, 1981) social identity has two aspects namely individual and group identity -both include individuals approach -attitude and perceptions – individual attitude toward himself and social community to which he belongs (Lee-2006).In social context identity has different layers; Family identity which is the lowest to global identity which is the highest (Fakuhi, 2011) In every layer-identity is presented with different economic- cultural ideological aspects. In a wide spectrum –how ever –identity finds it –ultimate form in the national identity which encompasses other ethnic – local –civil identities showing a kind of collective self-esteem (Zhang & Lang, 2002; Abolhasani, 2007). Cultural aspect of identity includes values – symbols – norms and beliefs which make an individual or society. Unicoi conference of cultural policies held in Mexico City in 1982 recognized cultural identity as the central lore in every individual or groups character which underlies most decisions behaviors- actions and processor (Salami. 2000). National cultural identity unites all aspects of common cultural heritage. Cultural has a uniting and stabilizing power which is the most important aspect of national identity. Other aspect like language –history –and religion are considered among this aspect (Sani Ajlal, 2005). There are some Identity Theories that we express them in sum.

Theory of cultural processes controlling system - This theory provides a pattern of a relation between force –stress-pressure and identity from which a new identity emerges. According to this theory social and environment pressures break away the return ties which were holding identity process. This break away is the result of two functions.

Theory of symbolic Mutual interaction - People get new perception of environment through interaction which leads to a change in his behavior.

Theory of Identity Structure- In this view behavior is approached as a reaction to environmental processes. Structuralisms attach or relate social positions to a specific identity and for them environmental factors have a hearing on behavior and identity.
And also, there are some theories about Media that we express them in sum.

Reflection Theory - According to this theory Media are a good reflection of a society and reflect values and meanings of every society. They have a controlling mechanism and transmit social heritage- and maintain solidarity –unity and order.

Used and gratification theory- The focus of this theory on the gratifications received through consumption, here the use or consumption is not the main end by itself.
As a result watching TV with other people or among family members can be enjoyable and pleasing (Mc Quail, 2001)

Cultivate theory (TV Role) - According to this theory watching TV helps viewer conceptualize social fact .there are four stages:

1. Message System Analysis
2. Formulating questions about social fact from viewer's point of view.
3. Viewer analysis to see the amount of time spent on watching TV.
4. Comparing conceptualizing of viewers who watch TV most of the theme and those who watch the least.

Television is important for the following reasons:

1. It is an exclusive medium
2. It forms mainstream culture
3. It cultivates fundamental assumption about life in people's minds rather than specific attitudes or beliefs.
4. It is a conservative socialization tool.
5. Televisions different effects on culture is relative.
6. New technologies has increased TVs power.
7. Cultivation analysis emphasizes on TVs wide homogenizing effect.

2. Methodology

The present study aimed at describing the effects of Ardabil on improving cultural identity of young generation. The sample consisted of all the youth living in Ardabil Province. Using cup city related sampling method 384 people were chosen as sample. The question is was two sections: demographic features and indexes according to the research topic. It was validated with the help of expert and also its reliability was 87% alerting to Cronbach ratio. In order to analyze the data descriptive fests (mean and standard deviation) freedman in perennial tests one variable variance analysis were used.

3. Results

Regarding the first question of this research as enhancing cultural identity of Ardabil Province Yong people the following table presents the average score for state television programs:

Table 1: Comparison of average score for TV programs

parameter	mean	SD	MD	t	Df	Meaning
Cultural identity	2.99	0.47	0.030	-0.127	0.245	0.899

According to table 1 results the average score for TV program role is 2.99, and the assumed t-test is (-0.127) that less than the t table in level of 95%. As it regards to the second question of the research – interest and appeal for local arts-the following table summarizes results.

Table 2: comparing results regard TVs role on improving appeal for local arts

parameter	Mean	SD	MD	t	Df	Meaning
Improving appeal f-local Arts	3.04	.70	0.038	1.069	327	0.286

The Average score for this parameter is 3.04 and t is less than that of the table. Thus the state eleven has an average effect on improving young people's interest and appeal for local arts (music).

Table 3: TV role on improving young generation's cultural heritage

parameter	Mean	SD	MD	t	df	Meaning
Enhancement of cultural heritage	3.24	0.57	0.032	7.765	0.319	0.001

The results of table 3 for the third research question summarizes the results showing an average score of 3.24 and t test is (7.765) bigger than the table.

Table 4: Multivariate variance of scores on the dimensions of cultural identity, gender- age- University degree –occupation and marital status

	Resource	r	df	Main squares	F	meaning	Sig	R²
Gender	Religious	0.052	1	0.052	0.203	0.653	0.001	0.073
	Cultural heritage	0.013	1	0.013	0.040	0.841	0.001	0.055
	Local art	0.078	1	0.078	0.143	0.706	0.001	0.066
	Local language	0.003	1	0.003	0.009	0.927	0.001	0.051
Age	Religious	0.596	3	0.199	0.777	0.509	0.016	0.214
	Cultural heritage	1.816	3	0.605	1.856	0.140	0.037	0.474
	Local art	0.693	3	0.231	0.423	0.737	0.009	0.133
	Language Local	1.213	3	0.404	1.163	0.326	0.023	0.308
Education	Religious	1.064	4	0.266	1.040	0.389	0.028	0.322
	Heritage Cultural	0.649	4	0.162	0.497	0.738	0.013	0.166
	Local art	1.235	4	0.309	0.566	0.688	0.015	0.185
	Local language	0.461	4	0.115	0.332	0.856	0.009	0.123
Occupation	Religious	1.655	6	0.276	1.078	0.378	0.042	0.416
	Heritage Cultural	2.341	6	0.390	1.196	0.312	0.047	0.460
	Local art	4.868	6	0.811	1.486	0.187	0.058	0.563
	Local language	1.382	6	0.230	0.663	0.680	0.027	0.257
Marital Status	Religious	0.030	1	0.030	0.115	0.735	0.001	0.275
	Cultural heritage	0.072	1	0.072	0.222	0.638	0.002	0.077
	Local art	1.070	1	1.070	1.960	0.164	0.013	0.057
	Local language	*0.236*	*1*	*0.236*	*0.678*	*0.412*	*0.005*	*0.204*

The result in Table 4 show that locate TVs Programs effect on different aspects of cultural identity is not meaningful.

4. Conclusion

The local TV has an average vole and effect on enhancing cultural identity of the youth. This is in line with what Azizi (2010) showed; they showed that in social aspect 92% and 75% in cultural the respondents attached themselves to cultural parameters. The results were the same for enhancing appeal for local arts. In Ardabil Province television (Sabalan TV) has a fundamental role and the religions society has expatiations of a different kind .People use the media differently according to their gender social class-economic status and etc. Sabalan TV has a great role in build a religions identity and is regarded as one the most effective sources of identity building.

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Information Technology Effects On Efficiency Of Human Resources

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Abstract: Nowadays human resources are one of the most important inputs in business environments that play an effective role in agencies' success. Thus, determining the effects of Information Technology on human resources efficiency is an important matter that due to the previously done studies, it has not been researched broadly. Therefore, in this article information technology effects on human resources efficiency is being evaluated by using Data Envelopment Analysis (DEA) method. At first, inputs and outputs of human resources which are created because of Information Technology or being affected by it are identified. Then, by using an appropriate model of Data Envelopment Analysis, the effects of Information Technology on human resources are being analyzed. At the end, this article locates the inputs and outputs which are having the most effects on efficiency. The results are useful guides for decision makers of agencies, that in order to achieve a better efficiency, to focus on the inputs and outputs that having the most effects to amplify efficiency.

Key words: *information technology, human resources, efficiency, Data Envelopment Analysis.*

1. Introduction

Information Technology with its fast growth has brought great advantages for organizations and caused superiority in competition with the others. In most cases, investing on information technology has caused a major thrift on expenses. But the amount of this effect and how much it affects different related aspects with business needs to be studied. One of the business's pillars which its operation is being affected by information technology is human resource (Sharyn,et al., 2003). Considering previously done studies, the literature of the topic in evaluating Information Technology effects on human resources can be classified in two categories of qualitative research and quantitative research.

Qualitative Research: Qualitative researches are discussing the nature of the effects of using Information Technology in work environments. Of qualitative researches following points can be indicated. Remenyi and colleagues (1991) have figured that the most prominent effects of information technology on human resource processes appear in three steps. These three steps are automation, making tasks informational, and mutation of workflows. This framework of information technology effects is improvable at any point which is related to technology (Sharyn D. et al, 2003). According to Zuboff (1988), automation of information technology, often decreases the amount of work normally needs to be done and potentially makes more opportunity for people to use the maximum capacity of their intelligence and talent. Above all the effects of Information Technology on human resources, considering the increasing automation as the result of using Information Technology, human resources are more able to achieve information and the opportunity of answering more questions of customers and managers arises in a time scope and it will also help to execute complex concurrent tasks. As an example Mutch found out that Information Technology will convolved tasks that were being executed separately from each other in the past (conclusion of Much 1998). There by reducing the time taken for a task of a job, the efficiency will be increased.

Haines (1999) found out that the technologies are being used recently, improves employees' knowledge, productivity and skills. In addition to these, Greengard (2000) believes that by using activities automation tools such as information technology, employees answer the questions quicker and gather more accurate information. Above mentioned topics, Broderick and Boudreau have researched on the goals of Information Systems on human resources which are very similar to the effects of Information Technology on human resources. They mentioned that the goals of Information Systems usage was to reduce costs, improve services, generation of technology and innovation of the employees (Broderick & Boudreau,1992). Decreasing cost can be achieved by the Information Systems usage so that the time can not be consumed for normal tasks and so the human resources of the organization can move their activities into the managerial state and hence increase their added value. The service improvements are categorized as changing the current method and working with the managers and decision makers. Employees can therefore be much more involved with the mangers and hence they can be more useful for

the customers. Furthermore innovation pushes into the development of the methods, technologies, services and new products. Employees can use information technology in order to develop new work methods and by becoming free from the day to day tasks, they will have the opportunity to be involved in new and innovative activities.

Apart from the above research, there has a long term research been conducted on the effects of the Information Technology on the working methods of employees (Wright et al., 1997). The results of the research show that Information Technology will decrease the enthusiasm of the employees and will increase the mechanism point of view to the relating task. Information Technology will virtually affect all aspects of the work. It has been specifically shown that the automation and information technology will increase the efficiency and quality of the employees. It also increases the market share in the global economy. This belief has causes so much investment in the technology in the recent years and hence the increase in profits of the enterprises. The above discussion shows to some extent the effect of Information Technology on the human resources but the amount of the efficiency achieved by this method is a separate question which will be discussed next.

Quantitative Research: Quantitative research's aim is to analyze the investment of the enterprises on nformation Technology, for example Ross and Ernstberger (2004) used the Data Envelopment Analysis (DEA) method to reach a conclusion on the amount of investment over Information Technology for production companies and generated a framework by DEA for analyzing the effects of information technology on the efficiencies of the enterprise. Table 1 shows all of the quantitative researches conducted on the effects of information technology on the efficiencies of the enterprises. By careful analysis of the researches, it can be seen that there is emptiness on the effects of the information technology on the efficiencies of the human resources of an organizations and according to the high capabilities of this model; it will be used to solve this specific problem.

Table 1 – A summary of the Issue at Hand

Researcher	Year	Goal	Method	Research Results
Arthurs A.J & Kinnie N.J	1996	Analysis of why managers cannot benefit from the advantages of IT in their work.	Comparing Effects of IT on jobs	IT is used as a power tool in the workflow and intelligent systems must be used for decision making.
Wright P.M, et al	1997	Analysis of the effect of IT on the employees and their work method.	Assumption Experimentation	IT decreases the enthusiasm and increases the mechanism in work.
S. M. Shafer, T A. Byrd	2000	Designing a structure for analysis of the efficiency of the organization with the IT investment.	DEA	DEA usage with the definition of inputs and outputs related to the effect of IT investment.
Back & Lynch	2001	Effects of environment and IT on the efficiency.	GMM[3] Estimation	IT systems has a positive effect on the efficiency of the organization only if it is used throughout all of the employees.
Sharyn D. and colleagues	2003	Analysis of the Effects of IT on HR specialists	Assumption Experimentation	IT enables the HR specialists to gain access and distribute information much more efficiently.
Ross & Ernstberger	2004	Analysis of effects of IT on Enterprise Efficiency	DEA mathematical model with the CRR-output method	Inefficient and even efficient enterprises that have invested highly on IT can improve their efficiency by decreasing IT investment.
Atrostic &	2004	Relation between	Even	IT in some countries has a

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[3] Generalized Method of Moments

Jarmin		business and effects of IT	Comparisons		relation with efficiency and efficiency, but it is a complex relation.
Chen Y. and colleagues	2006	Analysis of effects of IT investment on each stage of business	DEA mathematical model with the CRR-output method		The expansion of a method to assess the effects of IT on organizations profits can be made by a two stage DEA model.

It must be reminded that none of the conducted researches have been able to show a method to analyze the effects of Information Technology over the efficiency of human resources. Most of the previously conducted research on analysis of the profitability of investing over Information Technology is done on the effects of IT over the divisions that are directly involved with IT. Apart from this in banking studies, the efficiency of the banks has been analyzed by the DEA method has been done several times. But these studies have been mostly specific on the profitability factors.

Table 2: a Review on the Studies Made on Bank Efficiencies

Research Results	Outputs	Inputs	Method	Goal	Researcher
Description of indirect output costs function	Loans Investments	No. of Employees Stock Financial Resources	DEA-CCR Model	Assessing Efficiency of outputs and productivity changes	Fukuyama H & Weber W.L,2002
Development of law and technology during 1980-1990 has caused an increase in efficiency	Long and short-term loans Fixed capital gains	Workforce Fixed capital and loanable capitals	DEA-BCC Model	Analysis of the effects of law changes in Turkish bank efficiencies.	Isik I & Hassan M. K, 2003
After the experimentations pointed out issues have better usage compared to the traditional issues.	RDIBA ROA	Investors' capitals Gains Fixed Capital	DEA-CCR Model	Assessment of the efficiencies of Greek banks using the DEA approach	Halkos G.E & Salamouris D.S, 2004
The Small and Large banks have been more efficient than the medium ones.	Transactional Gains Loan Size	No. of Employees Fixed Capital	DEA Model	Chinese banks before and after changes in law	Chen X et al,2005
Development of a method for managerial assessments with a greater limitations such as indefinite costs.	No. Service Transactions	Branches No. of financial and administrative employees Operational costs	DEA-BCC Model	Assessment of the banking costs.	Camanho A.S.& Dyson R.G., 2005
Banks have evolved from transaction base into sales base. The organization of new banks is for increase of profit.	No. of Customers Account Credits Bank Credits No. of Transactions	No. of Employees Administrative costs	DEA-BCC Model	Assessment of the Portuguese banks in performing new roles, from profit, technical and operational point of view	Conceicao Silva, M, et al,2006
Generating a capability to compare banks in different environments.	P. notes in bank Loan installment Accounts Small Business Loans	Personnel Administrative equipment Administrative environment Other costs	DEA-BCC Fuzzy Model	Assessment of branches in different environments	Wu D., et al, 2006

Therefore this research will concentrate on the mechanism point of view of the effects of Information Technology over the human resources and will also use mathematical models to assess the efficiency, and hence aim to present a model to analyze the effects of developing information technology in enterprises on the human resources. This will be achieved by analyzing the inputs and outputs of the human resources that are caused or affected by Information Technology.

Data Envelopment Analysis (DEA) Method Description: Currently DEA method has a wide usage for operation assessment and its models are being developed and enhanced further every day. The structure of the method is the calculation of the most efficient relation between inputs and outputs of a decision making unit according to mathematical models and varying the input/output weights, which has made the vital difference between this method and others. Data Envelopment Analysis and varying the weights according to a specific goal, is used for improving efficiency in a space containing n decision making units which all use similar inputs to generate similar outputs. The most efficient weights for the inputs and outputs of the unit under study are selected in order to increase the efficiency of this unit over the efficiencies of the other neighboring units. Actually these are the limitations that a Decision Making Unit (DMU) will employ to reach the highest efficiency. Since the inputs and outputs of all the units are similar, by considering these limitations, the inputs and outputs of other units are adjusted. Number of DEA models is increasing by the day. Two structural models of DEA are CCR and BCC in which each has a specific goal in assessing the efficiency. Generally DMU's efficiency is calculated according to the inputs and outputs. This calculation is achieved by carefully assigning weights to the inputs and outputs of a DMU. The selected weights then will help to calculate the efficiency of a DMU which is a number between 0-1. Mathematically the efficiency of the J0th DMU is calculated as follows:

$$\max Z_0 = \left(\sum_{r=1}^{s} U_r Y_{r,j_0} \right) \Big/ \left(\sum_{i=1}^{M} V_i X_{i,j_0} \right), \qquad \textbf{(P1)}$$

Subject to:

$$\left(\sum_{r=1}^{s} U_r Y_{rj} \right) \Big/ \left(\sum_{i=1}^{M} V_i X_{ij} \right) \leq 1, \ j = 1,2,..., j_0,..., N$$

$$V_i \geq \varepsilon, i = 1,2,..., M$$

$$U_r \geq \varepsilon, r = 1,2,..., S$$

Where,

Z_0 = the relative efficiency of the j_0 th DMU,

Y_{rj} = observed amount of the r th Output for the jth

DMU, ($r = 1,2,..., S$; $j = 1,2,..., N$)

X_{ij} = observe amount of the ith input for the jth

DMU,($i=1,2,...,M$; $j = 1,2,..., j_0,..., N$),

U_r = weight for the rth output,
V_i = weight for the ith input,
S = number of outputs,
M = number of inputs,
J_0 = the index of the DMU being evaluated,
ε = a very non-archimdean number

Model (P1) is a non-linear program. The expected function is the maximum summation of the weights assigned to the outputs divided by the summation of the weights given to the input of the J0th DMU. In order to convert this function to a linear form, the following new form can be considered:

$$\max Z'_0 = \sum_{r=1}^{S} U_r Y_{r,j0}, \qquad \textbf{(P2)}$$

subject to:

$$\sum_{i=1}^{M} V_i X_{i,j0} = 1,$$

$$\left(\sum_{r=1}^{s} U_r Y_{rj}\right) - \left(\sum_{i=1}^{M} V_i X_{ij}\right) \leq 0, \, j = 1,2,\ldots, j_0,\ldots, N$$

$$V_i \geq \varepsilon, i = 1,2,\ldots, M$$

$$U_r \geq \varepsilon, r = 1,2,\ldots, S$$

Model (P2) maximizes the J0th DMU's outputs to the given weights. This is done when the summation of the J0th DMU's inputs is equal to 1. Vectors Vs and Us show the weights which cause the highest efficiency rate for the J0th DMU. Normally when the number of the DMUs overlaps the number of the inputs and outputs, Dual Problem solution can be used to decrease the calculation limitations. This solution also gives information for adjusting the inputs and outputs of the inefficient DMUs to boost them into efficient state. The mathematical Dual formulation of (P2) is the relation (P3).

$$\min \phi_0 - \varepsilon \left[\sum_{i=1}^{M} S_i^- + \sum_{r=1}^{S} S_r^+ \right], \qquad \textbf{(P3)}$$

Subject to:

$$\sum_{j=1}^{N} \lambda_j X_{ij} + S_i^- = \phi_0 X_{ij} = 0, \qquad i = 1,2,\ldots, M,$$

$$\sum_{j=1}^{N} \lambda_j Y_{rj} + S_r^+ = Y_{r,j0}, \qquad r = 1,2,\ldots, S,$$

$$\lambda_j \geq 0, \qquad j = 1,2,\ldots, j_0,\ldots, N$$

$$S_i^- \geq 0, \qquad i = 1,2,\ldots, M,$$

$$S_r^+ \geq 0, \qquad r = 1,2,\ldots, S,$$

By the addition of $\sum_{j=1}^{N} \lambda_j = 1$ condition, the efficiency that has a constant relationship to scale can be made variable as in model (P3) which will output much more realistic results compared to before. The resulting model is known as BCC.

In model (P3) the slack variables are related to inputs and outputs' constraints. In CCR model a DMU is efficient when the following two conditions stand:

A) $\phi_0 = 1$

B) $\sum_{i=1}^{M} S_i^- = 0, \sum_{r=1}^{S} S_r^+ = 0$

* Shows the DMUs that have the efficiency conditions. The main operation designed in the model in order to assess the operation of the DMU in converting inputs into outputs is their capability in generating virtual units. If all of the DMUs with the involvement rate of λ_j can generate a unit from their inputs and outputs, which can generate approximately the same output with decreased inputs (fraction between 0-1), the unit under study will be inefficient with the fraction of the efficiency (ϕ). But if none of the actual or virtual units can generate the expected output from the fraction of the inputs, i.e.:

$\lambda_j = 0, \, j = 1,2,\ldots, N, 0 \neq j, \lambda_0 = 1$ then, the unit under study will have a technical efficiency.

Inputs and outputs of the unit under study are defined as $\sum_{j=1}^{N} \lambda_j X_{ij}$ and $\sum_{j=1}^{N} \lambda_j Y_{ij}$ respectively, where

$\lambda_j \geq 0$.

Presenting the Proposed Model: According to the above discussion, the author is aiming to assess the Human Resources related to IT using the DEA method. The Logic of the DEA method is to assess the DMUs according to their inputs and outputs. Therefore in the proposed model the inputs and outputs of the

model are defined which include issues that IT affects their amount or itself causes these inputs and outputs. The inputs and outputs of the model are categorized into three groups according to the type of IT effect. The inputs of the HR of the bank's branches are divided into three groups of Data, Financial and Transactional needs and the outputs are again divided into three groups of Information, Financial and Transactional outputs. It must be reminded that the research of this study was made on Bank Keshavarzi of Iran. This bank specializes in two fields of providing loans for Agricultural industry developments and commercial investment accounts. With the lack of efficient IT usage in the loan department of the bank, this study was focused on the activities of the commercial or the financial departments of these branches.

Figure 1: Model Input/Outputs Classification According to Type
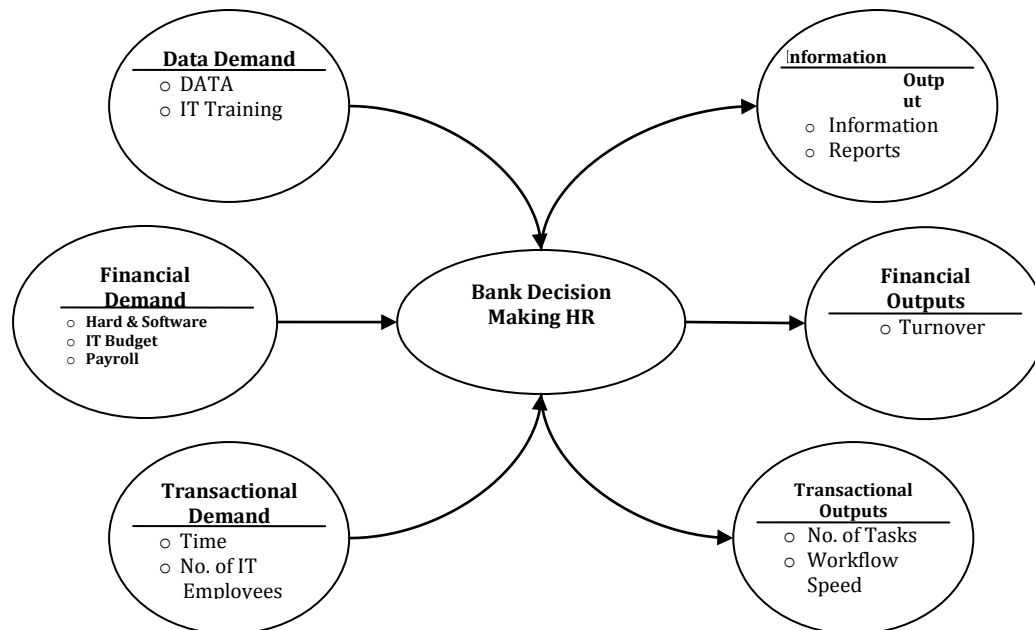
Next the inputs and outputs of the model will be discussed. According to each issues definition, their equivalent in the bank will be identified and measured.

Model Inputs: In this section all of the model inputs will be explained in detail. As stated before, since the study has been made on Bank Keshavarzi, the inputs are explained according to the realistic conditions of this bank.

Data Needs : Data needs are the general and specific definitions about work that the human resources need the access for it. It is mostly Data and IT training. These two inputs help the human resources in two ways to achieve their tasks. The data helps the employee to characterize the type of the services they will give but IT training helps the IT personnel to improve their services in relating sectors.

1. Data : An object or an activity is defined and explained by real elements and characteristics. Data is generated from the activities and operations within the organization or outside of the organizations such as customers, suppliers and etc (Sarrafizadeh, A 2004). In order for the Human Resources to achieve a workflow, there is a need for data. Since the outputs of IT usage are generated by data inputs into the DMU, hence Data is considered one of the most important resources for the processor to generate information and will therefore be used in the proposed model. In analysis of Iranian banks the data inputs to the human resources are considered as few fields that these human resources need to achieve their transactions. The data is received from three sources which are customers, Local Area Networks (LAN) and Wide Area Networks (WAN). This data after being processed by the human resources is then converted into information. The information is converted in an understandable format for the receiver and has a special value for the condition and situation of the decision maker. The amount of information produced by the bank employees can be measured by the number of information fields generated from the transactions.

2. Information Technology Usage Training :It must be noted that employees need specific training to be able to use tools and systems for gathering, processing and presenting information. In information technology usage, training and how to use these tools to make work more efficient is one of the most important factors. Due to this fact there is a direct relationship between skills and training (Hertel, G., et al, 2005) and in some cases when there has not been enough stress over training, then the training needs must be extracted and work must be done in improving them. These courses where taught in two levels of introductory and advanced in the Bank Keshavarzi branches that were studied. The introductory courses include computer basics, Introduction on Internet, windows and Microsoft Office family of products. The advanced courses include Access and Excel. The amount of employee training in the branches under study is the total hours of IT training given to each employee.

Financial Needs : The second group of inputs under the effect of IT has financial state. About the inputs, most of the financial resources are invested into IT, which are mostly purchase, implementation or development of hardware, software or other IT systems. IT budget is another input that has a financial characteristic. The most important elements of the IT budget are: equipment development, maintenance, training and etc… which can be considered for a specific period of time. It must also be noted that an increase in the skill level of the human resources, will also cause an increase in their payroll and hence affect the financial resources.

1. Hardware and Software: As Ross and Ernstberger (2004) learned, one of the needs of IT human resources for achieving their tasks is hardware and software tools. But it is important to concentrate on the specialist IT personnel. Hardware and software is mostly used for gathering, storing, maintaining, managing and presenting tasks of the personnel. In branches of Bank Keshavarzi these equipment are divided into 5 groups of communication devices, software, personal computers, VSAT equipment, scanners and different types of printers. The total value of these five groups is the general investment of the branch on hardware and software which is considered as the input of the branch employees.

2. Information Technology Budget: According to the research made, IT budget that is considered for each branch of the bank, is in order to increase the skills of the IT users by training, providing the required software and hardware equipment and maintenance of the IT equipment (Ross, A., et al,2004).

3. Payroll: Jarmin and Atrostic (2003) believe one of the sectors that IT really affects is payroll. The main reason for it is that because IT users gain a higher skill level compared to the rest of the users demand a higher payroll. But in Iranian banks, IT does not really affect the payroll of the employees. But the main reason for their increase of payroll would be their long services in the system and higher experience. For this reason this input will be considered as the inputs of the model.

Transactional Needs: The third group of the inputs for the proposed model is the transactional needs. These needs are mostly the needs for executing the user related transactions. The inputs for this group are the task duration and the number of IT users, which is strongly affected by the IT automation. Information Technology removes the reoccurring and long lasting tasks hence greatly affecting and reducing the workflow. With the same policy, Information Technology affects the number of users by reducing them.

1. Time : Workflow duration, hence time is one of the elements in the DMU model that acquires efficient usage. Increase of operation duration, increases costs, and decreases efficiency and effectiveness hence decreasing human resources efficiency as a specific case and in general DMU's. Information Technology together with proper tools gives the ability to decrease the workflow durations. As discussed in the effects of IT automation, Information Technology reduces reoccurring task and the workflow duration of the users and gives them the chance to maximize their intelligence usage (Sharyn D., et al,2003). Therefore the workflow duration of the user can be one of the inputs of the users that are equipped with the IT equipment.

2. Number of Employees : Human resources are one of the most important items in every organization. Efficient usage of the employees, decreasing time wastage, improving effectiveness, human resource usage in intelligent tasks and robotic usage in reoccurring tasks are of the final goals of Information Technology usage. In order to analyze the effects of IT on human resources, human resources can be divided into two groups of "Information Technology Human Resources" and "Human Resources of the Organization" (Ross,A., et al,2004). In Bank Keshavarzi branch employees are normally divided into two groups: financial and loan group which both classify as the IT employees. But because of the executive

difficulties of the loan group the relating workflow is not measurable, therefore the number of the IT employees of financial group is considered as the number of the employees of the branch.

Model Outputs: In this section all of the model outputs will be discussed in detail. Since this study is made for Bank Keshavarzi, the outputs here are explained according to the actual conditions of this bank. These outputs can be categorized into three groups of Information, Financial and Transactional outputs, which will be discussed next.

Information Outputs: Owning tools such as Information Technology will enable enterprises to increase their outputs such as information and reports need. The first consideration is the ability to create larger information because of the access to larger data by using Information Technology. However information technology will give the decision makers ability to generate specific and general reports. Each issue will be discussed next.

1. Information: Information is defined as data that is processed, organized and convolved, in order to transfer information to the person (Sarrafizadeh, A 1383). The information is processed in an understandable format for the person and has specific value for the condition or position of the decision maker. The amount of information that is generated by the bank employee can be measured from the number of the information fields of the transactions.

2. Report: Information Technology is used to improve the easiness in accessing data and hence increase the power of decision making in specific circumstances (Sharyn D., et al, 2003). In time access to correct information will enable a decision making unit to make correct decisions in a given time frame. By data mining some specific reports are generated for the users and some periodical reports (daily, weekly and monthly) for the managers and decision makers.

Financial outputs: Information Technology usage, will increase the efficiencies of the enterprises. The main goal of the enterprises in using IT is to increase their financial outputs and hence increase their profit. Therefore the financial outputs of the enterprise are one of the important factors that will be affected by the Information Technology. The most important characteristic that shows the effect of Information Technology is the financial turnover.

1. Financial Turnover: In developed countries, studies show that there is a strong and positive relation between the Information Technology and Economical efficiency (Indejikian. R., et al, 2005). The aim of the enterprises is to gain revenue and revenue itself depends on turnover, and since one of the goals of Information Technology usage is to increase the turnover of an enterprise, therefore turnover is one of the important parameters in measuring the efficiency of the enterprise. This is the total of Accounts Receivable and Payable of the financial division in a specific period of time.

Transactional Outputs: Information Technology automation will decrease the time required for the concurrent tasks (Sharyn D., et al, 2003). This will increase the transactional output which in the model is the number of performed tasks and speed of the workflow.

1. Number of Performed tasks: The effects of using information technology are the removal of reoccurring and physical tasks that are executed traditionally, such as calculations, time consuming activities and etc. These effects will cause the time needed to finish a task and hence increase the number of tasks achieved by a decision making unit. In banking terminology, the unit for each work is transaction. The operations that will be analyzed in the financial division of the branches under study are mostly the transactions relating to cash, transfer and Mehr Card services (intelligent inter bank money transfer system) that are achieved by this division's employees.

2. Speed of Workflow: One of the most important advantages of IT usage for enterprises and customers is the speed in attaining information and services. The reason for it is that IT reduces the reoccurring tasks for the users (Sharyn, et al 2003). Heins (1999) found out that IT also increases the knowledge and capabilities of users hence causing them to be able to answer larger range of questions and increase their working speed. In this study the work speed of the human resource is calculated by the division of the total number of transactions in a given period of time, with the assumption of the randomizing the transaction types.

Identification of IT Human Resource Efficiency by the DEA Approach: This research is using the DEA method for identification of the branches that are affected by the IT usage. It also aims to propose a method for increasing the efficiency of the decision making units by decreasing the inputs and outputs, and it must be considered that the increase in bank outputs depends on complex function of environment, such as competition, population, input and output prices (Dekker & Post, 2001). Since in such enterprises control over the outputs is very difficult, therefore this study will concentrate on increasing efficiency by better usage of inputs. Therefore the most appropriate method for the problem at hand is the usage of CCR model (P3 relation). It was noted that in previous researches the stated model has had many usages (refer to table 2). This model is designed with the aim to analyze the operation of each branch by converting the inputs into outputs. If all of the branches under study can be considered as DMU_j j=1,2,…,33 with the participation rate λ_j can create a sub branch by their inputs and outputs, so that with a lesser absorption of inputs (a fraction between 0 and 1) can generate approximately the same amount of output, the branch will be inefficient with the efficiency factor (θ). However if no real or simulated branch can produce the minimum analyzed output from the input with the efficiency factor of less than 1 i.e. $\lambda_j = o$, $j = 1,2,...,33$, $o \neq j$, $\lambda_o = 1$, then that branch has a technical efficiency. The decision making units are the human resources of the Bank Keshavarzi's branches. This bank is one of the first banks in Iran using IT for their development plans. The branches that have been studied are picked so that they have similar characteristics.

The number of the decision making units that are being studied must be 3 times the total number of inputs and outputs of the model (Fridman, L., et all, 1998). Therefore in the proposed model, since the total number of inputs and outputs of the model are 9, hence the number of the branches that are to be studied must be at least 27, the number of branches chosen for study are 37, and after refining the gathered data, only the information of 33 branches where considered and inserted into the model. But the important point is the method of picking the branches. As stated earlier, the environmental issues are very important in a decent analysis. The fair conditions state a similarity between the competitive conditions, geographical and population conditions and also the price of goods and services. In order to create similar conditions for comparing these branches, firstly the Bank Keshavarzi branch ranks where analyzed. Bank Keshavarzi branches are divided into 4 groups of first class and levels of 1-3. The ranking of the branches are according to the amount and value of the financial transactions and activities within all of the accounts. Therefore all of the selected branches must be of the same level. Because of the large number of branches in the 3rd level, at least 27 in similar geographical and population points, this group was selected for the research. All of the defined inputs and outputs for all of the branches with the same characteristics have been extracted and reported in table 3. The gathered data from the branches was analyzed using the Frontier software and the solution is presented in table 4.

Table 3: Appendix, Information Gathered from Inputs and Outputs of the Human resources of Branches

DMU	Data	IT Training (Hr)	Hard/Software (million IRR)	IT Budget (million IRR)	Data Capa.	Turn over (Sum)	No. of Transactions (thousand)	No. of Manag. Reports	Workflow Speed (trans/hr)
DMU1	136	80	25	31	296	9	11	264	6
DMU2	159	43	40	43	278	13	10	87	8
DMU3	386	35	47	49	251	13	9	107	10
DMU4	237	56	86	89	395	10	14	75	25
DMU5	139	27	46	47	216	10	8	85	7
DMU6	437	51	58	61	281	21	11	219	10
DMU7	132	53	61	64	252	21	10	180	10
DMU8	222	43	47	50	191	6	7	268	7
DMU9	348	40	44	46	251	35	10	211	11
DMU10	315	36	50	52	238	14	9	320	11

DMU	Data	IT Training (Hr)	Hard/Software (million IRR)	IT Budget (million IRR)	Data Capa.	Turn over (Sum)	No. of Transactions (thousand)	No. of Manag. Reports	Workflow Speed (trans/hr)
DMU11	120	16	37	37	247	14	8	206	9
DMU12	296	17	75	76	183	13	8	96	9
DMU13	142	55	72	76	238	11	8	317	10
DMU14	207	26	41	42	239	17	10	64	12
DMU15	165	42	39	42	299	15	11	113	10
DMU16	140	60	33	36	265	11	10	99	10
DMU17	241	77	51	56	268	13	9	81	7
DMU18	299	20	56	57	233	10	8	148	8
DMU19	213	50	20	23	205	8	7	85	10
DMU20	189	48	30	33	376	19	14	211	14
DMU21	394	75	54	59	230	15	9	138	8
DMU22	181	47	49	52	190	6	7	77	7
DMU23	450	64	45	49	257	21	11	297	6
DMU24	222	36	23	25	162	17	6	321	10
DMU25	101	51	73	76	262	15	9	105	12
DMU26	219	39	84	86	294	30	10	197	9
DMU27	61	29	44	45	139	7	5	199	7
DMU28	92	60	66	69	192	20	7	318	8
DMU29	212	40	60	62	150	7	5	182	3
DMU30	119	47	68	71	187	14	8	171	10
DMU31	194	48	71	74	203	16	7	196	6
DMU32	109	50	46	49	142	11	6	105	11
DMU33	199	60	41	44	257	10	9	96	10

Table 4: Results of Implementing Proposed Model

DMU No.	Input-Oriented CRS Efficiency	Sum of lambdas	RTS	Optimal Lambdas with Benchmarks	Reference Sets of Branches
*DMU1	1.00000	1.000	Constant	DMU1 1.000	{1}
DMU2	0.84584	0.883	Increasing	DMU11 0.307 DMU20 0.454 DMU25 0.122	
DMU3	0.72676	0.950	Increasing	DMU11 0.605 DMU14 0.147 DMU20 0.198	
*DMU4	1.00000	1.000	Constant	DMU4 1.000	{4}
DMU5	0.80344	0.919	Increasing	DMU11 0.783 DMU20 0.042 DMU25 0.095	
DMU6	0.66159	1.048	Decreasing	DMU9 0.252 DMU11 0.542 DMU20 0.250 DMU24 0.005	{9,11,20}
*DMU7	1.00000	1.000	Constant	DMU7 1.000	{7}
DMU8	0.72517	1.058	Decreasing	DMU11 0.407 DMU24 0.447 DMU27 0.205	{11,24,27}
*DMU9	1.00000	1.000	Constant	DMU9 1.000	{9}
DMU10	0.88778	1.342	Decreasing	DMU11 0.962 DMU24 0.379	{11,24}

DMU No.	Input-Oriented CRS Efficiency	Sum of lambdas	RTS	Optimal Lambdas with Benchmarks				Reference Sets of Branches
*DMU11	1.00000	1.000	Constant	DMU11 1.000				{11}
*DMU12	1.00000	1.000	Constant	DMU12 1.000				{12}
DMU13	0.86401	1.518	Decreasing	DMU1 0.016	DMU11 0.207	DMU24 0.103	DMU27 1.193	{24}
*DMU14	1.00000	1.000	Constant	DMU14 1.000				{14}
DMU15	0.88877	0.955	Increasing	DMU11 0.392	DMU20 0.483	DMU25 0.079		
DMU16	0.91969	0.753	Increasing	DMU4 0.012	DMU20 0.581	DMU25 0.159		
DMU17	0.54152	0.758	Increasing	DMU1 0.039	DMU20 0.601	DMU25 0.117		
DMU18	0.88276	0.996	Increasing	DMU11 0.795	DMU12 0.200			
*DMU19	1.00000	1.000	Constant	DMU19 1.000				{19}
*DMU20	1.00000	1.000	Constant	DMU20 1.000				{20}
DMU21	0.44772	0.727	Increasing	DMU9 0.120	DMU11 0.109	DMU20 0.498		
DMU22	0.54206	0.676	Increasing	DMU11 0.301	DMU20 0.274	DMU25 0.101		
DMU23	0.71866	1.135	Decreasing	DMU9 0.053	DMU11 0.176	DMU20 0.376	DMU24 0.530	{11,20,24}
*DMU24	1.00000	1.000	Constant	DMU24 1.000				{24}
*DMU25	1.00000	1.000	Constant	DMU25 1.000				{25}
*DMU26	1.00000	1.000	Constant	DMU26 1.000				{26}
*DMU27	1.00000	1.000	Constant	DMU27 1.000				{27}
*DMU28	1.00000	1.000	Constant	DMU28 1.000				{28}
DMU29	0.48549	0.813	Increasing	DMU11 0.530	DMU24 0.136	DMU27 0.147		
DMU30	0.86945	1.068	Decreasing	DMU11 0.331	DMU25 0.469	DMU27 0.266	DMU28 0.002	{11,25,27}
DMU31	0.59879	0.847	Increasing	DMU9 0.037	DMU11 0.492	DMU26 0.119	DMU28 0.199	
DMU32	0.99670	0.753	Increasing	DMU4 0.150	DMU20 0.190	DMU25 0.303	DMU27 0.109	
DMU33	0.63682	0.711	Increasing	DMU4 0.012	DMU20 0.610	DMU25 0.089		

The branches that might have advantage over the others can be distinguished by *.

As it is expected according to the definition, the human resources of a branch are efficient when they output with a lesser usage of resources. For this purpose the average of inputs and outputs of the human resources of efficient and inefficient branches are calculated and shown in figures 2 and 3. The results show that the number of human resources of the efficient units are less than the inefficient ones and also as seen in figure 3, the average output of the efficient units are higher than the inefficient ones.

Figure 2: Average Comparison of Inputs in Efficient and non-Efficient Branches
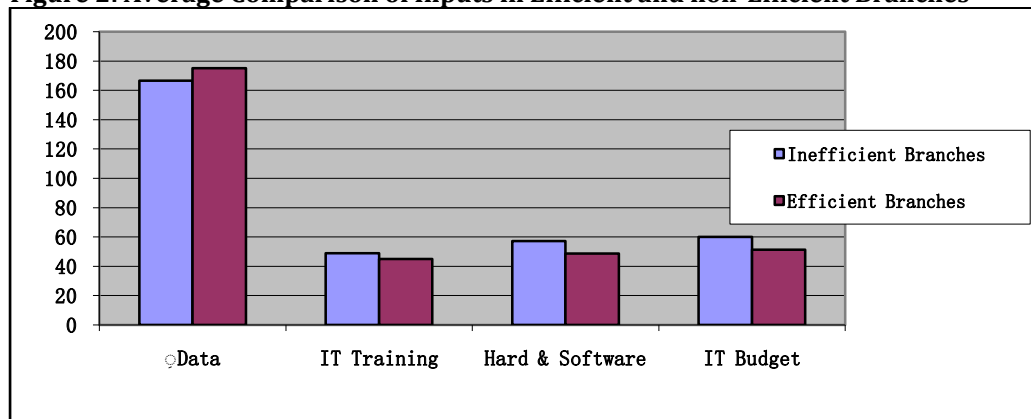
Figure 3: Average Comparison of Outputs in Efficient and non-Efficient Branches
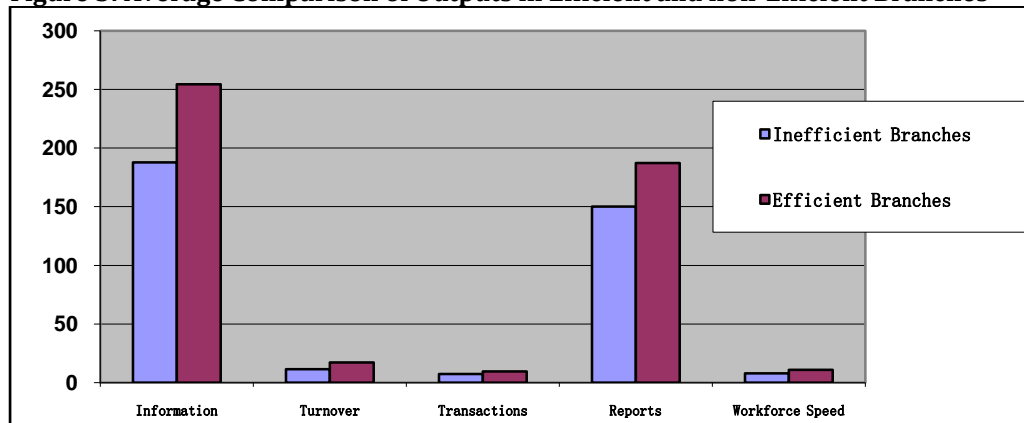
In order to answer one of the main questions of the research which is to generate a situation where the employees of the branch reach a higher level of efficiency, the generation of virtual branches is proposed. In order to achieve this, referential sets can be generated according to table 6, each decision making unit's share of virtual units is the answers given by the CCR model are the inputs of λi , these virtual units with the consumption of rate of θ times the inputs to the decision making unit. Therefore parallel with the aim of the research, the excess resources of the inefficient units that must become efficient; must be reduced according to the reference sets so that finally the efficiency of the entire DMU will increase. Table 5 shows all of the reference sets that are obtained by solving the designed model. The set considered in this table are branches 8, 10, 13, 23, 6 and 30 which contain the reference sets {9,11,20}, {11,24,27}, {11,24}, {24} and {11,20,24} respectively, are capable of generating the previous output by using only a fraction of the previous inputs.

Table 5: Reference Sets and Their Effect on Decreasing the Output

DMU	Technical Efficiency	Referential Sets	Decreasing Resources (%)	Decrease in Outputs (%)
DMU6	0.66159	{9,11,20}	0.33841	0.017046877
DMU8	0.72517	{11,24,27}	0.27483	0.008256304
DMU10	0.88778	{11,24}	0.11222	0.004218727
DMU13	0.86401	{24}	0.13599	0.00389349
DMU23	0.71866	{11,20,24}	0.28134	0.014195412
DMU30	0.86945	{11,25,27}	0.13055	0.003304378
Total				0.050915188

The presented reference sets are a guide of this discussion that with the decrease in the DMU$_j$ input resources (J being the branch that has a reference Sets) at the rate of the (1-θ_J), will give the same efficiency of jth branch. The application of all of the reductions in the inputs according to the referential sets logic will cause a reduction of 5.1% in the total inputs of the decision making units under study. With the application of the reduction in the inputs of DMUs according to the table 6 and resolving the problem with the new data, the efficiency of the whole branch was over 87.79% which has a 2.8% increase to the previous value of 84.97%. In other words this method has fulfilled the aim of this study which was to increase the efficiency by application of referential sets to decrease the input resources.

Analysis of the Effects of Each Input and Output in the Efficiency of Bank Branches: Considering the limitation of accessing the information relating to the inputs and outputs of the human resources in each branch under study in different periods, the approach of this study is to analyze the effects of IT on efficiency of human resources according to comparison between nits under study in specific period of time. The presented solution in this method is based on DEA input of CCR axis model. The presented method describes the effects of the equivalent changes in inputs and outputs of the presented model on the efficiency of the model. The stages of this model are as follows:
1. The DEA axis of CCR (P2 relation) model will be solved with the primary data and the efficiency of each decision making unit is calculated.

2. Efficient units are distinguished according to the efficiency conditions.
3. If it is required to analyze the effects of the inputs of the model on the efficiency of each unit, with keeping the entire inputs constant, only the related input will be varied by small differentiations of the original value.
4. If it is required to analyze the effects of the outputs of the model on the efficiency of each unit, with keeping the entire outputs constant, only the related output will be varied by small differentiations of the original value.
5. The model is solved with the new data and the results are compared to the old ones.
6. This procedure is applied for the rest of the model inputs and outputs.

According to the presented steps in this method, the inputs and outputs that have the highest influence in increasing the efficiency of the branches can now be identified. For example if the effects of IT training on the efficiency of the branches' human resources is to be analyzed, all of the inputs and outputs of the model except for the training are kept constant and regarding the IT training, amount of training for the efficient branch is kept constant also, but this input is reduced for the inefficient branches and the model is solved with the gathered data. As the results are shown in table 7, this adjustment in IT training as an input causes the efficiency of the branches under study. Furthermore this decrease in the inputs such as IT training directly reduces the extra training hours of the branches. After the application of these changes, the amount was reduced from 23 units into 13 units.

Table 6. Output Adjustment of IT Training for the HR and Analyzing the Results

DMU	Values (DMU *1, 2, 3, *4, 5, 6, 7, 8, *9 ... 33)	Efficiency %
Normal Conditions IT training (hr)	80 39 32 56 24 47 53 39 40 33 16 15 50 26 38 55 70 18 50 48 68 43 59 36 51 39 29 60 36 43 43 45 55	84.98
IT Training after Adjustment (hr)	80 35 28 56 22 42 53 35 40 29 16 15 45 26 34 49 63 16 50 48 61 38 53 36 51 39 29 60 33 39 39 41 49	86.3
Normal Excess Training (hr)	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 $\frac{13}{3}$ 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 9 2 0.23	---
Excess Training After the Adjustments (hr)	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 8 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 4 0	---

The proposed method can be applied to all of the inputs and outputs of the model, and there are interesting results about the effects of inputs and outputs on the efficiency of the human resources of the branches. Table 8 shows the solutions that are attained by running the model with slight changes in each of the inputs and outputs which are the data of the model. Regarding all of the inputs and outputs, uniform reduction in the inputs or uniform increase of the outputs results in the increase of the efficiency of the branch under study. However as it can be seen on table 7, the uniform increase of outputs or decrease of inputs does not have an equal result on the efficiency of the branch under study in which it shows the effect rate of inputs and outputs of the model.

Table 7: Assessment of the effects of Inputs and Outputs Adjustments on the branch Efficiency

|	Normal Branch Efficiency	Efficiency After Adjustment	Efficiency Improvement Rate	Efficiency Improvement %
Correct and Complete DATA	28.04301	28.71414	0.67113	2.39
IT Training	28.04301	28.48041	0.4374	1.56
Hard & Software	28.04301	28.38911	0.3461	1.23
IT budget	28.04301	28.38004	0.33703	1.20
Information	28.04301	28.54489	0.50188	1.79
Turnover	28.04301	28.21985	0.17684	0.63
Transactions	28.04301	28.70387	0.66086	2.36
Management Reports	28.04301	28.38332	0.34031	1.21
Workflow Speed	28.04301	28.29402	0.25101	0.90

With the application of these differentiations and analyzing their effects on the efficiency of the model regarding to the inputs, it will have the following result: having correct and complete information is the most effective issue in improving the efficiency of the human resources of the branch under study. Training, attaining hardware and IT budget are the next items that result in the improvement of the efficiency of the human resources of the branch under study. Look at figure 4.

Figure 4: Comparing efficiencies in the Primary State and After adjusting Inputs

■ **Total of DMUs' efficiency after Inputs Adjustment**
■ **Total of DMUs' Efficiency in Normal Condition**
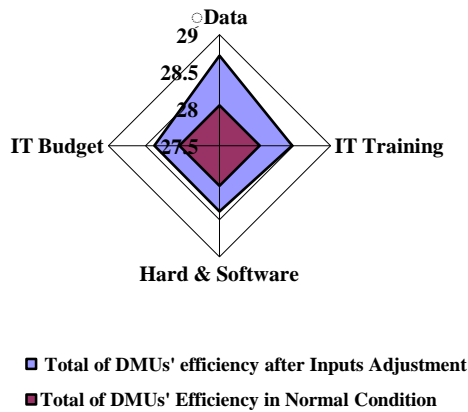
But the analysis of the model outputs needs a more careful attention. As it can be seen in the following graph, the uniform change in the outputs does not have a uniform increase on the efficiency of the human resources of the branches and as stated earlier the application of information technology has a vital effect on the number of operations completed in the branch and hence its efficiency. One of the other results that can be clearly viewed in the study is the effect of IT in the generation of larger scale correct and complete data. According to the changes in the efficiencies calculated, better reporting, higher speeds and larger turnover are the next inline affecting the efficiency of the human resources of the branch. It must be reminded that these results have been attained by the human resources that are engaged in the banking industry and it is possible that if this research was applied to a different industry it would give different results. Please look at figure 5.

Figure 5: Comparing efficiencies in the Primary State and After adjusting Outputs

■ Total of DMUs' Efficincy After Output Adjustment
■ Total DMUs' Efficiency in Normal Condition
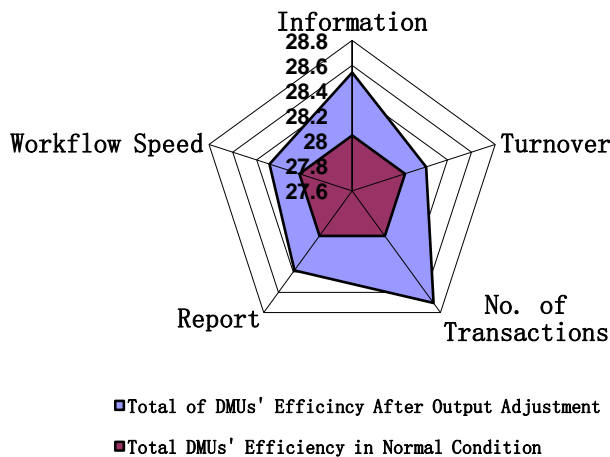
In order to analyze the credibility of the proposed method, the model can be solved using new data and the new results can be compared to the old ones. Therefore the first invented method which is the effect of changes in the inputs and outputs for human resources on the efficiency of the human resources can be resolved with a slight change in the inputs and outputs (decreasing the inputs and increasing the outputs) from 0.1 to 0.2 for all of the operations. The results are shown in table 8.

Table 8: Efficiency and the Calculated Increase/Decrease in Different Adjustment Rates

Adjustment Rate	0.00		0.10		0.20	
	Effic.	Inc/Dec	Effic.	Inc/Dec	Effic.	Inc/Dec
Data	28.04	539.71	28.71	378.47	29.21	224.00
Training	28.04	22.23	28.48	12.00	29.18	0.00
Hard & Software	28.04	6.70	28.39	0.29	28.79	0.00
IT Budget	28.04	12.93	28.38	0.44	28.54	0.16
Information	28.04	326.00	28.54	152.94	29.45	37.88
Turnover	28.04	42.01	28.22	29.34	28.51	20.83
No. of Transactions	28.04	8.18	28.70	2.20	29.51	0.58
Report	28.04	582.75	28.38	479.00	28.64	389.31
Workflow Speed	28.04	26.43	28.29	16.37	28.50	11.07

As expected it can be seen that with the differentiations in the model it has a logical response with the changes in the inputs/outputs and it is decreased. All of the results of 10% variation in the inputs and outputs of the model withstands for the variation of 20%. As it can be seen in table 9, in general with decreasing the inputs and increasing the outputs, the efficiency improves. But the important point here is that the results of 10% variations in the model strongly hold with the variation of 20%, hence the ranking of the effective inputs and outputs in different conditions are constant. (look at figure 6 and 7)

Figure 6: Effects of Re-Adjusting Inputs on the Branches' Efficiency
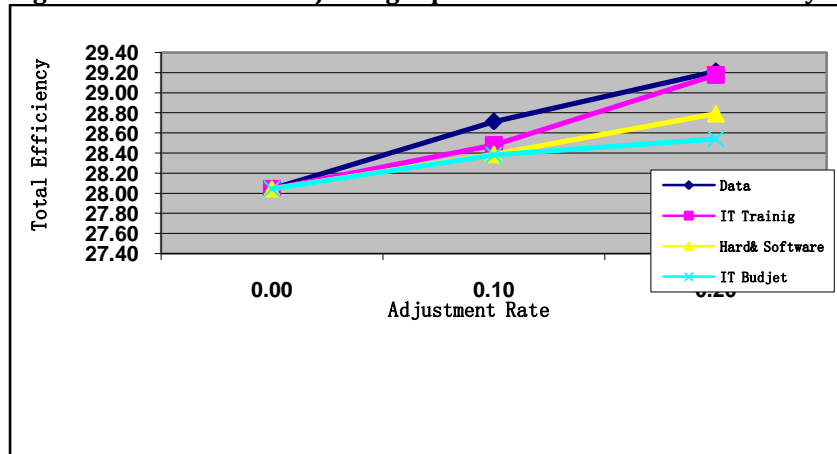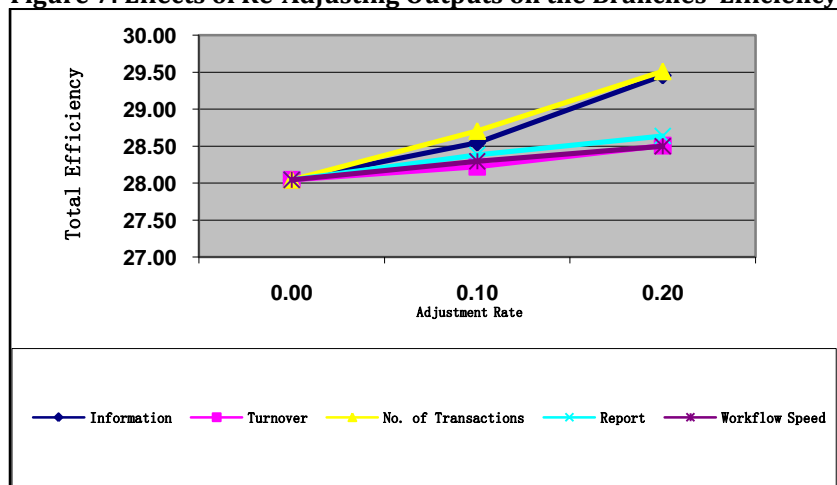

Figure 7: Effects of Re-Adjusting Outputs on the Branches' Efficiency

2. Conclusion

According to the goal of this research which was to revise previous research and identify the inputs and outputs that Information Technology has created, on the human resources of the organizations. In this

study the inputs are defined as Data, IT training, Hardware and Software, workflow duration, number of employees, IT budget and human resources payroll and the outputs are Data, Turnover, Number of tasks achieved, Report and speed of workflow. However the inputs and outputs of the presented model are defined according the realistic needs of a bank and related information has been gathered. This research further zoomed into the banking industry and presented a DEA model on the inputs, and aimed to increase the efficiency by decreasing the inputs and finally reached the target. Further on by keeping the entire parameters constant and applying uniform changes in the desired parameter, the effect of each input/output on the efficiency was measured. The results show that the most effective inputs are Data, IT training, hardware and software and IT budget and the most effective outputs were number of tasks achieved, generated data size, management reports, workflow speed and the turnover. The knowledge of the most effective inputs and outputs in the efficiency of the branch will help the decision makers to use their limited resources to increase the efficiency of their human resources and spend their resources according to the results of this paper to achieve the highest efficiency. It must be noted that the strategy of selecting the most efficient solution for the DMUs, the input and output prices must also be considered.

Suggestion for Future Research :The author of this paper suggests that the results of the research along with the analysis of the input and output prices will help to improve the decision making of the managers so that they can efficiently implement their plans and projects. Since this research was the first to use DEA model for viewing the effects of IT on the efficiency of the human resources, the basic DEA model was used. In future studies, the effects of Fuzzy DEA model can also be analyzed.

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Designing Human Resources Superior Model and Capacity Building for Rural Banks in Indonesia

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Abstract: The problem of inefficiency faced by Rural Banks is caused by non optimal human resource's performance. There are many Rural Banks that have not enough employees, so many employees do double tasks, uncompleted management happened**,** and low competence-compensations, that obstruct the performance of them. Because of that, the objective of this research is to map the condition of Rural Banks' human resource based on its quality and quantity, identify the policy and strategy of Human Resource Development, evaluate the effectiveness of the rules that exist at Rural Banks, and formulate Rural Banks' cooperation's scheme with others agencies or education institution. This research was held at Jakarta, Bandung, Denpasar, Manado, Medan, Surabaya, and Yogyakarta. The methods of this research were explorative, quantitative description, and qualitative approach, such as field survey, purposive random sampling, and focus group discussion. The results are map of Rural Banks' human resource's condition from its distribution and quality, identification of Rural Bank's human resource's problems, recommendation of recruitment and selection system, analysis of position based on competency and its standard, recommendation of training, curriculum's scheme, recommendation of compensation, and cooperation with others agencies/education institution that provide labor that are ready to be used by Rural Banks.

Keywords: *human resource, performance, rural banks, capacity building*

1. Introduction

Rural banks affairs was fluctuated quite feel concerned about two years recently (on December 2010-december2012).in that period, many financial rural bank's indicators was increase. However, growth was decrease as compared with previous period. Impact form this condition are decrease profit growth Rural banks until 8, 41%. Tight competition between rural bank and common banks and others financial institution was indicated as one of causal indicators to rural bank indicators decrease. The problem of inefficiency was faced by rural bank is caused by non optimal human resources performance. Human resources related, at the moment cost of human resource be at the biggest portion (46, 85%) form overhead cost must be cover by rural banks every month. Many rural bank have still deficiency of human resource staff so it was occurred overlapping of duty ,no complete of management,a little of competence and human resource skill that constrain work productivity. In rural banks not accomplish minimal of directors (2 people), it caused of difficult look for the right man competence, experiences and other director of rural bank conditions as would be prescript by BI. Rural banks with minimal capital werecomplaining about difficult of find candidate for director position because minimum of salary and facilities was offered. Commonly, it is about brand image of rural banks not lives yet on the mind and heart of the society, so work in the rural bank is not attractive choice for graduate of academy and university. There are 256 rural banks that have 10 person of employee. Whereas rural banks can be stable of management if it has minimum 12 members that include manager (director and commissioner). Need of members of rural bank as increase as growth volume of business and addition of office network.

The purposes
1. Mapping human resource of rural bank condition according to recent quality and quantity;
2. Identifying strategy and policy of Rural Banks' human resource recent growth can be seen at a).the owner influence to accomplishment and development of human resource and employee rural banks and b)policy of salary and facilities, as well as training and education for Rural Banks' human resource
3. Evaluating the affectivity of rural bank provision to organize rules and regulation commissioner council and director for contributed to optimal operation of rural banks:
   a. identifying obstacles have faced by rural bank to get actual amount of human resource and accede with qualification was given by rural bank based on function levels
   b. formulating recommendation of ideal quality and quantity of human resources rural banks to capable of the business and survival of competition.

4. Formulating scheme of cooperation with institute or company that produce manpower resource for rural bank industries

The Result
1. Mapping quality and quantity of human resources based on rural bank condition
2. The right scheme of cooperation with institute or company that produce manpower resource for rural bank industries.

2. Literature Review

As explained by Schermerhorn(1997),recruitment is a process to enlisting human resource candidate for filling space of position. The resource for recruitment is advertising (newspaper, magazine, radio, internet) university recruitment and agencies. According to Dubois (2004) competence is base characteristic which get to successful performance. So it means that capability based on knowledge and attitude to attain affectivity and efficiency certain job. The function competence is one of certain capability level which qualifying for position agree with level of structure organization. If the provision was filled, the position will be going on properly.Noe et al (2003:251) conclude that training as a planned for learning facilitatedby employee for job based on knowledge, competence, and behavior. And according to Gomes (2003:197) training is an effort to improve human resource performance at certain activity as their responsibility, or on occasion of their job. Mangkuprawira (2010) and Prabu (2009) explain that human resource quality was affected bylevel of education;experiences and integrity include attitude, human resource mentality and performance. The future of rural bank to be managed by human resources who have high competence and integrity as well as good implement of principle management. The first step that hasneeded to do of planning improvement quality of human resource is mapping or identifying human resource problem was faced by rural banks.

3. Methodology

This research was conducted at the seven locations for data collection. Those are Jakarta, Bandung, Denpasar, Manado, Surabaya and Yogyakarta. The region was chosen based on rural bank characteristic to get whole figure about rural bank condition. Time of research was held on early March to late ofJuly 2013. Research approach and methodology, This research use explorative approach, descriptive quantitative and qualitative. It used to get whole figure of rural bank to several aspect as human resources and dynamic. That stage are:
Mapping of Rural Banks' human resource:
i. Field survey for verification process was held through interview or discussion with rural bank participant (director and rural bank committee) to know about condition of fill Rural Banks' human resource for every level and functional position
ii. Sample of rural bank was chosen with purposive random sampling method. The sample amount is about 30 rural bank with represented rural bank at the Java region, Bali, Sumatra, and Sulawesi; the representative strata for each region; representative amount of human resources condition (>11 person and > 11 person) and minimum comprehensive management are two person (director and commissioner); amount representative branch office network; owner of rural bank representative (local government/individual proprietorship/ group/holding company).
iii. Focus group discussion (FGD) was conducted to get information about improve quality for Rural Banks' human resource available that associated whit rural bank and education institute and university for cooperation of Rural Banks' human resource improvement

4. Result and Discussion

Mapping Rural Banks' Human Resource: The minimum amount of human resource is 12 people. If human resource was divided into three components. It is namely commissaries, director, and staff. As a whole at 78,3 % rural bank that qualifying minimum amount for director and commissaries.

Identifying Rural Banks' human resource problems: The low level of quality Rural Banks' human resource caused of not optimal performance yet. Based on research was held through Fishbone analysis factor indicated that direct effect factors are the low commitment of ownership and management rural bank, the rule of rural bank is still traditional and clannish, there is no written formal rule about assessing implemented performance, thereis no coherent level of carrier in rural bank, there is no explicit

segregacy of duty, there are overlapping job, performance appraisal based on standard performance job no correlate with reward and punishment. Fishbone analysis perspective explain that not optimal Rural Banks' human resource performance caused by no written formal rule about assessing implemented performance, there is no coherent level of carrier in rural bank, there is no explicit segregacy of duty, there are overlapping job, human resource input not competence with their job, human resource work without passion, employee with low education, standard recruitment and selection system, low intention for human resource to work in rural bank, low carrier and salary system. Low compensation not interest, it can be direct effect for human resource input.

Fig1: Analysis Position Process Based Competence for Rural Banks
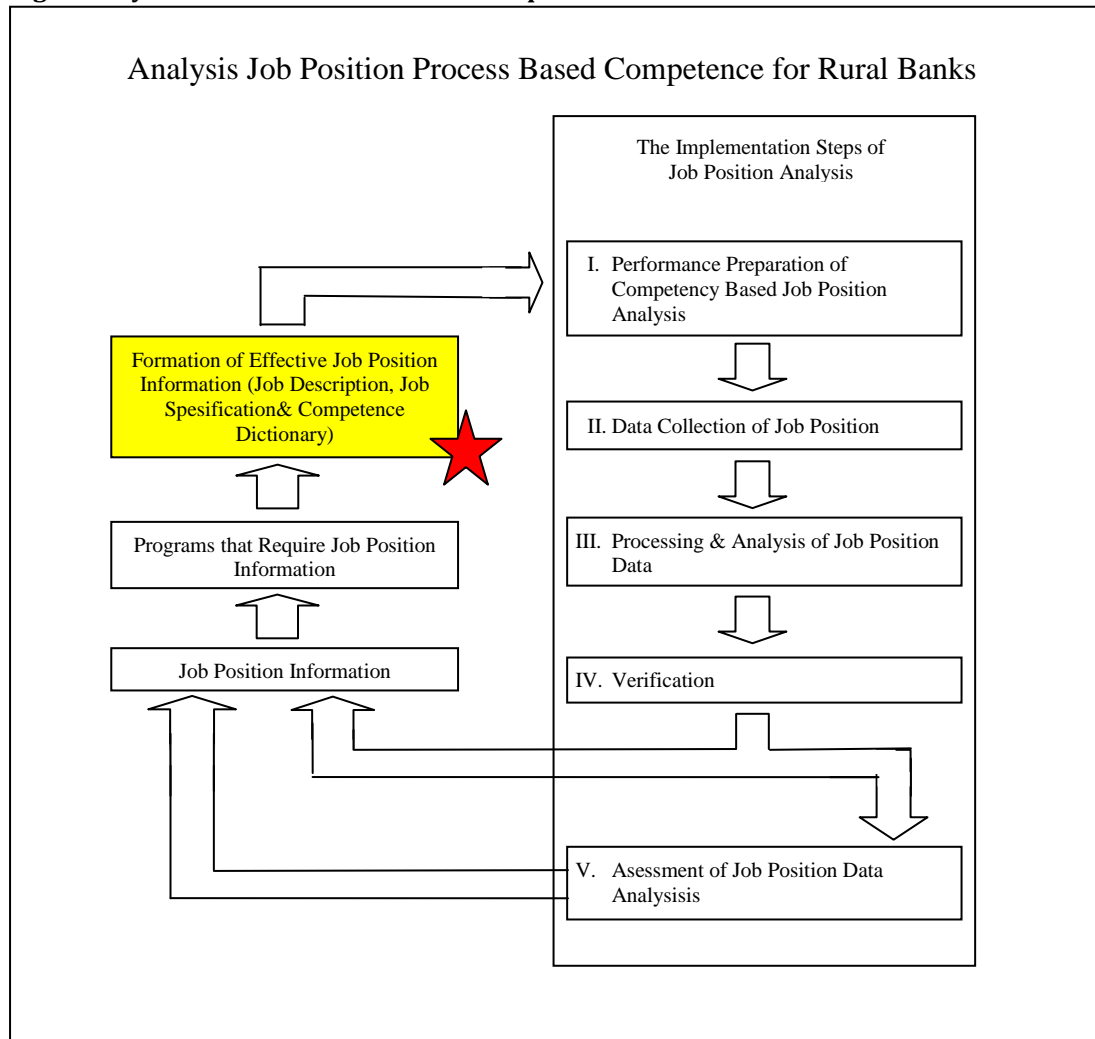
The effect low compensation are the organization structure not based on performance; human resource work without passion; there is no work load analysis and business process mapping for human resource and activities; the low commitment of ownership and management rural bank; the capacity of rural bank and other financial institution competition. The cause and effect interdependent each others. human resource performance not optimal direct caused by human resource input not competence. Low competence human resource caused by rural bank incapable to get high quality human resource and compensation is not attractive for human resource. This problem measured up by two solutions. First, improve commitment of rural bank ownership. And second, increase compensation of human resource especially for important position (e.i marketing, accountant and credit). It is for increase chance to get high competence of human resource through recruiting agree with specification job and training to improve human resource competence.

Rural Bank Recruitment System: In fact, indicate that several of rural bank not exploit recruitment resource to get new human resource. There are two systems that recommended for rural bank, internal

and external recruitment. Internal recruitment is recruiting human resource through promotion office, external recruitment is recruiting human resource through mass media, association, job hunter, cooperation with university/SMK and walk in interview.

Selection System: Selection process is done through administrative selection, Potential Academic Test (TPA), interview and internship program (about one month) that advised by supervisor. in time of internship pre-employee will be given evaluation of performance thought operational and attitude. At the director level selection is held more selective based on commissaries and shareholders advisement. Human resource recruitment system admissible for rural bank on several management conditions. It can follow this step 1) screening portfolio for pre-employee. The considerate factors are knowledge, skill, experience, networking and marketing. Marketing as the important factor on screening portfolio. 2) Potential academic test or pre-employee's knowledge. Psikotest used appropriate with employee needs and 3) medical test.

Position Analysis Based on Competence: Human resource work is influenced several factors. One of them is competence. Competence concerned with whole of human resource function. Every employee must have criteria and size of unique competence. It can be seen in figure 1 above

In identification process and arrangement competence each position rural bank must formulate condition work and job profile beforehand. Then, competence formulate each position can purpose as manager position to actualize vision, mission, goal and target organization (company). Rural bank management condition and the most of rural bank ability to give different compensation to their employees, so it effect to variety human resource's competence. The effort is done by part of rural bank to muddle through incompletely competence, there are used to employee competence growth through training strip done by internal rural bank, rural banks association (PERBARINDO), third side (consultant), and regular training was done by BI. Recommendation of rural banks' human resource competence must be accomplish standard was set in LSP LKM Certif that is SKKNI Financial sector banking sub sector, rural bank field based on ministry of manpower and transmigration Indonesia decree No: KEP.263/MEN/XI/2004 prescript on 26 November 2004.

Training: In common, training is need for all level commissaries Rural bank concerning to certification, administration control, recent banking law, good corporate governance, leadership and fraud audit. The lesson of training is need based on survey that are (a) asset 1-3 M :20% Position certificate,20 % Rural bank management control, 20% Recent banking law, and 40% technical of banking control; (b) Asset 3-10 M: 12 % Good corporate governance,25 % Leadership, 12% recent banking law,13% position certificate, and 38% technical of banking control; (c) Asset 10-30 M: 100 % Fraud audit and (d) Asset > 30 M: 100 % Administrative rural bank control. Training is need for all director level Rural bank concerning to business plan, leadership, managerial ability of functional management, and certification. The lesson of training is need those are a)Asset 1-3 M:12% business plan, 25% leadership, 12% Organization management, 13% human resource management, 13% manajerial,25 % director certificate, (b) Asset 3-10 M: 42% Leadership,17% human resource management, 8% strategic management, 8% self development, 8% banking, and 17 % director certificate; (c) Asset 10-30 M:34 % business, 33% operational management, and 33% strategic management and (d) asset > 30 M: 100% business colloquium.

Training is need for all marketing level rural bank concerning to credit analysis, marketing and handling credit problems. The lesson of training is need those are (a) asset 1-3 M): 14 % micro credit analisys,57 % marketing;29 % handling credit problems; (b) Asset 3-10 M): 22% micro credit analysis, 45 % marketing, 33% handling credit problems and (c) asset 10-30 M and > M); 100% marketing. Training is need for credit analyst levelrural bank concerning to credit analysis, marketing, communication,leadership and handling credit problems. The lesson of training is need those are (a) asset 1-3 M): 17 % marketing; 83% credit analysis ; (b) Asset 3-10 M): credit analysis, communication, leadership, marketing, handling credit problems and (c) asset 10-30 M and > M); 100% credit analysis. Training is need for accounting level rural bank concerning to accounting, asset and liability management, taxation, ETAB, APU, PPT, and BI policy. The lesson of training is need those are (a) asset 1-3 M): 29 % accounting; 14 % asset and liability, 14% taxation, 29% tax and accounting and 14 % taxation and ETAB; (b) asset 3-10 M: 25% accounting,12% APU from PPT, 12% Financial report, 13% motivation, 25% taxation and accounting,13% taxation and BI policy; (c) asset 10-30 M: 100% taxation and accounting, and (d) asset >30 M: 100% taxation.

Based on aspects that correlating to Rural banks' human resource competence growth and attainment of performance guarantee, so kind of training whom to Rural banks' human resource all level are teller skills; accounting and credit restructurisation; TKS appraisal and software application; Rural bank job plan and software application; Rural bank control; APU and PPT; micro credit analysis; basic accounting; rural bank orientation policy; Training of trainer; Rural bank credit accounting (SAK-ETAP); director certified; commissaries certified; conflict management; change and innovation management; human resource professional certification; selling skill; communication skill; organization management banking (GCG); leadership participative; coaching; counseling and mentoring; computer skill; English; adversity quotient; psychology; marketing; feasibility study; integrity; job ethic; making short term and long term strategic plan; analysis and mechanism of evaluation business; achievement motivation training (AMT); and outbound (team togetherness).

Rural Banks' Curricula Scheme: As financial institute, rural bank not only give service financial, but also function as agent of development for rural society growth. It is found expression in "microfinance handbook" that *"The term [microfinance] refers to the provision of financial services to low-income client, including the self-employed. Financial services generally include savings and credit; Microfinance is not simply banking, it is a development tool." (Ledgerwood, 1999: page 1)*. Implementation of function optimally, so need one of education system which can produce rural banks' human resource has already use with high competition for their tasks. It explainsthrough good and right curricula to attain goal and target education. Formal yuridis perspective, constraint of curricula was covered in two main curriculadimensions there are product and process. in education context, notice focus to outcomes as aware graduate performance, have appreciate, and positive attitude to environment. Whereas, the obstacles was faced by rural bank are need human resource who basic knowledge, task and responsibility as rural bank employee, so rural banks' goal can be optimal attain. The range of education curricula are:
1. Knowledge, is knowledge in financial and banking field
2. Skills, is skills and capability which have quality of hard skill and soft skill, as leadership , teamwork and communication
3. Attitude is pro active attitude, critical, objective and the important things is integrity/honest.

Fig 2: Capacity Building of Rural Banks' Human Resource
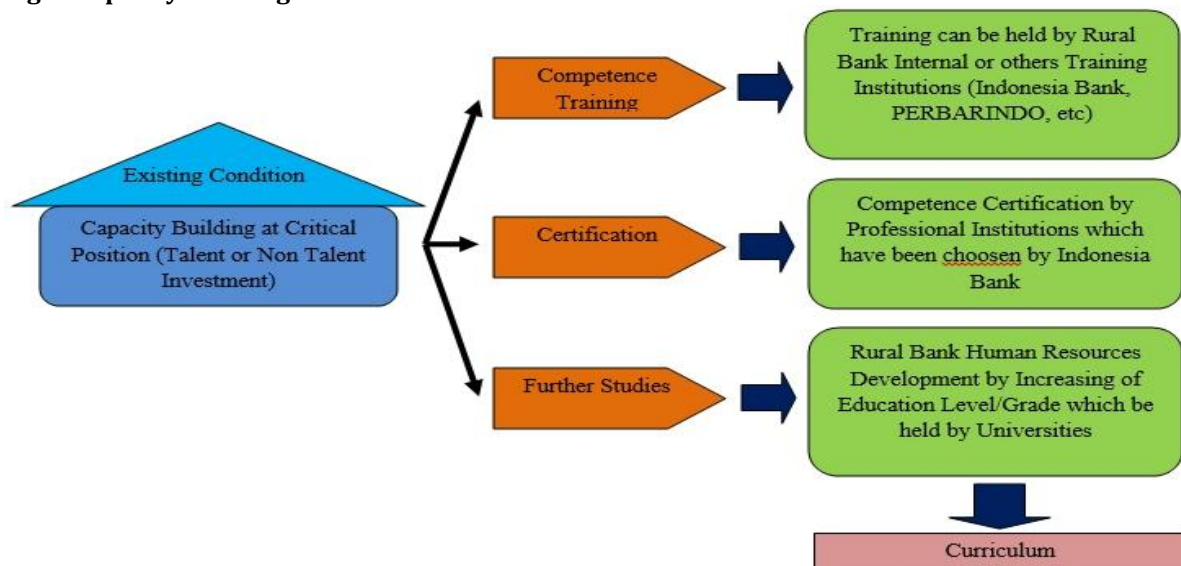
To answer that obstacles, government make qualification for education institute graduate in Indonesia through Perpres no 08 year 2012 about Frame of National Indonesia (KKNI) divided into two categories are academic and vocational, professional. And category non formal education, informal, training and experience divide into four levels, there are: as operator is qualification I (SD/SMP) to qualification II(D1), analyst is qualification IV (D2) to qualification VI (D4/S1) and as expert is qualification VII (Profession) to Qualification IX (S3). KKNI is base of rural bank curricula decree. KKNI be provided that change manner to see someone competency, no only based on diploma certificate but also see frame of qualification nationality agree as acknowledgement for someone educational result, accountable and

transparent. Education curricula for fulfill human resource's rural bank there are two categories,: human resource based on internal curricula (just for rural bank employee who potential through certification and extension) and external human resource (for rural bank pre employee through internship program), as whole showed at the figure 2.

Curricula- based internal human resource: Curricula-based internal human resource focus for rural bank employees to change employee behavior in order to integrate with organization goals. In this curricula created learning which employees can learn about attitude, skills, ability, knowledge and certain behavior as same as their position. Curricula based human resource approach are certification and extension. Certification was held by professional institute certified. In the certification program employee learning and training through several items which relevant with their job and standard competence need. That items are skill of teller, accounting restructurisation credit, TKS assessment and software application; rural bank plan job and software application;Rural Banks control;APU &PPT; micro credit analyst, basic accounting; Rural Banks credit policy; credit accounting Rural Banks (SAK-ETAP) and accounting. Extension is education program as set to produce rural bank pre employee who diploma education based. This program was done cooperation with education institute/ professional university. One of the lessons curricula will be grown is internship program. This goal is graduate already in practice of rural bank job condition.

Curricula of program study financial and banking with concentration rural bank management are first grade lesson, there are : 1.the first grade are Civic education, religion education, English and language laboratory, math, financial, PIE micro, risk and business management introduction, accounting I introduction, product and service bank; 2. The second grade lesson, there are: statistic business, PIE micro, accounting II introduction, computer application introduction, risk management introduction, bank activity business, English com in banking/personal com.skill, monetary economic, law aspect of banking and business; 3. the third grade lesson, there are corporate finance, banking accounting, taxation, risk market I, risk credit I, Operational risk I, Banking administration technology bank and financial institute; the fourth grade lesson are research method, administration management, RURAL BANKS accounting, management of company and integrity, internal control, RURAL BANKS business planning, law aspect of RURAL BANKS credit, RURAL BANKS policy and control,; The fifth grade lessons are active and passive management, RURAL BANKS credit management, analyses credit micro, price decree, RURAL BANKS operational practice, final task/ PKL. Bounden training: language laboratory, service excellent, attitude,trade financing, treasury management, credit analyses, teller skills.

Curricula- based external human resource: Curricula- based external human resource for pre employee from education institute (university and school) to looking for pre employee with high competency which linier with rural banks' need. Curricula based external human resource is internship. Internship was held cooperation between Vocation middle school (SMK) and rural banks through internship process in Rural banks (based on BI agreement) for certain period to train and educate as same as task and responsibility rural banks' employee. Then, they must be join on the job training for do their task and function employee under monitoring leader of rural bank. Kinds of task SMK students training for customer service, service excellent, account officer, and trade financing and internship to rural bank, credit analyst and basic treasury internship. In addition to attend lecture above, the students must join to co curlicue programs into internship and especiallyfor skill on banking and financial field, for example: customer service, service excellence, credit analyst, and account officer, trade financing and basic treasury. Improvement of skill especially for English includes TOEFL and IELTS Preparation.

Rural Banks' Human Resource Compensation

Recommendation Rural Banks human resource compensation system based on survey result: Recommendation of compensation based on observation through empiric data, salary survey, minimum regional salary (UMR) or minimum city salary, Rural Banks varieties, Rural Banks capability to give compensation based on financial capability. In the below showed that recommendation compensation for critical position and supporting staff which called important contribute to Rural Banks management as prepare for Good Corporate Governance.

1. **Critical position**
   a. **Compensation system managing director:** Managing director salary given based on asset company. for asset 1-3 M (4-8 Million). Asset 3-10 M (5-15 Million) asset 1-3M (4-8 million). Asset 3-10M (5-15 million), Asset 10-30 M (10-30 million), Asset 30-100 M (15-40 million), Asset 100-

200 M (20-60 million), and Asset >200 M (50-100 million). The benefit was given very varieties among Rural Banks with different main capital. The other benefit except main salary which employee need as motivation agree with task and responsibility. There are: communication subsidy, official car or ownership car and driver program, operational cost vehicles, day off subsidy, annual subsidy, bonus stock, sick benefit, extra pay, retired benefit. Main benefit: functional allowance, sick benefit, annual benefit, communication subsidy.

b. **Compensation system director:** Directors salary given based on Asset Company. Asset 1-3M (1.75-2.5-5 million). Asset 3-10M (3-8 million), Asset 10-30 M (5-18 million), Asset 30-100 M (8-22 million), Asset 100-200 M (12-40 million), and Asset >200 M (30-60 million). Benefit that acceptable to director same with managing director benefit.

c. **Compensation system credit analyst:** Credit analyst salary given based on asset company. Asset 1-3M (3-5 million). Asset 3-10M (2-2.5 million), Asset 10-30 M (2-3 million), Asset 30-100 M (2.2-3.5 million), Asset 100-200 M (3-5 million), and Asset >200 M (4-6 million). Benefit that accepted are: companycar, operational cost vehicles, day off subsidy, annual subsidy, bonus stock, sick benefit, extra pay, retired benefit. Main benefit: functional allowance, sick benefit, annual benefit, communication subsidy.

d. **Compensation system marketing:** Marketing as the important position that more *turn over*, therefore prosperity of loyalty very important. marketing salary about asset 1-3M (1.5-2.5 million). Asset 3-10M (1.5-3.5 million), Asset 10-30 M (2.25-4 million), Asset 30-100 M (2.5-5.5 million), Asset 100-200 M (3-5.5 million), and Asset >200 M (3.2-6 million). Benefit that accepted are achievement work benefit, vehicles treatment benefit, credit facilities, annual benefit, sick benefit, extra pay, retired benefit.

e. **Compensation system accounting:** Accounting salary for asset 1-3M (1.75-3 million). Asset 3-10M (2-3 million), Asset 10-30 M (2.5-4 million), Asset 30-100 M (2.75-4.5 million), Asset 100-200 M (3-5 million), and Asset >200 M (3.5-6 million). Accounting job need high accuracy and accurate, therefore need other benefit except main salary. Benefit that accepted are achievement work benefit, vehicles treatment benefit, credit facilities, annual benefit, sick benefit, extra pay, retired benefit, job performance benefit, transportation benefit.

2. **Supporting staff**
   a. **IT compensation system:** IT staff asset 1-3M (1.75-2.5 million). Asset 3-10M (2-3 million), Asset 10-30 M (2.2-3.5 million), Asset 30-100 M (2.5-4 million), Asset 100-200 M (3-4.25 million), and Asset >200 M (3.25-5.5 million). Benefit for IT position different based on experience and education background. Benefit that accepted are achievement work benefit, vehicles treatment benefit, credit facilities, annual benefit, sick benefit, extra pay, retired benefit, job performance benefit, transportation benefit, assurance, transportation benefit, credit facilities.

   b. **General department compensation system:** General department salary for asset 1-3M (1.75-2.5 million). Asset 3-10M (2-2.75 million), Asset 10-30 M (2.5-4 million), Asset 30-100 M (2.75-4.5 million), Asset 100-200 M (3-4.75 million), and Asset >200 M (3.5-5.5 million). Benefit for general department same with IT compensation.

   c. **Internal control compensation system:** Internal control salary for asset 1-3M (2-3 million). Asset 3-10M (2.5-3.3 million), Asset 10-30 M (3-4 million), Asset 30-100 M (3.25-4.5 million), Asset 100-200 M (3-5 million), and Asset >200 M (4-6.5 million). Benefit and main benefit for Internal control system same with IT and general department.

Change Model Management for Improve Capacity Building ofRural Banks

Analysis IPA and AHP: Analysisof Importance Performance Analysis(IPA) was used to comparethe level of importanceand performance ofa variety ofhumanattributes. This analysiswillmap thevariousattributes ofthehuman resourcesin thefour (4) quadrantsthat will be usedas the basis forhuman resource developmentpolicy strategiesatRural Banks. The fourquadrantscan be explained in figure 3.

QUADRAN I
2 : Recruitment based on competencyand professional
3 : Career system based on performanceandprofessionalcareer
12 : Training based Rural Banks needs and employee is quality improvement program of Rural Banks' employee preferred.
13 : Bonuses andincentivesare important factorsto improve rural banks' employee performance

QUADRAN II

1 : Top Management Competencethrough*fit and proper test*

4 : Compensation non financial (fasility, responsible, comfortable environment) is preferred factor by Rural Bank's management

7 : Attitude is*soft skill*competence that have to owned by all of Rural Banks' employee

QUADRAN III

5 : Competencegeneral and specificknowledgeaboutRural Bankmust beowned by theemployee/prospectiveemployee

8 : Networkingis abroadcompetencies thatneed to beshared by allemployees ofRural Banks

9 : Compensationis competitive withcommercial banksforsimilar workis essentialforRural Bankstoretain employees

10 : Work experiencein lineis an important factorworkinginRural Bank

11 : Educationin accordancewith the workis an important factorworkinginRural Bank

14 : Design work(job descriptionandjobqualifications) areproportional

QUADRAN IV

6 : Competencetechnicaljobskillsmust be masteredby all employees/prospective employees

Fig 3: Analysis Importance and Performance (IPA)
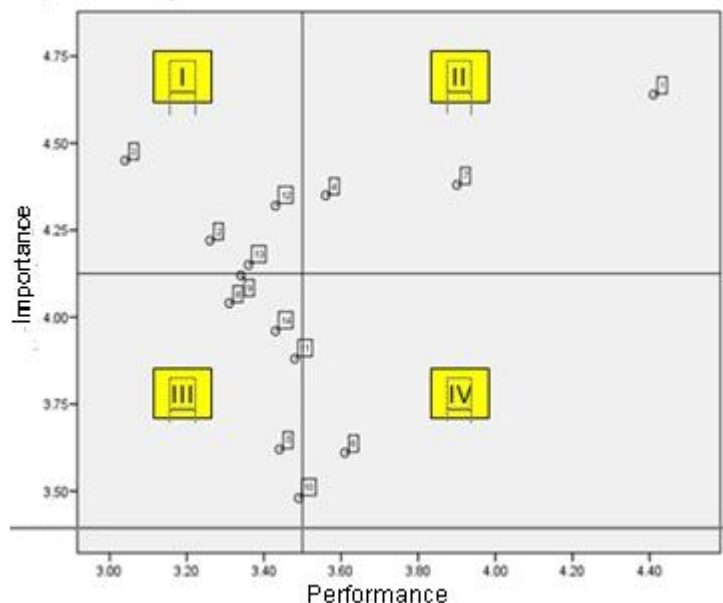
Based on result analysis with Analytical Hierarchy Process (AHP) showed that chance career growth factors as the most priority attribute has weight (0.128). This is relevant in Rural Banks organization structure limited. So it means that chance or opportunity growth more difficult to apply. It is need to Rural Banks professional management policy and system, so employee career opportunity for above position level will be wide open, especially for employee who has good work performance. Other than, work condition and main salary as priority indicator for employee. Competence aspect, attitude is the most priority indicator has weight 0.233. Rural Banks' Employee's Attitude is main things because it concern with employees honest, good attitude indicate good performance and integrity certain Rural Banks. Other than network and experience indicators are two indicators exactly relevant with employee need to Rural Banks growth. The AHP result also shows that competence factor more important than compensation in Rural Banks growth. It means that role of competency huge influence human resource Rural Banksperformance. High competency is provided that employee has good performance. It has impact to increase competence automatically.

Mapping Problems and Strategic Solution Rural Banks' Human Resource: Mapping problems human resource was faced by rural bank and solution. There are two categories, management and human resource

a. Level of management

1. Low owner commitment and management Rural bank to improve human resource quality. Management strategic alternative mapping can be done by improve owner's awareness to performance contract between owner to line management (Director- Commissaries- BI controller) and aware that human resource is asset for sustainable business growth
2. The most of Rural bank's Rule not in good system and the element of clannish is dominant. Management strategic alternative can be done by improve work spirit based system and important to knowledge documentation especially for tacit knowledge.
3. There aren't formal rule system about performance appraisal wasimplemented. Management strategic alternative can be done by collecting whole the rules and policy company (standard of operation and manual quality)
4. The aren't clear segregacy of duty, it was found employee do double tasks. Management strategic alternative can be done with break up the main task and clear functions between director, commissaries/owner and main or follower employee

b. Level of human resource
1. Human resource competency. Management strategic alternative can be done with improve Rural banks' human resource competency in all new level and recruit competence human resource through training needs analysis, coaching knowledge, counseling and mentoring. Stakeholders consist of director-employee-third side.
2. Problems: compensation system aren't attractive. Management strategic alternative can be done with planning compensation system based 3P (Pay for person, pay for position, pay for performance). It can attain the best employee motivation. Stakeholder consist of Director-commissaries-third side
3. Problems: the short career level and uncertain in career policy. management strategic alternative can be done with creativity management to divided career level company, It can change Rural Banks' brand image and more attractive.

Recommendation: The stage of management human resource is used Matric Eisenhower divided into four quadrants of problem and solution. Based on four quadrants can be classified human resource problem solving. it has showed in figure 4 below:

Fig 4: Matrix Eisenhower Priority Program for Rural Banks
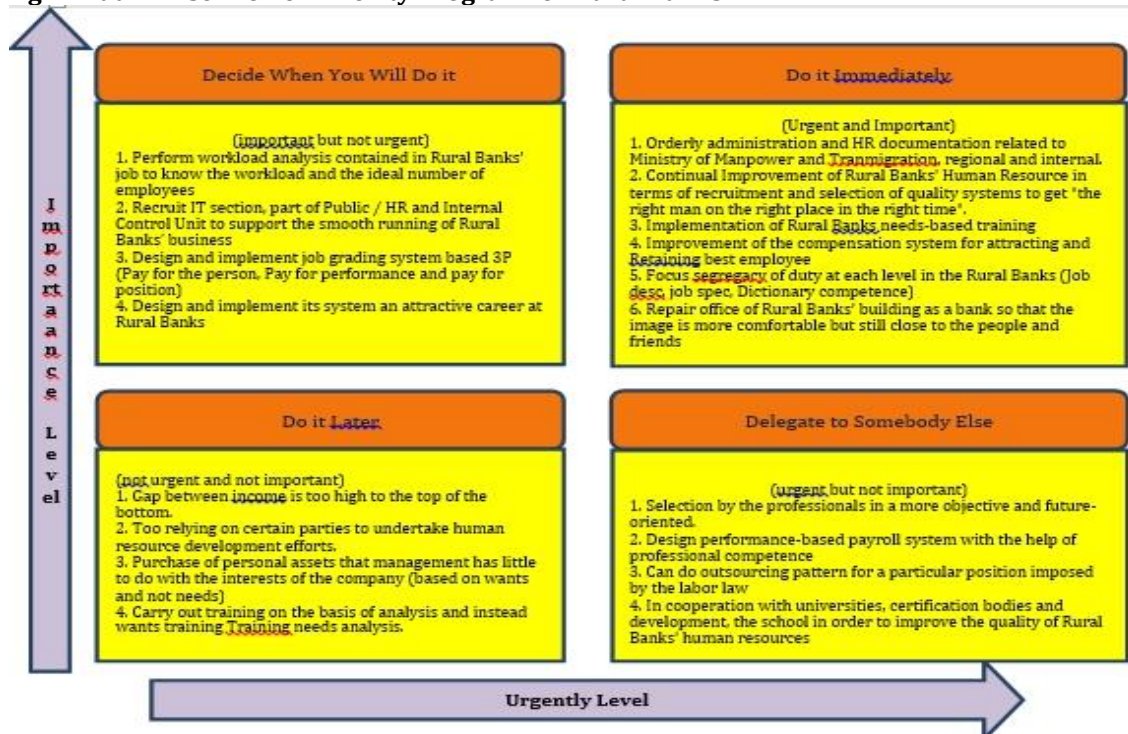
4. Conclusion

Recent rural bank performance less optimal on quantity As a whole at 78.3 % rural bank that qualifying minimum amount for director and commissaries. Whereas, quality perspective explain that there are several perception of relatively small number of Rural Banks' human resource. The first step must to do of improve human resource quality planning is mapping and identifying the problems of human resource is faced by rural bank with analysis Fishbone. The result of this analysis show that direct effect human resource performance was not optimal is the human resource input less competence. Those problems can be constraint with applying of system recruitment, selection, training, competence analysis and determine good and right competence. Recruitment has done must be benefitted potential from recruitment resource.Next, selection systems for rural bank are screening portfolio, potential academic test and medical test. Next, must be analyzed position based on competence has set by ministry of manpower and transmigration Indonesia decree No: KEP.263/MEN/XI/2004. It was given standard competency, need to train for improve knowledge, skill, attitude and employee integrity. Training like education need good curricula to attain education goals and target agree with their aspiration. This curricula based internal human resource as certification and extension. Whereas, curricula based external human resource as internship. The end of this step for attractive high quality human resource is compensation.

Next AHP analysis was used to change management. The result of analysis that the factor of chance career improvement is the most important attribute and The employee's attitude. Information Obtainable of AHP result that factor of competency more important than compensation of rural bank improvement. It showed that competency is the most important factor to influence Rural Banks' human resource performance. With the higher competence can be provided that employees have better performance impact to compensation increase automatically. Mapping of Rural Banks' human resource was divided into two problems are management and human resource. Based on the human resource management rural bank must do four different action for four different problems category, that is do the urge and important activity immediately, do the urge but not important activity, decide it when do the important but not urge activity, and left over activity that not important and urge. Rural bank need to cooperative with shareholder and stakeholder, such a training and recruitment with other institute, other rural bank and education institution.

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Pelatihan Motivasi Kewirausahaan Pnpm Mandiri Perkotaan Terhadap Pemberdayaan Perempuan Aceh: Entrepreneurship Motivation Training To Empower Women In Aceh

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Abstract: This article discusses the entrepreneurial motivation training funded by PNPM Mandiri Perkotaan (PNPM Mandiri P2KP) which enabled to increase the empowerment of women in Aceh. A program funded by the PNPM Mandiri Perkotaan invites Acehnese women to get involved in the activities undertaken by the PNPM Mandiri Perkotaan. The results obtained from the observations made before training; the house wife and teenagers as participants are still shy in expressing themselves as well as to speak up their opinion, but through the methods and techniques implemented during the training have changed the paradigm and motivate women's to actively speak out, provide creative ideas, foster the spirit of entrepreneurship by creating creative efforts, and change the old paradigm into the new one which is "success is available for everyone". During this training, surveys are also undertaken in aiming to see both motivation and knowledge of the participants in entrepreneurship. Pretest and post-test showed that before training, the participants do not have the knowledge and motivation in regards to the importance of being an entrepreneur. After joining two days of training, the post test's answer showed that the participants of PNPM Mandiri training have improved both in terms of motivation as well as knowledge. Participants also understand the importance of being an entrepreneur as well as actively involved in every development within the community.

Keywords: *poverty alleviation, entrepreneurships motivation training, empowerment of women, PNPM Mandiri Perkotaan, Aceh*

1. Introduction

Inequality of income distribution and poverty are two major problems in many developing countries, Indonesia is one of the developing countries that have a problem with poverty. Starting from the inequality, income distribution which trigger the gap income to happen, has implications on the issue of poverty. Poverty is a major problem in the developing countries of Indonesia. Poverty is considered as a source of various crimes and illicit activities (Ataul Huq in Shabri, 2013). The Poor (Acehnese: ureung Gasien) more easily drifts out to the valley of vicious depravity and evilness (Shabri, 2013). A Western expert economies Pete Alclock (1993) also states that poverty is one of the social illnesses. This will have a negative impact on the political and social situation in the community. The government seeks to solve poverty in various ways. A serious efforts undertaken by the government in tackling poverty is through an integrated concept on the basis of community empowerment. The government determines public participation as a determining success factor of the program. PNPM Mandiri Perkotaan is one of the government poverty reduction programs which involves various elements of society, ranging from planning, monitoring, until evaluation.

PNPM Mandiri is a national program of poverty reduction which mainly focus on community development (Bultek Governmental Accounting Standards No. 07, 2008). The PNPM Mandiri Program consists of several poverty reduction programs, including the National Empowerment Program Mandiri Rural or abbreviated to PNPM Mandiri Pedesaan known as KDP (Kecamatan Development Program) and the National Program Urban Self Empowerment (PNPM Mandiri Perkotaan). The program is conducted to further encourage the efforts of quality improvement of life, well-being and self-reliance in urban communities. The activities of PNPM Mandiri cover the provision and improvement of infrastructure / facilities, residential environment, social, human resource development, capacity building of communities and local governments as well as economic activities.

PNPM Mandiri Perkotaan in Aceh province are implemented in 12 Sub District. Community capacity building program is one of the programs of PNPM Mandiri which aims to create self-reliance and empowerment of women in Aceh. According Sumodiningrat (in Damian, 2014) Empowerment of the community is a result of the government's efforts in accelerating poverty reduction, which define participation as the basis and is expected to create social reinforcement processes that can guide the poor towards civil society, prosperous, equitable and faith and piety based. Via capacity building program undertaken by the government, it is expected to increase participation of women in Aceh in any

development activities undertaken by PNPM Mandiri and empower women in helping to improve the household economy. One of capacity building programs conducted by the PNPM Mandiri is through the harmony of entrepreneurial motivation training, where the participants are house wife and teenagers from selected villages. This paper will discuss the process of entrepreneurial motivation training funded by PNPM Mandiri Perkotaan with Selarasa program for some districts and cities in Aceh province, it aims to empower women in Aceh as well as provide some insights the government in regards to the importance of the training in building women's capacity, in order to enhance the role of women in the community and as a partner that can boost the families' economy.

PNPM Mandiri Perkotaan: Technical Bulletin Government Accounting Standards No. 07 (2008) explained that the program is a poverty reduction national program which mainly based on community empowerment. Some of the definitions of PNPM Mandiri are:

a. PNPM Mandiri is a form of a policy framework of national program that plays a role as a guidance and a basis for the implementation of poverty reduction community empowerment based programs. PNPM Mandiri is implemented through harmonization and development of systems and mechanisms as well as procedures, providing mentoring and funding stimulant to encourage initiative and innovation communities for a sustainable poverty reduction.

b. Community empowerment is an attempt to create / enhance the capacity of communities, both individually and collectively, in solving various problems related to improving the quality of life, self-independence and well-being. Community empowerment requires the involvement of the local government and other parties to provide opportunities as well as to ensure the sustainability of the results is achieved.

The objectives of the PNPM Mandiri program implementation are classified into general purpose and special purpose. The general purpose is to increase prosperity and employment opportunities of the poor independently, while the specific objectives are the following below:

a. Increasing the participation of the whole society, including the poor, women's groups, in remote indigenous communities and other groups that are vulnerable and often marginalized in the decision-making process and management development.

b. Increasing the capacity of community that is institutions rooted, representative and accountable.

c. Increasing the government capacity to deliver services to the people, especially the poor through policies, programs and budgets; Pro-poor (pro-poor)

d. Increasing a communities synergy, local government, private sector, associations, universities, non-governmental organizations, community organizations and other concerned groups in conducting an effective effort to reduce poverty.

e. Increasing the existence and independence of the community as well as the capacity of local governments as well as local care groups in tackling poverty within the region.

f. Increasing a developing social capital in accordance with the social and cultural potential as well as to preserve local wisdom.

g. Increasing the innovation and utilization of appropriate technology, information and communication of community development.

The PNPM Mandiri Program consists of several poverty reduction programs. National Program for Self Empowerment Among Rural or abbreviated as PNPM Pedesaan, formerly known as KDP (Kecamatan Development Program) and PNPM Mandiri Perkotaan (PNPM Mandiri P2KP). The program is conducted to further encourage the efforts to improve the quality of life, well-being and self-reliance in urban communities. The Selaras part of the program PNPM Mandiri Perkotaan Aceh provincial level is a strategy PNPM Mandiri program in an effort to build community self-reliance and local governments to reduce poverty in a sustainable manner through improving understanding and capacity. As a pilot project, the program in PNPM Mandiri Perkoatan in Aceh province is expected to promote the establishment of equality of men and women in a comprehensive manner through APKM parameters (access, participation, control and benefits) that are aligned with the characteristic of the program. Considering that the PNPM Mandiri activities have already been stepped towards the goals, hence the participation of women in all of PNPM Mandiri implementation stages is needed to be improved.

To increase public participation, potential volunteers at the village level are needed to drive the development of both men and women equitably according to its capacity. It is to ensure that the construction will be done to meet the aspirations of all parties without discrimination of sex, social status, occupation, age, ethnicity, religion and others. The potential volunteers who have been selected through a

transparent consultation mechanism at the village level need to be given a capacity building in a form of training that consist of to a profound understanding of the duties and functions of volunteers, program concepts of Selaras, volunteer's motivation, a skill that must be mastered volunteers and other materials. The potential of volunteers who became trainees are required to attend the strengthen capacity training; entrepreneurial motivation training. The training was attended by 50 participants from the housewives to teenagers. All of the participants are women.

Entrepreneurship Motivation Training: An Entrepreneurial is a discipline that studies the values, skills (abilities) and behavior in facing challenges of life and opportunities to acquire a wide range opportunities and share risks which may be encountered (Ministry of Education in Hendra, 2013). A high level of entrepreneurship in every component of the nations can generate a domino effect for the social economy, the transformation of the country (DR Ciputra in Hendra, 2013). An Entrepreneurial is a very important entrepreneurial which need to be implanted into each individual, where we can change the paradigm that to be successful is not only by being a civil servant, but success can be achieved by becoming an entrepreneur. The motivation to become entrepreneurs can be nurtured through trainings that utilise a variety of media and creative learning styles. According Soeparman Soemahamidjaya (1997), the ability of a person who becomes the object of entrepreneurship includes:

1. The ability to formulate a purpose in life / business
   In formulating the purpose of life / business, it needs a reflection and correction by repeatedly read and observed in order to understand the desired purpose.
2. Ability to motivate self
   The ability to give birth to a determination - the flame which is needed by entrepreneur.
3. Ability to take the initiative
   Doing something nice without waiting for orders, should be done repeatedly so that it becomes a habit
4. Ability to innovate
   Innovations spawned creativity (inventiveness) after repeated habit that yields to motivation. Habit is an innovative inner insistence to always look for new possibilities or new combinations of what can be used as a role in delivering goods and services for the prosperity of society.
5. Ability to establish financial capital or capital goods
6. Ability to manage time and always on time.
7. The mental ability based on the religious
8. Ability to learn from the mistakes

The purpose of this entrepreneurial motivation training in general is to increase personal confidence, understanding, skills, creativity and attitudes volunteers of SELARAS PNPM program in Aceh. The expectation of this training is by the end of it, an understanding of the importance of entrepreneurship is increased, increase in the confidence and courage to speak as well as express opinions and ideas - creative ideas in every activity in the community which later can support local development.

In particular, the training is aimed at:

1. To provide an understanding of the importance of developing the entrepreneurial spirit to improve the welfare of the community.
2. Changing the paradigm of the way the participants think that success should not only be reached by becoming public servants or employees, but also to foster the spirit of entrepreneurship by creating creative efforts.
3. Participants are able to formulate business ideas and business.

Participant's capacity building training activities organized by the PNPM Mandiri Perkotaan Aceh province consists of two villages (gampong) targeted programs. For each Gampong, 25 volunteers are all women with varying levels of education, but the dominant is elementary-high school, only a small part of the D-3 graduate college. The trainers in the training are all of the lecturers of the Faculty of economics, as it relates closely with the business, marketing and entrepreneurship, and has the talent and ability who can raise the motivation of participants in regards to raising the motivation of participants. To build the sense of courages of the trainees, trainers and presenters of the team approach and give priority to the participants to be more active and questions in a unique way, so that the participants who were unfamiliar with public speaking, therefore shy, but in a session when the group has to make the group's vision, the participants had begun actively shy and dare to speak. From the results of the training done by PNPM Mandiri Perkotaan in Aceh province, the enthusiastic participants were quite nice and responsive, the participants did not feel awkward anymore when the speaker used a game as a method to deepen

some of the materials needed, participants seem to enjoy and happy, as if they forgot to heavy burden of their life.

The start and the end of the training, trainers appointed to hold pre-test and post-test to see the level of motivation and knowledge of the participants towards entrepreneurship. The Statements used in the pre-test and post-test which consist of five agree and disagree statements that need to be answer. From the pre-test and post-test, it is showed that there has been a paradigm shift in the trainees entrepreneurial motivation, where the participants showed a different response from the same statement presented in the questionnaire for pre-test and post-test. Those differences are:

1. The trainees have understood that being an employee is not a guarantee that they will always get a nice quality of life compared to being entrepreneurs
2. The trainees have understood that it takes a strong persistence, willingness, hard work, responsibility, and creativity, so that any issues and challenges will be easy to be dealt with.
3. The trainees showed an understanding that in order to start a business, does not have to be equipped with a large capital, but what is needed is foresight in seeing every opportunity, so that businesses with small capital but a sustainable business will result in as big business. The important thing is not the power (capital) but also an effort to always proceed continuously
4. Trainees entrepreneurial motivation from Mns Manyang village showed that after training, they realized that to be a successful entrepreneur is not only through taking over a family business from a parent who is also a trader, but through having the talent and ability, along with the experience of doing business "learning by doing.
5. Basically, the majority of trainees in the pre-test and post-test showed a high response to the some potentials that can be developed village, it is just that the participants still do not know how to develop that potential into something that has a high selling value. In this entrepreneurial motivation training the participants are given the tricks of how to make a high commercial value product for instance, the creativity and the concept of ATM. ATM Concepts taught in this training is an extension of the Amati Adopt Modification (ATM). Hence trainees are required to observe any superior existing products as well as the process of creativity which is trying to change the products (modification) will indeed yield to a differentiation from the original product. This modification process of existing products would have added value and has a characteristic that is different from other products.

Empowerment of Women in Aceh: Community empowerment is the government's efforts to accelerate a participation based on poverty reduction. it is expected to create a social reinforcement process which can take the poor towards civil society, prosperous, equitable and faith and piety based (Sumodiningrat in Damian, 2014). Suharto (in Damian, 2014) also suggested that the goal of empowerment refers to the state or thing to be achieved by a social change, which is empowered community, possess the power or the knowledge and ability to meet their needs whether physical, economic and social as well as being independent in their daily life. The purpose and objectives of community development are as follows:

a. Assisting the development of authentic and integrated society who are weak, vulnerable, marginalized, the poor, indigenous peoples, the job seekers, the disabled and women's groups who are discriminated and marginalized
b. Empower groups socially and economically so that they can be more independent and able to meet their basic needs as well as participate in society.

In terms of the goal of empowerment is to increase the consciousness and to grow the involvement of communities in organizing themselves for collective advancement and independence (Damian, 2014). The Selaras Program of Community Empowerment Program (PNPM Mandiri Perkotaan) Urban in the province is able to strengthen the involvement of women in development (Antaraaceh). Through the program of PNPM Urban, it has increased the participation and role of women in the planning, execution, monitoring of the evaluation stage. According to one participant entrepreneurial motivation training of village Lamgapang Barona Jaya, the subdistrict said that prior to the program of this PNPM Mandiri Perkotaan, women are rarely involved as policy makers. Now, women have the courage to speak in public and promoted ideas and opinions in any activity in their environment. From the results of entrepreneurial motivation training held by PNPM Mandiri Perkotaan in the Aceh province. It has fostered self-reliance and motivation for Acehnese women to change their lives for the better, to improve the economy of the family by helping their husband make a living and to make their days becoming more useful.

2. Conclusion

Poverty is a major problem in the development of Indonesia. One of the efforts that the government undergone to decrease poverty in Indonesia on the basis of community empowerment is through community participation itself. One of the community empowerment program itself is Community Empowerment Program (PNPM) Urban/PNPM Mandiri Perkotaan. PNPM Mandiri Perkotaan in Aceh province implemented in 12 District Municipality. One of the scope of activities of PNPM Mandiri Perkotaan in Aceh is namely capacity building through training of entrepreneurial motivation. This training was followed by the rural people, especially the mothers. Housewives and teens are chosen to represent the village to participate in capacity building. Prior to this training participants seemed shy to come forward to express opinions and do self- introduction. Facilitators use a variety of learning styles and creative media for the participants to enjoy the training as well as for them to be able to absorb the message delivered throughout this training easily. Creative media used in the training are in the form of short feature films, songs and images and simulations related to the material presented. The participants were very pleased to take this training, even those who had never spoken in a public, via this training, they are able to appear in public and convey ideas. Participants also increased confidence which reflected by the participants' activeness; they spoke in the front and were not shy anymore.

One participant also suggested that the training program PNPM Mandiri Perkotaan in Aceh province, has strengthened the participation and role of women in the planning, execution, monitoring and evaluation. Before the program of PNPM Mandiari Perkotaan, these women just as complementing their husband, but now women have dared to speak and to express their ideas, being policy makers and become prominent. During the training, post-test and pre-test was also conducted to see the level of motivation and knowledge of the participants towards entrepreneurship. From the results of pre-test and post-test showed that there has been a paradigm shifting from the old paradigm which is to be successful is not just being a civil servant as well as increase the knowledge of the participants about tips to be a successful entrepreneurship.

Reccomendation: Based on the above presentation, the picture and the following several recommendations can be given by the author
1. For government, it is expected that this article can provide a view in regards to the importance of the implementation of the training, for the women in Aceh. Hence, since the capacity of women is increased and the paradigm has also changed that the role of women is also needed in the community. Furthermore, it also underpins the importance of the role development of women in the household (as a mother and wife), the paradigm that that success should not only can be obtained by public servants or employees as well as to foster the spirit of entrepreneurship through creating creative efforts
2. It is expected that it will increase local budget allocation for capacity building of women through training and other entrepreneurial motivation training, to increase the number Educated and creative Aceh women and also to increase the family income. For local governments alone, it can reduce poverty in the surrounded area through the implementation of this program.

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Evaluation for Creating Stories on Touch Screen Tablet with Heuristic Strategy

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Abstract: Storytelling technique is an effective method for teaching and learning process among educators due to its easy and fast technique. With the boost of technology on mobile devices such as tablet and smart phone, creating stories become easy with tool on natural interfaces. Compared to size with the smart phone, interaction of tablet works effectively with flick/fling and pinch/spread function which contributes the realistic details by making changesin the size and editing character in the making of narrative development. However, the lack of established guide lines for gestural control on the interaction has led to misunderstanding of heuristic on mobile applications specifically on creating stories. Therefore, heuristics evaluation strategy is proposed to evaluate the digital storytelling (DST) tool designated. The strategy consists of three components: Interface, DST Elements and Multimedia. Each of the components represents the issues to be considered and evaluated for creating compelling stories. The results indicate that the strategy is useful and potential to be implemented for similar DST tool applications.

Keywords: *Tablet, heuristic, digital storytelling, tool*

1. Introduction

Storytelling technique is an effective method for teaching and learning process among educators due to its easy and fast technique(Norly, Nadia Akma, Norasikin, & Nor Zuhaidah, 2013). This approach is popular and suitable for teaching all subjects in the process of developing courseware as it can increase communication and memory(Robiatul A'dawiah & Halimah, 2011). Tackvic(2012) claimed that the usage of computer equipment in the storytelling process has a positive impact compared to traditional method. Thistechnique is a key objective for data exploration bypresenting and communicating to an audience (Bongshin, Rubaiat, & Smith, 2013). Narrative stories can be conveyed to the audience in a variety of ways, whether oral, scripting stories, cartoons and movies. The idea of a narrative entertainment to connect audience through media and technology has comprehend the concept of digital storytelling (DST) (Miller, 2008). Ohler (2008) defines DST should be aided with the multimedia technology to meet the satisfaction of narrative communication. While Lambert (2010) summarizes that it is a short story, a video-narrative created by a combination of sound, image, music or sound, and animation. In order to understand the purpose of a story with fast and easyway, a storyboard is introduced as a storytelling tool (Sova & Sova, 2011). The tool should also work on tablet so that it could contribute the realistic details by making changes in the size and editing character, in the making of narrative development(Sutherland & Maiden, 2010).

The idea of using tablet in the class room has resolved certain problems dealing with interaction of tablet on natural user interface (NUI) which serves flick/fling and pinch/spread function (Jenning, Ryser, & Drews, 2013). Tablet as a mobile deviceis in small sized electronic applications and enable to process network facilities (R Inostroza, Rusu, Roncagliolo, Jimenez, & Rusu, 2012).In addition,other elements includedtouch screen, lightweight, fast start-up, efficient high-performance graphics and memoryhave aid users to complete any given task and reduced errors (Jenning et al., 2013; Milne et al., 2010). Using this image-based interaction on NUI has directed to innovative product design (Liu, 2010). Therefore, since the way of the technology used can differ, the choice of methods will differ,too (Kosara & MacKinlay, 2013).Method for testing product can be achieved by a heuristic evaluation which is increasingly popular and practiced in the field of design. However, the lack of established guide lines for gestural control on the interaction using NUI hasled to misunderstanding of heuristic on mobile devices(Norman & Nielsen, 2010). In this study, we proposed a set of adopted heuristics for tool from different aspects: interface, multimedia and DST element which will resolve usability problem and createcompelling stories.

2. Literature Review

The Human-Computer Interaction discipline provides a complete set of techniques to evaluate usability of interactive systems. Heuristic isthe evaluation techniques developed for usability of an application in

order to find out how users easily and efficiently achieve its objectives.This method has become popular because ofits cost effectiveness in the area of user interface and especially for interactive product(Albion, 1999).However, there are several researches made on user interface for mobile applications but lack research on interaction. Machado Neto & Pimentel (2013) extended 11 heuristics for the assessment of interfaces of mobile devices for android based application. While Norman et al., (2010) suggested several fundamental principles of interaction design that are completely independent of technology: visibility, feedback, consistency, non-destructive operations, discoverability and scalability. Whereas Haywood & Reynolds, (2008) present 7 guidelines to help design and evaluate touchscreen solutions for mobile handsets. There are screen size matters, touchscreen responsiveness, navigation & efficiency of use, the virtual keypad and icon design. However, R Inostroza et al., (2012)managed to evaluate and validate a set of 12 heuristics which are specific for the evaluation of mobile device interfaces by performing three types of experiments: inquiry tests, heuristic evaluation and experts' opinion. The studies took into account Nielsen's original heuristics by making changes of the heuristics definitions, in order to support the understand ability of the principle. In this study, we proposed two other components: multimedia and DST elements, since interface component is insufficientfor the evaluation of digital story. The heuristicsis expected to be useful in evaluating better tools for creating stories on touchscreen tablet.

Components of Heuristic Evaluation Strategy: The heuristic evaluation strategy for evaluating DST tool involved three components: Interface(IN), Digital Storytelling (DST) and Multimedia (MM). Asshown in Table I, Interface component described the interaction with touch screen for mobile devices(Rodolfo Inostroza, Rusu, Roncagliolo, Jimenez, & Rusu, 2012). The interface allows them to interact with other multimedia elements such as text, image and audios while developing stories. A good interface usabilityensures themto have interest whilecreating stories and interacting with objects until the end. Therefore, elements of multimediaas added component in this study for better interaction. As listed in Table II,the MM component consists of eight sub heuristics which concern about the issues on multimedia elements (Hasiah, Azizah, & Rohana, 2013). In addition,multimedia is a major contribution in the development of digital storytelling (Robin, 2008). Since, our major intention is to produce stories in developing media, DST elements areother major contents should be added in determining the applicable heuristics for this study.Table III presents the elements of DST which were validated reviewed by prominent experts through a conceptual model(Tenh, Norshuhada, & Harryizman, 2012).

Table I: InterfaceComponents(IN)

Code	Heuristic
IN01	Visibility of system
IN02	Match between system status and the real world
IN03	User control and freedom
IN04	Consistency and standards
IN05	Error prevention
IN06	Minimize the user's memory load
IN07	Customization and shortcuts
IN08	Flexibility and efficiency of use
IN09	Aesthetic and minimalist design
IN10	Help users recognize, diagnose, and recover from errors
IN11	Help and documentation
IN12	Physical interaction and ergonomics

Table II: Multimedia Components(MM)

Code	Heuristic
MM01	Each multimedia element used serves a clear purpose
MM02	Usage of multimedia elements are suitable with the content
MM03	Combination of multimedia elements are adequate
MM04	The presentation of multimedia elements is well managed.
MM05	Numbers of multimedia elements for each screen is not more than 2 elements
MM06	The use of multimedia elements support meaningfully the information provided
MM07	The quality of multimedia elements used is good.
MM08	The use of multimedia elements enhances the content presentation.

Table III: DST Components (DST)

Code	Heuristic
DST01	The point of story can be the perspective of first person or third person
DST02	Intention of the story is clearly defined
DST03	The story is personalized to engage viewer
DST04	Dramatic question raised during the progress of the story
DST05	The ability of story to engage audience's attention
DST06	The use of voice for a better impact
DST07	The use of soundtrack to support emotional value and deliver message
DST08	The pace of story changed by the music tempo
DST09	The story has introduction, body and conclusion
DST10	The expression using media contents(image and sound) rather than words
DST11	Materials used are significant content to the plot of story
DST12	User collaborates with other user in order to construct story
DST13	User contributes to the creation of story through interaction of system
DST14	Use sufficient material to construct story

A preliminary study on the usage of DST tool was conducted before implementing the strategy.The main objective of this study is to find their tool preferences in the process of developing media. Data from student responses were analysed on descriptive technique. The targeted samples were students, teachers and lecturers in the teachers' education institute. As illustrated inable IV, about 18 of the respondents are female and the remainder male including 30.3 % are lecturers, 48.5% are students and 21.2% are in service teachers. The results showed that 54.5% respondents used DST tool in the process of developing their media but their preference lays on Microsoft Power point desktop as their tool with 48.4 % users, 12 % used Movie maker and 9% used Prezi as shown inTable V.

Table IV: Demographic profiles of respondents

Tool	Male	Female	Total Frequency	Percent
Lecturers	7	3	10	30.3%
Students	7	9	16	48.5%
In-service teachers	1	6	7	21.2%
Total	15	18	33	

Table V: Preferences for DST Tool

Tool	Frequency	Percent
Microsoft Power point(desktop)	16	48.4%
Movie maker	12	12.0%
Prezi	3	9%
Others	2	6%
Total	33	

However, the introduction of other DST tool which works with tablet with easy interaction,is expected to help in achieving our objective. Using comparative analysis for DST tool, Storykit wasdesignated with its suitable functions: free, easy use, touch screen and user -friendly forthe creation of digital stories as described in Table VI. The tool was evaluated using the proposed heuristics evaluation strategy, and the results were then further discussed. The heuristic strategy is proposed for its cheap and fastmechanism in measuring the usability of a tool. Recent studies indicate that the strategy is useful and potential to be implemented for applications with the evaluation by users after the heuristic was validated by experts (Syamsul Bahrin & Norshuhada, 2010).

3. Methodology

Storykit was utilized as DST tool in the implementation of the heuristics evaluation strategy as shown in Figure I. The study was conducted to users in teachers' education institute during their class session. A briefing on DST tool was conducted to give an overview of its application for creating stories. In addition, this is an advantage for them because currently they have to complete their major project on developing a media. The sample involved 41 students who have experienced using mobile devices and developing instructional media. Previously, they used storyboard template using Microsoft PowerPoint as a tool in

the process of developing their media. The introduction of the DST tool had fascinated their attention and they were excited to use it. They were divided into groups in attempting the usage of the tool for about an hour guided by the researcher as shown in Figure II and Figure III. A set of questionnaire based on 7 Likert scales was used as an instrument during the usage of the tool. The questions consist of the three components of the heuristics evaluation strategy: interface, multimedia and DST elements (as depicted in Table I to III)

Figure I: Storykit's Interface

Table VI: Comparison of different tools

Function	Storykit	Photostory	Storyboardthat
Drawing	X	X	Not Available
Use image from libraries	X	X	X
Take and edit picture from camera	X	X	X
Use video from libraries	X	X	Not Available
Take and edit video	X	X	Not Available
Use audio from libraries	X	X	X(purchased)
Record and edit audio	X	X	X(purchased)
Type and edit text	X	X	X
Share data from server	X	X	X
Slot of scene	X	Not Available	X
Export in digital form	X	X	X
Touch Screen	X	X	X
Online application using tablet	X	Not Available	X
Free download to tablet	X	X	Trial Version

4. Results and Discussion

This section presents the data analysis of the heuristics evaluation strategy and discussion of the main results. The discussion is intended to highlight the findings from the responses obtained. First, the demographic profile of the users who participated in the study as illustrated in Table VII. Out of 41 users, 80.5% of the respondents are female and the remainder male. As for race composition, the majority of the respondents were Chinese (63.4%), while the rest were Malay (26.8%)and other races (9.8%) that

include Dusun. The results found that majority of the respondents with 87.8% have never used tablet as depicted in Figure IV.

Figure II: Student were divided into groups Figure III: Reseacher was distributing questionnaires to try out DST tool(Storykit)

Table VII: Demographic profiles

Race	Male	Female	Total Frequency	Percent
Malay	5	6	11	26.8%
Chinese	2	24	26	63.4%
Others	1	3	4	9.8%
Total	8	33	41	100.0%

Figure IV: Number of users using tablet
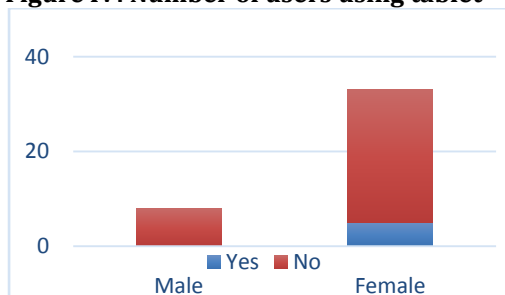
The first component of the evaluation is interface. As seen in Table VIII, the overall mean = 5.78with the highest score is IN02=6.56 (Match between system status and the real world). This is concerning with language or instruction used on application that should be clearly explained as there are students with non-technical background. Thus, technical terms may be difficult for them to understand. Ingeneral, the results showed that the tool is high in term of its interfacefor touchscreen aspect.The second component is the multimedia elements with**Error! Reference source not found.** the overall mean = 6.07 which the highest score is MM03=6.54 (Combinations of multimedia elements are adequate) and this can be expected as multimedia elements contribute to users' attention in creating stories. This is due to when dealing with texts, images and audios, the presentation of their stories becomes interactive and compelling.Finally, the component that is important for creating digital stories is the DST elements. The overall mean = 6.11 which the highest score is DST05= 6.39 (The ability of story to engage audience's attention) and the lowest is DST08= 5.83 (The pace of story changed by the music tempo) which indicates that the DST elements should be significantly infused in the proposed heuristics strategy. Although the scores were not consistent, the stories were expected by users to be more compelling rather than simpler version of other DST tool.

In order to determine the relationship among the three components, the data were analysed using Pearson Correlation Analysis to indicate their relationship. Results showed that there is a positive

relationship between DST and multimedia with significant value, $p < .05$ and $r = .703$. Furthermore, other results indicate that there are also positive relationship between DST and Interface (, $p < .05$ and $r = .424$); Multimedia and Interface ($p < .05$ and $r = .495$) as depicted inTable IX. Therefore, these components are significantly associated to each other in contributing with the heuristic evaluation strategy for creating stories.

Table VIII: Mean Score for Components

Code	Interface	Multimedia	DST
01	5.71	6.15	6.00
02	6.56	6.22	5.95
03	5.83	6.54	6.15
04	5.71	5.88	6.02
05	5.32	5.24	6.39
06	5.39	5.85	6.22
07	5.49	6.20	6.22
08	5.63	6.51	5.83
09	5.63		6.24
10	6.17		5.90
11	5.83		6.17
12	6.15		6.12
13			6.02
14			6.32
Average	5.78	6.07	6.11

Table IX : Pearson Correlation Analysis

Component		Multimedia	DST	Interface
Multimedia	Pearson Correlation	1	.703	.495
	Sig.(1-tailed)		.000**	.001**
	N	41	41	41
DST	Pearson Correlation	.703	1	.424
	Sig.(1-tailed)	.000**		.003**
	N	41	41	41
Interface	Pearson Correlation	.495	.424	1
	Sig.(1-tailed)	.001**	.003**	
	N	41	41	41

5. Conclusion and Recommendations

Generally, the evaluation is conducted in order to find out the usability of the application in creating stories for the users. However, from the past literatures, there were lack of heuristicsfor creating stories in terms of its interaction. Thus, a heuristics evaluation strategy is developed to evaluate theeffectiveness of DST tool in the aspects of interface, multimedia and DST elements (as listed in Table I to Table III). Therefore, a DST tool was designated based on special features that match with the objective of this study. The evaluation sessions were successfully conducted using the proposed strategy. The findings from the heuristics showed that all three components were associated to each other in creating stories. Finally, this proved that DST tool is useful rather than other manual template used in creating stories. It was simple and quick process in conducting heuristics evaluation and also can be implemented with a similar concept of DST. The tool was also expected by users to be easy to edit, user- friendly, using understandable language with adequate material. For future works in this study, further data analysis such as regression analysis which perhaps provide more accurate findings and discussions can be done.

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Factors that Influence Experiential Value of Timeshare Owners toward Timeshare Purchasing in Malaysia

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Abstract: This study was conducted to investigate factors that influencing experiential value of timeshareowners in purchasing timeshare in Malaysia. The research framework was constructed based on the extensive literature review to establish the hypothesis. The researcher used questionnaire and the respondents is among the timeshare owners from Malaysia. Quantitative methods were applied in the research for validity. The analysis of the findings of this research reveals that whether involvement ofinfrastructure, security, risk, cost and price would havebring significant experiential value to the timeshare owners.

Keywords: Timeshare owner, experiential value, infrastructure, security, risk, cost and price.

1. Introduction

Timeshare concept was initiated in 1960s by Alexander Nette in the French Alps. The idea is to purchase the apartment jointly and to share using it based on weekly basis. This model initiated the foundation of the timeshare industry (Madrid, 1996). The same timeshare concept was later entered to America and was adoptedin Florida (Woods, 2001). In the mid-1980s, timeshare was later introduced to Malaysia. Timesharing is a concept which provides for the maximization of the use of a capital asset, by sharing its ownership amongst a number of people, which each of them owning just the time they will use and sharing the costs of ownership in proportion to the amount of time which they own. The rationale of purchasing timesharing is to provide the opportunity buying a holiday home without having burden of the responsibilities of the ownership and maintenance. In Malaysia, the tourism industry has extended greatly in line with the growth of the economy and changing lifestyles of the people. Timesharing is a natural extension of the tourism industry and a number of companies, including subsidiaries of listed companies and hotel chains have ventured into this industry to tap the growth of this industry. However, during recession in 2008, the statistics of the timeshare industry was affected and shrink causing the timeshare industry facing severe challenges for future development. Finding shows that owners are more interested in selling their timeshare than in buying additional new ones (ADRA International Foundation, 2010b; ADRA International Foundation, 2011b). Apart from the internal challenges, timeshare industry also faces competitions on other services competitors in the hospitality industry such as cruise travel, tourism packages and luxury hotels. Therefore, it is crucial to evaluate what factors that can influence the experiential value of timeshare owners' to purchase timeshare.

2. Literature Review

Infrastructure: Infrastructure is referred to the resort unit which is the accommodation that provided to the consumers during their stay. The unit can have a number of physical factors that separate it from other units such as view, square footage, floor plan, and number of bedrooms provided. Resort units usually contain many of the items associated with hotel rooms with the addition of some of the same comforts as an individual's home (washer, dryer, kitchen equipment) (ARDA, 2005). Some resorts will have additional luxuries that go beyond the traditional comforts of home, such as Roman-style whirlpools, lush arrangements of silk greenery, and spacious vanity areas (ARDA, 2005). The furniture, fixtures and equipment associated with the resort unit are what make it appealing to a consumer and are shown to the prospective buyer during a sales tour by a sales person (ARDA, 2005). According to research by Wilkins et al. (2007), some of the more important itemsregarding unit experience are its cleanliness, the comfort, and the quality of the items contained within the rooms.

Timeshare Purchasing – Cost and Price: Woods (2001), discussed the major challenges facing the timeshare industryand generated a laundry list that includes ethics, capitalization costs, regulations, marketing costs, sales practices and timeshare resale issues. Timeshare costs is quite expensive because consumers are required to purchase their stays in advanced together with the maintenance fees. Apart from that, there will also be additional fees for certain exchanged resorts.

Hovey (2002) highlighted three aspects which are the cost of sales, maintenance costs and exit costs that will contribute to the costs of ownership of timeshare that are considered as factors that could beaddressed to make timeshare ownership more feasible. If the industry were able to take up the challenge of reducing these there costs in, it is likely that investment in timeshare would be more viable and attract a wider market.

Security: Every hospitality customer is concerned about physical safety, financial security, and confidentiality. The service provider should make sure that the customer is made comfortable during the stay (Kumar, 2010). Timeshare resorts are very similar in operations to a traditional hotel or resort, giving them the same types of factors to focus on in the design and implementation of services. They would have the same concerns associated with cleanliness and quality along with the additional concerns of landscaping and safety and security (ARDA, 2005). Landscaping can enhance the theme of the resorts and add to the curb appeal from a sales perspective. The safety and security measures of a resort are represented by the presence of safety/security officers, signs throughout the property, fencing around the perimeter, and key-lock entry into guest areas. These enhance the product by giving a sense of exclusivity to the resort while further enhancing the tangible timeshare resort experience.

Risk: There are various risks that related to owing a time-share interval (Hovey, 2002 and Larson & Larson, 2009). Consumers should carefully reviewing the risks of owning a timeshare. Risks from owning a timeshare is reflected in the discount rate based on the study by Stephen (2012).According to Stephen (2012), there are nine (9) risks that timeshare owners need to consider which are;
1. if the resorts end up being unsold
2. timeshare owners may be need to pay for the extra charges due to unexpected events such as losses that are not fully covered by insurance
3. agency problem which is quite possible especially if the resort's managers are not among the ownership stake in the timeshare resort, this will cause underperform and poor maintenance.
4. economic recession – other owner would increase management costs
5. the exchange program for alternate location could be default resulting additional fees need to paid for the exchange program
6. increase owner's level of financial risk by adding commitment or fixed costs to the household expenses
7. the resorts location and its resale value
8. political risk if the resort is located in another country
9. exchange rate risk which can impact the cash flows where appreciating currency will have higher management fees dominated by the foreign currency and vice versa for the depreciating currency.

Experiential Value: According to Sparks, Butcher, and Pan (2007) regarding the perceived value of a timeshare purchase, customer value was normally considered to be an antecedent of customer satisfaction. From their study, it shows that ownership and pride, new experience, flexibility, luxury and reward were some of the components of owning a timeshare that provided value forthem, thus enhancing their satisfaction with the product. This study delivered a new focus that organizations could use when marketing to approaching timeshare owners, as well as a method to promote the value and increase the overall satisfaction of the owners. Sparks et al. (2007) measured timeshare owners to discover where value is derived from. They found out that as owners are aware about additional options for using their timeshare units such as renting out, exchange for different resort locations or convert it into points that could be used to purchase services like vacations at other hotels or airline tickets, the timeshare value increased.

Problem Formulation: This study is mainly to measures the gap between factors that timeshare owners consider during purchasing and value gained by them. The investigation part will be more on answering the following research questions: (1) what are the factors that associates with the purchasing timeshare program in Malaysia? (2) The researcher is interested to understand why owners would buy the products even though it is costly.

Objectives: The objectives of this research is to measure the pre-factors affecting customer experiential value. It is to examine the associations between factors elements and experiential value. An overall concept and framework were proposed to examine these relationships.

Hypothesis: The following five hypotheses are constructed to identify the factors affecting experiential value of timeshare owners. They are:

H_0 = Null hypothesis H_1= Alternative hypothesis

Hypothesis No.1:

$H1_0$: There is no significant relationship between infrastructures with experiential value

$H1_1$: Infrastructure is positively related to experiential value

Timeshare owners often look forward for a quality and comfortable vacation. Therefore the infrastructure of the resort or hotel is important. According to a study by Wilkins et al. (2007) as mentioned in the literature review above, some of the important items regarding unit experience are mainly on the cleanliness, the comfort, and the quality of the items contained within the rooms or units of the hotel.

Hypothesis No.2:

$H2_0$: There is no significant relationship between securities with experiential value

$H2_1$: Security is positively related to experiential value

According to Kumar (2010) every hospitality customer is concerned about physical safety, financial security, and confidentiality. The hotel management should ensure that the customer is comfortable during the stay.

Hypothesis No.3:

$H3_0$: There is no significant relationship between risks with experiential value

$H3_1$: Risk is positively related to experiential value

The risks associated with any buyingmust be considered, mainly when comparinginvestment opportunities. Ideally an inventor should be compensated for the risk borne. There isalso the question related with valuing timeshare as to whether the risk-free discount rate isappropriate.Accordingly, from the timeshare perspective, it is the risk associated with the capacity of a consumer to sell a timeshare investment quickly and at a fair price. If an owner is required to reduce the price below market value or fair value, or takes extensive time to divest the investment, then it is considered illiquid (Hovey, 2002).

Hypothesis No.4:

$H4_0$: There is no significant relationshipbetween cost and price with experiential value

$H4_1$: Cost and price is positively related to experiential value

There is ample literature that emphasize the relationship between cost and price with experiential value.

Conceptual and Operational Detentions

The purpose of this study is to determine the four factors that influence experiential value of timeshare owners during purchasingof timeshare. All 25 items are divided intofive dimensions which are infrastructure, security, risk, cost and price, and experiential value.The research framework is shown in Figure 1.

Figure 1: Research framework
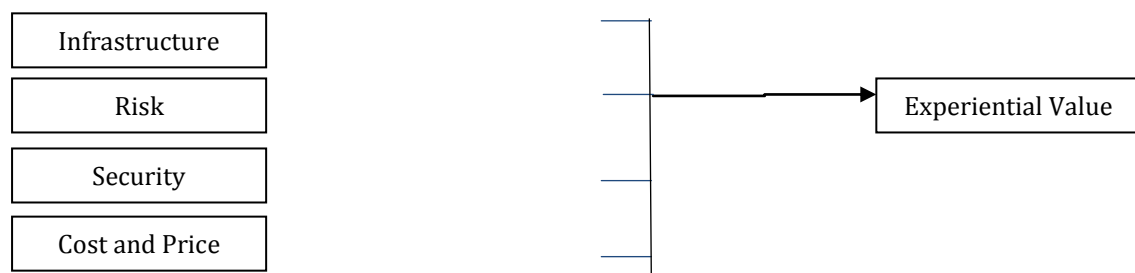
3. Methodology

A questionnaire was adopted and modified to fit this study on timeshare industry. It was distributed using a convenience sampling technique to the timeshare owners in Malaysia to determine their perceptions of purchasing the timeshare. In this research, the relationship between factors and consumers' experiential value is investigated. The consumers' perceptions of different aspects attributes are evaluated. The data used in this research is primary data by close-end questionnaire, regarding owners' perception and aspects, with 25 different elements and items. The first section of the questionnaire is aimed at gathering information on the respondents' demographic. In the second section

of the questionnaire, therespondents were asked to rate their perceptions on what factors that influencing them in converting the timeshare purchasing into experiential value.

Table 1: Profile of survey respondents

Characteristics	Descriptions	Statistics	(%)
1. Gender	Male	61	(44.5)
	Female	76	(55.5)
2. Age	17 – 24	36	(26.3)
25 – 34	76		(55.5)
35 – 44	15		(10.9)
45 and above	9		(6.6)

A total of 137 questionnaire were received and analyzed. Table 1 shows the profile of survey respondents. The largest group of respondents are female with 76 respondents (55.5%) and male are 61 respondents (44.5%). As for age group, the highest group of respondents are age 25 to 34 with the percentage of 55.5%, and the least group are from age 45 and above with the percentage of 6.6%.

4. **Result and Discussion**

The research analyze on the data reliability using Cronbach's Alpha coefficient. A reliability coefficient of 0.6 and above is considered acceptable in most social science research. To test the reliability, the Cronbach's alpha was estimated for each of the five factors in this research. Table 2 shows the reliability results of the five factors.

Table 2: Reliability statistics

Factor	Cronbach's Alpha	N of items
1. Infrastructure	0.819	3
2. Security	0.883	3
3. Risk	0.862	3
4. Cost and Price	0.784	3
5. Experiential Value	0.923	5

Table 3: Factor analysis (Rotated Component Matrix[a])

	Component				
	1	2	3	4	5
SEC1			.863		
SEC2			.846		
SEC3			.840		
RIS1		.857			
RIS2		.826			
RIS3		.873			
INF1				.834	
INF2				.725	
INF3				.871	
COS1					.829
COS2					.748
COS3					.798
VAL1	.840				
VAL2	.899				
VAL3	.855				
VAL4	.782				
VAL5	.879				

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.
a. Rotation converged in 6 iterations.

Based on Table 2, Cronbach's Alpha results show that the alpha coefficients ranged from 0.784 to 0.923 for the five factors. The results are considered reliable, since 0.60 is the minimum value for accepting the reliability test. Factor analysis is usually run for data reduction and is implemented by reviewing the pattern of correlations between the observed measures which are highly correlated, either positively or negatively. They are expected toinfluence by the same factors, while those that are relatively uncorrelated are expected to be influenced by different factors (DeCoster, 1998). Table 3 shows the factor loadings for each item in relation to the various factors. Based on Table 3, these values show the weight and correlation of each item has a factor or component. It can be realized that items from same dimension are regrouped under the same factor. This factor analysis proves that the questionnaire adopted is a good measure of factors in the timeshare experiential value because we expect to see similar items categorized under the same factor showing that they measure the same thing.

Table 4: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.797
Bartlett's Test of Sphericity	Approx. Chi-Square	1361.709
	Df	136
	Sig.	0.000

Table 4 show the KMO's test ranged between 0 and 1. According to Field (2005), a value of 0 indicates that the sum of partial correlations is large relative to the sum of correlations meaning factor analysis is expecting to be irrelevant while a value close to 1, shows that patterns of correlations are fairly compact and factor analysis yield distinct and reliable factors. For this data, the value is 0.797, which shows that the factor analysis is relevant for this research. The correlations computes the linear of the relationship between the two variables and also showing the direction of the relationship. The correlation coefficient r, measures the strength of the linear relationship. R value is between +1 and -1. If R near to +1 or −1 indicates a strong linear relation. If r close to 0 represents the linear association is very weak. Table 5 shows the correlations of each factor.

Table 5:Correlations

Factor	SEC	RIS	INF	COS
Pearson Correlation	0.484	-0.151	-0.161	-0.148
Sig. (2-tailed)	0.000	0.089	0.068	0.094
N	137 137	137 137		

Based on Table 5, the results shows there is a significant and positive relation between security (SEC) and experiential value, r = 0.484 at 0.05 significant level. However, risk (RIS), infrastructure (INF) and cost and price (COS) present a negative relation, r = -0.151, -0.161 and -0.148, respectively and has a non-significant correlation with experiential value at the 0.05 significant level. Based on the correlations results, hypothesis H21 will be accepted. It means security is positively correlates with experiential value. Higher security leads to more experiential value to the timeshare owners. On the other hand, hypothesis H10 will be accepted and H11 will be rejected which means there is no significant relationship (p-value is more than 0.05) between infrastructure and experiential value. This may due to some of the timeshare owners have no preference on luxury resort with fully equipped facilities such as having kitchen in the unit, swimming pool and gymnasium. They are more emphasizing on the location or different country and places of the availability of the timeshare resorts such as in Europe, U.S. Australia and etc. Hypothesis H30will be accepted and H31 is rejected, because the results shows there is no significance relationship (p-value is more than 0.05) and risk is negatively correlated with experiential value. This shows that higher the risk will give lower experiential value to timeshare owners.

Lastly,H40 will be accepted and H41 will be rejected. It shows there is no significant relationship (p-value is more than 0.05) between cost and price with experiential value. Cost and price is negatively correlated with experiential value. This shows that higher the cost and price will leads to lower experiential value to timeshare owners.

Table 6:R2Model Summary

Model	R		R Square	Adjusted R Square	Std. Error of the Estimate
1	0.562	0.316	0.293	3.29625	

Based on Table 6, R is the correlation coefficient measuring the strength of the linear relationship R=0.562 shows moderate relationship. R square is the coefficient of determination, it tells us that this model can predict 31.6% of the variables correctly.

4. Research Findings

Nowadays, the Malaysia Government have set a high priority on the tourism industry. Sustainable growth of tourism industry depends on a good plan for related services and facilities. The importance of experiential value makes it necessary to influence the purchasing of timeshare. Measurement of influencing factors toward experiential value of timeshare purchasing help the timeshare organizations to understand the motivations and behaviors of timeshare owners and use it to increase industry performance. From the four hypotheses, security influencing factor shows positive relationship with experiential value. This shows that every timeshare owners are concern about their physical safety, financial safety and confidentiality during the stay. The higher the security, the more comfortable feelings felt by the timeshare owners during the stay. According to Shahrivar(2012), there are security and safety problems in the tourism industry. Therefore in order to motivate timeshare purchasing, timeshare organizations needs to enhance the security system of their resort to give a sense of exclusiveness experiences to the timeshare owners. The safety and security of a resort are like the presence of safety/security officers, camera closed-circuit television, signs throughout the property, fencing around the perimeter, and key-lock entry into guest areas. Other results like infrastructure, cost and price, and risk do not show a significant experiential value influence toward timeshare purchasing. It could be no association at all or the relationship in non-linear. In addition, this may due to there are other factors that are influencing the experiential value toward timeshare purchasing and have not identified out.

5. Conclusion

In conclusion, the timeshare players can benefit from this study after knowing the most important influence factor that lead to timeshare purchasing. As this can help the timeshare company in Malaysia to provide a better service quality to their timeshare owners. For example, better security quality by Palace Vacation Clubas a timeshare resorts. Future research can be conducted using more influencing factors and sample size.

Recommendations: There is a limitation in this study is the survey done was distributed by using social media to timeshare owners in Malaysia, and was collected using e-form. There is a probability that the questionnaire is not evenly distributed among the age group due to technological exposure constraints. The researcher recommended that for future research should be involved the participation of the timeshare organizations for wider data collection.

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The Reasons of Internet Banking Resistance inYemen from the Perspective of Postponers, Opponents or Rejectors

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Abstract: Despite the advancement of internet banking around the world, internet banking adoption in Yemen is still lagging behind. It is stipulated that only five percent of Yemeni population utilized internet banking. Explicitly, internet banking in Yemen still faces resistance that may hinder customers' adoption of innovation in Yemen. Hence, the main objective of this paper is to understand the causes of this resistance towards internet banking by differentiatingthe internet banking resistorsinto three groups which are postponers, opponents, rejectors.This study organizesthe quantitative survey method by collecting primary information from the public via employees of several public Universities in Yemen. The instrument to measure customer resistance is based on the five dimensions (usage, value, risk, tradition and image barrier). A total of 900 questionnaires were distributed and 451 were returned representing 50% response rate. After screening of data, 407 usable data was analyzed using ANOVA. The finding shows that the three types of resistors are significantly different in all aspects of the resistance barriers.The highest score difference is in image barrier followed by usage barrier, tradition barrier, risk barrier and lastly value barrier. This indicates that all resistor groups aresignificantly different on their opinion on why they resist (resistance barriers). Thus, all hypotheses are supported. The finding also implies that the task of managing each group of internet banking resistors need a specific and custom made strategy in order to convert them into innovation adopters.

Keywords: *internet banking resistance, postponers, opponents, rejectors, barrier dimension*

1. Introduction

Financial institutions bring new banking services to their customers, as technology adds new services to the traditional banking systems. One of the most popular e-banking technologies is Internet banking (Calisir & Gumussoy, 2008). Improving substitute ways for holding the existing customers as well as for attracting new customers is very important to banks (Kimball & Gregor, 1995; Thornton & White, 2001). For example, over the last few years, e- technologies such internet banking hasswitched the need for face-to-face interaction between banks and customers (Eriksson & Nilsson, 2007). Internet banking service is introduced and offered by the Yemeni banks as a new free channel for receiving or delivering banking services to their customers, but it is generally believed that Internet banking practices are not progressing at the same level (Zolait et al., 2008; Al-Ajam and Md Nor 2013). Only 5% of the Yemeni banks' clients use Internet banking services (Al-Hariry, 2007). In addition, Internet banking technologies are not utilized efficiently and rarely used by Yemeni customers and they seem to be uninterested or not attracted to use Internet banking (Commercial Service and USA Department of State, 2009). Thus, resistance towards the internet banking service among Yemeni customers is evident. In this regard, customer resistance towards internet banking acts as a big barrier on the way of improving the banking service and further its contribution.Internet banking resistance is defined as*"the resistance offered by consumers to an innovation, either because it poses potential changes from a satisfactory status quo or because it conflicts with their belief structure."*(Ram &Sheth 1989).

Innovation resistance like internet banking resistance persists to be less developed perception deserving even more attention than innovation adoption (Seth, &Stellner,1979). Because of paying no attention to the non-adopter forms as an important basis of information may perhaps a critical in the successful development, implementation and marketing of innovation (Laukkanen, et al.,2008) Thus, this paper will highlight this type of non-adopters to the innovation and how this type control the purpose to utilize Internet banking. Hence, the main objective is to understand the causes of this resistance (usage, value, risk, tradition and image barrier) towards internet banking by differentiating the internet banking resistors into three groups that are postponers, opponents, rejectors.

2. Literature review

Types of resistors: Detecting customer resistance behavior necessitates classifying adoption categories. Rogers (2003) sorted the adopters of innovations into five categories: Innovators, Early Adopters, Early

Majority, Late Majority, and Laggards. Any of these categories has a different form and type of resistance to an innovation, which influences the timing of adoption (Joseph, 2010; Patsiosis, et al., 2012). Nevertheless, the customer's adoption began after the initial resistance to the innovation has overcome (Joseph, 2010; Patsiosis, et al., 2012). Thus, there is some a resistance at all times some before and after adoption.The adoption procedure does not basically derive to adoption, while most rejectors may terminate the entire procedure. In order to create the resistance level, it is crucial that the concepts of resistance and rejection are differentiated because they are slightly obscurely conceptualized in the past literature. Therefore, Kuisma et al. (2007) identified rejection as a passive form of the customer behavior outcome within an extreme choice not to accept an innovation, while resistance is an active action, which may occur in every acceptance procedure, driving to adoption or negative response. Szmigin and Foxall (1998) pinpoint that there are three categories of resistors of internet banking adoption in terms of their potential intention, namely: the postponers, opponents, and rejecters. First category, the postponers, are willing to use internet banking within one year; but has some concerns related to risk such as losing PIN code or input and possible errors of information. The second category, the opponents, who are intending to adopt internet banking; but at a suitable time and situation. This is also in line with the findings of (Joseph, 2010; Kleijnen et al., 2009). Furthermore, the main obstacles, as this group perceive, are presented as follows: risk (in which they have doubts), image (negative image of technology and internet banking), and traditions. Lastly, the rejectors, who never intends to adopt and reject internet banking. Their perceived reasons in addition to the aforementioned three elements (risk, image, and tradition) are as follows: the usability and value of internet banking and technology is perceived to be poor, in addition to their high risk image with belief that it opposes their habits and routines of financial transactions.

The findings of Laukkanen et al (2008) are in line with Szmigin and Foxall (1998) in which they classified the non-adopter into three groups with respect to build strategies and marketing actions according to the group class. Laukkanen et al (2008) suggest that for the postponers safety measures, to overcome the risk perceived, could urge them to adopt internet banking. For the opponents, who have risk, traditions, and image concerns, the measures should cover the safety issues, the psychological issues of the image, and the established routines to facilitate and speeds up the adoption. Lastly, the rejectors can be persuaded to adopt internet banking by means of face-to-face communication and education. These means can include the discussion of risks related with the service, in addition to the implementation of training of computer skills and internet banking services. Finally, Laukkanen et al (2008) recommend the acceptance of the perception of this group and offer high quality traditional services to them.

Dimension of barriers to adoption (customer resistance): Earlier literature have concentrated on the internet banking adoption (Lennon et al., 2007; Lin, et al., 2007; Nasri, 2011; Xu et al., 2009; Yiu et al., 2007). Whereas, other literature shed light why customers resist adoption of internet banking is vital (Laukkanen et al., 2008, 2009; Laukkanen, & Kiviniemi 2010; Kleijnen et al., 2009; Mzoughi & M'Sallem, 2013; El-Badrawy, et al., 2012).Based on Ram and Sheth, (1989) divide the innovation resistance to two main barriers (functional and psychological barriers). The functional barriers consists of usage, value, and risk while psychological barriers consist of tradition and image barrier. This study intends to focus from the resistance point of view by using the five barrier dimensions (usage, value, risk, tradition and image barrier). These will be discussed next.

Usage barrier: Usage barrier is mainly connected to the accessibility and easy-of-use of an innovation and the transforms it stresses from the users. The barrier starts to be effective when an innovation is not well-matched with accessible work flows, performance or habits (Ram & Sheth, 1989). Dover (1988) stated that an innovation that is complicated to recognize or utilize is a single cause for failure for adopting banking in the USA. Prior literature Liao & Cheung, (2002) documents that apparent ease of use is a significant determinant of readiness to utilize effectively and efficiently Internet banking, and user-friendliness determines the use as indicated by (Wang et al., 2003) in addition of the service (Yiu et al., 2007). Previous researchers (e.g. Black et al., 2002; Gerrard & Cunningham, 2003; Howcroft et al., 2002) found that the difficulty of using Internet banking hinders users from adopting the service. In their qualitative research on the causes of Internet banking resistance, Kuisma et al. (2007) found that resistance is related to difficulty of internet banking and inconvenience. Ram and Sheth (1989) note that usage barrier begins from "tangible, functional elements" of the Internet channel. Lacking of Internet connection, confusing menus of the screens, lacking of receipt, safety concerns, convenience, and lack of bar code readers are typical reasons to abandon and rejection of internet banking (Kuisma et al., 2007).
Lee et al. (2003) studied users' adoption of technology equipment-based service innovations (ATM and Internet banking) in America and found that involvement is related with Internet banking. Users who

found online banking difficult to utilize were less expected to adopt computer banking and ATMs. In addition, Laukkanen et al. (2007) analyzed Internet banking the resistance among older and younger customers of in Finland. Their results demonstrated that usage barriers are the strong and obvious barriers of Internet banking adoption for both young and old customers. Similarly, in Malaysia, Ndubisi and Sinti (2006) found that Internet banking difficulty is inversely related to adoption, which indicates that the lesser the effort expended to use a complicated system the higher the adoption likelihood. Additionally, Laukkanen et al. (2008) found that usage barrier was divergence for rejectors; but not clear enough for postoners, and opponents. Pikkarainen et al. (2004) studied user adoption of online banking in Finland by using technology acceptance model. They found that user friendliness was not significantly related to online banking. Hence, we hypothesis: divergent

H1. The usage barrier to internet banking adoption differs significantly between groups of resistors (postponers, opponents and rejectors).

Value barrier: This variable can be explained as the perception of the innovation's value in regard to the outcome produced by the customer compared to other alternatives, or can be referred as price for performance (Ram & Sheth, 1989). Value barrier depends on the financial value of an innovation. If the innovation is not expensive for users to modify their habits, resistance to it may not be likely (Laukkanen et al., 2008; Ram & Sheth, 1989). According to Rogers (2003), value barrier refers to the notion of relative gain, described as the apparent advantage of an innovation to the product or service. It is also equivalent with the notion of professed usefulness in technology acceptance model (Wu & Wang, 2005), which describes an individual's awareness of utilizing a particular innovation to develop his/her routine (Davis and Beath 1989). Thus, the value of Internet banking can be felt due to low transaction costs for both customers and banks (Floh & Treiblmaier, 2006; Lichtenstein & Williamson, 2006). Brown, et al., (2003) argue that the greater the advantage of Internet banking, the more probable it is to be adopted. When customers believe that they can access Internet banking anytime anywhere, and can manage their finances better, they will eventually adopt it (Laukkanen et al., 2006). According to Dunphy and Herbig (1995), the major reason for resistance to a new technology is because it is not "simple". Laukkanen et al. (2008) demonstrated that the three resistor groups (postponers, oppositors, and rejectors) differ significantly regarding the value barriers for Internet banking adoption. They found that value barrier was rather lower for oppositors and postponers but higher for rejectors. Hence, we hypothesis:

H2. The value barrier to internet banking adoption differs significantly between groups of resistors (postponers, opponents and rejectors).

Risk barrier: According to Kuisma et al. (2007), and Ram and Sheth (1989), risk barrier relates to the degree of intrinsic threats in an innovation. Uncertainty is a characteristic of innovation that is related to threat. Risk might be physical, monetary, social, or even functionalas indicated by (Kuisma et al., 2007; Lee, 2009; Ram &Sheth, 1989). In Internet banking, some users are anxious about the prospect of making mistakes during the service (Suganthi et al., 2001; Howcroft et al., 2002) and their safety when using the e-service. Adopters may face panic when they commit mistake while performing their bank transactions by using a PC (Black et al., 2001; Kuisma et al., 2007; Poon, 2008). Similarly, resistors are upset when encountered by link breaks that occur during the banking transactions. In addition, some people are anxious about code verification by the Internet service (Rotchanakitumnuai&Speece, 2004), and as a result many customers prefer performing transaction through ATM rather than an Internet service (Laukkanen, et al., 2006; Kuisma et al., 2007). The PIN codes might also cause security concerns to Internet banking as the list might be lost or misplaced. Kuisma et al. (2007) argues that risk barrier is a critical aspect that creates resistance to do online banking among non-users. Safety and confidentiality are important issues often raised with online banking transactions. Safety is associated with the fear of financial loss, while confidentiality is associated with private information of the customer. Pavlou (2003) likens privacy threat in online dealings to fraudulent of confidential information. In the online banking situation privacy is found to be a major concern with regard to safety (Liao & Cheung, 2002). Cooper (1997) considerssecurity and reliability of transactions on the Internet as threats that hinder adoption of innovation. Other authors also posit similar concerns (Daniel, 1999).

Internet banking will not be adopted if customers feel that it is not safe and secure. Lee et al. (2003) examined factors that influence users' adoption of two technology equipment-based service innovations (ATM & Internet banking) in America. They found that security was correlated with client adoption of electronic banking technologies. They found that users who felt that electronic banking is secure will consider giving private information through online banking schemes. In another study, Gerrard et al. (2006) demonstrated why customers are resistant to utilizing Internet banking in Singapore. They found

risk to be a significant factor that hinders adopting Internet banking. Similar result was reported by Walker and Johnson (2006), who examined why people use, or choose not to use, three types of technology service: online banking, mobile banking and online shopping services in Melbourne, Australia. They found that risk had significant influence on the use of all three technology-assisting services. The further found that customers in Australia prefer face-to-face contact. Studies also revealed that postponers, oppositors, and rejecters do not have significantly different perceptions of risk barrier in Internet banking (Kuisma et al. 2007; Laukkanen et al. 2008) in that they perceived that all Internet banking transactions are risky. For the above explanation we hypothesize the following:

H3. The risk barrier to internet banking adoption differs significantly between groups of resistors (postponers, opponents and rejectors).

Tradition barrier: Tradition barriers are primarily related to everyday habits and routines. If routine interaction like face-to-face is necessary to customers, the tradition obstacle will be essentially strong (Laukkanen et al., 2009). In addition, behavior that differs from family values and social custom will cause a barrier (Ram & Sheth, 1989). Howcroft and Durkin (2000) noted that in banking relationships, the face-to-face service is difficult to be substituted by internet. Ram and Sheth (1989) observed that customers regard daily routine is essential to them. Customers may have familial and societal principles. Behavior that is inconsistent with these values and standards will not be executed. Laukkanen et al. (2008) found that in Finland the three resistor groups (postponers, oppositors, and rejecters) are differentiate significantly with respect to the traditional barriers encountered in Internet banking adoption. Their results showed that tradition barrier to Internet banking were considerably different between opponents and rejectors, but not significantly different from postponers. However, Gerrard, et al., (2006) found that absence of physical interaction is not an important inhibitor in adopting Internet banking. Laukkanen et al. (2007) examined innovation resistance between older and younger people in the Internet banking in Finland. They found that tradition barrier is not a problem for each group. Yet, they showed that younger resistors in comparison to older resistors, had to some extent new optimistic views of Internet banking. Therefore, we hypothesis:

H4. The tradition barrier to internet banking adoption differs significantly between groups of resistors (postponers, opponents and rejectors).

Image barrier: The image barrier is a reflection of a previous thoughts and characteristics of products and country of origin (Laukkanen et al., 2007; Ram & Sheth, 1989). The image barrier can be considered as the image of the innovation in general (Laukkanen et al., 2007), and as a result of fear towards the innovation (Kay, 1993). Fain and Roberts (1997) argue that in Internet banking image barrier might happen because of the negative "difficult-to-use" image of PCs and websites. Kuisma et al. (2007) observed that several Internet banking resistors possibly will have an obviously depressing image regarding innovative technology. Correspondingly, Laukkanen et al. (2008) noted that the three resistor groups (postponers, oppositiors, and rejecters) are considerably varied with regards to the image barriers in Internet banking adoption. They found that image barrier is a higher determinant of resistance for oppositors and rejectors; while image barrier is a low determinant for postponers. In another study, Laukkanen et al., (2007) examined the responses between older and younger users of Internet banking. Their results demonstrated that older customers differed from younger users in terms of image barriers to adopt Internet banking. In Finland, Laukkanen et al. (2008) found that image barrier is significantly different among opponents and rejectors; but not significant among postponers. Thus, we hypothesis:

H5. The image barrier to internet banking adoption differs significantly between groups of resistors (postponers, opponents and rejectors).

3. Methodology

This paper is quantitative in nature with the aim to understand the causes of internet banking resistance and three groups of resistors: the postponers, opponents and rejectors. Furthermore, this paper is cross-sectional where data were gathered once to answer the study's research questions.The measurement of customer resistance was employed based on the previous literature on Internet banking resistance as shown in Table 1. The resistance measurement consists of five dimensions of 18 items construct (usage barrier, value barrier, risk barrier, tradition barrier and image barrier) (Lukkannen et al, 2008). A seven-point Likert scale with responses starting from "totally disagree" (1) to "totally agree" (7) was used. The three groups of resistors are differentiated by questions such as: postponers intends to adopt internet within a year; opponents intends to adopt internet banking in the future and rejectors have no intention of adopting internet banking at all (Lukkannen et al, 2008).This paper employs the quantitative method

where random sampling was used and self-administered survey questionnaires were sent to employees of universities who are resistors to adopt internet banking. There are eight government universities in Yemen with a total number of 15986 employees (Ministry of Finance Yemen, 2012). According to Sekaran, (2003) the population between 15,000 and 20,000, should have a sample size of between 375-377 employees. Hence, for the actual study,the collection of data were made from three universities in Yemen to represent the country's three regions; North Yemen (Sana'a university), South Yemen (Aden university), and Middle Yemen (Taiz university). The survey took six months (26th Oct 2012 to 26th March 2013). From the 900 questionnaires distributed, 451 were returned, representing 50.11% response rate. From this 451 questionnaires, 44 data sets were deleted due to incomplete data such as severe missing data of more than 50% (Hair et al. 2010).A final 407 questionnaires were keyed into SPSS, and the data were then carefully examined for reliability and validity screening analysis. Finally,one-way analysis of variance (ANOVA) test was employed to analyze the statistical differences in resistance to Internet banking among three groupsof resistors which arethe postponers, opponents and rejectors.

4. Findings

Based on exploratory factor analysis (EFA) using the principal component method with varimax rotation, two variables from the original variable list appeared to be cross-loaded and therefore not fit into the factor model. As a result, one item associated with usage barrier (UB5), and one itemassociated with the image barrier (IB5) were removed from further analysis. The final list of the retained items with factor loadings and Cronbach'sis given in Table I. The Cronbach's as vary between 0.713and 0.905, indicating acceptable reliability levels of above 0.60 (Nunnally, 1967). The Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy (KMO = 0.886) and Bartlett's test of sphericity (p= 0.001) confirmed that the factor analysis was appropriate. The total variance explained 65.75 percent variance in the measurement. The risk barrier explained the highest variance of 16. 06%. All Cronbach s alpha readings show adequate internal consistent (0.713-0.905) (Table 1).

Table 1: Factor Loading, Cronbach's Alpha

Measure	Factor loading	Cronbach`s Alpha	Internet / Mobile banking literature
Usage barrier (Variance=10.979%)		0.713	
In my opinion, Internet banking services are not difficult to use.	0.713		Kuisma et al. (2007)
In my opinion, the use of Internet banking services is inconvenient	0.734		Laukkanen et al., (2008), Laukkanen, & Kiviniemi, (2010), Lee and Chung, 2009
In my opinion, Internet banking services are slow to use.	0.759		
In my opinion, progress in Internet banking services is not clear	0.538		
Value barrier (Variance=12.973%)		0.795	
The use of Internet banking services is not economical.	0.756		Brown et al. (2003)
In my opinion, the use of Internet banking services does not increase my ability to control my financial matters by myself.	0.798		Laukkanen et al., (2008), Laukkanen, & Kiviniemi, (2010), Luarn and Lin (2005)
In my opinion, Internet banking does not offer any advantage compared to handling my financial matters in other ways.	0.694		
Internet banking transactions do not save more time.	0.697		
Risk barrier (Variance=16.060%)		0.905	
I fear that while I am using Internet banking services, the connection will be lost.	0.857		Brown et al. (2003) Kuisma et al. (2007)
I fear that while I am using an Internet banking service, I might tap out the information of the bill wrongly.	0.839		Laukkanen et al., (2008), Laukkanen, & Kiviniemi, (2010), Lee et al. (2003) Luarn and Lin (2005)

I fear that the list of PIN codes may be lost and end up in the wrong hands.	0.880		Poon (2008)
I fear that while I am paying a bill by Internet banking, I might make mistakes since the correctness of the inputted information is difficult to check from the screen.	0.830		
Tradition barrier (Variance=13.306)		0.822	
Visiting the bank branch and chatting with the teller is not a nice occasion on a weekday.	0.728		Marr and Prendergast (1993) Mattila et al. (2003) Srijumpa et al. (2002, 2007),
I do not find self-service alternatives more pleasant than personal customer service.	0.833		Laukkanen et al., (2008), Laukkanen, & Kiviniemi, (2010)
Internet banking services are not offering good option next to other banking services.	0.768		
Not the way customer accustomed to paying bills, etc	0.743		
Image barrier (Variance=12.427)		0.803	
In my opinion, new technology is often too complicated to be useful.	0.785		Gerrard et al. (2006) Kuisma et al. (2007)
I have such an image that Internet banking services are difficult to use.	0.823		Mattila et al. (2003) Laukkanen et al., (2008),
I do not have a very positive image of Internet banking services.	0.742		Laukkanen, & Kiviniemi, (2010)
Using Internet banking services do not improve my image.	0.577		

Kaiser Meyer Olkins (KMO)= .886; Bartletts Test of Sphericity=.001; Total Variance explained= 65.745%

Table 2 shows the result of ANOVA to find out whether the three groups of resistors differ significantly in their perceptions of the barrier dimensions. It was found that all the three groups are significantly different in their opinions towards each dimension barriers. The F-value is highest for image barrier (F=22.295, p=.000); usage barrier (F= 17.819; p=.000); tradition barrier (F= 11.186 ; p=.000); risk barrier (F=8.514; p=.000); and value barrier (F= 6.668; p=.001). The lower value of F in value barrier is accounted by the insignificant F–value (F=1.083, p=0.339) for the statement 'Internet banking transactions do not save more time'. Thus, H1 – H5 are supported. In the category of usage barriers, the rejectors scored the lowest mean (μ=3.59) on all items compared to postponers and opponents indicating that they reject using internet banking due to usage barriers (they disagree that using internet banking is not difficult or agree that using internet banking is difficult). However, the mean score for postponers and opponents are higher than rejectors indicating that the internet banking can be easy to use. The mean value scored by the three groups of resistors are almost similar (postponers: μ=5.00; opponents: μ=5.19; rejector: μ =4.93), indicating no difference in their opinions regarding 'internet banking can save time'. The respondents also agree that there is high risk in using internet banking (μ=5.23) especially when it comes to changing PIN codes or falling into wrong hands.

Table 2: Result of barrier dimensions against resistor groups (ANOVA)

Measure	Postponers (N=144)	Opponents (N=147)	Mean * (SD) Rejectors (N=116)	Total N=407	F-value	Sig.
Usage barrier						
In my opinion, Internet banking services are not difficult to use.	5.15 (1.458)	5.15 (1.382)	4.47 (1.726)	4.97 (1.535)	9.585	0.000
In my opinion, the use of Internet banking services is inconvenient	4.88 (1.456)	4.63 (1.693)	3.59 (1.881)	4.44 (1.743)	17.513	0.000
In my opinion, Internet banking services are slow to use.	4.84 (1.394)	4.91 (1.502)	4.43 (1.628)	4.76 (1.509)	4.428	0.013
In my opinion, progress in Internet	4.98	5.13	4.36	4.87	8.161	0.000

banking services is not clear	(1.453)	(1.594)	(1.755)	(1.617)		
				4.753	**17.819**	**0.000**
Value barrier						
1. The use of Internet banking services is not economical.	4.80 (1.525)	4.90 (1.447)	4.34 (1.423)	4.71 (1.483)	5.440	0.005
2. In my opinion, the use of Internet banking services does not increase my ability to control my financial matters by myself.	4.81 (1.422)	4.84 (1.461)	4.40 (1.333)	4.71 (1.422)	5.204	0.006
3. In my opinion, Internet banking does not offer any advantage compared to handling my financial matters in other ways.	4.98 (1.458)	5.04 (1.414)	4.47 (1.527)	4.87 (1.477)	7.167	0.001
4. Internet banking transactions do not save more time.	5.03 (1.486)	5.25 (1.333)	5.04 (1.442)	5.11 (1.419)	1.083	0.339
				4.796	**6.668**	**0.001**
Risk barrier						
1. I fear that while I am using Internet banking services, the connection will be lost.	4.29 (1.921)	4.14 (1.979)	4.91 (1.694)	4.41 (1.903)	5.785	0.003
2. I fear that while I am using an Internet banking service, I might tap out the information of the bill wrongly.	3.97 (1.908)	3.95 (1.772)	4.59 (1.684)	4.14 (1.816)	5.054	0.007
3. I fear that the list of PIN codes may be lost and end up in the wrong hands.	4.38 (1.896)	4.31 (1.849)	5.23 (1.573)	4.60 (1.833)	10.269	0.000
4. I fear that while I am paying a bill by Internet banking, I might make mistakes since the correctness of the inputted information is difficult to check from the screen.	4.30 (1.836)	4.12 (1.786)	4.85 (1.617)	4.39 (1.779)	5.928	0.003
				4.385	**8.514**	**0.000**
Tradition barrier						
1. Visiting the bank branch and chatting with the teller is not a nice occasion on a weekday.	4.55 (1.610)	4.39 (1.655)	3.82 (1.755)	4.30 (1.688)	3.077	0.047
2. I do not find self-service alternatives more pleasant than personal customer service.	4.70 (1.589)	4.42 (1.760)	3.88 (1.591)	4.38 (1.682)	6.582	0.002
3. Internet banking services are not offering good option next to other banking services.	4.93 (1.472)	4.80 (1.499)	4.07 (1.539)	4.65 (1.539)	8.617	0.000
4. Not the way customer accustomed to paying bills, etc	4.53 (1.872)	4.72 (1.806)	3.57 (2.011)	4.34 (1.941)	13.484	0.000
				4.411	**11.186**	**0.000**
Image barrier						
1. In my opinion, new technology is often too complicated to be useful.	4.70 (1.383)	4.72 (1.542)	4.01 (1.534)	4.52 (1.513)	6.766	0.001
2. I have such an image that Internet banking services are difficult to use.	4.77 (1.476)	4.77 (1.477)	3.91 (1.664)	4.54 (1.572)	11.323	0.000
3. I do not have a very positive image of Internet banking services.	4.69 (1.650)	4.79 (1.602)	3.67 (1.646)	4.45 (1.695)	16.895	0.000
4. Using Internet banking	4.78	4.97	3.86	4.60	21.987	0.000

services do not improve my image.	(1.485)	(1.388)	(1.498)	(1.520)		
				4.519	**22.295**	**0.000**

*mean values scoring: 1 = totally disagree; 7 = totally agree

Discussion: The items measuring the five dimensions of usage, value, risk, tradition and image were found to be internally consistent. The five resistance dimensions also maintain convergent validity although two items need to be removed due to cross-loading. Similar treatment was supported in past studies (Laukkanen et al., 2008; Laukkanen, & Kiviniemi, 2010). This study validates the measurement of customer resistance developed by Lukkanen et al., (2008) used in Finland, for the Yemeni internet banking resistors. The main finding from this study shows that all types of resistors, i.e postponers, opponents and rejectors, are significantly different in respect of the five dimensions of barriers (usage, value, risk, tradition and image barriers). This differs with Laukkanen et al., (2008) which found risk barrier has no significant difference between the resistor groups. The main barrier of the Yemeni customers is value barrier while in Finland is risk barrier. The "rejector" group in Yemen are the most difficult to adopt internet banking because they show intense resistance on all dimensions. The postponers and opponents are likely to use internet banking in future since they are more positive towards the usage, value and image of internet banking.

5. Conclusion and Recommendation

The main finding from this study shows that the three groups of resistors (postponers, opponents and rejectors) in Yemen are found to be significantly different in terms of their perceptions towards value, usage, image, tradition and risks barrier. The main reasons for the resistance towards internet banking are mainly due to value, usage and image barriers of the banks. For future study, since most studies have investigated (postponers, opponents, rejecters)in internet banking, other settings such as in online shopping, web-marketing and online education. Alternatively, similar study can be conducted in other online resistors Middle East countries such as Iraq, Libya and Oman. Studies that examine resistance barriers (usage, value, risk, tradition, and image) as dependent variable is also limited (Laukkanen, & Kiviniemi 2010), therefore, further studies are needed to evaluate these barriers as opposed to adopters.

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Bond Rating Revision: Return-Generating Models- Simple Model or Advanced Model?

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Abstract: This paper compares the usability of return-generating models in detecting the abnormal returns of shares during the corporate bond rating changes announcements by S&P and Moody's from 1997 to 2006. These models are the market model, the quadratic model, the downside model and the higher-order downside model. Based on daily data, there was insufficient evidence to support the private information hypothesis during upgrade announcements using all the models. Hence, no conclusion on the performance of the return-generating models could be derived in relation to rating upgrades. During the downgrade announcements, the higher-order downside model was not found to perform at the same level as the other models. This indicates that even the simplest model like the market model is adequate to estimate the abnormal return of share prices.

1. Introduction

The capital asset pricing model (CAPM) is popular among researchers in pricing the assets(see, for example Banz 1981; Basu 1983; Roll 1983; Faff and Chan 1998; Bossaerts and Plott 2002). However, it may not be suitable if the share price data suffer from non-normality and the distribution is asymmetric. For the past 50 years, researchers have tried to find ways to develop, more sophisticated models suitable for pricing shares. Hence, there is a need to investigate the suitability of other return-generating models in detecting abnormal returns during bond rating changes announcements. This paper uses four different return-generating models: the market model, the quadratic market model, the downside model and the higher-order downside model to assess the impact of the UK corporate bond rating changes announced by S&P and Moody's on the share price. One of the main criticisms of the CAPM is that the assumptions for the underlying model are unrealistic. For example, the asset pricing model assumes that all investors are risk averse. According to this assumption the relationship between the risk of the asset and its expected return is positive. This means the higher the risk taken by the investors, the higher the investments return will be. Surprisingly, based on the past literature, there is only weak statistical evidence of a positive relationship between risk and return (see, for example Sharpe 1964; Lintner 1965; Black 1972; Fama and MacBeth 1973). Researchers such as Kraus and Litzenberger(1976), Harvey and Siddique(2000) and Estrada(2002; 2004; 2007) have created enhanced models that overcome the weakness of the CAPM. Among examples of these alternative return-generating models created are the quadratic model, the downside model and the higher-order downside model.

Researchers such as Barone-Adesi(1985), Kraus and Litzenberger(1976) and Prakash, Chang and Pactwa(2003) have been concerned with the skewness of the share price return distribution, which is not taken account of in the CAPM. They have thus incorporated the systematic market skewness in the quadratic model. Furthermore, the skewness of share price return distribution can be either left (negative skewness) or right (positive skewness). Downside risk happens when the distribution of the share price is left-skewed. Focusing on the issue of downside risk, Estrada(2002; 2004; 2007) incorporated semivariance into the return-generating models. Another recently developed model, the higher-order downside model, accounts for both semivariance and semiskewness(Galagedera and Brooks 2007). All of these augmented models have been described as superior because they incorporate many important factors that are excluded from the market model. However, most of the available literature on the impact on share prices of corporate bond rating changes announcements uses the market model to calculate the abnormal return (see, for example Pinches and Singleton 1978; Hand, Holthausen et al. 1992; Akhigbe, Madura et al. 1997; Barron, Clare et al. 1997) and there is a dearth of alternative return-generating models used in the previous research to investigate the effect of bond rating changes on share returns. The major contribution of this paper is to consider different approaches to calculating the abnormal return and using the market model as a comparison benchmark in investigating the impact of the bond rating changes announcements.

Several hypotheses have been developed in past research to analyse the reaction of the market during the announcements of bond rating revisions. The first hypothesis is the efficient market hypothesis, which

proposes that there should be no abnormal market reaction during an upgrade or downgrade of a corporate bond as the share price will adjust simultaneously to new information on the market (see, for example, Weinstein (1977)). Another hypothesis is known as private information hypothesis. This hypothesis assumes that the announcements of rating changes by rating agencies contain information about the long-term financial prospects of the bond issuer, particularly since the rating agency is exposed to both the public and private information of the bond issuer. Additionally, the rating agency is exposed to insider information while undertaking its research to determine the bond rating. Based on this hypothesis, the bond upgrade announcements should cause a positive market reaction as the rating implies the good financial health of the bond issuer in the future. In contrast, the market should react negatively to downgrade announcements as they signal the weak financial health and prospects of the issuer (see, for example Abad-Romero & Robles-Fernandez 2006; Akhigbe, Madura & Whyte 1997; Zaima & McCarthy 1988). Specifically, the objective of this paper is to assess alternative return-generating models in terms of measuring the abnormal performance of share prices during the corporate bond rating changes announcements by S&P and Moody's. Three return-generating models, the quadratic model, the downside model and the higher-order downside model, will be used. The market model will be the benchmark model. The benchmark model will be compared to the three return-generating models in terms of the context of the bond rating changes announcements in the United Kingdom from 1997 to 2006.

2. Literature Review

After more than 30 years of continuing development of the market model, researchers have tried to create the best return-generating models by refurnishing the existing model so that it will become more realistic in pricing the share. The best return-generating models should be selected based on the condition and the nature of the data distribution, and whether the share return is symmetric or asymmetric. The mean-variance framework was first developed by Markowitz (1952) when he formulated a modern portfolio theory based on the mean and variance of share returns. Modern portfolio theory provided a foundation for the later development of asset pricing model (see, for example Sharpe 1964; Lintner 1965; Black 1972; Kraus and Litzenberger 1976). The CAPM has been used extensively in many empirical studies for numerous applications such as performance measurement and market efficiency testing. Roy (1952) who is also a pioneer in MPT proposed that the investment choices should be made based on the mean and variance of the portfolio as a whole. Other researchers such as Black, Jensen and Scholes (1972), Black (1972), Sharpe (1964) and Lintner (1965) have independently introduced and explored the value of the capital asset pricing model. Since this early work, the CAPM has been used extensively in many studies for numerous applications such as performance measurement and market efficiency testing. In short, the CAPM investigates an asset's sensitivity to systematic risk, which is denoted by beta (β), as well as the expected market returns and expected risk-free returns. The CAPM has been widely criticised for its absurd and unrealistic assumptions. Among those researchers who have criticised the CAPM is Estrada (2002), who pointed out that there are two major conditions in which the CAPM is considered inappropriate to calculate the share return: (i) when the distribution of returns is asymmetric; and (ii) when the distribution of returns is not normal.

According to Schwert (1983), there is no successful explanation of return share anomalies and most researchers have found evidence of the misspecification of the CAPM rather than evidence of inefficient capital markets. Such anomalies of share return as discussed by Schwert (1983) are the 'time effect' (i.e. weekly effect), associated with the high and low returns at a particular condition and time, and the size effect, which indicates that bigger companies have a lower risk adjusted rate of return in comparison to smaller companies. Hence, many researchers are refining and developing new return-generating models in order to overcome the weakness of the CAPM (see, for example Kraus and Litzenberger 1976; Barone-Adesi, Gagliardini et al. 2000; Harvey and Siddique 2000). One of the main flaws in the CAPM is its exclusion of systematic (nondiversifiable) skewness. Based on observations of monthly portfolio returns in the US from 1936 to 1970, Kraus and Litzenberger(1976) incorporated the skewness effect in the equilibrium rates of returns and, by performing a quadratic characteristic line analysis, they found that the systematic skewness is relevant to market valuation. Furthermore, they later extended their research (1983) and succeeded in providing evidence that the quadratic characteristic line is sufficient for assets to be priced based on the three moments in the CAPM (mean, variance and skewness). Thus, there is a negative relationship between the systematic market skewness and returns of the asset.

The skewness of the share return could be skewed to the right (positive skewness) or to the left (negative skewness). Most researchers agree that skewness does matter in terms of pricing the share and investors have a preference for a right-skewed portfolio over a left-skewed one (see, for example, Harvey &Siddique(2000) and Smith (2007)). Downside risk exists when the distribution is left-skewed. The correct perception of risk by investors should be based neither on the deviation of the actual return from the expected return nor in terms of deviation below the expected return, but more in terms of whether it can achieve the minimum target rate.[4] Hogan and Warren (1974) and Nantell and Price (1979) incorporated the semivariance within the CAPM. Furthermore, Estrada (2002) proposed that it is essential to incorporate the semivariance in the return-generating model, which he then named D-CAPM, which stands for the downside capital asset pricing model.

Semivariance defines risk as the volatility below the benchmark or minimum target rate. Semivariance is associated with downside risk. According to Estrada (2007), there are four reasons why incorporating the semivariance in a return-generating model is useful. The main reason is that investors are not entirely averse to volatility, but they do not like downside volatility, and semivariance is considered to be a credible measure of risk as it captures downside risk. Second, semivariance can be used for both symmetric and assymmetric share return distribution. Third, semivariance can measure both skewness and variance in one model; and, lastly, semivariance of returns can be used to generate mean-semivariance hypotheses. Based on D-CAPM, Estrada (2004) found that semivariance can be applied to both emerging markets, where the asymmetric return distribution occurs, and to established markets, where the return distribution is symmetric. Similar results to Estrada (2004) are observed in Estrada (2002; 2007). Downside risk is a condition resulting from downside market movements. Previous research (see, for example Kraus and Litzenberger 1976; Lee, Moy et al. 1996) has generally incorporated skewness in the return-generating model (also known as the three-moment CAPM) without specifically addressing the skewness when the market is up and down (semiskewness). Galagedera and Brooks (2007) compared both downside risk (semivariance) and downside gamma (semiskewness) in explaining the variation in the market. Based on monthly indices from 27 emerging markets from 1987 to 2004, they found that downside skewness could better explain the variation in market returns in the emerging markets than the downside beta.

3. Data and Modelling Framework

The announcement dates for the UK corporate bond rating changes are based on the data provided by both S&P and Moody's covering a 10-year study period from 1 January 1997 to 31 December 2006. The analysis was based on bonds issued by UK public companies sold in the local market. The daily share prices and market indexes were taken from the DataStream. The FTSE All Share was used to represent the overall price direction of the UK market. As seen in Table 1, there were 299 rating changes events as announced by S&P and Moody's in the United Kingdom for the event period. These rating announcements were selected following specified filtering process.

Table 1: Number of rating announcements based on bond grade in the UK

	Remain Grade	Investment	Remain Grade	Speculative	Move up / Below Grade	Drop Investment	Total
	Upgrade	Downgrade	Upgrade	Downgrade	Upgrade	Downgrade	
Announcements by S&P	17	59	10	11	3	5	**105**
Announcements by Moody's	36	110	13	23	4	8	**194**
	53	**169**	**23**	**34**	**7**	**13**	**299**

An event study was undertaken in order to identify the market reactions during the period of the corporate bond rating revisions in the UK from January 1997 to December 2006. The abnormal returns of the securities are computed based on four return-generating models: the market model, quadratic model, downside model and higher-order downside model. The estimation period of the return-generating

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[4]According to Nantell and Price Nantell, T. J. and B. Price (1979). "An analytical comparison of variance and semivariance capital market theories." The Journal of Financial and Quantitaive Analysis**14**(2): 221-242, the minimum target rate of return demanded by investors is at least at the same value as the risk-free rate of return.

models for this study is around 100 days, which is calculated based on 6 months of daily return observations beginning 120 days to 21 days before the corporate bond rating changes were announced to the public. The event period ranges from 20 days prior to the rating revisions to 20 days after (41 days in total). After obtaining the abnormal return, the average abnormal return and cumulative abnormal return are calculated.

Return-Generating Models: Below are discussions of the four return-generating models used to calculate the abnormal return (AR) during the bond rating changes announcements in the UK.

a) Market Model: The conventional market model assumes that share returns are normally distributed. The market model is based on an equilibrium in which the investors are maximising their utility function based on the mean and variance of returns in their portfolio. The expected returns for share *i* at time *t* is calculated as follows:

$$E(R_{i,t}) = E(\alpha_i) + E(\beta_i)R_{m,t} + \in_{i,t}$$

Where $E(\alpha_i)$ is an expected return of share *i* when the expected return of the market $(E(R_{m,t}))$ is zero, and $E(\beta_i)R_{m,t}$ is the systematic component assumed to have a linear relationship between the company's share returns and market returns, and α and β are estimated using a regression model for which the parameters are calculated using the ordinary least squares (OLS) method. The term $\in_{i,t}$ indicates the unsystematic risk component or error term (also known as the residual), which incorporates the impact of a company-specific event announcement (assuming that the information signal and the return of the market are independent). Measurement of abnormal return is introduced if $\in_{i,t}$ is brought to the left side of the equation:

$$AR_{i,t} = \in_{i,t} = R_{i,t} - E(\alpha_i) - E((\beta_i)R_{m,t})$$

and *t* is constrained to the period t_{-20} through t_{+20}.

b) Quadratic Market Model: The quadratic market model has been extensively used by previous researchers (see, for example, Kraus &Litzenberger(1976); Kraus &Litzenberger(1983); Harvey &Siddique(2000); Mishra et al (2007)) in order to test market equilibrium with non-normal returns. The quadratic market model is an extension of the market model with two additional factors: the market return and the square of the market return. The calculation of realised returns for share *i* at time *t*is as follows:

$$R_{i,t} = \alpha_i + \beta_i R_{m,t} + \gamma_i R_{m,t}^2 + \varepsilon_{i,t},$$

where $R_{i,t}$ and $R_{m,t}$ are the return of share *i*and market return during period *t*. $R_{m,t}^2$ is the skewness of the market return incorporated in the quadratic market model. β_i is the systematic component of share *i*, while γ_i is the market gamma or the systematic market skewness. The error term $\varepsilon_{i,t}$ is assumed to satisfy the usual stationarity assumptions.

Using the estimated parameter α_i β_i and γ_i,the abnormal return of the share *i* is obtained by:

$$AR_{i,t} = \varepsilon_{i,t} = R_{i,t} - \alpha_i - \beta_i R_{m,t} - \gamma_i R_{m,t}^2$$

and *t* is constrained to the period t_{-20} through t_{+20}.

c) Downside Model: The downside model is also known as the D-CAPM. This model has been extensively discussed and used by Estrada (2002; 2004; 2007). The downside model was developed to address the alternative measure of risk: the downside beta.

$$R_{i,t} = \alpha_i + \beta_i R_{m,t} + \beta_i^D D_{Down} R_{m,t} + \varepsilon_{i,t}$$

where D_{Down} is a dummy variable that takes a value of positive unity for days in which $R_{m,t}$ is negative and a value of zero otherwise ($D_{Down} = 1$ if $R_{mt} < 0$). β_i is the market risk for share i while β_i^D is the systematic downside risk for share i. All other variables are defined as above.

The calculation of abnormal return of share i is as follows:

$$AR_{it} = \varepsilon_{i,t} = R_{it} - \alpha_i - \beta_i R_{mt} - \beta_i^D D_{Down} R_{mt},$$

where $D_{Down} = 1$ if $R_{mt} < 0$

d) Higher-Order Downside Model: The higher-order downside model is used specifically to address the skewness when the market is down (semiskewness) (see Galagedera & Brooks (2007)).

$$R_{i,t} = \alpha_i + \beta_i R_{m,t} + \beta_{2i}^D D_{Down} R_{m,t} + \gamma_i R_{m,t}^2 + \gamma_{2i}^D D_{Down} R_{m,t}^2 + \varepsilon_{i,t},$$

where D_{Down} is a dummy variable which takes a value of positive unity for days in which $R_{m,t}$ is negative and a value of zero otherwise ($D_{Down} = 1$ if $R_{mt} < 0$). β_i is the systematic risk share for share i; β_{2i}^D is the systematic downside risk for share i; γ_i is the systematic market skewness (market gamma); and γ_{2i}^D is the downside skewness.[5] All other variables are defined as above.

The calculation of abnormal return of share i is as follows:

$$AR_{i,t} = \varepsilon_{i,t} = R_{i,t} - \alpha_i - \beta_i R_{m,t} - \beta_{2i}^D D_{Down} R_{m,t} - \gamma_i R_{m,t}^2 - \gamma_{2i}^D D_{Down} R_{m,t}^2$$

where $D_{Down} = 1$ if $R_{mt} < 0$

4. Empirical Results

Table 2 presents the data on the daily market reactions generated by the four model frameworks—the market model, quadratic model, downside model and higher-order downside model—during the corporate bond upgrade announcements. Panel A of Table 2 reports the daily market reactions for the 11-day event period (5 days before 5 days after the upgrade announcements) for corporate bond upgrades announced by S&P with 30 observations in the respective sample. Overall, there is no significant positive abnormal return observed on the day of the rating upgrade announcements (day 0) by S&P and Moody's. As shown in Panel A of Table 2, there are no significant AAR in all the return-generating models, which indicates that there is not enough evidence to support the private information hypothesis. Panel B of Table 2 presents the share price reactions to the upgrade announcements by Moody's, and there are 53 uncontaminated upgrade announcements available for the period 1997–2006. There is no significant positive abnormal return observed in the market model, downside model and higher-order downside model, as presented in Panel B. However, the quadratic model seems to be able to detect positive abnormal returns during the upgrade announcement by Moody's on day -3 and day +5. Unlike S&P, no

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[5] Downside skewness is also known as systematic co-semi-skewness risk (downside gamma) (see Galagedera & Brooks Galagedera, D. U. A. and R. D. Brooks (2007). "Is co-skewness a better measure of risk in the downside beta? Evidence in emerging market data." Journal of Multinational Financial Management**17**: 214-230.

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consistency could be observed across the models for upgrade announcements by Moody's. The market model, downside model and higher-order downside model have a comparable negative AAR result with a significance level of 1% on day -4.

Table 3 presents the results for the corporate bond downgrade announcements. Panel A relates to announcements by S&P and Panel B to announcements by Moody's. There are 75 uncontaminated observations of downgrade announcements by S&P and 141 downgrade events announced by Moody's. There is enough evidence found in Table 3 to support the hypothesis that the downgrade announcements contained some effect of private information as significant negative reactions were observed in both Panel A (see day -4, day -3, day -1 and day 0) and Panel B (see day -2, day -1, day +1 and day +3). In fact, consistency of negative significant AAR results across the market model, quadratic model and downside model was observed on day -3 and day -1 in Panel A; and on day -2, -1, and day +1 in Panel B of Table 3. Furthermore, both the market model and the quadratic model revealed negative abnormal returns on day -4 in Panel A, with a significance level of 5%, and on day +3 in Panel B, with a 10% confidence level. Interestingly, the higher-order downside model is not performing on par with the other return-generating models as no significant abnormal return was found during the downgrade announcements as shown in Table 3.

Table 2 Market reactions during UK rating upgrades announcements

Days	Market Model			Quadratic Model			Downside Model			Higher Downside		Order
	AAR	CAR	t-stat	AAR	CAR	t-stat	AAR	CAR	t-stat	AAR	CAR	t-stat
Panel A: Rating Upgrade Announcements by S&P (N=30)												
-5	0.006	-0.008	1.913	0.006	0.012	1.792*	0.005	0.001	1.858*	0.005	-0.024	1.414
-4	-0.001	-0.009	-0.417	0.000	0.013	0.096	0.000	0.001	-0.073	-0.001	-0.025	-0.158
-3	-0.003	-0.013	-1.100	-0.004	0.009	-1.104	-0.003	-0.002	-1.148	-0.003	-0.027	-0.694
-2	-0.003	-0.016	-1.033	-0.001	0.009	-0.172	0.002	0.004	-0.563	-0.006	-0.033	-1.551
-1	0.002	0.014	0.523	0.003	0.012	0.906	0.002	-0.002	0.827	0.001	-0.033	0.149
0	0.001	0.013	0.223	0.001	0.012	0.170	0.001	-0.001	0.241	0.002	-0.031	0.522
1	0.002	0.011	0.818	0.005	0.017	1.563	0.004	0.003	1.323	0.000	-0.031	-0.077
2	0.002	0.009	0.575	0.002	0.019	0.749	0.002	0.005	0.756	0.000	-0.031	0.031
3	-0.003	-0.012	-1.011	0.000	0.019	-0.077	0.002	-0.003	-0.604	0.001	-0.030	0.279
4	0.003	0.010	0.923	0.004	0.023	1.248	0.004	0.007	1.201	0.002	-0.028	0.570
5	0.001	0.009	0.268	0.001	0.024	0.183	0.000	0.007	0.148	0.000	-0.027	0.023
Panel B: Rating Upgrade Announcements by Moody's (N=53)												
Days	Market Model			Quadratic Model			Downside Model			Higher Downside		Order

	AAR	CAR	t-stat	AAR	CAR	t-stat	AAR	CAR	t-stat	AAR	CAR	t-stat
-5	-0.001	0.010	0.339	-0.003	0.014	-0.262	-0.001	0.014	0.281	-0.001	0.021	0.139
-4	-0.012	-0.022	-3.22***	-0.013	0.001	-1.277	-0.013	-0.027	-3.23***	-0.014	-0.035	-2.81***
-3	-0.002	0.021	0.471	0.021	0.022	2.015**	-0.002	0.025	0.453	0.002	0.033	0.347
-2	-0.002	-0.022	-0.388	-0.011	-0.011	-1.063	-0.002	-0.027	-0.481	-0.002	-0.034	-0.331
-1	-0.003	-0.025	-0.811	-0.008	-0.003	-0.756	-0.004	-0.031	-0.929	-0.005	-0.039	-0.916
0	-0.006	-0.031	-1.507	-0.005	-0.002	-0.484	-0.007	-0.037	-1.624	-0.009	-0.048	-1.821*
1	-0.002	0.029	0.485	-0.012	-0.013	-1.104	-0.002	0.035	0.416	-0.002	0.046	0.347
2	-0.005	0.035	-1.415	0.007	0.006	0.676	-0.006	0.041	-1.415	-0.006	0.052	-1.206
3	-0.001	0.034	0.312	0.005	0.001	0.515	-0.001	0.041	0.135	-0.001	0.053	-0.135
4	-0.000	0.034	-0.095	0.012	0.011	1.172	-0.001	0.041	-0.173	-0.006	0.059	-1.260
5	-0.004	0.030	1.025	0.019	0.030	1.800*	0.004	0.038	0.891	0.003	0.056	0.660

*   significant at 10% level of confidence
**   significant at 5% level of confidence
*** significant at 1% level of confidence

Table 3: Market reactions during UK rating downgrades

Days	Panel A: Rating Downgrade Announcements by S&P (N=75)											
	Market Model			Quadratic Model			Downside Model			Higher Downside		Order
	AAR	CAR	t-stat	AAR	CAR	t-stat	AAR	CAR	t-stat	AAR	CAR	t-stat
-5	-0.003	0.022	-0.651	-0.002	0.016	-0.311	-0.002	0.032	-0.352	0.010	0.213	0.769
-4	-0.010	0.012	-2.044**	-0.012	0.005	-2.049**	-0.009	0.024	-1.798	0.005	0.218	0.350
-3	-0.013	0.002	-2.707***	-0.015	0.010	-2.556**	-0.013	0.011	-2.682***	0.000	0.218	-0.009
-2	0.004	0.002	0.713	0.003	-0.007	0.538	0.004	0.014	0.779	0.013	0.231	0.994
-1	0.013	0.011	2.680***	0.012	0.019	-2.063**	0.012	0.002	-2.549**	0.001	0.232	0.058

Days	AAR	CAR	t-stat	AAR	CAR	t-stat	AAR	CAR	t-stat	AAR	CAR	t-stat
0	-0.011	-0.022	-2.229**	-0.005	-0.024	-0.859	-0.010	-0.008	-2.105**	0.004	0.236	0.328
1	-0.004	-0.026	-0.718	-0.001	-0.025	-0.192	-0.003	-0.011	-0.600	0.009	0.245	0.695
2	-0.002	-0.028	-0.448	-0.002	-0.026	-0.277	-0.002	-0.013	-0.425	0.012	0.257	0.914
3	0.003	-0.025	0.682	0.000	-0.026	0.025	-0.004	0.009	0.746	0.014	0.272	1.084
4	0.000	-0.025	0.024	0.005	-0.021	0.908	-0.002	0.008	0.346	0.014	0.286	1.082
5	0.002	-0.023	0.346	0.004	-0.017	0.689	-0.002	0.006	0.404	0.015	0.301	1.116

Panel B: Rating Downgrade Announcements by Moody's (N=141)

Days	Market Model			Quadratic Model			Downside Model			Higher Downside		Order
	AAR	CAR	t-stat	AAR	CAR	t-stat	AAR	CAR	t-stat	AAR	CAR	t-stat
-5	-0.002	0.013	-0.408	-0.001	0.013	-0.285	-0.001	0.013	-0.354	0.040	0.412	1.103
-4	-0.002	0.011	-0.584	-0.002	0.011	-0.582	-0.003	0.011	-0.674	-0.003	0.409	-0.072
-3	-0.007	0.004	-1.743*	-0.006	0.005	-1.691	-0.007	0.004	-1.822	0.005	0.414	0.142
-2	-0.012	-0.008	3.062***	-0.011	-0.007	3.080***	-0.012	-0.008	3.260***	-0.004	0.411	-0.095
-1	-0.010	-0.017	-2.438**	-0.009	-0.015	-2.449**	-0.011	-0.019	2.931***	-0.011	0.422	-0.295
0	-0.002	-0.019	-0.437	-0.001	-0.016	-0.300	-0.002	0.021	-0.509	0.027	0.449	0.741
1	-0.007	-0.026	-1.901*	-0.006	-0.022	-1.645*	-0.007	-0.028	1.8439*	-0.007	0.442	-0.196
2	-0.000	-0.027	-0.046	0.000	-0.022	-0.061	-0.001	-0.029	-0.226	-0.001	0.441	-0.025
3	-0.007	-0.033	-1.720*	-0.006	-0.028	-1.661*	-0.005	-0.034	-1.251	0.038	0.478	1.030
4	-0.004	-0.038	-1.105	-0.004	-0.032	-1.127	-0.002	-0.036	-0.650	-0.005	0.473	-0.135
5	-0.001	-0.039	-0.221	-0.001	0.031	0.366	-0.001	0.035	0.258	-0.002	0.472	-0.045

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[6] Although the event period for this study is 41-day, only 11-day result surrounding the event are reported in Table 2 and Table 3.

*   significant at 10% level of confidence
**   significant at 5% level of confidence
***   significant at 1% level of confidence

In summary, there is insufficient evidence to support the positive market reaction to the upgrade announcements by both S&P and Moody's, which is in line with past literature by, among others, Akhigbe, Madura and Whyte(1997), Barron, Clare and Thomas (1997), and Matolcsy and Lianto(1995). There is evidence of consistencies among all of the model frameworks (market model, quadratic model, downside model and higher-order downside model) in terms of the AAR signs that could be observed on certain days surrounding the upgrade event period. However, no conclusion could be derived on whether one model could outperform another during the upgrade announcements as no significant positive reaction is observed. Unlike the upgrade announcements, the market reactions during the downgrade announcements show negative market reactions, which support the private information hypothesis. The significant negative reactions during the downgrade announcements have also been observed by other researchers such as Brooks et al.(2004), Elayan, Maris and Young (1996), Griffin and Sanvicente(1982). Although some consistency was observed between the market model, quadratic model and downside model, the higher-order downside model did not perform as well as the other return-generating models during the downgrade announcements.

5. Conclusion

This paper used event study methodology to test whether announcements of bond rating revisions by Moody's and S&P have any information value to share market investors in the UK, over the period from 1 January 1997 to 31 December 2006. In analysing the share price impact, four return-generating models were employed to estimate abnormal returns: (1) the conventional market model; (2) the quadratic market model; (3) the downside model; and (4) the higher-order downside model. The results reveal consistency in terms of the sign of AARs across the return-generating models during upgrade and downgrade announcements by rating agencies in the UK. In general, there is not enough evidence to support the private information hypothesis from an analysis of the upgrade announcements using all of the models. Based on daily observations during the upgrade announcements, there is evidence of consistencies in terms of the sign of AAR across the models on some of the days in the event period. The same consistencies in terms of the value of AAR across the models are observed for rating upgrade announcements by S&P but not for Moody's when bond grade type is incorporated. However, no conclusion can be derived regarding the performance of the return-generating models as no significant positive reactions were observed to the upgrade announcements in the UK. As expected, there is evidence supporting the private information hypothesis. All of the return-generating models display some consistency in indicating negative reactions in some of the days during the downgrade announcements, except for the higher-order downside model. In conclusion, the findings demonstrate that an augmented return-generating model does not perform better in estimating the abnormal return of the share price. Consistent with the work of Brown and Warner (1980), the results show that the simple single-factor return-generating model produces results comparable to those produced by the augmented models. Allowing for asymmetry in returns and downside risk does not notably change the results.

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A Measure of Media and Youth Participation in Social and Political Activities: An Instrument Development

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Abstract: The importance of youth participation in decision making process in nation building should not be underestimated. Studies have shown that youth in the marginalized communities have lack of opportunities to get engaged in a democratic process. However, the advent of media technology provides an opportunity for the authority to tackle this problem. Henceforth, a research to investigate how participation of youth who are at risk in the marginalized communities can be increased through the use of media is undertaken. To measure the media and participation among youth, an instrument was developed. This paper presents the instrumentation process and items used for such purpose. The tested instrument is called "A Measure of Media and Youth Participation in Social and Political Activities". It consists of five sections, which are, (a) Demography (b) Media use (c) Level of youth participation (d) Domain of youth participation and (e) Youth perception on media and participation. Cronbach's alpha show high internal consistency, with values above 0.8.

1. Introduction

Studies have shown that majority of youth do not enjoy full citizenship due to their inability to exercise their full rights as citizens to participate, voice opinions, and influence decisions on issues affecting the nation. Studies also show that the roles of media, in particular new media, have changed the landscape of the way the citizens exercise their rights and participate in a civil society. As such, there is a need to study the important roles of media in empowering youth to engage more in nation building. Efforts must be undertaken to ensure that various authorities and institutions support and engage youth, particularly those come from marginalised communities to utilize various types of media positively as tools to facilitate their participation. To address these issues, a research was conducted to identify ways of how to increase youth participation in the nation's social and political agendas at national and regional levels through media utilization. Specifically, this project attempts to identify the current status of youth participation in the country, determine the ideal roles of marginalized youth participation in the social and political settings, reveal the existing and changing participation norms of the marginalised youth, implement strategies and programmes that promote marginalized youth participation in schools, communities, and the government's transformation plan by utilizing various media tools that are managed and produced by youths, and develop and propose specific policy and good practices on media in support of youth participation. This paper describes the initial stage of this ongoing project. An instrument was developed for identifying the current status of youth participation in the country and determining the ideal roles of marginalized youth participation in the social and political settings.

Youth and Media Participation: Youths aged between fifteen to twenty five years, make half of the world's population. The UN data in 2012 shows that this age group are jobless, under-employed, and being excluded from social and economic opportunities, particularly the marginalized groups. Their participation in nation building, political process, and civic engagement are still considerably low and thus far many of youths do not enjoy full citizenship (UNDP, 2012; Golombek, 2002). The youth are demanding equality to exercise their full rights as citizens to participate, voice opinions, and influence decisions on issues affecting the nation. They want more participation and consultation in the national agenda particularly educational, political and economic issues. Scholars have argued that, in order for a civil society to function well, it needs to be assisted by the media (Habermas, 1996). The current revolution in the media industry has created a new public sphere for public deliberation. The new media, in particular, has changed the landscape of the way the citizens exercise their rights and has strengthened civil society movements to the extent of transforming the public opinion. As such, efforts must be undertaken to ensure that various authorities and institutions support and engage youths to utilize various types of media positively as tools to facilitate their participation.

Realising the importance of the role of media and its impact on youth participation, steps need to be taken to ensure youth, in particular the marginalized groups, are being consulted and represented, and their voices are constantly being heard. This research attempts to answer several research questions such as what does youth participation means in context of the marginalized groups and in what way various media can be utilized to enhance marginalised youth participation in the nation building? Youth development however faces challenges and contradictions. In one aspect, the youth is recognised as a national asset (Nadchatram, 2007) that will determine the future progress of the nation. In another context, the youth was blamed as an immature group who constantly challenges the norms of society, hence deny them social responsibility. Welch et al. (2002), and Minnebo and Eggermont (2007) argued that media portrayal of youth in a consistently negative fashion, further accentuates this arising contradiction. Youth are pictured as problematic and frequently involved in negative acts, without giving equal portrayal to popularise youth development potentials. According to Penuel (1995), 'regardless of competence, youth are constructed in our society as immature and manipulable for the purposes of development'.

In Malaysia, approximately one million out of 4.5 million of youth population between the ages of 15 - 25 years are at-risk. According to the Malaysian Youth Index 2008, almost 500,000 youth between 14 - 25 years of age admitted to being involved in, at least, one social wrong-doing. In general, not much effort has been focussed on overcoming problems of at-risk youth. Most of the youth developmental programmes currently implemented target all levels of youth society. Nothing has been created specifically for the at risk-youth of the country. By ignoring the at-risk-youth, the nation is losing out on reaping the hidden potentials, of approximately one million of its youth between the ages of 15 - 24 years, that may be hugely beneficial to the nation's building. The profile of the at-risk youth in Malaysia can be summarized as (Samsudin, 1995 and Rozmi, 2007) coming from low-waged families who are not emotionally supportive with unsatisfactory living conditions, lacking parental supervision on activities that they are involved in, deficient in social skills, low aspiration, emotional control and self-esteem and devoid of suitable role model. The above profile substantiates the findings that at-risk youth come from one of the marginalized communities i.e. from the low socio-economic group. Based on family socio-economic standings, there is a probability that this young generation may be deprived of realising its true potential. Contributing to this hindrance is the lack of resources in its family owing to inaffordability, low personal aspiration and self-esteem, as well as the dire lacking of youth development approaches that emphasise the importance of this minority marginalized group.

Instrument Development: Questionnaire survey is commonly used as a data collection method particularly in a Social Science discipline. It allows researchers to obtain various information regarding knowledge, opinion, attitude, facts, and behaviors (Robson, 2002). This study employed a questionnaire survey in order to identify the current status of youth participation in social and political processes through the use of media. The five steps of developing and testing questionnaires proposed by Radhakrisna (2007) were followed through:

Step 1: Background: In this step, the purposes or goals of the questionnaires are determined. In the context of this study, the questionnaire is developed to identity the current status of marginalised youth participation in social and political processes through the use of media. Apart from goals, the target population, timing, and mode of the survey are also specified.

Step 2: Conceptualisation: This is the step where the statements and questions are generated to reflect the objective of the study. Measures used and variables involved are also determined in this step. The questionnaires in this study cover basis of items as follows:

a)   Demographic information: This information is important to ensure that the respondents indeed belong to the target population. In this study, some commonly used demographic items in many studies (e.g. Kruitzer, 2009; Shanti Balraj Baboo, 2013; Shahizan et al., 2009) are employed which include age, gender, race, education, employment status, income level (personal and family), and type of accommodation and neighbourhood location.

b)   Media Use: The items for this section are adapted from Shanti Balraj Baboo (2013), Kruitzer (2009), and Young (2012) detailed of which are presented in the following table 1:

Table 1: Basis for questionnaire items for Media Use

Researchers	Media use items
Shanti Balraj Baboo (2013)	media devices used – e.g.computer/laptop/notebook, tablet/iPAd, TV, mobile/smart phone, audio devices (ipod, MP3), DVD player, game console (PS. Xbox, Wii etc.), radio, others.
	media devices owned – e.g computer/laptop/notebook, tablet/iPAd, TV, mobile/smart phone, audio devices (ipod, MP3), DVD player, game console (PS. Xbox, Wii etc.), radio, others.
Kreutzer (2009)	Media devices used (similar with the above)
	Internet usage (frequency, technology used, for what purposes)
	Usage of SM (what SM used and for what purposes?)
	How and where participants get news from?
Cohen & Kahne (2012)	Access to digital technology – i.e. at home, college/ university, cyber cafes, Pusat Internet Desa, others
	Type of media used – i.e conventional and/or Internet based
	Source of news – Newspaper, TV/Radio (Broadcast or Online), Tweets, Facebook Posts, Blogs, YouTube Posts
	Types of participation – friendship driven (Sharing links or forwarding information through Social Network Services like Twitter or Facebook, sending messages, sharing status updates, or chatting online using Social Network Services like Twitter or Facebook]/ interest driven [Post an online comment, review, or critique of someone else's media/ post, link to, or forward information related to your interests, give help, advice or suggestions to others related your interests, use the Internet to organize an online group, discussion, or website, participate in a game community, guild, competition, etc./ participate in an online forum or group related to your interests)
Young (2012)	Resources and capacity to use Internet and SM
	Purpose of SM use
	Types of content shared in SM
	Satisfaction with SM

c) Engagement in social and political processes: The items are aimed at gathering information about youths' involvement in social and political activities through the use of media. Items developed by Cohen and Kahne (2012) and Shahizan et al. (2009) are adapted due to their suitability with the context of this study. These are presented in the following table:

Table 2: Basis for questionnaire items for engagement in social and political process

Researchers	Items for Youth Engagement in Social and Political Activities
Cohen & Kahne (2012)	Engagement in social and political activities: Online or/ and offline activities?
	Participatory activities:
	Exercise voting rights in general election/ election at academic institution, local communities, societies, and clubs)
	Started or joined a political group on a social network site (like MySpace or Facebook)
	Forwarded or posted someone else's political commentary or news related to a political campaign, candidate or issue
	Contributed your own article, opinion piece, picture, or video about a political campaign, candidate or issue to an online news site
	Forwarded or circulated funny videos or cartoons or circulated something artistic that related to a political candidate, campaign or political issues
	Commented on a news story or blog about a political campaign, candidate, or issue
	Written an e-mail or written a blog about a political campaign, candidate, or issue
	Taken part in a protest, demonstration, or sit-in
	Participated in a boycott or signed petitions

	Participated in an event where young people express their political views (such as a poetry slam, musical event, etc.)
	Been active in or joined a group that has worked to address social or political issues
Shahizan et al. (2009)	Role of participants while using media (follower/ contributor/ observer/ others)

d) Perception on the role and impact of social media on youth engagement in social and political processes.

Items intend to gather the perception of respondents regarding the role and impact of social media on youth engagement in social and political processes. This issue is equally important and in fact should not be under estimated as evidenced in several studies such as Shahizan et al. (2009). Three items are used in this section as listed as follows:

- Whether respondents can use social media to enable sharing of ideas with their friends and families regarding social and political issues.
- Whether respondents can share or exchange interesting pictures/ video clips of political leaders.
- Whether social media allows respondents to voice out their grievances regarding social and political issues.

Conceptualization for the youth perception was also completed through 3 focus group sessions, in which 18 youth from different races and background environments were involved. The objectives of the focus group sessions are:

- Understand how youth conceptualise 'participation'
- Identify their participation domain (the specific political & social aspects)
- Understand how they get involve (participate)/their roles
- Explore what are media push factors and restrictions in exercising their political and social participation Table 3 lists the main findings of the analysis.

Table 3: Basis for youth perception items

Objectives of focus groups	Youth feedbacks
Understand how youth conceptualise 'participation'	Focus Group 1
	Concern about issues related to our community.
	Gather information and news on things that affect their lives.
	Sharing information on things that in interest of their peers and family members.
	Discuss about government policies that affect them directly.
	Focus Group 2
	Individual role, as student strive towards academic achievement. Through the achievement, they may contribute to national development in their expert area.
	Making the idea of 'modal insan' as a successful agenda.
	Discuss national issues among our peers.
	Help to distribute flyer, pamphlet or leaflet regarding certain issues that in the public interest.
	Fight for the minorities.
	Focus Group 3
	Get to know community issues.
	Gather information from internet and social media.
	Express our rights.
	Express our thoughts, opinion and ideas.
	Freedom of expression with limitations.
	Critics or provide feedback to authorities
	Focus Group 1
	Graduate employment.
	Rising of the cost of living.
	Education system

Identify their participation domain (the specific political, social & economy aspects)	GST Racial unity Political democracy Good governance of the authority agencies Focus Group 2 The rights of minorities in Sabah and Sarawak. Religious, moral, values – social illness GST Housing for young people. Rising of the cost of living. Crime Corruptions among enforcement agencies. Political democracy Media and information freedom Education policies and system Racial unity Focus Group 3 GST Economy Cost of living Good governance Effective government Religious, moral, values Culture Politics - democracy Employability/ Employment Security Social illness Education system Focus Group 1 Using internet to get information about current issues. Reading news (digital) and info from social media (Facebook) Gather information from mass media (radio, television, newspaper, magazine) Sharing info from social media with friends via social network Sharing info from social media via interpersonal communication Khidmat siswa activities University community program
Understand how they get involve (participate)/ their roles	Academic (class project/assignment) based activity at community level Focus Group 2 Involved in community based activities Gather information from social media Share posting/information via social media Like Facebook posting Create posting via social media Follow public opinion leader Facebook, Twitter, Instagram Retweet in Twitter Watching TV news Reading newspaper Co-organise community program with any organisation Plan to establish organisation to resolve racial issues Practice non-bias political thinking/perception Focus Group 3 Generally just follow the news Gather interested issues/information from internet and social media Share posting/information via social media Like Facebook posting Share Facebook posting/ Retwitt Utilise knowledge as student to get better understanding on interest area

	Run a social media based project on sexual security
	Do posting on interested topic
	Involve in student society activities to promote law awareness
	Become volunteer in breast cancer campaign
	Involve in charity activities
	Using youtube to boost charity activities
	Volunteer in educational non-profit organisation
	Focus Group 1
	Information from mass media is not really objective
	Using internet to gather information.
	Smartphone is the best medium for youngster to get and share information.
	Prefer media that trendy and mobile to communicate.
Explore what are media push factors and restrictions in exercising their political, social and economy participation	Social media the best medium as it make sharing easier.
	Using new media will make their political participation more comfortable (without need physically participate such as in ceramah, rally or gathering)
	Focus Group 2
	Who are we to get attention from mass media?
	We can use new media to voice our opinion or to make people aware about something.
	Mass media being control by certain people/group.
	Mass media information is more trusted
	Social media is trendy to the youngster.
	Smartphone provide the best platform for many kind of channels (website, social networking, tv, radio, newspaper)
	Focus Group 3
	Malaysia have some restriction on freedom of speech laws/policy
	There are limits/boundaries on certain aspects when dealing on races, religion and politics.
	New media (facebook, twitter, instagram, youtube, blogs) is ideal platform to participate.
	Social media is trendy to the youngster as participation mechanism.
	Smartphone provide the best platform for many kind of channels (website, social networking, TV, radio, newspaper)
	Smartphone subsidies for youth can become catalyst of youth involvement.
	Stop of smartphone subsidies could hinder youth participation.
	Government should have more platform to get youth involvement.
	Any policy should get involvement and feedback from youth.

Step 3: Formatting and Data Analysis: Step 3 focuses mainly on phrasing the questions, selection of scales of measurement, layout and format, question grouping and ordering, cosmetics such as font type and size, cover letter, and the identification of the proposed data analysis.

Step 4: Establish Validity: Once steps 1-3 are accomplished, the questionnaire should be evaluated for validity by a panel of experts. Validity refers to the amount of systematic or built-in error in measurement (Norland, 1990). For this purpose, three experts were selected to vet the questionnaires in terms of construct and face validity. A preliminary data collection was also conducted to establish whether the answers of the items are applicable to the potential respondents. For this, data was collected from 80 youth. After this phase, where a number of changes were made, the final version of the instrument was developed.

Step 5: Establish Reliability: Reliability relates to the accuracy of the measuring instrument (Norland, 1990). In this final step, a pilot test is carried out to measure the reliability. A group of youth participated in this pilot test. The tested instrument is called "A Measure of Media and Youth Participation in Social and Political Activities". It consists of five sections, which are, (a) Demography (b) Media use (c) Level of youth participation (d) Domain of youth participation and (e) Youth perception on media and participation.

Establishing Instrument Reliability: The pilot instrument was administered to 100 youth. However, only 90 were usable and utilized to calculate the reliability measures. The respondents represent all age group of youth (15 to 25 years old). Part A, the *Demography* consists of eleven items. Firstly, the types of neighborhood, the majority of the respondents' homes are located within the Traditional villages (27.0%) and Land planning area (31.0%). The rest are from Flats (22%), Chinese new village (10%), Low cost housing (8%), and Estate and Squatters (1% for each area). Most of the respondents are between 19-20 years old (28.0%), followed by (27.0%) for age range between 21-22 years old. Meanwhile, both genders of the respondents are equal which (50.0%) for male and female. As for the respondents' race, most of them are Malays (87.0%) followed by Chinese (4.0%), Indian (7.0), and Iban (2.0%). The religion shows Muslim (88.0%), Cristian (2.0%), Buddha (4.0%) and Hindu (6.0%). The respondents also come from different educational backgrounds where majority of the respondents have SPM (47.0%) and Bachelor (44.0%). Most of the respondents have 4-6 family members (48.0%) and only have one family (83.0%) in the household. Next, employment status and household income level of the respondents. It can be seen clearly that most respondents (72.0%) are still receiving formal education at either secondary schools or institutes of higher education. Nonetheless, 10.0% of the respondents are already employed. In term of household income status, majority of the respondents have income of RM1,001 – RM 1,500 (30.0%). Meanwhile, 28.0% belong to the income group of RM1,501 – RM2,000 and income more than RM 3,501 only 10.0%. From the result shown respondents house is owned by their parents (66.0%) and (34.0%) is rental house.

Part B, Media Use, for *Type and frequency of media used*, the results show that most respondents are using mobile phones (54.4%) and computers (33.3%) frequently. The result also shows that the importance of conventional media such as TV, newspapers, and radio should not be underestimated as a substantial number of the respondents are still using them frequently or occasionally. Details are presented in table 4. The results also show that respondents use multiple methods to get access to the Internet. Unsurprisingly, the top three methods used by respondents are via the use of computer at home (55), with mobile smart phones/ portable wifi/ broadband (55), and the use of computer at work place or place of study (42). On the *Role when using social media,* the results reveal that the respondents play different roles when using social media. Most of the time, the respondents play the role of either observers (72) or followers (56). Not many of them are willing to become contributors (24) or entrepreneurs (11).

Table 4: Type and frequency of media used

Type of Media	Frequency of use				
	Never	Ever	Rarely	Occasionally	Frequently
Computer/ notebook/ laptop	6	11	28	15	30
Tablet/ iPad/ iPod	20	25	17	14	14
Mobile/ smart phones	7	4	15	15	49
TV	8	9	34	26	13
Radio	13	26	32	14	5
Newspaper	15	34	27	11	3
Magazines	17	31	29	7	6

The respondents also provide feedback regarding the most popular social media they use and their frequencies. The results show that there are at least seven major social media tools used by the respondents which are Facebook, WhatsApp, Instagram, YouTube, WeChat, Google+, and Twitter. Among these, Facebook and WhatsApp are the most popular tools used by respondents where more than 50% respondents use them frequently. On the *Purposes of using new media/social media*, the respondents use social media for various reasons and purposes (see table 5). The top five purposes as identified in this pilot study are to get in touch with friends and families, to share knowledge and expertise with others, to get information and latest news, as a hobby during free times and to build network and meet new friends. Despite slight variations in the result, this finding highlights the potential role of social media as a tool for the youth to engage in decision making process involving social, politics, and economy.

Table 5: Purposes of using new media/ social media

Purposes	Yes	No
To document and share personal experience with others	40	50
To get in touch with friends and families	67	23
To share knowledge and expertise with others	53	36
To encourage people to take action on certain issues	31	59
To influence the way people think	19	71
To build network and meet new friends	44	46
To generate income via business	14	76
To get recognition and increase reputation	14	76
To explore and build confidence and self-belief	25	65
As a platform for mind development (incl. learning and revisions)	35	55
To enhance creativity	26	64
To get feedback about products or services	31	59
To get information and latest news	50	40
As a hobby during free times	49	41
Others	5	83

Part C, the *Level of youth participation*, the respondents were asked about their involvements in social, political and economic activities. There are fourteen items in this section (refer to table 6) which use five-level Likert scale responses, i.e. never (1) , rarely (2), occasionally (3), frequently (4) and highly frequently (5). The results show that respondents are not actively involved in all ten activities where the mean scores for all these items are below 3.0. The activities which receive highest mean scores for respondents activities are access social media to find out the issue on social/political/and economic (mean = 3.04) and sharing issues with others (mean = 3.03). This finding could be an eye opener to the government and relevant agencies because of the low level of respondents' involvement in social and political activities. Henceforth, intervention and awareness programmes should be introduced to increase youth engagement in these activities.

Table 6: Social and political activities among youth

Activities	Mean	Stdev
Share the current news/information/ opinions via social media with family/ friends on the social/political/economic issues	3.02	1.32
Obtain information about social/ politics/economic issues	3.02	1.06
Organize activities that help local society	2.38	1.09
Follow social activities while at school/ college/university/working place	2.90	1.09
Spread messages/comments/articles on social/politics/economic issues	2.66	1.19
Follow the news of current issues in and outside country	3.02	1.02
Volunteer to help society	2.66	1.10
Contribute energy, ideas and money in empowering youth activities	2.53	1.27
Involve in community activities organized by other parties/government/ NGO	2.50	1.26
Write own blog about social/political/ economic issues	2.14	1.16
Share the latest issues with others	3.03	1.20
Access social media to know about social/political/economic issues	3.04	1.15
Disseminate information about social event/programs such as political/religious talks/sports/communal work	2.72	1.20
Participate in event/program where I can express opinion on social/political/ economic issues	2.62	1.30

In Part D, the *Domain of youth participation*, the respondents were asked about domain of youth participation. The responses are based on a five-level Likert scale items; never (1) rarely (2), occasionally (3), frequently (4) and very frequently (5). The result is shown in table 7. The results show most respondents are interested in information about social problems (such as abandoned babies, and drugs) with mean equals to 3.19. Education system, racial unity, freedom of press, career and employment are

also on the the youth most interested domains of participation. Part E, *Youth perception on media and participation*, presents the result of the respondents' perception on the role of new media and social media. There are fifteen items used for this section which are based on a five likert scale responses of strongly disagree (1), disagree (2), slightly disagree (3), agree (4) and strongly agree (5).

Table 8: Domains of youth participation

Activities	Mean	Stdev
. Career/employment	2.92	1.38
. National security	2.50	1.16
. Corruption/abuse of power authority	2.40	1.23
. Freedom of speech	2.66	1.24
. Racial unity in Malaysia	2.97	1.08
. Efficient administration and accountable government	2.69	1.19
. The increase in cost of living	2.79	1.20
. National education system	3.09	1.13
. Social problems (such as abandoned babies, illegal street racing, drugs)	3.19	1.32
0. Freedom of the press	2.97	1.19
.. The issue of crime (such as robbery, theft, rape, murder)	2.92	1.19
2. Rights/interests of certain	2.87	1.15
3. Cost/price of buying a home	2.64	1.25

From the results as shown in table 9, most respondents agree to the statement that youth in Malaysia prefer to use new media compared to the conventional media (mean = 3.90, stdev = 1.13). Findings also show that smart phones give them convenience (mean = 3.78, stdev = 1.12), sharing of information becomes easier and more attractive with social/new media (mean = 3.58, stdev = 1.00); however information through conventional media is still believed to be more reliable than new/social media (mean = 3.36, stdev = 1.00). Interestingly, many believed the information through new/social media is dubious. The youth do not agree that currently the new/social media provide space for to express dissatisfaction about the current issues to the government or non-government entities (mean = 2.97, stdev = 1.12). Therefore, they believed that they require special space and programs through new/social media to enable them to participate and give opinion on the development of the country (mean = 3.26, stdev = 1.15). Also, their views through new/social media are desirably be recorded and considered before the government/administrative make any decision in the development of the country (mean = 3.43, stdev = 1.15).

Table 9: Perception on the role of new media and social media

Activities	Mean	Stdev
lew Media is the choice of youth today	3.90	1.13
The use of new media and social media has potential to contribute to the sensitive issues related to religion, culture and race	3.46	1.00
I am more convinced of the truth of information through conventional media	3.18	0.91
The use of smart phones provides convenience in doing work, in getting information and in communicating	3.78	1.12
Conventional media pay less attention to youth	3.04	1.09
Sharing of information becomes easier/ more comfortable/more attractive through new media/social	3.58	1.00
Conventional media content is controlled and censored more	3.21	1.00
Many of the information through new/social media is dubious	3.32	1.07
Information through conventional media is more reliable than new/social media	3.36	1.00
. Space for youth to voice and provide views through conventional media is limited	3.29	1.03
. The cost of using the new media is a burden	2.93	1.00
. New/social media provide space for me to express dissatisfaction about the current issues to the government or non-government entities	2.97	1.12
. I have used new media such as news portals, TV streams (e.g. KiniTV, SelangorTV) and radio streams (e.g. hitz.fm, ikim.fm) to give opinion or received information	2.69	1.00

. Youth in Malaysia require special space and programs through new/social media to enable them to participate and give opinion on the development of the country	3.26	1.15
. Views from youth through new/social media are desirably be recorded and considered before the government/ administrative make any decision in the development of the country	3.43	1.15

Reliability tests were performed on the three most relevant dimensions on measuring media and participation. The Cronbach's alpha values are all more than 0.8 indicating the internal consistency or average correlation of items in a survey instrument is high. Table 10 lists all the values.

Table 10: Cronbach's alpha values

Dimension	No of items	Cronbach Alpha
Level of youth participation	14	.856
Domain of youth participation	13	.930
Youth perception on media and participation	15	.834

4. Conclusion

This study attempts to investigate how youth, in particular those who live in the marginalized communities, can contribute more in decision making process in the nation building in the technology era. An instrument consisting of three main dimensions is developed and tested. It is put forward that in measuring the media and participation among youth, the level of participation, domain of participation and the youth perception on media and participation should be included.

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Intergovernmental Cooperation in Decentralized Public *Services* Provision in Indonesia: a Case Study on Regional Clean Water Provision, Central Java, Indonesia

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Abstract: This paper analyzes the implementation of intergovernmental cooperation in public services provision under the decentralization regime in Indonesia and takes a case study on regional clean water provision in Bregas Region, Central Java Province. The analytical framework developed here emphasizes the important features/characteristics that form and sustain the cooperative process among different levels of government. Using policy documents, field observations and expert interviews, the study shows several important findings that vital for intergovernmental cooperation process in public services provision: combination between hierarchical and horizontal approach, clear distribution of roles and responsibilities, and combination between common interest and regulations.

Keywords: *clean water provision, intergovernmental cooperation, Central Java*

1. Introduction

Intergovernmental cooperation is a relatively new strategy in solving regional problem in Indonesia. Decentralization policy has been interpreted in various ways by regency/city governments. Many regency/city governments, which have great power and authority, regard decentralization as an opportunity to exploit their own resources without considering their neighbors (Firman, 2009). Thus, negative externalities, spillover problems and inefficient government expenditure with low outputs have become the general trend in Indonesia's decentralization era. Through intergovernmental cooperation among three tiers of government, negative externalities and spill over problems can be solved. Many regency/city governments have attempted to establish cooperation with their neighbors through various forms of cooperation such as Board of Secretary, Regional Management, or Join Promotion. However, the absent of higher level of government has made the inter-local cooperation face several classic challenges: limited financial and human resources (Hartono, 2005; Suryani, 2006; Firman, 2010). As a result, the cooperation gives more focus on non public services issues.

This study examines the intergovernmental cooperative process in public services provision, particularly in clean water service provision, and tries to find the key features that form and sustain the process. This research focuses on the intergovernmental cooperation that has not yet been fully researched by assessing and analyzing intergovernmental cooperation from two perspectives, cooperation formation process and actors' interaction. To do so, it uses a study on the Bregas Region in Central Java Province since water management has unique characteristics compared to other infrastructures. The problems in water resources management are complex and must be understood from two dimensions, governance and ecosystem (Saleth & Dinar, 2004; Islam & Susskind, 2013). The paper is divided into four sections. The first part reviews relevant literatures and previous researches on intergovernmental cooperation and highlights some theoretical concepts that become the foundation for the analysis. The second part introduces the background of the case study and the current situation on the case study. The third part presents the important findings from the analysis using the theoretical framework. Finally in the last part discusses the conclusion and the recommendations.

2. Literature Review

Historically, intergovernmental cooperation mechanisms were developed based on several perspectives such as public management, collective action on common pool resources, and regional planning. The cooperation started with handling simple issues such as police and fire departments. Later, it became more complicated with cooperation in strategic sectors like investment, urban planning, waste and pollution management and public services. In the research on local development issues, there are two contrasting point of views, competition and cooperation, although both basically have similar objectives. Most of them would agree that the main objective for every government is to improve social welfare. Competition is considered best in creating efficient public sector services since each local government will try to create desirable services for consumers. In term of creating opportunities/jobs/economic

development, competition among local governments is therefore the best solution (Post, 2002). On the other hand, proponents of cooperation assert that competition would create inequality and diseconomy of scale in term of providing public goods and services (Post, 2002; Feiock, 2007, Firman, 2010). They claim that in massive investment services, several local governments can share the cost and receive same benefit. Externalities and asymmetries of information outweigh the benefit of competition.

While many scholars stressed the value of cooperation or collaboration on their study such as conceptual point of view by Olson (1965) and Ostrom (1990); or a more practical study like Feiock (2007, 2009), and Firman (2010), little attention paid to the factors that form and sustain the cooperative relationships. The need to address regional problems without changing or disturbing the current decentralization system in Indonesia makes intergovernmental cooperation as a strategic solution. This type of cooperation emphasizes the multi-level interactions through vertically and horizontally linked organizations. On this issue, the study of McGuire (2006), Luo and Shen (2009), and Firman (2010) provide a building block to understand multi-level cooperation without changing the existing governmental structure. Table 1 shows the four key features that form and sustain the intergovernmental cooperation. The main idea of Luo and Shen study is analyzing the building of intergovernmental cooperation regarding the formation process of cooperation and actor partnership. It tries to capture the structure, rationale, interactions of actors and negotiation process of the intergovernmental cooperation. The research of McGuire and Luo and Shen concludes that the combination of hierarchical and horizontal approaches in decision making process, especially when the actors come from different levels of government, become the key parameter. In a structured cooperative process, stakeholders need to become mutually dependent to allow the synergistic power of the process to emerge. There is power in face-to-face communication among stakeholders to integrate their ideas.

The presence of actors from each level of government and the distribution of roles and responsibilities is divided into three categories, crucial actors, influential actors and ordinary actors (Luo & Shen). Each actor in each category has specific roles and responsibilities depend on their functions in the system. The spectrum of roles distribution affects the effectiveness of the cooperative process and implementation. The rationale for joining the cooperation is an important feature in creating effective cooperation. The main question in establishing intergovernmental cooperation is what is the best way for actors to deal with their differences in term of individual interest? In many cases, actors face similar problems or have mutual goals but they have different points of view on how to solve the problems or to gain mutual goals. Firman (2010) conclude that one significant factor affected the effectiveness of cooperation process is the mutual interest. Furthermore, Luo and Shen argue that mutual interest in solving problems or gaining profit must be encourage with strong regulations and policies to provide guidance for the negotiation process.

The other crucial point to be understood regarding the intergovernmental cooperation is that cooperation is not an event, it is a process and it involves joint decision making process among different stakeholders (McGuire). The process of cooperation defines as interaction among actors, formal and informal, jointly creating rules and structure under mutually predetermined agreement and belief. A cooperation, by which two characteristics, giving each other (or resource exchange) and benefiting each other, intermingle within, will direct to successful implementation. Understanding the cooperative arrangements characteristics and formation is undeniably a crucial step to have a clear idea of government's cooperative preferences. Addressing this issue will help government to choose the proper cooperation arrangement that suit to their situation and improve the current system. Thus examining the system as a whole network works through analyzing the formation process of cooperation and observing the implementation process becomes important. The effective formation process of intergovernmental cooperation would lead to effective implementation and the mutual objectives and goals would be achieved.

Case Study: Decentralization system in Indonesia provides opportunity for a relationship between multi-level governments and between regions. Although regency/city government still gives more focus on their own problems, with the new law, at least there is a clear framework how to solve cross territorial problems. Central government gives broader opportunities through various regulatory umbrellas (government regulation) to encourage cooperation between regions. Cooperation is expected to be a bridge that can turn a potential conflict of interest between the regions into a mutually beneficial development potential.

In term of infrastructure and public services provision, especially water related issue (clean water and irrigation); decentralization also brought drastic impact not only on financial mechanism and management but also on assuring the water resources sustainability. Water has unique but complicated value in term of public services, which are water as public goods—as basic human needs and water as economic goods. In this sense, the role of every level of government becomes essential particularly in providing effective management policies of water especially in two major issues; water allocation and water right administration (Nababan, 2012).

Table 1: Features of Intergovernmental Cooperation

Feature	Parameter	Justification
Rationale to join the cooperation	The combination between regulation based and mutual interest	The tension between individual interest and collective interest must be solved then supported by state regulation and policy
Structure of the cooperation	The combination between hierarchical coordination and horizontal negotiation	The presence of leading actor that manage the process of decision making process, but in the same time interactions among actors are carried out in horizontal person-to-person relationships
Formation Process	Cooperation process is started with sharing of knowledge and information, consensus building and division of roles	The cooperative process is more cyclic rather than linear meaning in order to build collective trust
Distribution of roles and responsibilities	All levels of government have represented actors with specific tasks and responsibilities. The spectrum or diversity of roles among actors	The actors involved divided into three categories: crucial, influential and ordinary. There is no one single actor who dominates the process

Source: Author's interpretation adopted from McGuire (2006) and Luo & Shen (2009)

Bregas Region, a region consists of three neighboring regencies (Brebes Regency, Tegal Regency and Tegal City) in Central Java Province. Bregas Region is located in the northwest part of Central Java Province bordering on West Java Province. Compared with other regions in Indonesia, in term of clean water services systems, Bregas Region is a unique and special region. The regional water services system is already applied since 1992, long before decentralization and intergovernmental cooperation issues emerged. However, the cooperation was established not to provide better services but more as a solution to a conflict resulting from the fragmentation of the previous clean water company. The conflict among the PDAM began to emerge because there was no clear scheme to divide the water resources equitably. As the superior government, the government of Central Java Province tried to mediate the conflicts. The three regencies agreed to hand over the production units to Central Java Province while distribution became each regency responsibility. In 1992, the government of Central Java Province established the provincial clean water company (PDAB Jawa Tengah) through Provincial Regulation No. 6 of 1992. After more than two decades, the clean water services in Bregas Region still do not manifest optimum performance and face several big issues. Two main problems faces by Bregas Region are limited water resources that cannot match the increasing population and high level of water loss while transmitting water to the consumers. The service coverage of the clean water service system is limited to each capital of the regencies with several other surrounding districts. Therefore, most of population in Bregas Region still uses traditional clean water system (non-piping system).

With the severe problems that Bregas Region faces, it would be very difficult for Bregas Region to achieve MDGs goals without any drastic improvement. For this reason, the three regencies in Bregas Region facilitated by the Ministry of Public Works renewed their cooperation in order to improve the service coverage and quality. The cooperation was signed in 2011 and will need four years for the construction process. The new clean water service system will explore four new water resources in Brebes Regency and Tegal Regency with a capacity of about 650 liter/second and will provide 46,000 new household connections. To implement the new cooperation, 510.5 billion rupiah for construction new networks is needed. The funds will be shared by the central government, Central Java Province, and three regencies. Each stakeholder has specific tasks in the construction stages including the financial support. Before the construction stage started, there were several preliminary stages that had to be completed, feasibility

study, environmental impact assessment, detail engineering design (DED), and land acquisition. Based on the agreement, all stakeholders have the responsibility on the construction stage including the financial needs. Central government through Ministry of Public Works has the responsibility to build the production unit including main transmission system. The provincial government is responsible for constructing the secondary distribution unit and regency governments build the service distribution system and household connections system.

Discussion: From the study's analysis in the case of Bregas Region clean water service system, we have identified that there are four features or factors that underlie the effective intergovernmental cooperation practice. The first feature is the common understanding regarding the regional clean water provision problems resulting collective initiatives of central and local leaders to improve clean water infrastructures, to manage the potential conflict due to the scarcity of water resources and to achieve broader goals (MDGs) in an integrated way. This common understanding is the main asset to establish effective intergovernmental cooperation. To produce common rationale from different levels of government, it is important to share knowledge and information so that all stakeholders have one ultimate point of view and goal.

**Figure 1: Intergovernmental Cooperation Process in Bregas Region**
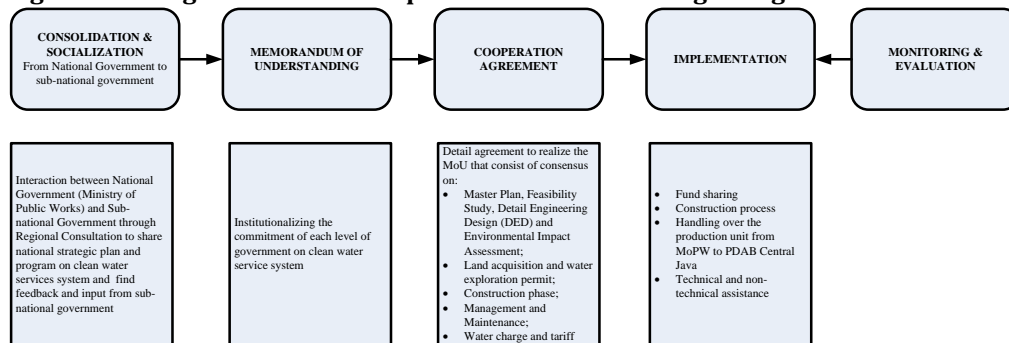
All levels of government consider the clean water as an important and strategic sector that closely related with health issue and approve that its provision should be handle by the government. Nevertheless, each level of government has different views in prioritizing the clean water issue on their policy. The divergence among levels of government also appears in deciding the intergovernmental cooperation on clean water provision. As it can be seen in table 2, central government has several solutions in providing clean water services while for regency/city government, intergovernmental cooperation is the only solution. Ideally, cooperation must be based on mutual interest, and then the process of formation of cooperation should be participatory, flexible and non-hierarchical where no one actor dominates the process. In this clean water issue, the structure of the cooperation is the second important feature that determines the effective intergovernmental cooperative process. The structural organization in Bregas Region clean water system shows the combination of hierarchical and network relationship which consists of three different levels having different responsibilities and authorities (**Figure 2**). The top level is the tactical level consisting of top manager from three levels of government: Minister, Governor and Regents. The second tier in the structure isthe technical agencies from three levels of government: Directorate General in the Ministry of Public Works, Public Works agencies and clean water companies from province and regencies. The third tier in the structure is the operator level consists of two clean water companies from province and regencies.

Table 2. **Perception on Clean Water Issue and Intergovernmental Cooperation**

Level of Government	Clean Water Issue	Intergovernmental Cooperation
Central Government	Constitutional Responsibility and International Commitment	One option to intervene regency/city government policy
Central Java Province	Important issue in term of economic consideration	Indirectly force to involve
Regency/City Government	Important but not a first priority	The only option

Figure 2. Structure of the Cooperation in Bregas Region
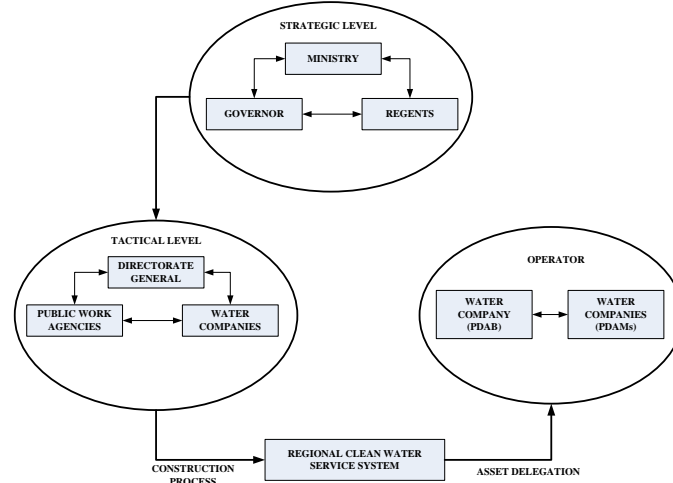
The network relationships occur in each level where the negotiation and decision making process worked in more horizontal way. Each actor/organization in every level has similar power and responsibility. The knowledge and information sharing, negotiation and consensus building is more likely held in forum model rather than briefing. However, high dependency of the three regencies to the financial assistance from central government and the absent of regency-level technical agencies has made the decision making process dominated by national actors. PDAMs, as the representatives of three regencies in strategic level, are more passive in the negotiation and more concerned with their own interest rather than promoting the broader purposes. Meanwhile the hierarchical approach occurs within each level of government body. This hierarchical system is similar to the organizational structure in the governmental system where top leader (Ministry/Governor/Regent) gives order and delegated several authorities to his subordinates. Top leader (tactical level) provides general consensus on the importance of intergovernmental cooperation to tackle the clean water problems and commitment to share risks, benefits and resources. This consensus and commitment are then brought in a more technical forum to establish detail sharing strategies, roles and responsibilities of each stakeholder to achieve what has been agreed with. Finally, after the infrastructure is finished, all assets and its management will be delegated to provincially-owned and regency-owned water companies.

The third important feature found in this study is the formation process itself. Different with many previous studies on intergovernmental cooperation or relationships such as Thompson and Perry (2006) which finds that cooperative process is a cyclical and reciprocal process, the cooperative process in Bregas Region case is a linear process. The cooperative process is divided into three stages, knowledge and information sharing, consensus building and implementation. The absence of monitoring and evaluation forum in each level has brought difficulties in assessing the progress of the cooperation. Coordination and interactions between levels only occur in one way from top to bottom and made the cooperation as more linear rather than cyclical. Normatively, the process of intergovernmental cooperation would depend on the capability and willingness of the regency government to cooperate. The decision whether a regency needs to establish cooperation or not depends on the empirical database and based on a Master Plan document. This approach is also stated in the Ministerial Regulation No. 12 of 2010 on Guidelines on Clean Water Services Cooperation Scheme issued by the Ministry of Public Works. If a regency government cannot provide clean water service by it selves, the government should coordinate with the provincial government and if both governments still have problems then they should ask assistance from the central government.

As for the Bregas Region case, the process of intergovernmental cooperation agreement occurs in more a hierarchical approach because none of the three regencies have a master plan yet. In this case, the central government, through the Ministry of Public Works, creates guidelines and an action plan for solving the clean water service issue and socializes it through workshops by inviting regencies and provinces. Ministry of Public Works tries to share the actual problems and the importance of clean water problems as a local development issue and create common understanding on how to solve the problems. Finally, our results are similar to Firman (2010) and Dirgahayuni & Nakamura (2012)'s finding that three-tier

hierarchical model (**Figure 2**), as an integrated system, generates effective distribution of roles and responsibilities. Our study also finds that the tactical level as the highest tier in the structure provides strong commitment that becomes the foundation for the cooperative process while the strategic level consists of technical actors who have specific roles both in the formation process and implementation process. After the construction is finished, all assets are delegated to the operator level, in our case consisting of provincially-owned and regency-owned water companies.

3. Conclusion

The findings on this research show several important implications in practical and policy design for intergovernmental cooperation in Indonesia in broader context. Cooperating governments in the program and activity management toward common goals are often influenced by classical paradigm: intra organizational pattern based on hierarchical system. Application of the hierarchical principles, such as span of control, rationality, and impersonal, tends to be inward looking as it uses intra organization parameter. Such paradigm is less applicable to the realities of the intergovernmental management in decentralization regime because horizontal relations more likely rely on networking/inter organization. However, it does not mean that hierarchical system should be entirely omitted in intergovernmental cooperation. Theoretically,of course,regional organizationsneed to be designedproperly. It becomesveryessentialandcrucialbecauseintheorganizational structurearethe rules, division of tasks, the formalauthorityrelationships, coordinationandevenresourceoptimization. This research shows that the combination between horizontal network system and hierarchical approach is the most important features that shape the whole process of intergovernmental cooperation.

Furthermore, the findings also demonstrate that there is a change from voluntary relation to collaborative spirit, which has more power in performing a collective action. The mutual goals or common problems that all stakeholders' have cannot guarantee that the intergovernmental cooperation process could happen easily. Rather, it needs regulations and policies from the central government that ensure the cooperative process will occur in the right track and all stakeholders involved in it will have equal power and position. This collaborative spirit also characterized by the commitment to share resources, risks, and benefit. The problem that should become focus for the central government in providing policies and regulations is how to solve the financial dependency of regency/city governments so thatthey will no longerbe passive in the decision making forum especially in resolving the decision that related with financial issues, as happened in Bregas Region case. In general terms, the intergovernmental cooperation in Bregas Region could be replicated in many other regions in Indonesia. However, several drawbacks and absence of important features should be fixed to ensure the effective intergovernmental cooperation. Furthermore, since every region has its own characteristics, it should be stressed that the intergovernmental cooperation must meet with technical and non-technical requirements. In addition, it is most important to learn how to find a common rationale and, by sharing knowledge and information, to implement the consensus effectively.

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Addressing the Zone of Trade-offs using Service Quality Dimensions in the Higher Education Sector

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Abstract: The study attempts to address the zone of trade-offs using service quality dimensions among academic staff at the Strathclyde Business School. Overall, 139 full time academic staff from various departments in Strathclyde Business School were invited to participate in the online survey. The findings shows that the empathy dimension scores the highest areas of trade-offs with average mean value 2.81 and the lowest was from the tangibility and assurance dimensions with 2.26 average mean value.However,the results of the study suggest that it would be more favourable to integrate more service quality dimensions to highlight the trade-offs among academic staff appropriately. Furthermore, the recommendation also suggests that service organizations should monitor a service provider's performance by identifying the zone of trade-offs.

1. Introduction

In early studies, the father of modern economics, Adam Smith (1776) in his article "An Inquiry into the Nature and Causes of the Wealth of Nations", argues that it is impractical for an economy to operate efficiently with simultaneous factors working in isolation; the system needs to sacrifice (trade-offs) the efficiency of one economic activity in order to improve another economy activity. In a dynamic context, he suggests that an economy needs to sacrifice one production in order to improve another by introducing absolute advantage in the system. Adam Smith addresses the concept of trade-offs in an economy by using a Production Possibility Frontier (PPF) curve. The Production Possibility Frontier shows all the possible combinations of two goods that can be produced at the same time during a given period of time. PPF represents how many units of a resource need to be sacrificed for a given increase in output of the product. (Slack et al., 2010) The concept of trade-offs in a manufacturing operation was formally introduced by Wickham Skinner in the year 1969 (Skinner, 1969). After this, the trade-off concept began to attract much attention from many scholars in the service operations sector. Johnston (1999) has developed a model of study on service transaction to address the need for managers to engineer their service processes by analyzing the basic factor that will generate improvement. His research article has encouraged service managers to consider inappropriateness and disparity between service and service delivered to the customer. Overcoming trade-offs has now become the main aim of many service organizations, like higher education, to increase effectiveness of the service delivery system. As stated above, the current phenomena has challenged higher education institutions to highlight the need of addressing the zone of trade-offs among academicians.

This current development has compelled universities to manage their operations as corporate organizations, competing for resources to sustain excellence in the industry (Sultan and Wong, 2010). These issues have created great pressure among academic staff to balance their teaching, research, consultancy and other administrative duties while maintaining quality from every perspective in the faculty. The commercial competition and reduction in government funding has forced higher education institutions to seek alternative financial sources while sustaining their position in the industry. Currently, many universities are facing a tremendous challenge of being centres of excellence for teaching as well as research. Furthermore, studies show that academics have also been required to acquire new skills and knowledge in line with current developments in higher learning (Robertson et al., 2002:478) while being asked to teach over large numbers of students in various specializations. Meanwhile, they have the responsibility to provide quality teaching at all times. (Umashankar and Dutta, 2007).Billot (2010) believes that the academicians face distinct trade-offs which might impact on the quality of service provided to the students. In another article, Looy et al., (2006) stated that academicians who are involved in entrepreneurial activities such as consultancy, technology development and scientific publication may be liable to jeopardize an activity which may result in a trade-off. Today, many higher education

institutions are operating like other service organizations, concerned with productivity, market share, quality services and return on investment (Nadiri et al., 2011).

Besides that, Massy and Zemsky (1994) state that many faculty members loosen their institutional ties and responsibilities by placing greater value on pursuing personal goals leading to greater financial rewards. The researchers also commented that academicians tend to trade off activities such as grading papers, meeting with students, teaching modules and other tasks to pursue their personal goals. Current practice has highlighted the need for addressing the zone of trade-offs among academic staff when delivering a variety of services to stakeholders. Moreover, Slack et al. (2010) stated that producing a variety of services to the stakeholders generally reduces an operation's ability to function effectively. Therefore, limiting the variances on service offer will lead to higher customer satisfaction and increase organizational performance within the industry. The main objective of this research is to address the zone of trade-offs using service quality dimensions in the higher education sector. Existing research has failed to coordinate the relations between trades-offs and service quality dimensions in the service organization. To achieve this, the study initially explores the body of knowledge using existing literature. Secondly, the study uses relevant literature to generate a number of items for the service quality dimension. From there, the research develops a survey to analyze the trade-offs being practised by academic staff. Finally, the research applies a quantitative method to analyze the data gathered from the on-line survey distributed to staff. Subsequently, the output contributes to the understanding of the zone of trade-offs in higher education, identifying those areas needing to be improved in the future.

2. Literature Review

The Cambridge dictionary defines trade-offs as "a situation where you accept something bad in order to have something good" (Cambridge, 2004:748). Similarly, many articles on operations management have used the word "compromises" to indicate the trade–off concept. Today, the concept of trade-offs is widely used in service marketing to describe an operational compromise made by managers in their daily production activities.Besides that, Johnston, (1995) referring to Berry and Parasuraman in his article, states trade-offs as a "zone of tolerance" which mediates between customer desired level of service and adequate level of service. This researcher has also added that the tolerances are dynamic and may be adjusted during the process of delivering service quality. Service productivity may compensate for a poor performance. In the last few decades, the importance of the trade-off concept has been noted by a few scholars in line with current development of service activities and its contribution to economic growth (Johnston, 1994). The concept of trade-offs was formally introduced by Wickham Skinner in 1969 (Skinner, 1996). In the same article he pointed out that trade-off is able to influence competitive performance of a business unit if sufficient care is not taken. In his articles, he argued whether the tools, approaches and ideas were adequate and appropriate in overcoming trade-off challenges faced by managers in manufacturing. Before that, the author addressed this mismatch in his article "Production under Pressure" in Harvard Business Review (1966). As evident from this literature, many researchers contributed their ideas in developing manufacturing trade-offs in manufacturing operations since the 1960s.Skinner (1996) identified seven criteria for trade-offs in manufacturing operations; flexibility for volume, flexibility for product change, quality, delivery cycle, cost, investment and reliability of delivering promises in meeting manufacturing operations objectives.

Mapes et al. (1997) said that the early manufacturing research viewed trade-offs as a constraint to competitiveness and that it focuses only on a narrow set of aims and tasks. Subsequently, Pagell et al. (2000) considered trade-offs as a production constraint which may challenge the performance of the production department. The concept of trade-off has been increasingly seen as a central issue of discussion among operational scholars since the last decade, with a view to identifying zones needing to be improved (Silveira and Slack, 2001). According to Silveira and Slack (2001), the concept of trade-offs was challenged in the 1980s and 1990s when investigating production compromises in manufacturing operations. However, by the beginning of the 2000s, the concept of trade-off started getting attention from scholars in service operations perspectives. This notion has triggered some researchers to study the trade-offs on service firms' operational perspectives. Many firms enthusiastically started to apply manufacturing operational concepts into service firms' operations activities with the aim of improving efficiency and improving their service quality (Bitran and Lojo, 1993). Previously, the importance of the trade-off concept has been noted by a few scholars in line with current development of service activities and its contribution to economic growth (Johnston, 1994). Some notable publications in this field include the works of Parasuraman (2010); Johnston and Kong (2011); Pagell et.al (2000); Johnston (1995; 2005)

and Silveira (2005). Ghobadian et al. (1994), when referring to Haywood-Farmer, stated that quality trade-off failed to offer a practical method to help management to identify problems in service quality. This is because of the characteristics of service itself such as service intangibility, participation of the customer in service delivery, the heterogeneous nature of the process, lack of predictability and repeatability of the service process, a diverse customer base sharing the same processing facilities and process, lack of transparency, difficulties in identifying source of quality, productivity, the trade–off problems and the time required to improve service operation.

Johnston, as an active service operations scholar, developed a model to study service transaction, addressing the need for managers to engineer their service process by analyzing the root causes that lead to improvements (1999). His research article forced service managers to consider the appropriateness or otherwise of their customer process. The study also indicated the mismatch between actual service concept and service delivered to the customer. Johnston asked service firms to see the process from a customer's point of view and increase "customer orientation." The researcher also strengthens existing models by providing structural methods to service process evaluation based on service concept, service process, transaction quality assessment and messages. Before arriving at this conclusion, the researcher has referred to current models from Fitzsimmons and Fitzsimmons (1994); Stauss and Weinlich (1995);Stauss, 1993; Stauss and Weinlich 1995); Danahar and Mattsson (1994) and King Man-Brundage (1991).

Hwang and Teo (2001) provided a review based on empirical studies conducted in the Business School at the National University of Singapore. These researchers have requested future researchers to view quality issues in operational perspectives. They also recognize many potential areas and also would like to extend research scope to other service industries. Their work also requested that university management should not only focus on external customers, such as students, but must also provide equal importance to other stakeholders such as academicians and administrators in striving for excellence in higher education.Along similar lines, the importance of service delivery by staff was extensively emphasized within academia. Furthermore, existing academic literatures support the view that many service firms are highly dependent upon the ability of staff to deliver services to the customer. The behaviour and attitude of staff can significantly influence customers' service perceptions. By managing staff effectively, it will help the organization to deliver superior quality service. Moreover, the researchers also addressed the need to manage heterogeneity of service in service firms. They also asked future researchers to consider SERVQUAL determinants proposed by Parasuraman, Zeithaml, and Berry in 1985 to manage service employees (Chebat and Kollian, 2000).

Johnes (2006) has examined pressure exerted on teaching staff in higher education. The researcher demonstrated substantial evidence of variation in quality of teaching and suggests that staff in higher education should improve their individual efforts in order to perform better. The study also encourages future researchers to examine factors affecting teaching efficiency in higher education. Shafti et al. (2003/2006) clarified the need for further research into service operation, in particular to investigate the trade-off and its consequences. The authors stated that the demands for productivity, time, and quality and customer service cannot all be fulfilled at the same time. This forces sacrifices and compromises when delivering service to the customer and they suggest that more research needs to be done to clarify the precise nature of trade-offs in service operations. A study by Ali and Musah (2012) provides empirical evidence by introducing a modelling causal relationship between quality culture and workforce performance which leads to improved work performance among academic staff in higher education in Malaysia. The researchers also found that quality of teaching in higher education is an essential factor in meeting student demands and needs to be taken into account. This paper refers to previous work done by Fichtner in 2003 when emphasizing the importance of understanding staff in higher education. This can enrich instructional effectiveness, enhance continuous improvement and help to provide quality teaching. In this article the researchers also discussed a survey conducted among Scottish hotel assistants which addressed the importance of a balanced environment to help achieve organizational vision.

Acknowledging this, Grebennikov and Shah (2012) produced empirical research evidence revealing that higher education institutions still struggle to meet desired expectations from customers. The researchers suggest that academicians should view quality from students' perspectives. Additionally, the research also suggested that the quality of academicians in higher education has a significant impact on service

delivery. Subsequently, the findings also revealed that academicians should possess desired attributes when involving themselves in academic activities without losing rigor in the classroom.

In a similar vein, Nie (1995) stated that only very few models exist in service operations literature that link operational issues with marketing concepts and highlights the issues encountered by service firms. The preliminary research shows that the current theory and body of knowledge is still insubstantial and there is an absence of literature in associating interaction between trade-offs and service quality. Johnston (2005), as an active service operations scholar, has suggested that the need for further research in trade-offs and service operations performance has not been explored extensively by researchers. He also applied the theory of trade-offs in service firms' perspectives in his articles published in 1995. Along similar lines, the concept of trade-off has increasingly been used in recent years within academia. Johnston and Kong (2011) argued that previous studies only focused on customer service experience and limited coverage was given to incorporate SERVQUAL improvement with operational techniques. The researchers discussed how an institution's staff should understand customer experience from service delivery perspectives. The research provides a clear and concise guideline to the organization on how to embrace service delivery gap and provides empirical evidence to effect improvement in service firms. The findings provided evidence that after identifying the area for improvement, staff were making fewer mistakes, were better engaged, improved efficiency and were able to observe things from the customer's point of view. However, the authors of this article also noted that many organizations did not have a clear picture of how to deal with improving customer experience from service provider perspectives. As evidenced from existing academic literature from a number of different bodies, several broad conclusions can be drawn. Firstly, there is a need to revisit the concept of trade-offs using service quality dimensions from the perspective of service organizations. Secondly, there has been considerably less research on practical aspects and knowledge development such as identification and improvement of the trade-offs (Silveira, 2005). Keeping this in mind, this research will addressing the zone of trade-offs using service quality dimensions and will aim to fill the knowledge gap.

3. Methodology

The scope of study was limited to academic staff from Strathclyde Business School using convenience sampling. The total 139 academicians were selected as a sample of this study. The questionnaire was sent to all 139 full-time academic staff with at least 30 returns required in order to conduct an analysis. The scope of study is limited to the full-time academic staff in the Strathclyde Business School due to the nature of the duties undertaken by them compared with part-time academic staff involved in specific academic activity. The research used both primary and secondary research methods to answer the research questions and meet the objectives of the study. For primary data, the data was collected using a questionnaire designed for this study. The questionnaire was designed with two sections consisting of demographic and service quality dimensions questions. The questionnaire was designed using online software names as Qualtrics and distributed to the SBS academic staff by mailing the URL to their email accounts. For the secondary data, various articles were reviewed in order to address the issues raised around trade-offs and service quality. The total responses comprise 32% of the total sample selected for the study; it is therefore valid and reliable to report the outcome of the undertaken research. According to Sekaran (2000), if the questionnaire achieves 30% of the online responses, this is reliable for a piece of research. Besides that, the average time to answer the survey questions was 42 minutes which is quite high in comparison to the time suggested to the respondents. This might have been due to respondents leaving the website unattended after starting the survey. However, 13 responses were omitted from the analysis since these respondents failed to complete the survey after having started it.

Rationale of Choosing Service Quality Dimension: The most widely reported set of service quality dimensions is proposed by Parasuraman and his colleagues. The researchers have initially identified ten dimensions that reflect service attributes used by consumers in evaluating the quality from the service provider (Parasuraman, 1985). However, as a result of later research, the ten dimensions of service qualities were reduced to five dimensions. The five dimensions are tangibles, reliability, responsiveness, assurance and empathy as illustrated in Zeithmal et al. (1988). Johnston and Kong (2011) stated that service quality in service operational perspectives can be measured using quality dimensions of service quality such as tangibility, reliability, responsiveness, assurance and empathy. Besides that, in the last three decades the service quality dimensions were widely used in the higher education industry to understand perceived experience by the students. Many researchers concentrated on developing service quality instruments to measure teaching effectiveness by investigating student satisfaction level in the

higher education sector (Li and Kaye, 2006:103). Furthermore, recent research found that service quality dimensions studies are still dominating the service field (Sultan and Wang, 2010). Thus, the research study uses the service quality dimensions proposed by Parasuraman et al. (1985) to address zone of trade-offs in Strathclyde Business School.

4. Results

The data analysis used descriptive statistics to address the zone of trade-offs among respondents at the Strathclyde Business School. The discussion of results starts by providing general information on the questionnaire responses, then subsequently addresses the zone of trade-offs using service quality dimensions.

Demographic Data of Respondents: The highest numbers of responses, 7 in total, came from the Department of Management Science. 6 responses were each received from the departments of Management and Marketing and 5 from both the Marketing and Economics departments. Only 4 responses were received from the department of Accounting and Finance. Lastly, the lowest response was from the department of Hunter Centre for Entrepreneurship with only 1 response. Overall, 34 respondents have participated in this survey with all departments in the SBS represented.

Academic Position: The highest response came from "lecturers" which comprises 35% of total responses. Secondly, 18% of responses were received from "professors." Thirdly, 15% of the responses were received from "senior lecturers", followed by "readers" which recorded 12% of the overall responses. The response from research associates, research fellows, teaching associates, teaching fellows and industry associates consist of 3% of overall responses. However, no responses were received from any "research staff" or "senior research staff."

Gender Composition: The highest number of male responses came from the departments of Accounting and Finance, Management and Management Science; for females, the highest responses came from the departments of Economics, Human Resource Management and Management Science.

Years of Experience: The years of experience are classified into 9 categories which start from less than 1 year, 1 to 3 years, 4 to 6 years, 7 to 9 years, 10 to 12 years, 13 to 15 years, 16 to 18 years, 19 to 20 years and 21 years and above. The highest number of responses received was from academic staff who have been working from 7 to 9 years. The academic staff in this category have provided 8 responses for the survey. This is followed by 6 of the academic staff who have been working more than 21 years in the SBS. 5 responses were received from the academic staff who have working experience between 4 to 6 years and 10 to 12 years. 2 responses were received from the academic staff in the category between 13 to 15 years and 19 to 20 years of working experience. However, none of the academic staff from the category of less than 1 years' experience responded. The survey result shows that all the respondents who have participated in the survey have more than a year's experience.

Addressing the Zone Of Trade-Offs Using Service Quality Dimensions: The service quality dimensions items used a Likert scale 1 to 5 ranging from 'strongly disagree' to 'strongly agree' to distinguish between scales. The respondents were able to specify their level of agreement or disagreement on items based on the scale given to them.

Tangibility: The tangibility dimension items considered factors such as physical facilities, equipment and appearance of personnel; these may be the cause of the trade-offs among academic staff. There are 8 items designed in this section to meet the tangibility's condition. Overall, the item numbers 3 and 7 show slightly higher mean compared with other items' mean values. Items 3 and 7 scored mean average values of 3.61 and 3.06 respectively. These results indicate the respondents' collective agreement on both items. Item 3 is about maintaining teaching materials on the computer and item 7 is about updating course information on the website. Besides that, item 6, revealing inadequacy of internet connection in the student room, scored the lowest mean average in this dimension. Another 4 items scored between 1.78 to 1.90, falling into the categories of strongly disagree and disagree. These results clearly show that the academic staff do not agree with the items discussed in the tangibility dimension. On the other hand, the mean averages value for the 34 respondents indicates 2.26 for all 8 items in the tangibility dimension. This mean average value indicates that the respondents in general do not agree with the items. The range of the items is 3 and the scores for maximum value is 4 and for minimum value is 1. Overall, the

respondents have given a variety of answers between 1 and 4 for the tangibility dimension. Furthermore, the variations between items are quite small and the results are spread between 0.37 and 1.78. Item 6 in the tangibility dimension scored the lowest variation. This shows that the respondents might have similar opinions on the items tested in the tangibility dimensions.

Reliability: The reliability dimension items considered the ability to perform the promised services ie keeping records correctly and carrying out services at a given time, factors which might cause trade-offs among academic staff. There are 18 items designed to meet the reliability's condition. Item numbers 6 and 8 show the highest mean comparatively with other items in the reliability dimension, scoring 3.22 and 3.99 respectively. These values show that the respondents somewhat agree with both items. These items are:

- Item 6
  Managing research grants as a principal investigator or co-investigator.
- Item 8

Preparing research grants: Items 2 and 4 scored the same lowest mean average at 1.56, commenting on the delivery of seminars, trainings and tutorials as well as setting and marking examinations. This suggests disagreements on the items designed, which score very low mean average values from the 34 respondents. On the other hand, items 6 and 8 scored mean average values of 3.22 and 3.39 respectively, indicating a positive sign of trade-offs being practised by academic staff. However, the mean scores of both items are not strong enough to support the existence of trade-offs among staff. The mean average scored for the 18 items in the reliability dimension is 2.43, slightly higher than tangibility. The mean average scores clearly show that the respondents generally do not agree with the statements in the reliability dimensions. The range of scores is 3 with a minimum value of 1 and a maximum value of 4. None of the respondents chose 'strongly agree' options for any items. Item 4 scored the lowest variance comparatively with other items and the pattern of the variance shows that the respondents might have similar opinions on the items tested in the reliability dimensions. The standard deviation results show item scores between 0.51 and 1.09 respectively. The overall average standard deviation score for all 18 items is 0.84, which is slightly lower than the tangibility dimension discussed earlier.

Responsiveness: The responsiveness dimension items considered factors such as willingness to help the customer, keeping records and performing at the designated time; these might cause academic staff to trade-off. There are 11 items designed to meet the condition of responsiveness. Furthermore, 8 items in the responsiveness dimension scored between 1.78 and 2.94, clearly showing disagreement among respondents on the items tested. These 8 items are attending class presentations, preparing more practical tutorials, undertaking supervision of research students, rehearsing for lectures and others. However, there are 3 items scoring a mean average value more than 3. These are writing letters, e-mails or memos to respond to queries, responding to daily enquiries from students and finding sources for case studies to be discussed in class. The mean average value for all 11 items is slightly higher than other service quality dimensions such as tangibility and reliability. Once again, the result proves that the respondents are in general disagreement with the items tested in the responsiveness dimension, suggesting they do not practise trade-offs when delivering services as per the responsiveness condition. The variances between items are quite small and the items are spread between 0.28 and 1.40. Item 10 scored the lowest variance comparatively with other items while the pattern shows that the respondents might have similar opinions on the items tested in the responsiveness dimensions. On the other hand, the standard deviation result shows that item scores vary between 0.53 and 1.18 respectively. The overall average standard deviation score for all 11 items is 0.78, which is slightly lower than tangibility and reliability. The lowest and highest variance and standard deviation score was found between items 9 and 10.

Assurance: The assurance dimension items considered factors such as knowledge and courtesy of employee, ability to inspire trust, confidence and providing individualized attention; these may cause academic staff to carry out trade-offs. There are 5 items designed to meet the assurance condition. The items 1, 2, and 3 in the assurance dimension scored below 2 which means that the respondents either strongly disagree or disagree with the items stated in the survey. The 3 items which score lower than 2 in the assurance dimensions are representing the institution at professional events, establishing collaborative links outside the institution and visiting companies. However, items 4 and 5, commitment to the profession and planning and organizing administrative duties, score between 2.78 and 2.88 which are close to 'sometimes' scale in the survey. The mean average for the 5 items is 2.26 which is lower than

the responsiveness and reliability dimensions but similar to the tangibility dimension which also scored 2.26 as a mean average value. The mean average value score indicates that respondents are in disagreement with the items stated in the assurance dimensions as most of the items score below 3. The items' variance in assurance dimensions are quite small and spread out between values of 0.43 and 0.99. Item 1 scored the lowest variance in comparison with other items. On the other hand, the standard deviation result shows that scores varied from 0.43 to 0.99. The overall average standard deviation score for all 5 items is 0.75 which is the lowest among the other dimensions discussed earlier. The range of items is 3, with the minimum value chosen by respondents as 1 and the maximum value chosen by respondents as 4. None of the respondents chose 5 for their option in this section.

Empathy: The empathy dimension items considered factors such as caring and individualized attention for students. There are 6 items designed to meet the empathy conditions. The average mean score of 2.81 shows that the respondents disagree with the items in the empathy dimensions. Items 2, 3, 4 and 5 score average mean values between 2.26 and 2.95 while items 1 and 6 score mean values from 3.00 to 3.39. Items 1 and 6 score slightly higher than the other four items. Items 1 and 6 are responding to requests and providing pastoral care for the student. These two items show some significance on the trade-off being practised by the respondents. Furthermore, the empathy dimensions scored 2.81 as an average mean which is comparatively higher than other service quality dimensions scores. The item 4 scored the lowest variance comparatively with other items. The pattern shows that overall the respondents might have similar opinions on the items tested in the empathy dimension. The standard deviation results vary between items from 0.71 to 0.85 and score 0.77 as an overall average. The range level between items scored is 3. The maximum value chosen by respondents is 4 and minimum value chosen is 1. None of the respondents chose a scale 5 when providing responses to the items.

Open ended question: The respondents were given the opportunity to provide any relevant information which is not covered in the items discussed in the service quality dimensions. Only three staff have given comments. These respondents commented that academic staff cannot be great researchers, great teachers and great administrators. The respondents also commented that the university tends only to reward the great researchers and not the great teachers. This makes staff feel that spending time with students or providing a pastoral role is not helping them to advance their careers. However, the respondents admitted that they enjoy working as an academic staff.

5. Conclusion and Managerial Implication

Strathclyde Business School does not seem to have serious problem in managing their staff, particularly in meeting the various demands from stakeholders. However, the research has shown some positive indication of trade-offs which need to be considered for future improvement. This study used 45 items to address trade-off practices among academicians in the Strathclyde Business School using five service quality dimensions. The five are Tangibility, Reliability, Responsiveness, Assurance and Empathy. The results prove that 70% of the respondents either strongly disagree or disagree on the items discussed in the survey; this means that they are not practising trade-offs. On the other hand, 14 respondents, comprising 30% of the total participants, show some evidence that practising trade-offs does occur. Table 1 below illustrates the areas usually traded-off by the academic staff and the areas needing to be improved in the future. From the items listed in the questionnaire, the preparation of grant proposals is viewed as the main factor leading to trade-off practices among academic staff. This shows that academic staff are spending more time on preparing applications for grants, leading to trade-offs in other academic activities. The lowest indication of trade-offs was recorded from delivering seminars and setting marking guidelines for examinations. Probably this is due to staff experience in handling seminars and setting exam questions and marking schemes. This experience means less time is required for these tasks. Both of these duties come from the reliability dimension.

The explanation of these results can be extended by addressing them dimensionally using service quality. Both tangibility and assurance scored an average mean (χ) value of 2.26, the lowest dimension compared with the other three service quality dimensions used in this research. However, the service provider needs to monitor some of the items which scored an average mean (χ) more than 3. The three items mentioned in the tangibility dimension is evidence that Strathclyde Business School needs to monitor staff knowledge of information technology (IT) to prevent trade-off practices occurring. Secondly, the reliability dimension scored an average mean value (χ) of 2.43, showing some positive indication of trade-offs being practised. This is particularly pertinent in the areas of academicians managing research grants

as a principal investigator or co-investigator as well as in preparing research grants. The findings clearly show that the average mean values for both items exceed 3, approaching the 'agree' scale in the survey. The institution should provide assistance or help to the academicians to manage their research grants and for preparing applications for research grants. The organization should also consider hiring research assistance to help the principal /core–investigator in managing their research grants. If the service provider fails to provide adequate assistance on this issue, it will have a negative impact for the work of the institution in the future.

For the responsiveness dimension, the average mean (χ) value scored 2.51 with three areas identified as being at risk of trade-offs. The findings show that academicians tend to practise trade-offs when writing letters, emails or memos to respond to queries or find sources for case studies. Management has to find better solutions to help the academicians with their administrative work. This can have a significant detrimental impact among academicians with regard to their other duties. This issue can be solved if the institution considers employing a research assistant to help the academicians in dealing with the items from the responsiveness dimension. Finally, the empathy dimension was found as the area where the practice of trade-offs was most common among academic staff at Strathclyde Business School; the average mean (χ) value is 2.81. This clearly demonstrates the impact of the trade-offs on duties undertaken by the academic staff at the Strathclyde Business School. The academicians believe that responding to requests and providing pastoral care for students forces them into trade-offs. The managers have to look into this area seriously and investigate how to overcome these issues. The challenges faced by academicians have been discussed and areas needing to be improved, especially in balancing their role when performing academic activities, have been identified. The research findings clearly enhance the knowledge and understanding of the field of trade-offs and its application using service quality dimensions. Even though all the dimensions show average mean values below 3, the service providers still need to monitor organizational changes in a consistent manner. Some of the items in the five dimensions show positive signs of trade-off practices by academicians in the Strathclyde Business School. This research will also help service providers to identify appropriate training programmes to improve the efficiency of academicians in their daily routines. The research is also significant in addressing the need for future resource allocation and in responding to the changes in staff needs. The results of this study also have practical implications for service providers in their efforts to improve their operational efficiencies as well as in satisfying their customers.

Limitations and Recommendations: This study has limitations that need to be recognized. The survey has opened up a new dimension by exploring trade-offs among service providers in a higher education context. The scope of study chosen was the Strathclyde Business School, a high profile business school which was ranked 55 in 2010 and 74 in 2011 by the Financial Times. Furthermore, Strathclyde Business School has an excellent reputation for business studies and is regarded as one of the best business schools in the world. The impact of trade-off is shown to be at a minimum level among the academic staff in the Business School. However, the research might produce diverse outcomes if applied to a different context in the university or among other business schools. Furthermore, the small sample of the study should not be used to generalize the whole population of the Strathclyde Business School academic staff. The service quality dimensions proposed by Parasuraman (1985) were unable to provide the precise meaning of the items used in the dimensions. Some of the items need to be repeated in a different service quality dimension but using some similar meanings. There has been some confusion created among the academic staff when answering the questions in the survey due to this issue.

In the future, research should consider other service quality models which might give better outcomes for this field of study. Moreover, the research only considers five service quality dimensions. These may not be able to address all of the trade-offs being practised by the academic staff in the Strathclyde Business School. Secondly, the study should develop various service quality items which could provide better options for the respondents and lead to more accurate and meaningful answers. Thirdly, any future research also should consider measuring the impact of the trade-offs being practised by the academic staff within the entire higher education institution. A future researcher could also consider employing this model in other service organizations to identify the trade-offs being practised. Finally, the research has employed empirical analysis to analyze the data gathered from the survey. However, the research failed to utilize qualitative analysis, resulting in a knowledge gap in the work. Therefore, the direction of future research should consider using qualitative methods such as SODA and System Dynamics to address the issues appropriately, compared with the quantitative methods which have been used widely by service scholars.

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Global Financial Crisis and Calendar Anomalies in Stock Returns: Evidence from Malaysia

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Abstract: This study investigated the calendar anomalies in the Malaysian stock market, by using the Kuala Lumpur Stock Exchange Composite Index (KLCI) for the entire period (Jan 2007- April 2011) and for three sub-periods: pre-financial crisis (Jan 2007- May 2008), during-financial crisis (June 2008- Dec 2009) and post-financial crisis (Jan 2010- April 2011). In this study, the t-tests were applied to achieve the study objective where the month effect, the day effect, the turn of the month effect and the holiday effect are examined. The findings of this study revealed that calendar anomalies, i.e Month effect and day of the week effect have largely disappeared from the Malaysian stock market after the global financial crisis. On the other hand, the turn of the month effect has been raised after the global financial crisis. While, the holiday affect is not exist in the Malaysian context. These findings have significant implications to the market hypothesis and investors' trading behaviors. In particular, for an emerging country such as Malaysia, it can be said that the global financial crisis has made significant differences of the investor trading behaviors.

Keywords: *Global Financial Crisis, Calendar Anomalies, Returns, t-test, Malaysia*

1. Introduction

Enormous studies have examined the calendar anomalies around the world. Regardless of the increasing evidence, the reasons behind the anomalies remain ambiguous. An anomaly is described as an event that is inexplicable even with the assistance of the relevant theory. With regards to stock markets, anomalies are considered as changes in returns that are inconsistent with the Efficient Market Hypothesis (EMH). According to the EMH, security prices indicate all available information and as a result, no opportunities exist to earn excess returns. The calendar anomalies that previous studies have highlighted are higher average returns in one month of the year than other months (Month effect), higher average returns in one day of the week than other days (the day of the week effect), higher returns at the onset and at the end of the months depicting the turn of the month effect, and higher returns prior to holidays depicting the holiday effect. These anomalies are deserving of interest owing to the fact that their presence goes against the weak form of market efficiency. Even though, some of the prior studies have been dedicated to the changes of the anomalies, and enormous studies contribute to understanding the global financial crisis 'causes and consequences. However, far less is known about the global financial crisis with the calendar anomalies. Therefore, the aim of the paper is to investigate the anomalies in the Malaysia context pre, during and post the global financial crisis. In addition, the existence of calendar anomalies have been widely reported in the twenty years past in the field of financial markets. Unfortunately, in the context of Malaysian market, empirical analyses concerning these anomalies are few and far between and what there is of it indicate inconsistent results. Several studies showed the existence of market anomalies while others did not.

The global financial crisis is in contrast to the Asian financial crisis experienced by Malaysia in 1998. Malaysia experienced a contraction of Gross Domestic Product (GDP) growth owing to the Asian financial crisis in 1998 which started from Thailand. On the other hand, the global financial crisis stemmed from the weaknesses in the U.S. financial industry which developed into an international financial crisis of a huge proportion and a steep slump in the global trade and eventually, the global recession in the later parts of 2008. Malaysia can be described as a small open economy that is dependent on exports and thus, it is not surprising that it was affected by the shock caused by the global crisis. Until the first part of 2008, the financial turmoil did not impact Malaysia, but towards the fourth quarter of the same year, the negative shock reverberated throughout the Malaysian economy. Therefore, the period of this paper has divided into entire period (Jan 2007- April 2011) and three sub-periods: pre-financial crisis (Jan 2007- May 2008), during-financial crisis (June 2008- Dec 2009) and post-financial crisis (Jan 2010- April 2011).

With the global financial crisis, it is expected that market return behaves differently during and after financial crises in that much of the documented calendar anomalies will reverse or disappear in action. Therefore, the main goal of this paper is to tests whether anomalies exist and behave differently before, during and after the global financial crisis, by using an updated data (till April 2011). Hence, this

paper offers new insights of calendar anomalies to global financial crises and it is closely related to the following strands of literature. First, it contributes to the study of the trading behavior of individual investors. Most of the existing studies are conducted in a period of rising markets, whereas some researchers showed that individual investors are more overconfident during bull markets than in bear markets (Kim and Nofsinger, 2007). In contrast, this paper provides an examination of calendar anomalies under different market conditions, where the studies that examine the calendar anomalies before, during and after global financial crisis are null. The remainder of the present study has the following sections: next section discusses the literature review followed by a section that provides description about Malaysian stock market. The following section contains the methodology used and findings are presented in section five. Lastly, section number summarizes the discussion and conclusion of this study.

2. Literature Review

Month Effect: In the literature, month effect is described as the January effect, which is defined as the stock returns in January are on average higher than for the other months. The first study about January effect was conducted by Rozeff and Kinney (1976) in the context of the U.S. stock market. This was latter followed by Keim's (1983) study that revealed that small firms experienced a January effect. Other study done by Gultekin and Gultekin (1983) confirmed the January effect for seventeen developed countries. In the context of the Singapore, Wong, Agarwal and Wong (2006) found that January effect is exist before and after the Asian Financial Crisis. Other studies supported the evidence of the January effect in context of Singapore market (Agarwal and Rivoli, 1989; Lee, 1992; Chan et al., 1996). Al-Rjoub and Alwaked (2010) examined the January effect on U.S during the global financial crisis and found that the average January returns are consistently negative during crises in U.S.A. Alrabadi and AL-Qudah (2012) revealed that in Jordan, a highly significant January effect exists. On the other hand, Agathee (2008) investigated the existence of the month of the year effect on the Mauritian Stock Exchange. The results showed that the mean returns for all the months are positive except for March. Moreover, Ariss, Rezvanian and Mehdian (2011) examined the calendar anomalies among GCC stock markets and revealed a statistically significant positive effect in December as opposed to the January effect reported in the developed Western countries. Furthermore, Al-Saad and Moosa (2005) revealed a July effect in the context of Kuwait Stock Exchange which they termed the "summer holiday effect". Farooq, Urooj and Zafar (2010) examined the month of the year affect in the Karachi Stock Exchange for the period November 1991 to December 2007. Their findings showed negative returns for the month of May as opposed to January, the common benchmark for the Month of the Year effect. Balint and Gica (2012) found the January effect on Romanian stock market only before the financial crisis.

Day of the Week Effect: This type of effect provides the description of the anomaly that returns are different across the week. Specifically, the return on Monday is reported to be negative and low, however Friday reveals a positive and high return. Notably, in literature, the day effect has been extensively investigated. Among the studies is Mehdian and Perry (2001) which revealed that Monday effect declined significantly in U.S. In Ghana, Paul and Theodore (2006) investigated the day effect. They used daily data over the period 1994-2004 and their findings revealed that all statistics are significant. Along the same attempt, Chen and Lian (2004) examined the Monday effect for five countries including Malaysia, prior, during also following the Asian Crisis. They revealed that the effects are still exist and significant. However, in light of the Malaysian stock market, there are only few studies that have been done concerning calendar anomalies (Abd. Rahman and Nik Muhammad, 2010; Dollery, Ho and Lim., 2010; Hakan and Halil, 2001; Lian and Chen, 2004; Ibrahim, 1997). Ibrahim (1997) revealed in Malaysia that the day of the week existed over the period 1980-1996. Hakan and Halil (2001) found that extreme returns are revealed on Wednesday with the highest and Monday with the lowest returns. Similarly, Lian and Chen (2004) indicated that in Malaysia, the day of the week effect was present with a negative Monday effect and a positive Wednesday and Friday effect for the year 1996. Alrabadi & AL-Qudah (2012) found that in Amman Stock Exchnage, the returns are significantly higher on Sundays (the first day of trading of the week) and Thursdays (the last trading day of the week) than other days of the week.

Nevertheless, the period of crisis from the years 1996-1998 were attributed to no daily seasonal anomaly while for the period following the crisis, only a positive Tuesday effect was revealed. Abd. Rahman and Nik Muhammad (2010) found also that the Monday effect exists in Malaysia. Dollery, Ho and Lim (2010) investigated the „day of the week" effect and the „twist of the Monday" effect for Kuala Lumpur Composite Index for the period May 2000 to June 2006. Their results supported the Monday effect with Monday

having a negative mean return of (-0.09%) indicating the least stock returns of the week. On the other hand, Wednesday had the highest returns of the week with (0.07%) returns, followed by Friday with (0.04%) returns. In Kuwait, Al-Saad (2004) did not find the presence of any holiday effect. Whereas, in the context of the GCC markets including Saudi Arabia, Kuwait & Dubai, Al-Barrak (2009) investigated the day-of-the-week effect and revealed its existence in only the Kuwait stock market. Al-Khazali (2008), on the other hand, revealed lack of support for the day-of-the-week effect in the U.A.E. stock markets. In the emerging equity market of Saudi Arabia, Kar, Ulussevr and Yumusak (2011) investigated the said effect. By using a non-linear GARCH model and covering the data from January 2001 to December 2009. The results showed that the returns on the five trading days follow different process. This confirms that mean daily returns are significantly different from each other and validates the day-of-the week effect. Ariss, Rezvanian and Mehdian (2011) revealed a Friday-type effect "Wednesday Effect" that exists on the final trading day of the week as Wednesday is the final day of the week prior to the weekend in the Gulf Cooperation Council region.

Turn of the Month Effect: This anomaly can be defined as the distinctive excess returns in the final day of trading of the month to three initial days of the next month. Few studies have examined the turn of the Month effect. In U.S., studies such as Lakonishok and Smidt (1988) revealed that the turn month return is around eight times greater compared to remaining days. Similarly, Cadsby and Ratner (1992) found this effect in Australia, Canada, Switzerland, the U.K., and West Germany with the exclusion of France, Hong Kong, Italy or Japan. Also, Tan and Wong's (1996) study in Singapore, revealed a significant turn of the month effect. They reported that returns on the turn of the month days is distinctly greater compared to other trading days for the years 1975-1994. On the other hand, Bley and Saad (2010) examined market anomalies in; they reported no month-of-the year effect in the context of GCC countries like in the case of many of the Western countries.

Holiday Effect: This effect is defined as the return in the day following a holiday is greater than other trading days. According to Ariel's (1990) findings, the mean return of NYSE and AMEX stocks before the holiday is distinctly greater compared to the stocks on the remaining trading days. Similarly, Cadsby and Ratner (1992) revealed that the existence of the holiday effects for some developed countries, and not holiday effects for others. Their findings also revealed that countries exhibiting holiday effects do so prior to their local holidays with the exclusion of Hong Kong. In Australia, Marrett and Worthington (2009) examined the holiday effect and found in evidence of a pre-holiday effect and evidence shows no post-holiday effect. In the context of the market in Singapore, Tan and Wong (1996) indicated that returns distinctly are greater before the holidays compared to other trading days. Ali, Al-Loughani and Al-Saad (2005) investigated the presence of the holiday effect upon stock returns. The results showed the non-existence of the holiday effect in the Kuwait stock exchange. Patel (2010) found the presence of the holiday effect in the Indian stock market; his results showed pre-holiday returns were substantially higher than that of other trading days. Another study done by Zafar, Urooj, Chughtai and Amjad (2012) found that the returns in pre-holidays have been found significant than post-holidays in Karachi Stock Market.

3. Methodology

The data of this paper is taken from Data stream International covering the period from January 2007 to April 2011. Firstly, the entire period from January 2007 to April 2011was analyzed, then additional analyzes for the three sub-periods were made: January 1, 2007 – May 31, 2008 (pre-crisis Period), from June 1, 2008 to December 31, 2009 (during crisis), and from January 1, 2010 to April 30, 2011 (post-crisis Period). To achieve the paper objectives, t-tests were applied. In addition, the daily return used in this paper is:

$R_t = (P_t - P_{t-1} / P_{t-1})$

Where: P_t is the stock index closing value of day t.

4. Results and discussion

Descriptive analysis: Table 1 shows the mean with the standard deviation of the daily indexes of KLCI starting from January 2007 until April 2011. There were 1069 data. The mean and standard deviation for the whole period was 0.000362 and 0.009699 respectively. To determine whether the mean returns have been changed with the global financial crisis. The entire period is divided into three periods: January 1, 2007 – May 31, 2008 (pre-crisis), and from June 1, 2008 to December 31, 2009 (during-crisis), and from

January 1, 2010 to April 30, 2011 (post-crisis). The table shows that, during-crisis period had lowest average return which is 0.000044 and the post-crisis period had highest mean which is 0.000587.

Table 1: Summary for KLCI index

Period	Obs.	Mean	Std Dev
Pre-crisis period Jan 2007- May 2008	348	0.000509	0.011095
During-crisis period June 2008- Dec 2009	393	0.000044	0.010175
Post-crisis period Jan 2010-April 2011	328	0.000587	0.005623
Entire period Jan 2007- April 2011	1069	0.000362	0.009699

Testing for the Month Effect: In the literature, January effect has been found significant and positive. In contrast to the literature findings, Table 2a and 2b show that the return in April is significantly positive and higher than other months in the entire period. These findings contradict the literature findings by indicating that the highest mean daily return is in January, such as Al-Rjoub and Alwaked (2010), Alrabadi and AL-Qudah (2012) who support the January effect. For the three sub-periods, Table 2a and 2b reports that January has negative returns during and after the crisis. This leads to conclude that the mean daily return shifts from positive in the pre-crisis period to negative for during and post-crisis period. Furthermore, the findings also reveal that May return truns to negative and significant during the crisis and after the crisis. This result supports Farooq et al. (2010) who showed negative returns for the month of May as opposed to January.

Table 2a: Testing for the Month Effect

Period	St.	Jan	Feb	March	April	May	June
Pre-	Obs.	41	35	42	42	41	21
	Mean	0.001182	-0.000507	-0.000788	0.002033	0.000402	0.000281
	Sd.	0.012961	0.011743	0.021755	0.007039	0.007001	0.005938
	t-stat	-0.382893	0.529545	0.748994	-0.880502	0.060664	0.090063
During-	Obs.	41	35	42	42	41	42
	Mean	-0.001182	0.000919	-0.000950	-0.000511	-0.003180	0.000324
	Sd.	0.009409	0.010477	0.007772	0.010024	0.012798	0.011571
	t-stat	0.816694	-0.532971	0.670874	0.374721	2.158239[b]	-0.187969
Post-	Obs.	41	35	42	42	21	21
	Mean	-0.000141	0.000176	0.001287	0.000169	-0.001811	0.001291
	Sd.	0.005642	0.006875	0.006047	0.004605	0.008552	0.005854
	t-stat	0.886296	0.456391	-0.863326	0.514683	2.029849[b]	-0.592099
Entire period	Obs.	100	85	109	107	81	86
	Mean	0.000490	-0.000227	0.000203	0.002125	0.000293	-0.000149
	Sd.	0.010348	0.009325	0.014632	0.007637	0.007808	0.007954
	t-stat	-0.138535	0.583782	0.180798	-1.984569[b]	0.066357	0.509456

Table 2b: Testing for the Month Effect

	Obs.	July	Aug	Sept	Oct	Nov	Dec
Pre-	Mean	22	22	20	22	21	19
	Sd.	0.000674	-0.003252	0.002414	0.002585	-0.000530	0.001812
	t-stat	0.007917	0.018876	0.006704	0.007136	0.008542	0.008084
	Obs.	-0.066864	1.526952	-0.733304	-0.840992	0.410279	-0.488010
During-	Obs.	44	24	20	22	21	19
	Mean	0.000648	-0.000253	-0.000397	0.002633	0.005155	0.001649
	Sd.	0.008182	0.010773	0.008764	0.010989	0.011127	0.008057
	t-stat	-0.417906	0.148197	0.199201	-1.230773	-2.384048[a]	-0.705210
Post-	Obs.	22	22	20	22	21	19
	Mean	0.001318	0.002106	0.001439	0.001418	-0.000188	0.000556
	Sd.	0.004057	0.004171	0.005977	0.003392	0.005691	0.004552

	t-stat	-0.630714	-1.312937	-0.698746	-0.717127	0.652292	0.024310
Entire	Obs.	89	84	81	85	81	81
period	Mean	0.001359	-0.000970	0.000307	-0.000488	-0.000087	0.001005
	Sd.	0.008187	0.011463	0.007898	0.011156	0.008490	0.007284
	t-stat	-1.012163	1.312345	0.053416	0.842813	0.433441	-0.619757

[a, b, c] represents the significance level at the 1%, 5% and 10% respectively.

Testing the Day of the Week Effect: In Table 2, it can be seen that Monday has a negative returns on for the full period along with the two sub-periods (pre-crisis and during crisis). Additionally, the mean Monday returns tend to increase and to be positive in the post-crisis period. Additionally, returns of Monday are significantly negative for the pre-crisis period but no significant in the other sub-periods. This shows that the impact of the day of the week might not be present in Malaysia stock market. Furthermore, for the entire period, the average return was the lowest on Monday (- 0.000077) and on Friday was the highest (0.000748). The findings are consistent as Monday exhibited the least average return. With regards to the pre-crisis period, Wednesday showed the least average return (-0.000404). On the other hand, Thursday showed the highest average return. Also, the findings for the post-crisis period show the Monday had the lowest average returns but without significant differences. Based on these results, it can be concluded that the day effect is not in the Malaysian context.

Table 3: Testing for the Day of the Week Effect

Period	Statistic	Monday	Tuesday	Wednesday	Thursday	Friday
Pre-	Obs.	70	69	72	66	71
	Mean	-0.001652	0.001778	-0.000404	0.001886	0.001052
	Sd.	0.016849	0.009847	0.011976	0.010345	0.008992
	t-stat	1.695860[c]	-0.984143	0.726868	-1.039108	-0.428548
During-	Obs.	80	78	81	74	80
	Mean	-0.000040	0.000372	-0.000986	0.000273	0.000644
	Sd.	0.009173	0.011438	0.008406	0.012190	0.009472
	t-stat	0.083517	-0.317227	1.025622	-0.214215	-0.590585
Post-	Obs.	67	65	68	62	66
	Mean	0.000041	0.000478	0.001230	0.001386	-0.000166
	Sd.	0.005051	0.006977	0.005067	0.005678	0.005157
	t-stat	0.889348	0.173485	-1.059741	-1.242989	1.217761
Entire	Obs.	210	214	222	211	212
	Mean	- 0.000077	0.000165	0.000290	0.000687	0.000748
	Sd.	0.012218	0.008279	0.009131	0.009273	0.009256
	t-stat	0.732389	0.332480	0.123854	-0.543108	-0.647289

[a, b, c] represents the significance level at the 1%, 5% and 10% respectively.

Testing for the Turn of the Month Effect: Consistent with prior studies' findings, the returns of the trading days of the turn of the month with the return on the other days are shown in Table 4. From this table, it is evident that the turn of the month days displays higher returns in comparison with the other trading days for the whole period and for the three periods. Nevertheless, t-test results show a significant difference of the return after the crisis and for the whole period. These findings reveal that the effect of month turn is present following the crisis however not preceding the crisis indicating that the turn of the month effect has risen after some years and it may exist in Malaysia.

Table 4: Turn of the month effect t-Test

Period		Mean	Standard Deviation	Observation
Pre-crisis	Turn of the month days	0.001085	0.012519	69
	Other days	0.000367	0.011835	279
	t-stat	-0.446533		
During-	Turn of the month days	-0.000605	0.010677	79

	Other days	0.000208	0.010033	314
Post-	t-stat Turn of the month days	0.635593 0.002511	0.005565	65
	Other days	0.000111	0.005546	263
Entire period	t-stat Turn of the month days	-3.122240a 0.001554	0.010264	209
	Other days	0.000072	0.009540	860
	t-stat	-1.983059b		

a, b, c represents the significance level at the 1%, 5% and 10% respectively.

Testing for the Holiday Effect: To achieve the paper objectives, the holiday effect is considered as the stock market is closes owing to a public holiday in this day. The trading day that precedes a holiday was defined as a pre-holiday. This is consistent with the methodology employed in previous studies. Table 5 depicts the mean returns of pre-holidays and it is evident that they are greater compared to other trading days for the whole period. A t-test is done, to examine the differences between the means of the day before the public holidays and the other days, and showed insignificant in the whole period and for the sub-periods. These insignificant results are indicating that the holiday effect may not be present in Malaysia.

Table 5: Test for holiday effect

Period		Mean	Standard Deviation	Observation
Pre-	Pre-holidays	0.000342	0.012229	17
	Other trading days	0.000518	0.011964	331
During-	t-stat Pre-holidays	0.059043 0.001006	0.010116	18
	Other trading days	-0.000013	0.010170	375
Post-	t-stat Pre-holidays	-0.410709 0.000264	0.004901	16
	Other trading days	0.000604	0.005664	312
Entire period	t-stat Pre-holidays	0.235263 0.000427	0.011398	52
	Other trading days	0.000359	0.009611	1017
	t-stat	-0.049030		

a, b, c represents the significance level at the 1%, 5% and 10% respectively.

5. Conclusion

The present paper investigated the calendar anomalies including Month effect, day-of-the-week effect, turn-of-the-month effect and holiday effect, in the context of the Malaysian stock market. The results found the April effect and contradicted the findings in the literature concerning the January effect for the whole period. In addition, in January, the mean daily returns are negative following the crisis. Consequently, the mean daily return shifts from positive prior to the crisis to negative following the crisis. In addition, the day of the week effect may not be existing in the Malaysia, because for all days of the

week, there is no systematic pattern for the entire period and the other three sub-periods. The results also showed that the turn of the month days display high average returns, compared to other days in the whole period as well as the three sub-periods with the t-statistic being significant in after the crisis. This reveals that the turn of the month effect has risen throughout the years and it may be present in the stock market in Malaysia. Similar results have been found for the holiday effect; the mean returns on pre-holidays are greater compared to other trading days for the whole period. However, the t-statistics proved to be insignificant indicating that the holiday effect may not be present in the Malaysian stock market.

The calendar anomalies disappearance in the post-crisis period (month effect, day of the week effect) indicates that market makers may be unable to produce abnormal returns through the capitalization of the anomalies. In addition, results of this paper may help market makers in their investment decisions in Malaysia; for instance, following the discovery of the May effect, investors expecting the appreciation of stock price in May will decide to purchase prior to May and sell towards the end of May. Their actions may urge the stock prices to increase prior to May and decrease it towards the end of the same month resulting in the disappearing May effect. From the finding of this paper, the issue that most anomalies might diminish and eventually disappear after the global financial crisis can be supported. The disappearance of calendar anomalies in the post-crisis period is consistent to the notion that Malaysian stock market satisfies the weak-form of the Efficient Market Hypothesis. The disappearance of the calendar anomalies (day of the week effect) from the Malaysian markets in the post-crisis period suggests that the Malaysia markets are becoming more efficient. Additionally, on basis of the findings, the investors in Malaysian stock market have the opportunity to outperform the market by leveraging the turn of the month effect.

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The Relationship between Inflation and Exchange Rate Volatility in Nigeria (1970 - 2012): Further Evidence

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Abstract: This paper reinvestigates the long run relationship between inflation and exchange rate volatility and the extent to which inflation affect the volatility of the exchange rate in Nigeria from 1970 to 2012. The result proves the existence of long run positive relationship between inflation and exchange rate volatility for the studied period. The paper further finds bidirectional long run causality between the variables. On the effect of inflation on volatility of exchange rate, the study points out to potentially variability of exchange rates resulting from the increase in inflation. The contribution of this paper is to highlight a choice of policy reactions by the monetary authority of Nigeria to further strengthen the policy of inflation targeting earlier proposed in the country and keeping the money supply at a level to curtail the inflation.

1. Introduction

The significance of exchange rate stability in determining international competitiveness could not be over emphasized. It directly affects the nation's profitability of tradable goods and services, balance of payment, terms of trade, investment decision and efficient allocation of resources (Taiwo & Adesola, 2013). In developing economies like Nigeria, exchange rate plays an important role in attaining optimal level of macroeconomic growth and stability. Nigeria practices fixed exchange rate prior to the structural change of 1986. The introduction of flexible exchange rate under the Second Tier Foreign Exchange Market (SFEM) in Nigeria was due to persistent deficit in the country's balance of payment. Financing the persistent budget deficit in the economy results to an upward inflation gravity (Enoma, 2011). The sustain increase in the supply of money resulted to the persistent increase in the level of general prices. The phenomenon exists when supply of money grows from 56.6 percent to 91.3 percent in 1975. Furthermore, it also led to the continuous increase in the country's inflationary trend which compounded the rate (Central Bank of Nigeria, CBN, 1982). It was fueled by the enormous fuel revenue generated during the oil boom of 1970s, fiscal expenditure on rehabilitation and reconstruction of the Nigerian post-civil war era as well as a 100 percent increase in wages and salaries of government workers.

Inflation causes the depreciation in exchange rate and persistent decrease in the value of the country's currency which results to a problem in international transaction (Danmola, 2013). Nigeria had experienced rampant inflation over a long period (See figure one). It increases from 13.8 percent in 1970 to 33.9 percent in 1975 later reduces to 7.7 percent in 1982 and 23.2 percent in 1983. The rate of inflation also reduces to 5.4 percent in 1986 and 40.9 percent in 1989; it further jumped to 72.8 percent in 1995 and 6.6 percent in 1999. In 2003, the rate of inflation was reported as 14 percent and later decreases to 12 percent in 2012 (CBN, 2012). This fluctuation in the level of inflation from 1970s to date led to continuous depreciation in the value of naira against the US dollar and other major trading currencies. Nigeria is bedevil with political instability since independence in 1960 couple with several exchange rate policies since prior to the establishment of central bank of Nigeria. According to Omotor (2008), "The country underwent several political conflict and 'stop-go' economic policies which resulted in high inflation and severe macroeconomic instability." Stability of exchange rate in the economy was affected by the unfashionable attribute of the state which does not allow for transparency and continuity of exchange rate stability due to frequent changes in administration that usually comes with a new set of policies. A clear instance is the military regime of 1980s that changes the structure of exchange rate regime from fixed to flexible exchange rate.

Figure 1: Inflation and exchange rate trend in Nigeria
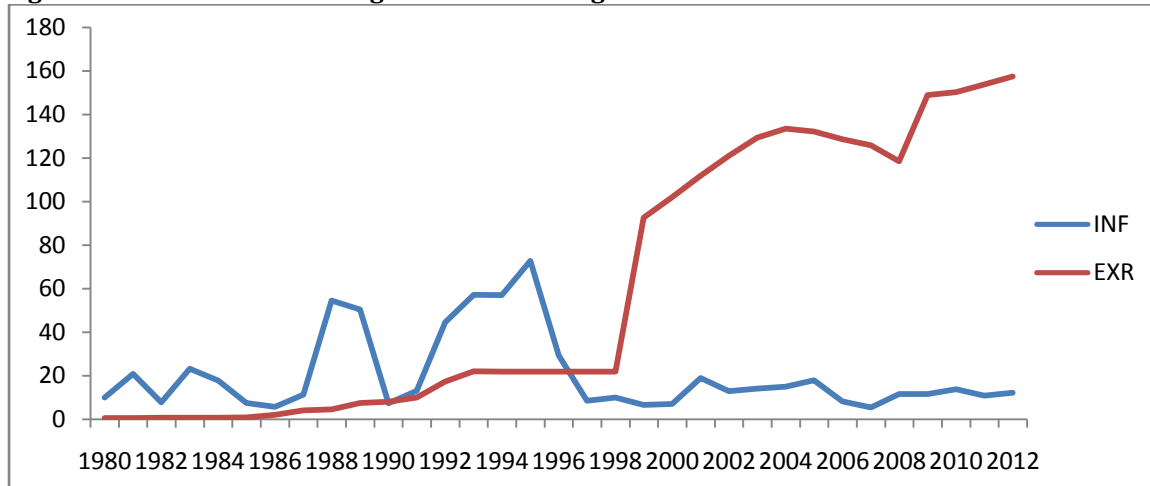
The variability and depreciation in the exchange rate[7] (see Figure 1) resulted to various reforms to transform and deepen the Nigerian foreign exchange market to facilitate stability in exchange rate for greater capital investment and acceleration of economic growth. Upon all these efforts to ensure stable exchange rate, the Nigerian naira has been depreciating. Naira depreciated against US dollar from N0.66 in 1972 to N2.02 in 1986 when Nigeria switched to market based exchange rate regime under the framework of the Nigerian Structural Adjustment Program. It continuous to depreciates to N22.33 in 1994 when Nigeria introduced a formal foreign exchange market. The rate also pushed from N127 to N135 in 2004, thereafter appreciated to N115 in 2007. The global financial crises of 2009 also affected the exchange rate of the naira, where it depreciated to N145 per dollar and later to N155.27 in the first quarter of 2013 (CBN, 2013). Evidence has shown that naira depreciated continuously overtime. Most of the previous studies conducted were on exchange rate determination, and even those studies are constrained with inconsistencies in their findings. Previous studies such as Cookey (1997) study number of factors and found inflation to be insignificant. This is in line with (Emmanuel, 2013; Nnamdi and Ifioma, 2013; Parvar, Mohammed and Hassan, 2011). However, some studies found a positive relationship between the variables (Abbot and Vita, 2011; Adebayo, 2012; Amuzie and Emenyonu,2012; Chaudhry, Akhtar, Mahmood and Faridi, 2011; Ezirim, Amuzie and Emenyonu, 2012; Udoh, Akpan, John and Patrick, 2012). While, some authors argued that there is a negative relationship between inflation and volatility in exchange rate (Danjuma, Shuaibu and Said, 2013; Danmola, 2013; Ndungu, 2000).

Inflation and exchange rate are considered as foremost macroeconomic variables that worth to be closely monitored and controlled by the government. Some studies show bidirectional relationship between the variables (Arabi, 2012; Arize and Malindretes, 1997; and Madesha, Chidoko and Zivanomoyo, 2013. On the contrary, some other studies discover only a unidirectional causal relationship between inflation and exchange rate (Achani, Jayanthy, Fauzi and Abdullah, 2010; Imimola and Enoma, 2011; and Omotor, 2008). Conversely, investigation reveals the absence of causality from neither of the variables (Cheng, Taylor and Weng, 2006; Rashid and Hussain, 2010; and Wang, 2005). Danjuma et al. (2013) and Ezirim et al. (2012) noted that extensive research on exchange rate volatility and inflation in developing countries like Nigeria is relatively scarce which indicates an apparent concern, as a result, of the effects of exchange rate volatility on macroeconomic performance. Furthermore, reasons for inconsistencies in previous studies are not yet established. Existing literature concentrates on the general concept of exchange rate determination (Bergen, 2010; Chen and Wu, 2001; Cookey, 1997; and Ezirim, 1999, as well as the effect of exchange rate volatility on inflation (Enoma, 2011).

Unlike the recent work of Ezirim et al. (2012) which examines the equilibrium relationship between inflation and exchange rate using a bivariate model and suggested investigating tripartite relationship using a different methodology for further research. This study is unique in relation to past studies as it determines the reverse relationship of most previous studies. Renders a comprehensive analysis of the long run relationship between exchange rate volatility and inflation and the magnitude to which inflation affect exchange rate stability in Nigeria using more sophisticated method of analysis that has not been

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[7]Following Clark et al. (2004) the exchange rate volatility is constructed as the standard deviation of the first difference of the logarithms of exchange rate series.

massively used in the context of less developing countries especially Nigeria. The study further exceeds the scope of previous researches by employing a larger sample period and modeling broad variables that have not been jointly studied together. This includes capturing oil price as a control variable that constitutes one of the significant determinants of exchange rate volatility, but usually omitted in Nigerian context. Crude oil accounts over 90 percent of the country's total export and a major source of external balances, although, GDP and foreign reserve are included in the model, but oil prices are entirely different from revenue. Therefore, including such a variable will take care of the problem of omitted variables and further enhance the adequacy and fitness of the model. The paper is divided into five sections. Section two reviews literature and present literature review on inflation and exchange rate volatility. Section three explains the methodologyand data. Section four discusses the empirical results and the conclusion and policy implication are provided in section five.

2. Literature review and theoretical framework

It has been suggested by economic theories like monetary theory of exchange rate determination that inflation is one of the determinants of exchange rate. Since the collapsed of the Bretton Wood system issue on the exchange rate determination and inflation has attracted many researches. In the literature, findings on the relationship between the variables have been inconsistent. Several studies on Nigeria have established a positive relationship between inflation and exchange rate (Adebayo, 2012; Akpan, Inyang and Simeon, 2009; and Udoh, Akpan, John and Patrick, 2012). However, Udoh et al. (2012) further argue that the relationship subsist only in the short run, which may neutralize in the long run condition. While, Ezirim et al. (2012) discover that inflationary spirals affect exchange rate stability not only in the short run but also in the long run situation. Similar studies conducted for the United States provide a similar result that shows significant positive relationship between inflation and exchange rate movement (Holman and Rioja, 2001; Kamin and Klau, 2003; and Kara, 2011). It is thereforeestablished that inflation affects the level of exchange rate. Using data for Canada, Germany, Japan and the United Kingdom,Cheng, Taylor and Weng (2006) obtained similar results confirming causality between wholesale prices and exchange rate. In his attempt to examine the relationship between budget deficit, inflation and exchange rate, Kara (2011) finds that inflation and exchange rate are positively related. Hence, inflation is considered as one of the variables that lead to dollar depreciation in both short run and long run. Additionally, Astley and Garratt (2001)[8] claim positive relationship between the United Kingdom exchange rate and consumer price (a proxy to inflation). They further claim that the appreciation of UK pound sterling is associated to the fall in consumer prices. Similarly, Kara and Nelson (2003) find weak positive relationship between exchange rate and inflation in the UK.

Empirically,Abbot and Vita (2011)[9]point out that inflation cost of economic growth in relation to exchange rate to be significant for developing countries with floating exchange rates system, mainly due to their weak financial system. Similarly, Carranza, Galdon-Sanchez and Gamez-Biscarri (2009)[10] show that the effect of inflation on real depreciation is more observable in nations practicing fixed exchange rate than flexible exchange rate regime. Though, almost same sample is used in the cross country analysis but the result is inconsistent and inconclusive. However, several other studies in Nigeria and elsewhere countered the positive relationship between inflation and exchange rate volatility. The studies point out that any increase in inflation will prompt about half percent diminishes in exchange rate unpredictability (Danjuma, Shuaibu and Said, 2013,and Danmola, 2013 for Nigeria; Eichenbaum and Evans, 1995, and Kim, 1998 for the United States; and Ndungu, 2000 for Kenya). A relative variability in relationship between inflation and exchange rate in Nigeria is also reported in some studies whererelationship between inflation and exchange rate cannot be established as proposed by Cairns, Ho and McCaulay (2007); Chen and Wu (2001); Emmanuel (2013), Kamas (1995), Nnamdi and Ifionu (2013), and Parvar, Mohammed and Hassan (2011)[11].

To explore interdependencies some studies look at the possibility of causality between the variables and emphasize the existence of the simultaneous long run feedback between exchange rate fluctuations and

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[8]Astley and Garratt (2000) study the relationship between price implications and exchange rate fluctuations in United Kingdom, Japan, Germany and France for the period of 1973 to 1994.

[9] They examine the preelationship between inflation and growth with reference to exchange rate for 125 industrialized and developing countries.

[10] The study on the effect of exchange rate depreciation in 124 dollarized countries including Nigeria.

[11]Kamas (1995) shows that neither exchange rate nor domestic loan can explain fluctuations in Columbian inflation.

its determinants such as inflation (Arabi, 2012; and Madesha, Chidoko and Zivanomoyo, 2013)[12]. For comparison Achani at el. (2010); Imimola and Enoma (2011) and Omotor (2008), show unidirectional relationship from exchange rate volatility to inflation particularly in Asia with a strong correlation between inflation and exchange rate. They further find that sensitivity of inflation to changes in exchange rate be higher in Asia than EU and North America. Notwithstanding, these findings are only concerned with how exchange rate affect inflation not the other way round as proposed in this study using monetary theory of exchange rate determination as a theoretical framework.Using US data, Kim (1998) concludes that despite the negative relationship between the variables, there is no causality from inflation to exchange rate. The study is further supported by recent findings like Cheng, Taylor and Weng (2006); Rashid and Hussain (2010); and Wang (2005).

Some studies in oil producing countries also show that the exchange rate volatility is largely determined by the changes in the oil prices determine by the world market. Some recent studies in Nigeria include Englamo, Duke, Ogunleye & Ismail (2010); Olomola (2006) & Oriawote & Eriemo (2012). Englamo et al. (2010) examines the impact of oil price volatility, external reserve and demand for foreign exchange on Nigerian exchange rate volatility. The findings show that oil price instability massively causes exchange rate volatility in Nigeria. While, a study by Olomola (2006) indicates that the impact of oil price shock on output, real exchange rate, inflation and money supply in Nigeria, yields a significant causal relationship from oil prices to exchange rate volatility. Result from Oriawote & Eriemo (2010) on the other hand, exhibits a long run causal relationship and persistent impact from real oil prices and exchange rate volatility in Nigeria. This finding is consistent with Parvar, Mohammed & Hassan (2011). In contrast, a similar study conducted in Norway reveals a negative relationship between oil prices and Norwegian exchange rate fluctuations (Akram, 2004). Result of no relationship between oil prices and exchange rate fluctuations is exhibited in Habib & Kalamoro (2007) who study the impact of real oil price on the real exchange rate in Norway, Saudi Arabia and Russia. They conclude that there exist no relationship between oil prices and exchange rate volatility in Norway and Saudi Arabia. Although this result might be influenced by the deviation from the IMF standard measurement of the variable, effective exchange rate and in addition, the unbalance data affect both highlighted in their study.

The inconsistencies in findings of these researches lead to inconclusive and mixed result. Moreover, variations in market and policy structures of the countries make comparisons very difficult to justify the actual relationship that exist between inflation and exchange rate volatility especially in cross country analysis. The modeling and measurement of variables especially the exchange rate volatility may also lead to disparity and inconsistent result. This research work provides a comprehensive analysis of the long run relationship, causality and the extent to which inflation is related to exchange rate volatility in Nigeria. The underpinning economic theory employed in this study is the monetary theory/model of exchange rate determination. The model analyzed how exchange rate stability is affected due to changes in domestic and foreign demand and supply of money. This is based on assumptions that high capital mobility exist, perfect substitution of foreign and domestic commodities, PPP and interest rate parity continuously holds over time (CBN, 2010).

Theoretically, the model implies that changes in money supply will have an effect on inflation and exchange rate volatility. It explains how changes in income induce exchange rate volatility through the changes in money demand and supply[13].It further relates the interest rates with external reserves and thus the exchange rates volatility. The theory postulates that increase in money supply increases domestic inflation rate and increase in domestic inflation lead to low demand for local currency that raises the exchange rate volatility. The relationship between oil prices and exchange rate is well established (Amano and Van Norden, 1998; Gulub,1983; Corden, 1984; MacDonald, 1998; and Aziz, 2010. A country like Nigeria,a self-sufficient oil producing country is expected to experience exchange rate appreciation and stability when oil price increases in relation to oil importing countries, ceteris paribus. Various studies examine the determinants of equilibrium exchange rates in support of various theoretical framework of exchange rate determination. Studies, for example, Arabi, (2012); Cookey, (1997) and Macdonald, (1988) consider the rate of interest, inflation rate, foreign reserves, gross domestic product

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[12] Similar result obtained in 41 cross country examination of exchange rate volatility and inflation under flexible exchange rate (Arize & Malindretes, 1997).

[13]Balassa and Samuelson productivity-based model postulates that the real exchange rate is a function of inter country relative productivity differentials measured by the country's gross domestic product. Increase in domestic product only reduces the relative prices slightly and the rate of exchange appreciates which reduce exchange rate volatility and vice versa (Balassa, 1964 & Samuelson, 1964).

(GDP), money supply, and current account balances as elements that influence volatility of exchange rate. Others such as Zhou (1995) further argued that exchange rate volatility is also determined by the fluctuations in the oil prices. Some recent studies in support of this argument include Englamo, Duke, Ogunleye and Ismail (2010); Olomola (2006) and Oriawote and Eriemo (2012). In a nutshell, exchange rate volatility in Nigeria is a function of inflation, interest rate, external reserve, gross domestic product (GDP), money supply and oil prices. In another word, exchange rate volatility is expected to be positively related to inflation and money supply and negatively related to income (gross domestic product), oil prices and foreign reserve while interest rate may be negative or positive relying upon the underpinning hypothesis or theory.

3. Methodology and data

This study uses annual data from 1970 to 2012 which is obtained from various issues of Central Bank of Nigeria statistical bulletins, and World Bank development indicators. Hakkio & Rush (1991) state that using quarterly and/or monthly data in time series analysis that involve the test of co-integration does not add value to the robustness of the results. Even though, it has been suggested that an extensive number of observational data be necessary to ensure a reliable statistical significance. Exchange rate volatility (VEX) still lacks a standard unit of measurement as some researchers use variance, standard deviations at level or difference, moving averages, Autoregressive and Generalized Autoregressive Conditional Heteroscadesticity ARCH and GARCH models among others which also differ among studies (Bahmani-Oskooee & Hegerty, 2007). Early researchers such as (Akhtar & Hilton, 1984) first measure the volatility as the standard deviation of the nominal exchange rate using daily data in three months interval. It was later criticized for not capturing the actual volatility. Following Clark et al. (2004), the most effective and widely adopted measure of volatility of exchange rate, which is the "standard deviation of the first difference of the logarithms of exchange rate series," is, therefore, adopted for this study. All other variables are transformed into logarithms for computations except inflation and interest rate.

Models specification: The study adopts the monetary model analysis of exchange rate determination which explains the ways in which exchange rate is affected by demand and supply of money. It is based on certain assumptions and in support of numerous theoretical frameworks of exchange rate determination. From the preceding section, the following exchange rate volatility function can be derived for Nigeria.

$$VER = f(INF, INT, GDP, MSS, FRV, OIL) \tag{1}$$

Where *VEX*, *INF*, *INT*, *GDP*, *MSS*, *FRV* and *OIL* represent exchange rate volatility, inflation, interest rate, income, money supply, external reserve and oil price, respectively. μ is the stochastic error term.

In our study, the possible long run relationship amongst the variables under consideration is examined based on autoregressive distributed lag (ARDL) bounds testing approach introduced by Pesaran, Shin and Smith (2001). ARDL model is a solution to the possibilities of producing false results from conventional co-integration tests when co-exist differing orders, I(1) and I(0) series. The method also able to deal with the issue of small-sample problem and thus it is appropriate in this study. According to Narayan (2005), the model also provides efficient and unbiased estimation even if the sample size employed is small. The ARDL model also takes into account the error correction term in its lagged period. The analysis of error corrections and autoregressive lags fully covers both the long-run and short-run relationships of the variables tested. As the error correction term in the ARDL model does not have restrictive error corrections, ARDL is an Unrestricted Error Correction Model (ARDL-UECM). In this paper, the test for co-integration of the variables under consideration is based on the following ARDL-UECM model:

$$\Delta LVER_t = \sum_{j=1}^{n_1} v_j \Delta LVER_{t-j} + \sum_{j=0}^{n_2} \phi_j \Delta INF_{t-j} + \sum_{j=0}^{n_3} \varphi_j \Delta INT_{t-j} + \sum_{j=0}^{n_4} \gamma_j \Delta LRMS_{t-j}$$

$$+ \sum_{j=0}^{n_5} \eta_j \Delta LRGDP_{t-j} + \sum_{j=0}^{n_6} \lambda_j \Delta LRFR_{t-j} + \sum_{j=0}^{n_7} \pi_j \Delta LOIL_{t-j} \tag{2}$$

$$+ \omega_1 LVER_{t-1} + \omega_2 INF_{t-1} + \omega_3 INT_{t-1} + \omega_4 LRMS_{t-1} + \omega_5 LRGDP_{t-1}$$

$$+ \omega_6 LRFR_{t-1} + \omega_7 LOIL_{t-1} + \varepsilon_t$$

Where ε_t is an independent identical distribution (i.i.d.) of white noise and t is the time trend. For the long run relationship the null test of the ARDL model is $H_0 : \omega_i = 0$, $\forall i (i = 1, 2, \dots 7)$, and the alternative

hypotheses is H_1 = at least one $\omega_i \neq 0$, $\forall i (i = 1, 2, \ldots 7)$. If the calculated F-statistic of our ARDL bound testing is higher than the upper value, the null hypotheses of no relationship is rejected and conclude existence of co-integration among the variables. There is a long run equilibrium relationship among the variables under consideration. On the other hand, if the F-statistic falls below the lower value, we cannot reject the null of no co-integration relationship among the variables. However, we cannot reach any definite conclusion if the *F*-statistic falls within the asymptotic upper and the lower critical values. However, Narayan, (2005) and Dahalan & Jayaraman, (2006) argue that the critical values generated by Pesaran and Pesaran (1997) and Pesaran et al., (2001) were for large sample size observations. Therefore, to avoid size distortion, this study adopts the small sample size critical values computed by Narayan (2005) for the bound testing process. A dynamic error correction model is estimated to determine the long run and short run causal relationship among the integrated variables (Engle and Granger, 1987). While the long run dynamism is explained by the error correction term (*ECT*) which further proves the existence of long run relationship by its significant negative value, the short run behavior is described by the lagged terms individual coefficients of the estimate.

Stationarity test: A battery of unit root tests is employed in the study that includes Dickey and Fuller (1979) Augmented Dickey Fuller (ADF) and Phillips-Perron (1989). Perron (1989) however suggested that conventional unit root tests such as ADF tests are biased towards the nonrejection of the unit root null in the case of structural breaks. Lee and Strazicich (2003, henceforth LS) have developed tests which account for structural breaks in order to avoid bias in favor of a unit root hypothesis. We include the LS minimum Lagrange multiplier (LM) unit root test with one and two breaks.

4. Empirical Results

Unit root test: One of the advantages of applying Autoregressive Distributed Lags (ARDL) model is that, bound co-integration test can be performed on variables without concern about the level of integration. Nevertheless, the implication is that the result will be null and void when variable(s) order of integration is beyond I(1) and difficulty to decide when the *F*-statistics value falls between the lower and upper critical bounds (Adebola, Yusoff and Dahalan, 2011). Inferences drawn from such kind of data can be very sensitive to specification problem especially when variables are neither I(0) nor I(1) or mutually co-integrated. The preliminary step in our analysis is concerned with examining the integration properties of the series under consideration. The results of the various unit root testsare shown in Tables1, 2 and 3.

Unit root tests without structural breaks: We first perform tests for the presence of unit roots in series under consideration using augmented Dickey Fuller (ADF) and Philip and Perron (PP) tests. Table 1 reports the results of unit-root tests. As evident, we fail to reject the null hypothesis of non-stationarity for *LVER*, *INT*, and *LOIL* series at all significance levels. Further, we do reject the null of non-stationarity for the first differences of these series, implying that these series are stationary at first difference or I(1) processes. Nonetheless, the tests reject the null hypothesis of a unit root in *INF*, *LRMS*, *LRGDP* and *LRFR* series at five percent significance level, implying that they are stationary at level or integrated oforder zero, I(0).

Table 1 Augmented Dickey Fuller (ADF) and Phillips - Perron (PP) Unit root tests

Variables	Levels				First difference			
	k	ADF	k	PP	k	ADF	k	PP
LVER	0	-1.8631 (.6556)	3	-2.0725 (.5456)	0	-5.1421* (.0008)	2	-5.1399* (.0008)
INF	0	-3.4574** (.0143)	3	-3.4161** (.0159)				
INT	0	-2.2920 .4289)	3	-2.1401 (.5092)	1	-6.8777* (.0000)	0	-8.1778* (.0000)
LRMS	0	-3.9079** (.0204)	2	-3.8827** (.0216)				
LRGDP	0	-3.8478** (.0235)	2	-3.8259** (.0248)				
LRFR	0	-3.5918**	2	-3.6180**				

		(.0247)		(.0402)				
LOIL	0	-2.4099 (.3694)	0	-2.4099 (.3694)	0	-5.7851* (.0001)	0	-5.7851* (.0001)

Note: k is the optimal number of lagged first-difference terms included in the unit root test to correct for serial correlation. ADF test is estimated based on Schwarz Information Criterion (SIC) and PP on spectral estimation method and Bartlett kernel Newey-West band selection. The probability values are reported in parenthesis. * and ** implies significance level at 1% and 5% respectively. The values in parenthesis represent the probability of the test statistic.

Unit root tests with structural breaks: The results of the two-break minimum LM unit root tests are shown in Table 2. The unit root null is rejected in *INF*, *LRMS*, and *LRGDP* at onepercent significance level and in *LRFR*at 10 percent significance level. All are for model A.For model C, the unit root null is rejected in*INF*, *LRMS* and *LRGDP*at one percent significance level and in *INT* at five percent significance level. The break points in all seriesexcept for *INT*, *LRMS* and *LRGDP*are statistically significant for model A and most breaks are significant in model C. Our results could imply that including two breaks instead of one may not be appropriate and can adversely affect the power to reject the null hypothesis taking into consideration of the small sample size of the data used. As such we performed additional test using the LS one break LM unit root test (Lee and Strazicich, 2013). The advantage of the one break minimum LM test is that it is free from spurious rejection and size distortion in the presence of a unit root with a structural break. The results are shown in Table 3 below.

Table 2 Lee and Strazicich (LS) Two-Break Lagrange Multiplier (LM) Unit Root Tests

		Model A					**Model C**			
Variables	k	T_B	$\hat{t}_{\gamma j}$	Test Statistic	Critical Value Break Points λ	k	T_B	$\hat{t}_{\gamma j}$	Test Statistic	Critical Value Break Points λ
LVER	1	1988	2.233**	-1.693	.05	1	1985	5.051**	-4.516	.12
		1998	7.725*		.19		1997	1.553		.04
INF	1	1991	1.964**	-6.270 [a]	.05	1	1992	2.423**	-6.305 [a]	.06
		1995	-2.551*		-.06		1997	-.559		-.01
INT	1	2002	-.696	-2.635	-.02	1	1987	4.351*	-5.382 [b]	.11
		2006	-1.567		-.04		2007	-3.684*		-.09
LRMS	1	1985	-.282	-4.785 [a]	-.01	1	1981	-5.027*	-6.789 [a]	-.16
		1996	.734		.02		1996	4.132*		.13
LRGD	1	1980	-1.590	-4.693 [a]	-.05	1	1981	-5.310*	-6.533 [a]	-.17
		1995	.558		.02		1996	4.085*		.13
LRFR	1	1983	-2.171**	-3.773 [c]	-.07	1	1983	.264	-4.770	.01
		1988	-3.325*		-.03		1992	-3.103		-.10
LOIL	1	1985	-1.962**	-1.656	-.06	1	1977	.003	-4.627	.00
		1990	-.887		-.03		1984	-4.119*		-.13
Critical values		1%	5%	10%						
Model A		-4.545	-3.842	-3.504						
Model C		-5.823	-5.286	-4.989						

Note: k is the optimal number of lagged first-difference terms included in the unit root test to correct for serial correlation. $\hat{T}_B$ denotes the estimated break points. $\hat{t}_{\gamma j}$ is the t value of DT$_{jt}$, for j=1,2. SeeLee and Strazicich (2003) Table 2 for critical values. a, b and c indicates significance of the LM test statistics at 99%, 95% and 90% critical level, respectively. While *, ** and *** indicates the two-tailed significance level of the break date at 99%, 95% and 90% respectively.

The one break LM test results for unit root hypothesis are essentially the same as the two-break results where the unit root null in *INF*, *LRMS*, *LRGDP*and *LRFR* are rejected at five and tenpercent significance levelsfor model A. The results imply that *INF*, *LRMS*, *LRGDP* and *LRFR*series are determined to be stationary with breaks while the unit root null hypothesis is accepted in all other series. As for model C, the results are similar to model A. We conclude from the tests that all series except for *LVER* and *INT*are stationary with structural break.

Table 3: Lee and Strazicich (LS) One-Break Minimum Lagrange Multiplier (LM) Unit Root Test

Variables	**Model A**					**Model C**				
	$\hat{k}$	$\hat{T}_B$	$\hat{t}_{\gamma j}$	Test Statistic	Critical Value Break Points λ	$\hat{k}$	$\hat{T}_B$	$\hat{t}_{\gamma j}$	Test Statistic	Critical Value Break Points λ
LVER	1	1998	1.105	-1.558	.04	1	1985	3.982*	-3.064	.13
INF	1	1996	-7.649*	-4.034 [b]	-.18	1	1988	-.999	-4.450 [c]	-.02
INT	1	2002	-.529	-2.200	-.01	1	1988	-.102	-3.760	-.01
LRMS	1	1985	-.503	-3.667 [b]	-.02	1	1993	-.391	-5.129 [a]	-.01
LRGD	1	1995	.730	-3.969 [b]	.02	1	1994	2.759*	-5.550 [a]	.09
LRFR	1	1983	-1.685***	-3.213 [c]	-.05	1	1992	-2.378**	-4.218 [c]	-.08
LOIL	1	1985	-1.907***	-1.544	-.06	1	1982	-4.602*	-3.818	-.15
Critical values	1%	5%	10%							
Model A	-4.239	-3.566	-3.211							
Model C	-5.110	-4.500	-4.210							

Note: $\hat{k}$ is the optimal number of lagged first-difference terms included in the unit root test to correct for serial correlation. $\hat{T}_B$ denotes the estimated break points. $\hat{t}_{\gamma j}$ is the *t* value of DT$_{jt}$, for j=1,2. See J. Lee and Strazicich (2013) Table 2 for critical values. a, b and c indicates significance of the LM test statistics at 99%, 95% and 90% critical level, respectively. While *, ** and *** indicates the two-tailed significance level of the break date at 99%, 95% and 90% respectively.

According to Lee and Strazicich (2003, 2013), the critical value of break points λ, the asymptotic null distribution for model A is found to be invariant to the structural breaks location λ in both endogenous and exogenous breaks of LM test. The invariance property however does not holds for model C in which the endogenous break of LM unit root test is variant to the location λ eventhough, the test statistics does not diverge under the null hypothesis regardless of the magnitude of the breaks. In this study the break point λ is computed as T_B/T and found not beyond $\lambda = 0.1$. Therefore, the critical values displayed in Table 2 and 3 are appropriate for testing the null hypotheses. In both one and two breaks of LM tests,the break points are found to be more statistically significant under model C compare to model A. This means that the series are characterized by more of changes in both level and trend than only shift(s) in level. Tables 1, 2 and 3 show similar results with *LVER*, *INT* and *LOIL* indicate I(0) processes and all other series are integrated of the same order, i.e. I(1). In other word, the integration orders for the series in the study are mixed. Therefore, the Autoregressive Distributed Lags (ARDL) model appears to be the most appropriate technique since the series are mutually integrated.

ARDL Bound testing approach to co-integration

Long run relationship: In our ARDL analysis the lag lengths are crucial for the credibility of our empirical results. The results from the lag selection based on Schwarz Bayesian Criteria are 1, 0, 0, 0, 0, 1, 1 for *LVER, INF*, *INT*, *LRMS*, *LRGD*, *LRFR*, and*LOIL*. We constitute an ARDL-UECM (1, 0, 0, 0, 0, 1, 1) model for our long run and short run examination of relationship between exchange rate volatility and inflation in Nigeria.

Table 4 ARDL bound testing for co-integration analysis

Dependent variable	Calculated F-statistic
LVER	6.678***
INF	1.743
INT	1.621
LRMS	2.066
LRGD	2.988
LRFR	2.151
LOIL	4.451*

	Critical bound's value			
	Narayan (2005)[a]		Pesaran et al. (2001)[b]	
Level of significance (percent)	Lower bound	Upper bound	Lower bound	Upper bound
1	4.270	6.211	2.96	4.26
5	2.970	4.499	2.32	3.50
10	2.457	3.797	2.03	3.13

Notes:

***, ** & * represent 1%, 5% and 10% level of significance respectively. k = 6 and n = 30.

[a] Narayan (2005), p. 1988. Case III: Unrestricted intercept and no trend,

[b] Pesaran et al. (2001), p. 300. Table CI(iii) Case III: Unrestricted intercept and no trend and

Table 4 presents the estimated result of the ARDL-UECM model based on Equation 2. According to Table 4, only when *LVER* and *LOIL* as dependent variables the computed F-statistic are greater than the critical value provided by Narayan (2005) and Pesaran et al. (2001). Since our interest focuses on exchange rate variability and inflation, the discussion is centered on the results relating to two equations with exchange rate variability and inflation as dependent variables, respectively. The results show that the calculated *F*-statistic of the bound test (Pesaran et al.; 2001) for the equation with *LVER* as dependent variables is 6.678, which is significantly above the 1 percent significance level while the *F*-statistic for equation with *INF* as dependent variable is below the lower and upper bound critical values. The results provide the evidence of the existence only for the long-run equilibrium relationship between exchange rates volatility and macro fundamentals. Meaning, There is a long run co-movement between exchange rates variability and macro fundamentals. We conclude that the variability of the exchange rates in Nigeria depends on the changes of the macro fundamentals.

Following, the long run equilibrium between exchange rates variability and the macro fundamental in the study can be modelled:

$$LVER = \underset{(1.194)}{-6.365} + \underset{(0.009)}{0.022 INF^{**}} + \underset{(0.033)}{0.135 INT^{*}} + \underset{(0.454)}{0.654 LRMS}$$

$$+ \underset{(0.440)}{0.019 LRGDP} + \underset{(0.157)}{0.413 LRFR^{**}} - \underset{(0.250)}{0.844 LOIL^{*}}$$

Table 5 Diagnostic tests of the long run equilibrium model

	Null hypothesis	Test statistics
Breusch-Godfrey serial correlation LM test	No autocorrelation	$\chi^2_{(1)}$ = 1.257[0.262]
Ramsey's RESET test	The model is correctly specified	$\chi^2_{(1)}$ = 0.741[0.389]
Jarque-Bera normality test	Normality of error term	$\chi^2_{(2)}$ = 1.50[0.472]
ARCH test	Homocedasticity	$\chi^2_{(1)}$ = 0.143[0.705]

The figures in the parentheses are the standard errors, while * and ** indicate significance levels of 1 percent and 5 percent, respectively. In the estimated model above, the inflation coefficient shows a positive sign which signifies a significant positive effect of inflation on exchange rate variability in Nigeria. It shows that a unit increase in the inflation rate will result in variability of more than two percent in the exchange rates. Interest rate, real foreign reserve and oil prices also show significant roles in the exchange rates variability in the study. However, real money supply, and real gross domestic product are found to be insignificant in explaining Nigerian exchange rate variability in the long run. To avoid

spurious result and arrive at valid and reliable conclusion, the adequacy of the model is further examined by the usual diagnostic tests. The null hypothesis of diagnostic tests of no serial correlation, normality of distribution of residuals, no functional form misspecification and homoscadesticity could not be rejected as shown in the Table 5. The results are the evidence of the adequacy of the above estimated long run model.The stability of the model is further supported by the cumulative sum (CUSUM) and the cumulative sum of squares (CUSUMSQ) of the recursive residuals test for structural stability. The plots of both the CUSUM and CUSUMSQ are within the 5 percent critical bound and hence confirm the stability of the model over the period of study. The graphical presentation of the CUSUM and CUSUMSQ statistics are shown in Figure 2and Figure 3.

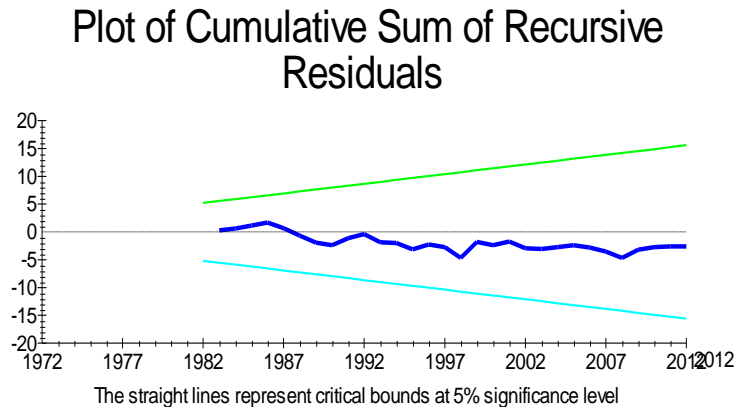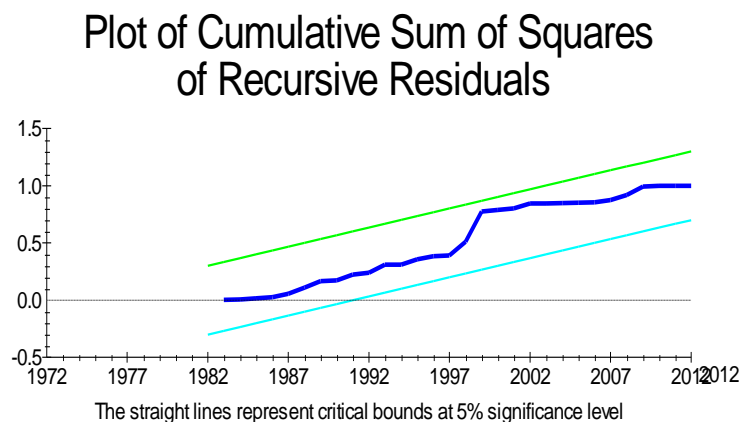**Figure 2 Plot of CUSUM statistics for stability test**

Plot of Cumulative Sum of Recursive Residuals

The straight lines represent critical bounds at 5% significance level

Figure 3 Plot of CUSUMSQ statistics for stability test

Plot of Cumulative Sum of Squares of Recursive Residuals

The straight lines represent critical bounds at 5% significance level

Vector Error Correction Model (VECM)

Short run relationship and Granger-causality: The interaction between exchange rates variability and macro fundamentals can be further examined. In estimating the VECM we can examine the short-run impact of change in a given variable on the independent variable. The VECM is based on a uniform lag length of one as in the co-integration model. By construction, the error correction term (ECT) represents to which the exchange rates variability is away from long-run alignment. The short-run relationship of vector error correction model (VECM) is given as follows:

$$\Delta LVER = -2.257 - 0.354^{*} ECT_{t-1} + 0.008\Delta INF_{t}^{***} + 0.048\Delta INT_{t}^{*} + 0.232\Delta LRMS_{t} + 0.006\Delta LRGD_{t}$$
$$\quad\quad\quad\quad (0.079) \quad\quad (0.004) \quad\quad\quad (0.009) \quad\quad\quad (0.154) \quad\quad\quad (0.156)$$
$$- 0.023\Delta LRFR_{t} - 0.012\Delta LOIL_{t}$$
$$\quad (0.058) \quad\quad\quad (0.121)$$

The size of the coefficient on the error term (-0.354) in the equation indicates that about 35 percent adjustment toward the long-run equilibrium takes place within a year. Both *Wald*-test and *t*-test of the VECM are reported in Table 6. In this system, the *t*-value of the coefficient of the *ECT* in *LVER* is statistically significance at 1 percent level. The results confirm that all the variables are tied together with a long-run relationship and the error disequilibrium can be used to predict the next period of exchange rates variability for Nigeria. The statistical significance of either the *Wald*-test of joint explanatory variables or the t-test of the ECT indicated the presence of Granger-causality. The dependent variable in the formulated equations is influenced by the instability of the regressors and that of the error correction term. The negative significant values at 1 percent level of the error correction terms further prove the bound test co-integration result earlier reported. The significant negative value of *ECT* indicates quick adjustment to the disequilibrium of the last period which takes a short time to revert to equilibrium. However, there could be deviations in the short run but it adjusts quickly and moves together again in the long run. The below result (Table 6) shows the existence of bidirectional causality between exchange rate volatility and inflation as well as interest rate in the long run, and one-way causation from exchange rate volatility to real income and foreign reserve without a feedback effect. In a nutshell, exchange rate volatility is significantly affected by the domestic inflation, interest rate while gross domestic product, money supply, foreign reserve and oil prices have no long run causal effect on exchange rate volatility for the sample period in Nigeria. This simply shows that exchange rate stability in Nigeria is affected by inflation and interest rate.

Table 6 Granger-Causality Tests Based on Vector Error Correction Model (VECM)

Dependent variable	Wald statistic							t-statistic
	ΔLVER	ΔINF	ΔINT	ΔLRMS	ΔLRGD	ΔLRFR	ΔLOIL	ECT(-1)
ΔLVER	-	3.372*	28.526***	2.269	0.002	0.167	0.01	-4.447***
ΔINF	7.496***	-	0.289	0.597	10.04***	0.002	7.791***	-3.62***
ΔINT	15.211***	0.34	-	0.361	0.237	3.81**	1.506	-4.111***
ΔLRMS	0.392	2.683	0.318	-	241.473***	0.914	4.815**	-4.621***
ΔLRGD	4.188**	4.959**	0.977	151.797***	-	0.006	13.078***	-5.02***
ΔLRFR	3.499***	17.569***	0.963	0.277	0.121	-	9.924***	-5.381***
ΔLOIL	2.426	1.391	0.005	5.545**	4.349**	0.013	-	-2.701**

***, ** & * simply shows the rejection of null hypothesis at 1%, 5% and 10% level of significance. *t*- statistic is used to determine the long run causality while Wald χ^2 statistics is reported for the variables.

5. Conclusion

This paper determines the long run causal relationship between inflation and exchange rate volatility in Nigeria from 1970 to 2012. The result uncovers that there is a noteworthy long run positive relationship between inflation and exchange rate volatility in Nigeria for the period studied. It points out to potentially variability of exchange rates resulting from the increase in inflation. The result of the study is in support of previous researches such as Akpan et al. (2009); Ezirim et al. (2012); Holman & Rioja, (2001); Kamin & Klau, (2003); Kara (2011). In addition, Markiewcz (2012) suggest that inflation targeting lowers the volatility of exchange rate. Theories also predict that the increase in inflation is associated with domestic currency depreciation which makes currency vulnerable to foreign exchange shocks (Hallwood & MacDonald, 1994). The finding of this research paper is explained by such theories like purchasing power parity and monetary theory of exchange rate determination in Nigerian context.

The study further shows bidirectional causality from inflation to exchange rate volatility and vice versa. This result is in line with Arabi, (2012); Madesha et al. (2013) among others.The study is constraint by the small sample size. Robust analysiswith more credibleoutcomescould have been produced if a significant size of the number of observations is available. Nevertheless, the contribution of this paper is to highlight a choice of policy reactions by the monetary authority of Nigeria to further strengthen the policy of inflation targeting earlier proposed in the country and keeping the money supply at a controlled level to curtail the inflationary rate.

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Subordinate Economic Development in the Arab World during the Nineteenth   Century

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Abstract: The modern world haswitnessed the first experience of local development supported by domestic resources that were monopolized by the West at the hands of Mohamed Ali Pasha during the 19th century. This unprecedented manner of development devastated in 1848 after the collapse of the Egyptian model due to western intervention. In the aftermath of Mohamed Ali's reign, development followed a haphazard model resulting into economic catastrophes. Khedive Said, son of Mohamed Ali, sold out the rights and privileges of the Suez Canal Company to the west on conditions that led to the deterioration of the local economy. Like his brother Said, Khedive Ismail introduced failure policies that negatively affected the Egyptian economy due to subordination to the west. Following the Egyptian model of economic development that depends entirely on the West, Tunisia suffered from the same consequences. Such kind of development led to the bankruptcy of both Egypt and Tunisia in addition to the British occupation of Egypt followed by the French occupation of Tunisia. The huge Egyptian debts to England were exploited by the latter to blackmail the former and keep the occupied country under western control. In Tunisia, the French occupation authorities did not need any justifications to continue their domination of the country. Within the context of this argument, the current paper explores the negative consequences of the economic policies dominated by the west on Egypt and Tunisia.

1. Introduction

The Arab world has witnessed a period of deterioration on all levels due to the   weakness of the Ottoman Empire and the beginning of the French colonization by the end of the eighteenth century. The military interference of France in Egypt and the Levant triggered the fury of other rising colonial powers; particularly Great Britain. Several colonial forces were seeking to inherit the legacy of the collapsing Ottoman Empire and they united against the French ambitions in the Arab world. The conflict between France and Britain resulted into the withdrawal of the French forces[i] from the Levant and Egypt; to be replaced by British colonization after the ejection of French from the region. After the evacuation of the French from Egypt, problems erupted between the Mumluks/Ottomans and Britain; however there was an agreement between the two sides which ended the British occupation of Egypt. Nevertheless, there was anarchy in Egypt after the Ottomans regained their power. The continuous chaos paved the way for the accession of Mohamed Ali who became the ruler of Egypt regardless of the Ottomans' concerns about his defection.

Systematic Development: Mohamed Ali - referred to later as Ali - controlled Egypt and North Africa; and in his attempt to create a modern state, he developed both agriculture and industry. Ali was also interested in developing trade and commerce and he created connections between Egypt and Italy in this respect[ii]. He introduced new crops like cotton that will serve both his commercial and industrial policies in cooperation with European partners[iii]. Ali also sent student delegations to Europe to get education in medicine, engineering and other applied sciences and industries besides studying foreign languages in the west[iv]. Ali established the first high schools in medicine and engineering the region. He constructed a strong army importing weapons from Europe and then started an independent military industry in Egypt. Moreover, Ali recruited experienced French military officers to train his armed forces.[v]

Subordinate Development in the Post-Mohamed Ali Era: After the death of both Mohamed Ali and his son Ebrahim in 1848, followed by the assassination of Khedive Abbas in 1852 due to conflicts in the royal family, Khedive Said took over the rule. Said was influenced by the European way of life and he was using the state's budget for personal pursuits[vi]. After becoming the ruler of Egypt, Said engaged Egypt in mega projects without previous studies; which bled to commercial catastrophes.

Suez Canal: With the beginning of the Suez Canal project, Said borrowed enormous amounts of money from foreign sources because Egypt was not financially equipped to advocate such a huge project. The accumulated debts led to calamities and had negative consequences on the Egyptian nation[vii]. Debt led to complete economic collapse and Egyptalmost became bankrupt. After Said, Khedive Ismail became the ruler in 1863, and instead of adopting a more rational policy to compensate for the losses that paralyzed the Egyptian economy in the reign of Said. The new khedive deepened Egyptian wounds and more bank

interests were added to Egyptian debts[viii]. Egyptian debts were to paralyze the Egyptian economy until 1973[ix].Thus the construction of the Suez Canal project destroyed the economy of Egypt and put the nation under the mercy of colonial powers.

The Tunisian Experience: Ahmed Albai of Tunisia in an attempt to imitate the Egyptian experience has made some positive developments including the extermination of slavery, the establishment of a local army, the import of textiles machines and the recruitment of French technicians to train the Tunisians. These endeavors that took place after the colonization of Algeria in 1830 were not able to redeem the collapsing economy of Tunisia[x]. Furthermore, Albai introduced the first constitution in the Arab world in 1861[xi]. He also made some developments in road pavement constructions[xii]. The reform movement led by Albai was badly affected by the interference of Minister MostafaKhazna who was well-known for his corruption policies. He died in 1878 [xiii].In the reign of Mohamed Albai starting in 1855 his friends and relatives dominated the state[xiv] and the authority of Khazna was diminished. Khazna plunged Tunisia in debts in 1863 and 1865[xv] which led to destructive ramifications on the country. The crisis triggered by Khazna reached culmination in 1899[xvi].

Administrative Corruption and its Role in accumulating Tunisian Debts: Khazna was responsible for the financial problem in Tunisia due to his failure fiscal policies[xvii]. He and the rich class in the country were involved in corruption[xviii] and bribery. In addition, he himself was a broker[xix] who abused his authority. Compared with Egypt Tunisia suffered from embezzlement, theft and all kinds of fiscal corruption. However, the corruption policies and briberies networks in both countries led to foreign domination of their destinies.

Debt Administration in Egypt: The Debt fund in Egypt was controlled by foreigners from the west who exploited the debts for their own benefits. The debt fund in Egypt was bilaterally administered by the French and the British[xx].

Debt Administration in Tunisia: There was a committee dealing with Tunisian debts which includes 2 divisions[xxi]. Part of the function of the committee includes providing necessary documents on debts[xxii] and the investigation of local debt[xxiii] besides collecting the revenues of the country[xxiv]. In 1869 Khayeldin was appointed as chair of the committee[xxv]and the debt in 1970 was as follows[xxvi]:

Table (1) shows the values of the public debts and its resources in French Francs

	loan's source	Value
1	Langara Paris Bank	35.000.000
2	PNB 1863 debt	9.000.000
3	Langara Paris Bank 1865 debt	25.000.000
4	Internal uncontrolled debt with internal bonds	48.200.000
5	Internal Debts	36.800.000
6	Debt's profits	20.380.000
	Total	174.380.000

Table formed by the researcher depending on Historical documents Tunisian National Archive. The statistics shows that France was the dominating factor in the debts of Tunisia. The country took most of its debts from France.

 The Role played by the Foreign Administration of Debts: In Egypt and Tunisia, the role played by the Foreign Administration of Debts was heavily destructive to both countries.[xxvii]. The Foreign Debt Administration DESATROYED THE ECONOMY OF BOTH COUNTRIES IMPOSING TAXES[xxviii] and blackmailing the two nations[xxix].

The Cancellation of the European Committee for Tunisian Debts: FranceoccupiedTunisiain 1883andturned   it   intoa   Frenchcolony[xxx]. French administrationof the countryembarked onthe liquidation offoreigndebt administration. The French administrationof the country asked for a newloan ofFF142000000 with annual rate 4% interest andallocatedthe   newvalue   of   the   loanto   pay   offthe   oldloan[xxxi]. Frenchcolonial administrationgot rid ofthe European Committee for Tunisian Debtsin1884.

The Cancellation of The Debt Fund in Egypt: BritainoccupiedEgypt1882anddid not notabolish theEgyptianforeigndebtmanagement. The British policy was the indirect control to the country[xxxii]. Britishcolorism administration usedEgyptianthe debt administration todominate theEgyptian Financial and absorption ofthe Egyptian financialsurplusand turn ittoBritain. Britishadministration usedit to financetheBritish budgetuntil the year1943[xxxiii].In 1943 the Egyptian government issued a new local public debt with fewer interests. The local capital bought all the bonds of the new debt because it had no chances for investments. The Egyptian government became able to cancel the foreign administration of the public debts on 1943[xxxiv].

The Impact of the Subordinate   Economic Development in Egypt and Tunisia in Increasing Poverty Rates in Both Countries:

2. Conclusion

The experience of Mohamed Ali was unique and it was the talk of the world . He was able to successfully create real and genuine development in Egypt. In the post Mohamed Ali Era, subordinate development depending on the west led to catastrophes resulting into colonization and occupation and domination of the country's resources and created enormous debts. The same subordinate development depending on the west in Tunisia led to identical consequences.

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