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FACTORS AFFECTING IMPLEMENTATION OF OPEN TENDERING PROCESS IN PUBLIC INSTITUTIONS: A CASE STUDY OF JOMO KENYATTA UNIVERSITY OF AGRICULTURE AND TECHNOLOGY IN KENYA

Buuri James Murithi*
Jomo Kenyatta University of Agriculture and Technology
Email: jimbuuri@gmail.com

Abstract

The purpose of the study was to determine the factors affecting tendering in public institutions in Kenya, with reference to Jomo Kenyatta University of Agriculture and technology. The objective will be to find out how the independent variables had influence on tendering in public institutions. The study will seek to establish the effect of duration taken, ethical practices, familiarity with regulations and training of employees, and ICT use influence effectiveness of tendering process. The findings of the study will benefit the management of Jomo Kenyatta University of Agriculture and technology, Government of Kenya and other researchers. The study is meant to identify the various factors that make open tendering process as less preferred than the alternative procurement methods. This research is aimed at assessing the various factors affecting implementation of open tendering process with aim of improving its use and performance. The research focused on how various public institutions chose other procurement processes over open tendering process. The research was aimed at comparing the independent variables against the independent factor which is the implementation of the open tender process. The Data Collection Instrument was a questionnaire that was self administer with the help of research assistants. The collected data was analyzed using descriptive statistics and inferential statistics namely Pearson Product Moment Correlation and T-test and presented by use of tables. The study findings indicated that there was need for strong procurement procedures and adequate training of staff is required for good practices in procurement and creating efficiency in the tendering process in the county.

Keywords: Open procurement, direct procurement, organizational policies, and competitive procedures.

Introduction

Public procurement is broadly defined as the purchasing, hiring or obtaining by any other contractual means of goods, construction works and services by the public sector. Public procurement is alternatively defined as the purchase of commodities and contracting of construction works and services if such acquisition is effected with resources from state budgets, local authority budgets, state foundation funds, domestic or foreign loans guaranteed by the state, foreign aid as well as revenue received from the economic activity of state. Public procurement thus means procurement by a procuring entity using public funds (World Bank, 1995).

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The public procurement in Kenya has evolved significantly over the last decade. According to Public Procurement Oversight Authority (PPOA) (2007) the public procurement has evolved from an unregulated system in 1960s to treasury controlled system in 1970s, 1980s and 1990s. Public procurement and disposal act was later introduced in 2005 and further new standard were introduced by Procurement Regulations of 2006(PPOA, 2006). Prior to the introduction of Public Procurement and disposal Act of 2006 the procurement system was inefficient and the government lost a lot of money. According to the World Bank (1997), the procurement system was not transparent and was characterized with skewed competition; staff presiding over the system lacked capacity and were easily compromised; there was also an urgent need for a professional oversight body to instill discipline. These recommendations gave rise to the reforms that have characterized the procurement system in Kenya over the last decades.

Statement of the problem

The basic presumption in public procurement in all public institutions is that contracts of a specified type and value will be procured using an advertised, competitive procedure that is open, fair and transparent, ensuring equality of opportunity and treatment for all candidates and tenderers. There are only limited circumstances where a procedure without advertised competition is permitted. The public procurement entities are legally bound to ensure this is achieved through the Public Procurement and disposal Act of 2006.

Although in 2003, the GOK began implementing reforms to address inefficiency in the use of Public resources and weak institutions of governance. The reforms included the development of anti corruption strategies to facilitate the fight against corruption and the enactment of the public Officer Ethics Act 2003, the Ant-Corruption and Economic Crime Act, the Financial Management Act 2004, and the Public Procurement and Disposal Act 2005.The aim was to make the procurement process more transparent, ensure accountability and reduce wastage of public resources among others. Currently, there are weak oversights institutions, lack of transparency, poor linkages between procurements and expenditures, delays and inefficiencies, poor records management, bureaucracy, rampant corruption, Political interests. Bottom-up approach to the development of institutional mechanisms for holding to account the domestic implementation of international regulatory decision-making is also missing hence the need to investigate on the factors that influencing the open Tendering processes in the Public Sector in Kenya and provide suggestions to improve the tendering process.

However, Public Procurement Oversight Authority (2007) admits that, procurement entities are faced with challenges when it comes to applying the framework in practice and complying with the new provisions and standards. Such challenges, emanates from legal environment, political environment, organizational environment, and socio-economic and other environmental factors.

This study was seeking to find out the factors that affect the implementation of open tendering process public universities (Koech, 2009); the study was to further examine whether the use information technology and training of employees can help in the management of the tendering process in order to reduce the duration within which the tendering process takes place in public institutions.

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Objectives of the study

The general objective of this study was to examine the factors that hinder use of open tendering process in public universities.

a) To establish how familiarity with Regulations by procurement officers affects the implementation of open tendering in public institutions.

b) To establish the extent to which duration taken in open tendering process by public procurement process on implementation of open tendering in Jomo Kenyatta University of Technology.

c) To establish how organizational policies influences the implementation of open tendering in public institutions.

Importance of the study

The study will benefit the management of JKUAT by providing data and information on better strategies that can be used in order to eliminate bottlenecks and improve efficiency. This is to enlighten and educate the employees on benefits of logistics and development for effective and efficient performance of their studies. The study will benefit institutions of higher learning in Kenya as guideline of the study of open procurement especially with attempt to adopt the use of the same

The government of any country has sole responsibility for the general welfare of its population. Therefore the study will bring to fore all the activities hence will the government to effectively monitor the happenings in the manufacturing sector with an aim of making sure that its policies are followed.

The research findings, will help other researchers who would want to undertake the same study to come up with more comprehensive research work or highlight the necessary adjustment that were not dealt with in depth by this research.

Impact of public procurement reforms in Kenya

According to Wanyama (2010) the objectives of the reform process have never been achieved. The study posits that the principle provisions of the Act and the Regulations have inherent weakness prone to abuses by procuring entities and do not envisage contemporary market realities. Kenyanya et al (2010), also argues that though development of mechanism for contract administration and appeals was hailed as a positive move, institutional capacity in procuring entities and procurement markets are the weakest. However PPOA (2007) reveals that the strongest points of the reforms have been the delegation of the procurement decisions which have been fully achieved. The report adds that the responsibility of procurement have been fully left to the tender committees and units of the procuring entities.

Improving the capacity of staffs involved in the procurement process was also key in the reform process. However PPOA (2007) once again reports of a shortfall of expertise within procurement units despite efforts to develop a professional procurement workforce thus, compromising the

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efficiency of the procurement operations. Timely procurement is also a critical aspect of any procurement system, but Kenyanya et al (2010), argues that the reforms have not yet positively impacted on the timely procurement, contract execution and payment. The study adds that there are no clear legal provisions to guide on timeliness of procurement operations. Several studies (KPMG, 2008; KACC, 2007) also observe that, public procurement still suffers from various forms of corruption with officials manipulating the regulations to favor participation of certain firms and restrict others.

According to the Public Procurement and Disposal Act procurement means a public entity making procurement where public entities are includes government departments, corporations, and courts, public schools, colleges and public Universities among others. In the public universities, the vice-chancellors are the chairmen of the committees, while principals/heads of colleges chair College Tender Committees. Other members of the University Tender Committees include the deputy vice-chancellors, finance officers, college principals, at least two faculty heads and two council representatives who are not members of the academic staff (Odhiambo and Kamau, 2003 p. 29).

A number of methods are specified in the public procurement laws and regulations of the three, Open Tendering, Restricted Tendering, Quotations and Proposals, Direct Procurement / Single Source Procurement (Odhiambo and Kamau, 2003). In the heart of the procurement reforms is the open tendering system. Asian Development Bank (2006) observes that, open tendering is the method of choice in many countries accounting for the largest share of goods and services procured. Though other procurement methods such as restricted tendering and request for proposals are provided for, they entail risks of abuse and corruption (Asian Development Bank, 2006).

Open tendering as per the Kenya Gazette Supplement No. 92, 2006 involves invitation of prospective suppliers to compete for an advertised contract where the lowest tenderer in terms of price will be accepted. However, the lowest bidder should be deemed qualified to perform the contract (Jack Reddy and Abe Berger, 1983). The Public Procurement Regulations of 2006 part IV states that 'for each procurement, the procuring entity shall use open tendering or an alternative procurement procedure under Part VI' (National Council for Law Reporting, 2010. P.20). However, such alternate procurements are subject to written approval by the tendering committees and documented reasons should be provided (Kenyanya et al, 2010). According to the act part VI the tendering entity should among other things advertise the tender providing the name and address of the procuring entity indicate where to obtain and submit the tender documents and enough information to allow for fair competition among the participants (National Council for Law Reporting, 2010).

Further open tendering as two levels national and international (Odhiambo and Kamau, 2003). Open national procurement is open to all providers at equal terms, though it is specifically meant to attract local firms foreign firms are allowed to participate. On the other hand open international tendering, is open international tendering, on the other, hand is open to participation on equal terms by all providers although it specifically seeks to attract foreign providers.

According to De Boer and Telgen (1998), at the initial stage of inception of the public procurement many institutions are unable to able to comply because the officers concerned are

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unfamiliar with the regulations. Such challenges have been reported in Europe in a survey on implementation of EU procurements (Gelderman et al., 2006). The procurement procedures in Kenya involve a number of steps which must be followed to the latter. Given that the regulations are relatively new in Kenya there is a possibility that officers concerned are not familiar.

Eyaa and Oluka (2011) observe that, many board members in state corporations have little understanding of their role in the procurement process thus prone to manipulation. Charles & Oludele, (2003) further asserts that most of the members are outright in-competent and simply acts as rubber stamps to decisions made elsewhere. In this context therefore Fisher (2004) suggests that implementation of procurement requirement is possible if various stakeholders understands their role. Public Procurement Oversight Authority (2007) agrees that low competency level among procurement staff is a major bottleneck to further improvement of the system. The report however argues that there are disparities across government institutions where some procuring units are highly competent and others in dire need of assistance.

Familiarity is not only limited to the public institutions alone but it's also a challenge to the private sector whose role in the implementation of public procurement regulations is critical. According to a Compliance and Performance Indicator survey conducted in 2007, 37% of the suppliers who received the tender specifications never submitted them while 29% of those submitted were rejected at the initial evaluation stage and 45% at the technical evaluation stage (PPOA, 2007). Similarly, familiarity in Kenya can also be looked from the context of awareness of e-procurement. E-procurement can ease the cost of the open tendering since the information can be easily transmitted and obtained through the web thus making open tendering more preferable. Public Procurement Oversight Authority (2007) however decries the low awareness of the web-based procurement despite its potential benefits.

Duration taken is one of the factors that influence effectiveness of tendering process in Public Sector. If not well managed it will be very costly to the company. All Public sectors are required to comply with the law on duration taken in tendering process. Tendering is the function that costs an organization a great deal of money and this has to be performed correctly in order to maximize effectiveness and minimize costs (GOK, 2004). Organizations, Executive management everywhere is realizing that managing Tenders must emerge as a critical core competency if organizations are to increase revenue. According to Public Procurement and Disposal Act 2005 and Regulation Procurement play a very important role in Economical growth and Development of a country if well managed (Jodie, 2004). It is vital to ensure that time taken in tendering process is reasonable and is compliant with the law.

The recommended duration is less than three months. This study aimed at establishing whether in road construction agencies is duration is adhered to and whether it influences effectiveness of tendering. In Kenya, District Tender Boards (DTBs) were also established to cater for procurement at the lower levels of government administration. DTBs were also inter-ministerial and were made up by the representatives of government ministries in the districts. They had the same powers as MTBs. In addition, the Financial Regulations applied to the tender boards of local authorities, public enterprises, public universities and other institutions of learning and cooperative societies (GOK, 2005a).

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Indeed, the Government Contracts Act provides that "public officers" cannot be sued personally upon any contracts which they make in that capacity."The incentive for public officers to engage in corrupt procurement deals is thus quite strong. Second, procurement policies and procedures were scattered in various government documents. Thus, for example, it was difficult to comprehend the Financial Common corrupt practices in public procurement thus included public officers – often under the influence of powerful politicians and businessmen – only inviting preferred firms, favoring certain firms at the short-listing stage, designing tender documents to favor particular firms and releasing confidential information. This state of affairs was exacerbated by the fact that the procurement system was manned by junior officers, who were therefore powerless to correct any anomalies and could easily be manipulated by their seniors and powerful politicians (Ahmed, Irfan, and Parasuraman, 1994).

Further, there was no provision for dissatisfied bidders or the general public to appeal against the procurement decisions of the various tender boards where, for instance, there were irregularities in the process. The system only allowed for appeals by accounting officers (usually permanent secretaries) in the relevant government ministries, departments and agencies. And there was no role for the judicial system as the decisions of the administrative appeal bodies were deemed final. All these unethical practices have led to a flawed tendering process that resulted to loss of huge sums of money. This study sought to investigate the influence of unethical practices on effective tendering process.

Due to regulatory reforms and changing community expectations, the role of culture in organizational compliance has gained momentum (Lisa, 2010). Basing on the competing values model, which involves enforcement of rules, conformity and attention to technical matters, individual conformity and compliance are achieved through enforcement of formerly stated rules and procedures (Zammuto and Krakower, 1991) as cited in Parker and Bradley (2000). Although there is no single definition of culture, one can define it as 'the structure of behaviors, ideas, attitudes, values, habits, beliefs, customs, language, rituals, ceremonies, and practices of a particular group of people that provides them with a general design for living and patterns for interpreting behavior' (Rice, 2007). According to Lisa, (2010), culture plays a central role in the compliance process and associated outcomes. It is also contended that in a specific type of culture, characterized by specific values such as openness, trust and honesty (Arjoon, 2006) as cited in Lisa, (2010), employees are more likely to engage in compliance behaviors, which collectively will contribute to organizational compliance. Parker and Bradley (2000) further indicated that awareness of the nature of public organizational culture is vital in explaining and assessing the appropriateness and outcome of the current reform process. This applies to developing countries where waves of procurement reforms have resulted into enactment of procurement rules and regulations.

Theoretical underpinning

Institutional theory can be used to explain the factors affecting the may affect the implementation of open tendering. Obanda, 2010), observes that, institutional theory is normally used to examine public procurement from varying perspective, Theoretically institutions are composed of cultural-cognitive and regulative elements that, together with associated activities and resources give meaning to life (Scott, 2004). Scot, (2004) further explains that the mainstays of any institutions are regulatory, normative and cultural- cognitive, where regulatory refers to rules and

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laws and the enforcing mechanism, the normative elements includes norms and values while cultural-cognitive are the shared beliefs and understanding. In the context of the study the procurement process of the Universities are governed by Public Procurement regulations. Universities, Colleges, primary and Secondary Schools are recognized as procurement entities (Odhiambo and Kamau, 2003).

Similarly, the principle agent theory is also relevant to the study. The theory is based on the relationship between the principal and the agents where, the principle influences performance of some task by the agent in favor of the principal (Health and Norman, 2004). In the context of this study, the procurement officers are the agent and the principals are the politician. Owing to the influence of politician (resulting from power of appointment), the procurement officers are pressured to compromise open tendering regulations in favor of entities affiliated with politician.

Sutinen and Kuperan (1999) propounded the socio-economic theory of compliance by integrating economic theory with theories from psychology and sociology to account for moral obligation and social influence as determinants of individuals' decisions on compliance. Lisa (2010) also adds that psychological perspectives provide a basis for the success or failure of organizational compliance. According to Wilmshurst and Frost (2000), the legitimacy theory postulates that the organization is responsible to disclose its practices to the stakeholders, especially to the public and justify its existence within the boundaries of society. This theory, which focuses on the relationship and interaction between an organization and the society, provides a sufficient and superior lens for understanding government procurement system (Hui et al; 2011). From this theory, the perceived legitimacy of public procurement rules has been identified as one of the antecedents of public procurement compliance behavior.

Figure 1: Conceptual Framework

The conceptual frame work shows the relationship between the independent and dependent variable in figure 4 Based on the theory and literature review familiarity of the regulations, professionalism, political environments and organizational culture may affect the implementing of open tendering in an institution. In this regard therefore familiarity, professionalism, political environments and organizational culture will constitute the independent variable while implementation of the open tendering is the dependent variables.

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Research Methodolgy

Descriptive survey research design was adopted for this study. Descriptive research design is a scientific method of investigation in which data is collected and analyzed in order to describe the current conditions, terms or relationships concerning a in a certain specific field Problem (Mugenda &Mugenda, 2003).

The study adopts the case study design. According to Orordho (2009), a case study is useful especially when one identifies a case rich in information which can allow a in-depth investigation of the problem at hand. The case of Jomo Kenyatta University of Agriculture provides is a public institutions and procurement entity as per the Public Procurement and disposal Act of 2006. Thus it will allow an in-depth investigation on the factors affecting implementation of open tendering.

Target Population

The target population will be the staff of the procurement department in Jomo Kenyatta University of Agriculture. The Department of procurement in the University consists of seven sections with a total of thirty nine members. The thirty nine staff consists of Chief Procurement Officer, Deputy Procurement officer, seven head of section heading each section and thirty procurement officers.

Sampling frame

Census was the most preferred method because the population is not homogeneous. A sample frame was identified and the population size determined. The main reason for using this category of people is that their activities directly or indirectly has a bearing on procurement within JKUAT which was the scope of the study.

Sample and sample technique

In conducting the research study, it is practically impossible, time consuming and too expensive to test every individual in the entire population but in this case, the population was relatively small thus testing was done on the entire population. The study used structured questionnaires since they were simple to be filled and be easily understood by the respondents and the level of confidentiality was maintained. Face to face interviews were also be used since the researcher was on the ground thus making it easy to administer the instruments.

Data collection procedure

This research employed both primary and secondary methods of data collection. For primary data, questionnaires which were structured and were administered to selected respondents. The questionnaire had both closed and open ended questions. For secondary data, books, journals, manuals, magazines and newspaper articles related to Tendering process were used. On the other hand an interview will be used on the Chief procurement officer and the deputy. The Interview technique will allow for in-depth probing, on the open tendering implementation especially in relation to political environment. As Head of the section he is well privy to any political interference than the junior officer.

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The questionnaires were hand-delivered to the respondents and collected after a few days. The types of questions that were use include both open and closed ended questions were used to ensure that the given answers were relevant to the topic. The research phrased the questions clearly in order to make clear dimensions along which the respondents analyzed. In open ended questions; space was provided for relevant explanation by the respondents, thus giving them freedom to express their feelings. This method was considered effective to the study in that; it created confidentiality. The presence of the researcher was not being required as the questionnaires were self-administered.

Reliability of Research Instrument and Pilot Testing

Test re-test method was applied, where the questionnaires were administered to the same respondents twice in the span of two weeks. The responses were matched and the instrument was seen as reliable since a reliability index of 0.89 was found which was above 0.5 hence an acceptable indicator of the reliability of the instrument.

Data Processing and analysis

According to Kombo and Tromp (2011), data analysis procedure includes the process of packaging the collected information putting in order and structuring its main components in a way that the findings can be easily and effectively communicated. After the fieldwork, is done before analysis, all the questionnaires were adequately checked for reliability and verification.

Editing, coding and tabulation were carried out. The data was analyzed by using descriptive statistics and inferential statistics namely Pearson Product Moment Correlation coefficient and

Test was used. Data was presented in form of tables and percentages with description. Both thematic and descriptive analysis will be conducted in this study. The data collected from the procurement officers through a questionnaire will be analyzed and presented by generating frequency table, percentage, and pie charts. This will involve presentation of information on the demographic characteristics of the respondents, education level and experience.

The thematic analysis will be used to analysis data collected through the interview. Holliday (2002) suggests that thematic analysis involves categorizing data into themes as they are reflected in the interview text. Arriving at these can be achieved by formal analysis of interview text as well as from what was observed during data collection. Themes are established by reading through the text, while noting down probable themes and initial codes, thereafter these notes are grouped into themes. In this study the interview administered to the Chief of Procurement will be categorized in to themes, analyzed and interpreted accordingly

Research Findings

The respondents composed of management and all procurement staffs from the chief procurement officer, senior procurement officers, procurement officers, assistant procurement officers and stores people. Census was done since the population was not large and this ensured that the researcher got all the relevant information about the population. In most organisations there are a few managers at the top and many staff at the lower levels this is clearly reflected in

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the able below. All the respondents did not indicate their job titles. They indicated that this could easily reveal who they were and thus defeating the whole purpose of confidentiality.

The aim of the section was to find out whether the respondents answers were valid. Most of the respondents were experienced in procurement .Out of the 34 respondents 20 had the experience of over 5 years in procurement which accounts for 59 % .Most of them had the experience of over five years which means that they understood the organisation well. The long stay in the organisation shows the stability and how it retains its employees. There JKUAT can be said to be a good employer.

Each respondent listed various factors that lead to Unfamiliarity with procurement regulations. The list was wide and varied as there were many respondents but five factors took a centre stage. They included lack of facilities (88%), inadequate skills (73%), and resistance to chance (67%) supply factors (58%), and cost of the system (88%). Each respondent listed various factors that lead to duration taken during procurement procedure.

Organisational policies normally give guidance the direction in which the organisation takes. The policies determines the pace at which at which projects are implementation within JKUAT. The researcher sort to find out whether organisational policy affects the adoption of e- tendering system in JKUAT. Using likert scale the respondents were supposed to state whether they strongly agree, agree or disagree. Out of 34 respondents 32 strongly agreed that organisational policies affect the adoption of open procurement. One respondent said no and there was one respondent disagreed. In the context of the study the procurement process of the Universities are governed by Public Procurement regulations.

Summary

The study investigated the factors affecting the slow adoption of open procurement, the effects of open procurement on costs and the challenges in the adoption of open procurement by exploring the perception of the procurement officers and the management of JKUAT. It's important to understand the factors that may get in the way of successfully adoption of e-procurement. Keeping informed of these challenges to implementation should help all the executives participating in purchasing intelligently plan for and implementing their firms tendering initiatives .From the findings and the discussions, the researcher concluded that adoption of open procurement has many benefits including; reduction in paperwork, reduction in administration costs, reduction in lead time and incise in performance due to increased efficiency and effectiveness.

There the cost benefit analysis should be conducted in order to enhance the adoption of open tendering. This calls for all the players to be involved in the adoption process. Procurement managers should convince top managers to invest in the open procurement .they have to highlight all the advantages of electronic procurement in terms of cost reduction, shortened delivery times, and improved supplier buyer relation ship resulting form prompt settlement of payment. Procurement managers have to present the system as value adding activity and not cost centre. The system should be seen in the light of contribution to the organization strategic objective.

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Conclusion

The review was discussed from past activities undertaken to address the effects of stores management tendering functions were highlighted. The theoretical review explored various suggestions and issues that have been made by past researchers to address the effects of tendering management and how improvements can be made to enhance effectiveness on tendering management and how improvements can be made to enhance effectiveness on tendering process. The factors that had much impact towards the study objectives will be critically analyzed in critical review and the research gaps will be established.

It is possible for any public institution to achieve its full potential without a successful tendering procedure. In the long run the success of any public institution depends on how its implementation of the public procurement and disposal Act 2005 in public institution is managed. It is clear that the other researchers have tried to investigate the factors affecting tendering process. However this is not enough due to emergence of stiff competition in the sector.

The researcher in this study will endeavors address these gaps and give recommendations on what institutions needs as far as completion is concerned to ensure that good implementation of tendering process in public institution are followed. It is also evident as seen in the discussed literature review above that no specific research has been undertaken locally to highlight the factors affecting implementation of tendering process in public institution in the public sector.

Recommendations

The researcher has the following recommendations to make concerning the adoption of open tendering. A cost benefit analysis should be carried out before adopting the open procurement system. All the players should involve and consulted from the initial stages of adoption. This reduces resistances from both the internal and external customers and users. Open procurement should be fully integrated with other systems such as financial system and such as financial system and strategic suppliers system. Supply base rationalization is critical to the success of electronic tendering system. Although it's not possible for buyers to have electronic connections with all its suppliers, there is need for buying organizations to identify key strategic suppliers and then partner with them in the development of the system for mutual benefits. Open procurement objectives should be in line with organizations goals.

Areas for Further Research

The existing literatures have explored the use of electronic technologies in many field of business. However, not many researchers have tried to look into factors contributing to slow adoption of these technologies in e- tendering process by public entities. This research undertakes to find out these factors with a view to giving recommendations for its improvement.

Further research could also investigate what range of interventions might assist open tendering uptake amongst suppliers. Any effective and efficiency open procurement systems should be capable to integrate with the suppliers system. The research will seeks to find how a procuring firm can help its supplies on implementing e-commerce. Also further research could be conducted to assess, how open procurement adoption and other policy objective interact .The

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bottom line of any firm is to make profit and organizational growth and development .The research will seek to find whether the procurement goals are always in line with the organization goals.

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**Main Author*

TO DETERMINE THE EFFECTS OF COMPETITIVE MARKETING SRATEGIES ON A FIRMS PERFORMANCE.

Donald Mwangi Nderitu*
Jomo Kenyatta University of Agriculture and Technology
Email: **donnderitu@gmail.com**

ABSTRACT

The main purpose or objective of this paper was to determine the effects of competitive marketing strategies on a firm's performance in the downstream sector of the freight industry, a case study of Tabaki Freight services International limited. The specific objectives of the study include: to investigate the nature of competitive marketing strategies on a firm's performance, to determine the magnitude of competitive marketing strategies that makes up a marketing strategy, to investigate the level of performance of the firm in consideration of sales volume, market share and profits. The researcher found out that Tabaki Freight services international ltd doesn't have well set competitive marketing strategies and this has a direct effect on its customer base as well as the firm's performance. Therefore the organization should invest more on marketing strategies or even go to an extent of seeking advice in the area of marketing. This study provides insights on the shortcomings of suppliers and procurement contracts to enable optimization techniques in enhancing organizational competence. The research recommends the development and adoption of effective competitive marketing strategies to ensure client needs are met effectively. Competitive marketing strategies is very vital and therefore the management should handle this issue with caution as it has great connection with its profitability. The firm should ensure it is able to obtain a high competitive niche over its market participants.Finally the researcher suggested that further study should be conducted to establish the effects of competitive marketing strategies on a firms performance.

Key words: Competitive Marketing Strategies, Firms Performance

Introduction

Information Communication Technology (ICT) came to the face of earth long time ago and according to Timothy Clearly (1998) there are various ICT equipment.ICT is an innovative field, which keeps on advancing on daily basis. Today researchers claim that IT and the Internet in particular can create a competitiveadvantage and improve performance and competitiveness (Namasivayam, Enz, &Siguaw,2000); Porter, 2001; Sirirak, Islam, Khang, 2011). A company is profitable if its ultimate value exceeds the collective costs of performing allthe activities required to gain a sustainable competitive advantage over its rivals (Porter,1979; 1989).

Problem Statement

The problem statement, according to (Wiersma 1995), describes the content for the study and it also identifies the general analysis of issues in the research necessitating the need for the study (Creswell 1994). The research is expected to answer questions and provide reasons responsible

**Main Author*

for undertaking the particular research (Pajares, 2007). The problem of this study is to measure, analyse and establish the various competitive marketing strategies and performance indices that enable goal actualization of the organization objectives.

Without a well-defined strategy, organizations will be driven by current operational issues rather than by a planned future vision. Market positioning has long been recognized as a vital tool to confront competitive pressures and improve organizational performance.Every business has a competitive strategy. However many strategies are implicit, having evolved over time, rather than explicitly formulated from thinking and planning process. Implicit strategies lack focus produces inconsistent decisions, and unknowingly become obsolete.

Firms which position themselves within a particular market place relative to competitors, earn higher rates of return. Competition and profitability pressures mean that firms must be responsive to the market conditions. The study sought to determine the effects of competitive marketing strategies on an organizations performance in the freight industry in Kenya using Tabaki Freight Services International Ltd as the case.

Research Objectives

The general objective of the study is to analyze the effects that can be brought about through the adoption of Internet Communication Technology (ICT).

i. To investigate the nature of the relationship between ICT systems on a firm's performance.
ii. To determine the magnitude of competitive marketing strategies that makes up a marketing strategy.
iii. To investigate the level of performance of the firm in consideration of sales volume, market share and profits

Research Questions

i. What is the firms' level of performance in consideration of sales volume, market share and profits?
ii. To what extent does information and communication technology affect a firm's performance?
iii. What type of relationship exists between ICTsystems and firm's performance?

Literature Review on Information and Communication Technology- (ICT)

ICT has become one among key drivers of recent developments and has pervaded everybusiness segment and also every home (Kuppusamy and Santhapparaj, 2005). So called "dot.com organizations" have been emerging lately very fast and electronic business, which is coming tothe forefront of the international markets. It is often claimed that ICT has become to economywhat steam and machine power were to the industrial revolution (Hoek, 2001). On the

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otherhand also expectations about the impact of ICT on business are positive and high. Evident isthat use of ICT is positively correlated with improved overall organizational performance(Pokharel,2005).

Information and communication technology is a term that applied to any communication device or program, such as: radio, television, cellular phones, computers, software, hardware, networking, satellite systems and the like it that is related numerous services, programs and services to them. Information and communication technology is often in specific concept and position in a more accurate review of application, such as information and communication technologies ineducation and health, libraries and so on, convergence between computer and communications. The most important feature of information and communication technology is storage method, processing and access to information (Malekian,2010).

In any case, it is generally accepted that ICT in itself is not a panacea and there is still a serious debate about how its adoption improves firm performance. In general, it is supposed thatcomplementary investments in skills, organizational change, and innovation are the key tomaking these technologies work. In this study, we argue that the simultaneous presence ofcomplementary resources increases the positive effect of ICT investment in performance.

Methodology

This study adopted a survey research methodology to examine the strategic marketing strategies of Tabaki freight services International Limited in an attempt to attain their desired level of performance. Thirty (30) respondents were chosen from the target population of seventy two (72) through simple random sampling methods. The respondents included six (6) respondents from imports division, three (3) respondents from exports, four (4) respondents from sales & marketing division, four (4) respondents from local/internal distribution, five (5) respondents from warehousing and three (3) respondents who are subordinate staff totaling to twenty five (25) respondents. Twenty five (25)questionnaires were issued to the respondents. Twenty two (22)questionnaires were returned while three (3) questionnaires weren’t returned.

There was a 88% cooperation in returning the questionnaires while they also experienced a 12% letdown for those who didn’t return their questionnaires. Simple random sampling was used to select the individual respondents of the study. Open and closed ended questionnaires were used to collect data.Other methods used in collecting data include personal interviews and direct observation.Data collected was edited, sorted analyzed and coded using clustersampling technique to give meaningful results from the questionnaire findings, personal interviews and observations This study adopted a survey research methodology to examine the strategic marketing strategies of Tabaki freight services International Limited in an attempt to attain their desired level of performance.

Research Findings

The researcher found out ICT has become the foundation of every sector of evry economy, everywhere. Some of the benefits ICT has brought in freight industry are discussed here below.

Increased Efficiency and Productivity

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i. Reduce the cost of doing business. They tend to be quantitative, easier to measure than other benefits.
ii. Enables better utilization of people and equipment
iii. Enables operators to reduce administrative burdens, shorten processing times, and therefore reduce cycle times as well for faster document preparation and security processing.
iv. Enables operators to minimize errors and, when they occur, find and fix them more quickly and easily.

Improved reliability and service has been realized through the following:

i. Better schedule adherence.
ii. Increasedoperational flexibility
iii. Increased shipper confidence, especially the confidence that a freight transporter will deliver as promised or provide advance notice of problems and even alternative solutions

Enhanced Shipment and Service Integrity

Shipment and service integrity includes both the "pre-9/11" (protection against theft and traditional contraband, such as narcotics) and "post-9/11" (protection against terrorism) forms of security.

The importance of the study will help to bring together the various considerations that need to be taken into account when choosing competitive marketing strategies; give an overview of the commonly employed strategy in consideration of the critical variable prior to the firms performance.

Summary

Tabaki freight services international limited being the organization in study has adopted some freight technology monitoring systems. The freight industry and its customers use information technologies and telecommunications to improve freight system efficiency and productivity, increase global connectivity, and enhance freight system security against common threats and terrorism. In short, these technologies help us operate the transportation system more intelligently. Most importantly, they do so in ways that improve safety, whether related to hazardous materials transport, heavy truck maintenance or load limit compliance.

Recommendation

I will recommend Tabaki for adopting some of this technology systems in place but it should also go an extra mile since more confiscated and better technological systems are coming up hence they are better and more efficient in monitoring transit.

Tabaki can also engage in third party logistics as opposed to their small fleet of vehicles as compared to the growing economy and customer base hence secure their market. This will help

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increase their profit margins hence they wouldn’t lose any customer despite the amount of consignment that needs to be transported while considering time.

The research recommends the development and adoption of strong competitive marketing strategies to ensure client needs are met effectively. Competitive marketing strategies is very vital and therefore the management should handle this issue with caution as it has great connection with its profitability. The organization should ensure it is able to obtain a high competitive niche over its market participants.

Finally the researcher suggested that further study should be conducted to establish the effectsof ICT technological systems on a firms performance.

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ANALYSIS OF DETERMINANTS OF STOCK RETURNS OF COMMERCIAL BANKS IN KENYA

Elisha Kidenda*
Jomo Kenyatta University of Agriculture and Technology

Abstract

The year 2011 proved to be an extremely turbulent year for the Kenyan economy with the Kenyan shilling hitting an all time low against major currencies such as the United States dollar and sterling pound, the Central Bank of Kenya lending rate reaching 20.04%, a level it had not reached since march 2001 (CBK, 2012) inflation rates rising to 19.72%, levels last seen in the post election crisis period of 2008 (KNBS, 2011).This study was aimed at establishing whether volatility in the key economic and financial indicators; interest rates, exchange rates and inflation have a causal effect on the movements in the returns of banking financial institution stock in Kenya. The study focuses on the monthly returns of five banks listed on the Nairobi Securities Exchange over the duration spanning from January 2006 through to June 2012 selected for their representative nature of the Kenyan Banking industry. The study finds that change in exchange rate is the predominant determinant of change in stock returns as the coefficient of change in exchange rate is the only significant variable in the long run model at 51%. The relationship is of an inverse nature. It is also noteworthy that in the short run historical values for stock returns exert a level of influence on the current period stock returns. Similarly, the risk free rate and inflation from previous periods also seem to exert some influence on current stock returns. The study further finds that NIC Bank Limited is the bank whose findings tally with the results found within previous literature that has been reviewed in the study. The study recommends further research to be carried out in the area of causality.

Keywords: Inflation, Interest Rate, Exchange Rate, Stock Returns, Causality.

Introduction

The aim of this study was to establish whether there is a causal effect that volatility in these key economic and financial indicators has on the returns of banking financial institution stock in Kenya. Specifically, the study aimed at establishing what effect movements in these indicators have on stock returns of the following five (5) banks which have been consistently listed on the NSE Securities exchange throughout the duration of the study period. The banks are Standard Chartered Bank Kenya Limited, Barclays bank Kenya Limited, NIC Bank Limited, The Kenya Commercial Bank Limited and The Diamond Trust Bank Limited. The following are the reasons why the banks were picked over all the other forty three licensed banks in the Kenyan space.

Out of the forty three (43) licensed banks only ten (10) are listed on the Nairobi securities exchange (NSE, 2012). As such obtaining data on the other thirty three's returns over the study period proved onerous. Out of the Ten (10) listed banks, only five (5) have been consistently on the list for the entire duration of the study period and as such are the banks on which information pertaining to stock prices can be easily obtained over the study duration. Table 1.1 gives a comparison of the return on equity for the banks under study. The banks were selected due to

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their varying levels of size in terms of market share and capitalization so as to give a representative image of the Kenyan baking sector.

Table 1 Comparison of Return on Equity for Listed banks

	Return on Equity				
	2007A	**2008A**	**2009A**	**2010A**	**FY2011F**
KCB	22.53%	19.87%	17.91%	18.34%	15.82%
NIC	22.16%	26.67%	22.48%	31.23%	34.26%
BARCLAYS	27.96%	27.00%	25.16%	33.69%	26.88%
STANCHART	31.79%	28.27%	33.82%	26.44%	32.88%
DTB	7.03%	7.71%	7.68%	11.57%	6.92%

Source: ApexAfrica Capital Estimates, Company Annual Reports

The general objective of this research is to determine whether there exists a causal effect of interest rate movements, exchange rate volatility and fluctuations in inflation on bank stocks in Kenya. The specific objectives are; 1) to determine whether there exists a causal effect of interest rate movements on Bank stock returns, 2) to determine whether there exists a causal effect of exchange rate volatility on Bank stock returns, and 3) to determine whether there exists a causal effect of fluctuations in inflation on Bank stock returns.

The continuous study of different sets of variables as determinants of stock returns imply that there is as yet no consensus as to which variables are indeed the determinants of stock returns and more importantly, which of these determinants are the most statistically significant. Most of the literature reviewed are studies that were carried either in North America (Haugen and Baker, 1996), Europe (Artman, Finter and Kempf, 2011) or East Asia (Siti, 2011; Yang, Lee, Lin and Chung, 2004. As such there is a need to develop more literature centred around developing markets in sub Saharan Africa and in particular Kenya. Further, the models applied may not appropriately capture the impact of this volatility. Some of the models did not take into account recent developments in data analysis such as the time series properties of the data and panel data.

The Engle-Granger Two Step Approach: The study employed the Engle-Granger two step approach based on the Arbitrage Pricing Model Framework. The equation that was regressed was in the form;

$$\mathbf{E(Rj) = \alpha + \beta_0 Rf_t + \beta_1 i_t + \beta_2 r_t + \beta_3 f_t + E_t}$$

Where;
E(Rj)- expected return on stock j;
Rf - risk-free rate of return;
β- sensitivity of asset j to risk factor k;
f- foreign exchange rate;
i- inflation rate;
r- interest rate;
E- stochastic term.

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This accorded us an opportunity to asses both the long run and short run relationship between the dependent variable and the independent variable while also allowing us to establish the speed of correction back to equilibrium.

Methodology

The Data was mined from various sources. To begin with, the rate of inflation captured in the consumer price index is computed on a monthly basis by the Kenya National Bureau of Standards. The percentage change of the CPI over a given period is what is usually referred to as inflation with respect to other time period. This record of percentage change was retrieved from the Kenya National Bureau of Statistics and is the value the study used to represent inflation. Secondly, as a measure of interest rate, the study employed the use of the commercial banks weighted average lending rate. This measure of interest was chosen because it is the interest rate most felt by the shareholders of the banks who participate in trading of its shares and hence determine its stock price. A record of the monthly weighted average is available on the CBK website.

Thirdly, the monthly average stock price of the banks forming the portfolio can be sourced from the archives of the Nairobi Securities Exchange. These monthly averages were then used to compute the stock returns. For the purposes of this study dividend was not considered when computing stock returns since the annual dividend would be split equally between all 12 months of a year hence maintaining their ratios. Moreover, data on dividend payout amounts was not readily from the Nairobi securities exchange. Furthermore, the 3 month (91 day) Kenyan Treasury bill is used as the proxy for the risk free asset. The data on the yields were downloaded from the Central Bank of Kenya website. The data is already de-annualized as presented on the website. Finally, foreign exchange monthly averages for the Kenya Shillings to Dollar are available on the CBK website.

The study begun by running a test to determine whether the data contained unit roots in the individual time series. If the individual time series data are non-stationary, the presence of trend in the data series would mean that the regression results will be spurious as the presence of unit roots would imply non-stationarity. To achieve this, the Augmented Dickey-Fuller test was employed. If the p-value of the test statistic is lower than assumed confidence level – the null hypothesis of presence of unit root is rejected. When the opposite is true - p-value is higher than α, the null cannot be rejected. Having tested for stationarity the study has proceeded to test for whether there is a long-run relationship between the variables (whether the variables are co integrated). The level equation was estimated to obtain the residuals which were then tested for unit root (stationarity test). It is represented as follows;

$$\mathbf{E(Rj) = \alpha + \beta_0 Rf_t + \beta_1 i_t + \beta_2 r_t + \beta_3 f_t + E_t} \quad \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots \; (2.1)$$

The results were to be interpreted based on whether the residuals are found to be stationary making it possible to use the error correction model. The error correction equation was then to be estimated to obtain the coefficient of the error correction term. This coefficient represents the rate at which the disequilibrium in the system is corrected. For a good model the sign should be negative and significant. When the negative sign is maintained and the highest possible significance is achieved the coefficient of the error term can be interpreted. The estimated Error correction model was then subjected to residual diagnostic tests of serial correlation, normality and heteroscedasticity.

Granger Causality: The standard Granger causality test examines whether past changes in one variable, y, help to explain current changes in another variable, x, beyond the explanation provided by past changes in x. If not, then one concludes that y does not Granger cause x. To determine whether causality runs in the other direction, from x to y, one simply repeats the experiment, but with y and x interchanged. Four findings are possible: 1) neither variable Granger causes the other; 2) y causes x, but not vice versa; 3) x causes y, but not vice versa; and 4) y and x Granger cause each other. In more formal terms, the standard Granger causality test is based on estimating the following Vector autoregressive.

$$\Delta X_t = \sum_{i=1}^{n} \alpha_i \Delta Y_{t-i} + \sum_{j=1}^{n} \beta_j \Delta X_{t-j} + \mu_{1t} \qquad \text{................(2.2.1)}$$

$$\Delta Y_t = \sum_{i=1}^{m} \lambda_i \Delta Y_{t-i} + \sum_{j=1}^{m} \delta_j \Delta X_{t-j} + \mu_{2t} \qquad \text{.................(2.2.2)}$$

Where Δ is the first-difference operator and Δx and Δy are stationary time series. The null hypothesis that y does not Granger cause x is rejected if the coefficients, $\sum \alpha_i$ in equation (1) are jointly significant, based on a standard F-test. The null hypothesis that x does not Granger cause y is rejected if the $\sum \lambda_j$ are jointly significant (different from zero) in equation (2). It is assumed that the disturbances μ_{1t} and μ_{2t} are uncorrelated.

Discussion of Findings

The test results show stock returns, Barclays Bank, NIC Bank and Diamond Trust Bank are non-stationary at 1% 5% and 10%. Kenya Commercial Bank and Standard Chartered Bank are stationary at 10% when tested with intercept and non-stationary in all other scenarios. When tested at level. The results for other variables (exchange rates, inflation, risk free rate and interest rates) indicated non-stationary processes as the ADF statistics are less in absolute terms that of the critical values. They are however stationarity in the first difference.

Having concluded that the time series data for the independent variables is non – stationary, the study proceeded to test for co-integration. Using the granger two-step approach, the residuals of the estimated equations were tested for unit root. The findings are that the residuals did not have the unit root as the augmented dickey fuller test gave a statistic that was higher in absolute terms than the critical values at 1 %, 5% and 10 %. This implies that the null hypothesis that the residuals have a unit root can be rejected. It therefore means that the residuals are stationary. These results indicate that the variables are co-integrated and therefore the Error Correction Model (ECM) can be used.

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Table 2: Results of the unit root test

Variable	ADF Test Statistic	1%	5%	10%	Lags
LN_SHAREPRICE-I^	-2.16789	-3.51126	-2.89678	-2.58563	0
T^ & I^	-2.2062	-4.07242	-3.46487	-3.15897	0
No I^ & T^	0.433225	-2.59312	-1.94476	-1.6142	0
LN_KCB-I^	-2.70933	-3.51126	-2.89678	-2.58563	0
T^ & I^	-2.6545	-4.07242	-3.46487	-3.15897	0
No I^ & T^	0.235522	-2.59312	-1.94476	-1.6142	0
LN_DTB-I^	-2.39852	-3.51126	-2.89678	-2.58563	0
T^ & I^	-2.29094	-4.07242	-3.46487	-3.15897	0
No I^ & T^	1.394353	-2.59312	-1.94476	-1.6142	0
LN_BBK-I^	-2.20987	-3.51126	-2.89678	-2.58563	0
T^ & I^	-2.28898	-4.07242	-3.46487	-3.15897	0
No I^ & T^	0.104362	-2.59312	-1.94476	-1.6142	0
LN_NIC-I^	-1.4263	-3.51126	-2.89678	-2.58563	0
T^ & I^	-2.53427	-4.07242	-3.46487	-3.15897	0
No I^ & T^	-0.45199	-2.59312	-1.94476	-1.6142	0
LN_SCB-I^	-2.85972	-3.51443	-2.89815	-2.58635	3
T^ & I^	-3.06267	-4.07686	-3.46697	-3.1602	3
No I^ & T^	0.935963	-2.59312	-1.94476	-1.6142	0
INFLATION-I^	-2.05775	-3.51229	-2.89722	-2.58586	1
T^ & I^	-2.13686	-4.07386	-3.46555	-3.15937	1
No I^ & T^	-2.13686	-4.07386	-3.46555	-3.15937	1
INTEREST -I^	-1.11446	-3.51229	-2.89722	-2.58586	1
T^ & I^	-2.07322	-4.07386	-3.46555	-3.15937	1
No I^ & T^	0.640966	-2.59347	-1.94481	-1.61418	1
LN_FX- I^	-1.4602	-3.51229	-2.89722	-2.58586	1
T^ & I^	-2.92507	-4.07386	-3.46555	-3.15937	1
No I^ & T^	0.615185	-2.59382	-1.94486	-1.61415	2
RFR-I^	-3.33577	-3.51443	-2.89815	-2.58635	3
T^ & I^	-3.51796	-4.07686	-3.46697	-3.1602	3
No I^ & T^	-0.84667	-2.59456	-1.94497	-1.61408	4

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The Long-run Equation

The results of estimation of the long run equation are presented below.

Table 3:-Results of long run estimation-Share price average.

Variable	Coefficient	Std. Error	t-Statistic	Prob.
LFX	-0.517281	0.210454	-2.45793	0.0162
INTEREST/100	0.255051	0.006428	0.39679	0.6926
INFLATION/100	-0.073545	0.001256	-0.58566	0.5598
RFR/100	-0.595649	0.003667	-1.62427	0.1083
C	3.214599	0.371476	8.653576	0

The resultant Long run equation becomes.

LSHAREPRICE = -0.52*LFX + 0.26*INTEREST/100 - 0.07*INFLATION/100 - 0.60*RFR/100 + 3.21

Since the variables are co-integrated the model is said to be long run model and the coefficient are therefore long run coefficients. The coefficients of Exchange rate are negative and significant at 5 % significance level. The Coefficients of risk free rate, interest rate and Inflation are not significant at 5 % level of significance. The adjusted R- squared of 0.154497 indicates that the model explains only 15.45% of the changes in stock returns. The F statistic is significant indicating that all the variables jointly explain the changes in stock returns. According to the results, a 1% change in inflation is expected to cause 7.35% change in stock returns, a 1% change in exchange rate is expected to cause 51.73 % change in stock returns, a 1% change in risk free rate is expected to cause 59.56 % change in stock returns and a 1 % change in interest rate will lead to a 25.51 % in stock returns.

Table 4:-Results of long run estimation-KCB.

Variable	Coefficient	Std. Error	t-Statistic	Prob.
INFLATION/100	0.258705	0.157252	1.645167	0.1039
INTEREST/100	1.336534	0.804914	1.660468	0.1008
LFX	-0.834367	0.263537	-3.166039	0.0022
RFR/100	-0.837951	0.459215	-1.824749	0.0718
C	3.724638	0.465174	8.006983	0

The resultant Long run equation becomes.

LKCB = -0.83*LFX + 1.34*INTEREST/100 + 0.25*INFLATION/100 - 0.84*RFR/100 + 3.72

The coefficients of Exchange rate and risk free rate are negative and significant at 5 % significance level. The Coefficients of interest rate and Inflation are not significant at 5 % level of significance. The adjusted R- squared of 0.142449 indicates that the model explains only

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14.24% of the changes in stock returns. The F statistic is significant indicating that all the variables jointly explain the changes in stock returns. According to the results, a 1% change in inflation is expected to cause 25.87% change in stock returns, a 1% change in exchange rate is expected to cause 83.44 % change in stock returns, a 1% change in risk free rate is expected to cause 83.8 % change in stock returns and a 1 % change in interest rate will lead to a 133.65% in stock returns.

Table 5:-Results of long run estimation-DTB.

Variable	Coefficient	Std. Error	t-Statistic	Prob.
INFLATION/100	-0.028765	0.201021	-0.143093	0.8866
INTEREST/100	2.087928	1.028956	2.029171	0.0458
LFX	0.794051	0.33689	2.357001	0.0209
RFR/100	-1.402188	0.587034	-2.388597	0.0193
C	0.22516	0.594652	0.378642	0.706

The resultant Long run equation becomes.

LDTB = 0.79*LFX + 2.09*INTEREST/100 - 0.03*INFLATION/100 – 1.4*RFR/100 + 0.23

The coefficients of Exchange rate and interest rate are positive while the coefficient for risk free rate is negative. They are all significant at 5 % significance level. The Coefficient of Inflation are not significant at 5 % level of significance. The adjusted R- squared of 0.178467 indicates that the model explains only 17.85% of the changes in stock returns. The F statistic is significant indicating that all the variables jointly explain the changes in stock returns. According to the results, a 1% change in inflation is expected to cause 2.87% change in stock returns, a 1% change in exchange rate is expected to cause 79.41 % change in stock returns, a 1% change in risk free rate is expected to cause 140.22 % change in stock returns and a 1 % change in interest rate will lead to a 208.79 % in stock returns.

Table 6:-Results of long run estimation-BBK.

Variable	Coefficient	Std. Error	t-Statistic	Prob.
INFLATION/100	-0.178941	0.124456	-1.437785	0.1544
INTEREST/100	-0.27215	0.637044	-0.427208	0.6704
LFX	-0.810973	0.208574	-3.888172	0.0002
RFR/100	-0.199392	0.363442	-0.548619	0.5848
C	4.076227	0.368159	11.07193	0

The resultant Long run equation becomes.

LBBK = -0.81*LFX - 0.27*INTEREST/100 - 0.18*INFLATION/100 - 0.20*RFR/100 + 4.08

The coefficients of Exchange rate are negative and significant at 5 % significance level. The Coefficients of risk free rate, interest rate and Inflation are not significant at 5 % level of significance. The adjusted R- squared of 0.256823 indicates that the model explains only 25.68% of the changes in stock returns. The F statistic is significant indicating that all the variables jointly explain the changes in stock returns. According to the results, a 1% change in inflation is expected to cause 17.89% change in stock returns, a 1% change in exchange rate is expected to cause 81.10 % change in stock returns, a 1% change in risk free rate is expected to cause 19.94 % change in stock returns and a 1 % change in interest rate will lead to a 27.22 % in stock returns.

Table 7::-Results of long run estimation-NIC.

Variable	Coefficient	Std. Error	t-Statistic	Prob.
INFLATION/100	-0.637308	0.240113	-2.654204	0.0096
INTEREST/100	-5.367806	1.22905	-4.367444	0
LFX	-2.642876	0.402403	-6.567737	0
RFR/100	1.551319	0.70119	2.212409	0.0298
C	7.437642	0.710289	10.47129	0

The resultant Long run equation becomes.

LNIC = -2.64*LFX – 5.37*INTEREST/100 - 0.64*INFLATION/100 + 1.55*RFR/100 + 7.44

The coefficients of exchange rate, interest rate and inflation are negative while the coefficient for risk free rate is positive. They are all significant at 5 % significance level. The adjusted R- squared of 0.605522 indicates that the model explains only 60.55% of the changes in stock returns. The F statistic is significant indicating that all the variables jointly explain the changes in stock returns. According to the results, a 1% change in inflation is expected to cause 63.73% change in stock returns, a 1% change in exchange rate is expected to cause 264.28 % change in stock returns, a 1% change in risk free rate is expected to cause 155.13 % change in stock returns and a 1 % change in interest rate will lead to a 536.78% in stock returns.

Table 8:-Results of long run estimation-SCB.

Variable	Coefficient	Std. Error	t-Statistic	Prob.
INFLATION/100	-0.02282	0.134173	-0.170075	0.8654
INTEREST/100	0.887257	0.686785	1.291899	0.2002
LFX	0.408898	0.22486	1.818456	0.0728
RFR/100	-1.409757	0.39182	-3.59797	0.0006
C	1.478334	0.396905	3.724656	0.0004

The resultant Long run equation becomes.

LSCB = 0.41*LFX + 0.89*INTEREST/100 - 0.02*INFLATION/100 – 1.41*RFR/100 + 1.48

The coefficient of Exchange rate is positive and significant at 10% significance level while risk free rate are negative and significant at 5 % significance level. The Coefficients of interest rate and Inflation are not significant at 5 % level of significance. The adjusted R- squared of 0.218968 indicates that the model explains only 21.90% of the changes in stock returns. The F statistic is significant indicating that all the variables jointly explain the changes in stock returns. According to the results, a 1% change in inflation is expected to cause 2.28% change in stock returns, a 1% change in exchange rate is expected to cause 40.89 % change in stock returns, a 1% change in risk free rate is expected to cause 140.98 % change in stock returns and a 1 % change in interest rate will lead to a 88.73% in stock returns.

Error Correction Model

The results of estimation of the error correction model are presented below.

Table 9:- Error correction Model estimation results-share price.

Variable	Coefficient	Std. Error	t-Statistic	Prob.
DRFR/100	0.371612	0.288141	1.28969	0.2017
DINTR/100	-1.08011	0.79899	-1.35184	0.181
DINF/100	-0.10077	0.127165	-0.792402	0.431
DEX	-0.84738	0.266596	-3.178527	0.0023
RESID01(-1)	-0.24618	0.051097	-4.817871	0
C	0.004192	0.002893	1.448955	0.1521
DSP(-2)	0.31035	0.09837	3.154912	0.0024
DSP(-3)	0.289113	0.098234	2.943101	0.0045
DRFR(-3)/100	-0.62564	0.261858	-2.389246	0.0197
DRFR(-5)/100	0.829469	0.338295	2.451911	0.0169
DINF(-1)/100	0.281703	0.135835	2.073861	0.042
DINF(-2)/100	0.361993	0.132285	2.736466	0.008

The results in table 9 indicate that the coefficient of the error correction term is negative and significant at 5% significant level based on the fact that the p value is less than 5 %. This is the highest significance level achieved in the model reduction process. This means that the disequilibrium in the relationships is corrected at the rate of 24.62% per month i.e. 24.62% of the short run variations feed into the long run path.

The results in table 10 indicate that the coefficient of the error correction term is negative and significant at 5% significant level based on the fact that the p value is less than 5 %. This is the highest significance level achieved in the model reduction process. This means that the disequilibrium in the relationships is corrected at the rate of 26.12% per month i.e. 26.12% of the short run variations feed into the long run path.

Table 10:- Error correction Model estimation results-KCB.

Variable	Coefficient	Std. Error	t-Statistic	Prob.
DEX	-0.962942	0.370374	-2.59992	0.0115
DINF/100	0.111143	0.152187	0.730308	0.4678
DINTR/100	0.023163	1.169388	0.019808	0.9843
DRFR/100	0.061034	0.379974	0.160626	0.8729
RESID01(-1)	-0.261229	0.069703	-3.747723	0.0004
C	0.007237	0.003876	1.867256	0.0663
DEX(-2)	-0.978444	0.335276	-2.918319	0.0048
DEX(-4)	-1.002405	0.382375	-2.621524	0.0109
DINF(-4)/100	0.284142	0.156453	1.816146	0.0739
DRFR(-1)/100	0.89384	0.435775	2.051149	0.0442
DRFR(-2)/100	-0.915267	0.405192	-2.258849	0.0272
DRFR(-5)/100	0.855069	0.462519	1.848722	0.069

Table 11:- Error correction Model estimation results-DTB.

Variable	Coefficient	Std. Error	t-Statistic	Prob.
DEX	-1.049822	0.323632	-3.243879	0.0018
DINF/100	-0.153608	0.152649	-1.006278	0.3177
DINTR/100	-2.048386	0.774722	-2.644025	0.0101
DRFR/100	-0.42728	0.304605	-1.402736	0.1651
RESID01(-1)	-0.110289	0.039188	-2.814341	0.0063
C	0.008369	0.003507	2.386259	0.0197
DLDTB(-5)	0.189115	0.102468	1.845599	0.0692
DINF(-1)/100	0.390759	0.155968	2.505382	0.0146

The results in table 11 indicate that the coefficient of the error correction term is negative and significant at 5% significant level based on the fact that the p value is less than 5 %. This is the highest significance level achieved in the model reduction process. This means that the disequilibrium in the relationships is corrected at the rate of 11.03% per month i.e. 11.03% of the short run variations feed into the long run path.

The results in table 12 indicate that the coefficient of the error correction term is negative and significant at 5% significant level based on the fact that the p value is less than 5 %. This is the highest significance level achieved in the model reduction process. This means that the disequilibrium in the relationships is corrected at the rate of 20.42% per month i.e. 20.42% of the short run variations feed into the long run path.

Table 12:- Error correction Model estimation results-BBK.

Variable	Coefficient	Std. Error	t-Statistic	Prob.
DEX	-0.724713	0.380855	-1.902858	0.0611
DINF/100	-0.113195	0.172706	-0.655422	0.5143
DINTR/100	-0.363988	0.911006	-0.399545	0.6907
DRFR/100	0.132713	0.391196	0.339251	0.7354
RESID01(-1)	-0.20421	0.063575	-3.212134	0.002
C	0.003139	0.0042	0.747492	0.4572
DINF(-2)/100	0.401211	0.178713	2.245006	0.0278
DRFR(-3)/100	-0.908297	0.385258	-2.357633	0.0211

Table 13:- Error correction Model estimation results-NIC.

Variable	Coefficient	Std. Error	t-Statistic	Prob.
DEX	-0.447614	0.761302	-0.587959	0.5585
DINF/100	-0.21527	0.326015	-0.660306	0.5113
DINTR/100	0.402517	1.963189	0.205032	0.8382
DRFR/100	0.552074	0.701809	0.786644	0.4342
RESIDNIC(-1)	-0.105626	0.06055	-1.744431	0.0855
C	-0.003784	0.008078	-0.468427	0.641
DINF(-6)/100	-0.618411	0.329912	-1.87447	0.0651
DRFR(-2)/100	-1.878342	0.787405	-2.385485	0.0198

The results in table 13 indicate that the coefficient of the error correction term is negative and significant at 10% significant level based on the fact that the p value is less than 10 %. This is the highest significance level achieved in the model reduction process. This means that the disequilibrium in the relationships is corrected at the rate of 10.56% per month i.e. 10.56% of the short run variations feed into the long run path.

Table 14:- Error correction Model estimation results-SCB.

Variable	Coefficient	Std. Error	t-Statistic	Prob.
DEX	-0.262001	0.238116	-1.100308	0.275
DINF/100	-0.127342	0.112378	-1.133156	0.2611
DINTR/100	-0.218882	0.604226	-0.362251	0.7183
DRFR/100	-0.136841	0.238707	-0.573258	0.5683
RESID01(-1)	-0.131203	0.037106	-3.535927	0.0007
C	0.003404	0.002573	1.322983	0.1902
DLSCB(-1)	0.158794	0.107453	1.477802	0.144
DLSCB(-2)	0.204101	0.108965	1.873085	0.0653
DLSCB(-3)	0.177552	0.107995	1.644073	0.1047
DEX(-2)	-0.399427	0.22285	-1.792359	0.0775
DINF(-1)/100	0.34813	0.114157	3.049572	0.0032

The results in table 14 indicate that the coefficient of the error correction term is negative and significant at 5% significant level based on the fact that the p value is less than 5 %. This is the highest significance level achieved in the model reduction process. This means that the disequilibrium in the relationships is corrected at the rate of 13.12% per month i.e. 13.12% of the short run variations feed into the long run path.

Granger Causality test: In so far as causality is concerned, it is observed that changes in exchange rates will granger cause changes in interest rates while the risk free rate and interest rate have a bi- directional causality according to the results of the test. This may explain why the impact of interest rate and the risk free rate are not captured in the results as would be expected. It was noted that when a bank stock granger caused a determinant, that determinant turned out to be a significant determinant of that stock's returns.

Conclusions And Recommendations

The study finds that change in exchange rate is the predominant determinant of change in stock returns as the coefficient of change in exchange rate is the only significant variable in the long run model at 51%. The relationship is of an inverse nature. This is interesting especially since foreign exchange trade is increasingly emerging as a major revenue stream for banks with local banks reaping record profits during the year 2011 when exchange rates had been the most volatile they had been in over a decade. It is also noteworthy that in the short run historical values for stock returns exert a level of influence on the current period stock returns. Similarly, the risk free rate and inflation from previous periods also seem to exert some influence on current stock returns.

Of note, in so far as causality is concerned, it is observed that changes in exchange rates will granger cause changes in interest rates while the risk free rate and interest rate have a bi-directional causality according to the results of the test. This may explain why the impact of interest rate and the risk free rate are not captured in the results as would be expected.

The study concludes that exchange rate and risk free rate are the most important variables for managing stock returns for bank stock. It however takes note of the causality exhibited between the tested variables implying that exchange rate can be used to predict future interest rates. Based on the findings, there is need to further study in this area especially in the area of causality.

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FACTORS AFFECTING TIMELY COMPLETION OF COMMUNITY PROJECTS IN KENYA: A CASE STUDY OF NAKURU COUNTY.

George Misigah*, Caroline Kinyanjui and Oscar Ohaya
Jomo Kenyatta University of Agriculture and Technology
Email: **gmisigah@yahoo.com. Tel: 0722-322436**

Abstract

The paper investigates factors affecting the timely completion of CDF projects in Nakuru County, a strategy to attain regional sustainability and independence in the devolved regional government structures in Kenya as entrenched in the new political dispensation. It also aimed to assess the extent to which financial procedures used affect the completion of the CDF projects within the Constituencies. CDF has enabled many communities attain the development milestones spanning education, health, water, infrastructure, social amenities, energy and security. Empowering the Mwananchi to decide their development agendas as in the case with CDF, is the panacea that will drive our country towards realizing the Vision 2030 which is anchored on the three pillars; Political, Economic and the Social pillars. The target population for the study was 50 projects funded in the 2009/2010 financial year. Convenience sampling technique was used to select 25 project chairpersons from the entire population. Both quantitative and qualitative data was used to obtain the information about the timely completion of the projects. A comparison between the project's completion times was done using t statistics and ANOVA test. The result reveals that the main factors affecting the timely completion of CDF projects were; poor planning, poor budgeting, poor scheduling, inadequate and late disbursement of funds, undue political influence, political patronage and poor community participation. The major recommendation is that the government should ensure that proper planning of projects is done before implementation, proper financial procedures should be used to disburse funds, and corrupt individuals are apprehended and finally the community to be empowered to participate in the project.

Key Words: CDF Project, Completion of the projects, and independence in the devolved regional government structure

Introduction

It is important for a project manager to understand timing and scheduling and how to make planning tools work for their project and not the other way round .Time is unique and unlike other resources such as money and people lost time can never be replaced. For years down the line, CDF has enabled many communities attain the development milestones spanning education, health, water, infrastructure, social amenities, energy and security. The CDF Projects should be monitored by Wananchi, the LDC, CDC, CDF, MMC and DDC, the department heads and all the stakeholders. Its expectations are audited by internal auditors from the fund and external auditors from the controller and auditor general.

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Statement of the problem

The constituency development Fund (CDF) is one of the devolved funds in Kenya. Prior to the establishment of CDF the constituency was solely a unit of political representation in Kenya of which there are 210 in the country.CDF provides that at least 2.5% of government revenue will be allocated to the fund which is geared towards the alleviation of poverty and promotion of local development. The implementation of CDF in Subukia Constituency has been marred by repeated accusation of abuse of funds, patronage due to excessive power of the MP. Incomplete projects, lack of technical capacity, poor planning and a litany of other weaknesses which theater to undermine the very success of the fund. In this case Subukia CDF Projects have been well implemented and completed while others are ongoing .There are some which have collapsed or stagnated. Thus this study was set out to find out the factors facing the timely completion of CDF Projects in Subukia Constituency.

Objectives of the study

1. To establish if community support influences the timely completion of CDF Projects within Subukia Constituency.

2. To asses if political interference is a factor delaying the timely completion of CDF Project within Subukia Constituency.

3. To examine if planning affect the timely completion of CDF Projects within Subukia Constituency.

4. To assess the extent to which financing procedures used affects the timely completion of CDF Projects within Subukia Constituency.

Significance of the study

The findings of the study will be of importance to several stakeholders who will benefit directly or indirectly from the timely completion of community projects. The communities at large need these projects either as social amenities as vital projects like schools and health centers. The government of Kenya will find the study of interest as a source of information for evaluating its efforts in implementing projects for its people. The general public and other scholars will also find the study to be of use for their general information regarding CDF Projects.

Scope of the study

This study was carried out to analyze the factors affecting the timely completion of CDF Projects. The study was carried out in Subukia Constituency .The target population for this study was 50 project chairpersons of the 50 projects funded in 2009/2010 financial year.

Literature Review

The Constituency Development Fund (CDF) was created in Kenya in 2003 through an act of parliament to fight poverty at the grassroots level through the implementation of community based projects which have long term effects of improving the people's economic well being and

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to relieve members of parliament from the heavy demands of fund-raising for projects which sought to be financed through the consolidated fund.

The case of CDF Program involves redistribution of decision making responsibilities for project planning and implementation from the central government ministries and departments to the constituencies.

Previous Studies

According to Odiek (2010) policies are very important in project implementation .In his research on water projects, it was revealed that the possible cause of these challenges was lack of clear policies that govern the management of projects. As much as there are policies in place, those charged with this responsibility need clearly set guidelines and responsibilities that go with that.

According to Changole (2008) projects especially entrepreneurs are affected by both internal and external factors. Internal factors include managerial skills, capabilities of the owners, technology adopted, business advice and internal services. Some of the external factors include government incentives, location of the project, infrastructure, finance and competition.

Critical Review

Factors affecting the timely completion of CDF Projects

Devolved Funds: Devolved funds have been said to be one of the ways to ensure fair distribution of resources and generation of wealth. One such fund is the CDF whose creation was hailed as a good model for development.

Misappropriation and Embezzlement: Many people say CDF has not reduced corruption or discrimination as earlier investigated. Instead it has increased graft and political manipulation. There are no accountability structures making it susceptible to misappropriation and embezzlement.

Institutional structure of CDF program: The CDF Act requires the government to grant the program a minimum of 2.5 % of the national revenue for each financial year, besides monies to be recurred through borrowing or other sources , presumably donations received by the National Management Committee (NMC) of the fund .

Governance: Governance factors encompass the following items; The acts of parliament that have created some of the funds give immense powers to the local member of parliament (MP).

Poor project planning: The translation of the project mission, goals and performance measuring into workable (feasible) plan is the link between the conceptual design phase and the production place.CDF projects lacks detailed plan that covers all aspects of the project – technical, financial, organization scheduling, communication and control which are the core basis of implementation.

Poor Communication: The successful transition between the phases of a projects life cycle and good coordination between participants during each phase requires a continuous exchange of information .This is a major challenge for CDF Projects as the structure and channels of

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communication are highly impaired. The communication lines of authority between the CDF Project stakeholders are not clearly defined.

Monitoring and Evaluation: The facts captured under monitoring and evaluations are: There is a lack of professional and technical supervision, which has led to late project deliveries.

Implementation: Poor participation, particularly for marginalized groups, results in poor prioritization of projects and exclusion and the criteria for allocating secondary education bursary fund, for example has been found to be unfair to orphans, whose multiple roles undermine their academic performance.

Lack of interest and support from the local community: Most people in Kenya are generally behind news or simply, lack of interest on the government's new initiatives of spearheading development through the bottom up approach of engaged governance. This is mainly due to failure on the part of the government in rising above board in building public confidence on the new institutions of development.

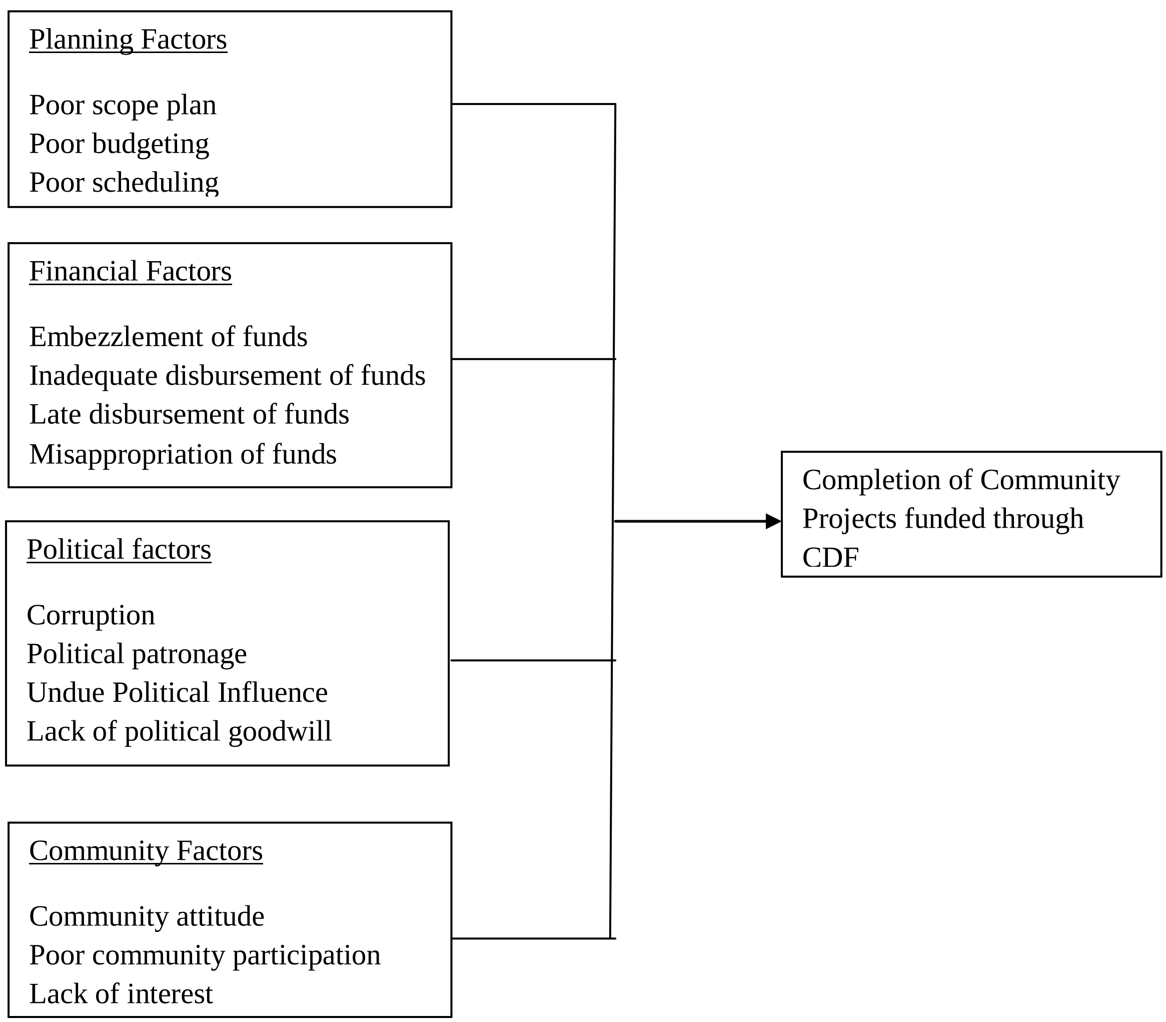

Figure 1: Conceptual framework

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The above conceptual framework illustrates the interplay of different variables involved in the completion of community projects. The factors that affect the completion can be viewed as inputs which are processed in a project setup to produce the required outcome. Poor scope plan, poor budgeting and scheduling form the planning factors affecting the timely completion of CDF projects. On the other hand embezzlement of funds, inadequate disbursement, and late disbursement of funds and misappropriation of funds constitute the financial factors causing the delay. However, corruption, political patronage, undue political influence and lack of political goodwill also affect the timely completion of CDF Projects, forming the political factors.

Methodology

The study adopted a descriptive survey research design. Mugenda and Mugenda (2003) describes a survey design as an attempt to collect data from members of a population in order to determine the current status of that population with respect to one or more variables.

The study targeted all the project chairperson of the 50 projects funded in 2009/2010 financial year. There were 50 projects headed by 50 project chairperson, who formed the population size of this study.

Sampling in the process of selecting a member of individuals for a study in a such a way that the individuals selected represent the larger group which they were selected (Mugenda and Mugenda, 2003).The sample frame consisted of projects managers of the 50 different projects.

The study used convenience sampling technique. This involved selecting 25 project chairperson from the entire population. These were the respondents the researcher was able to contact and were available for the issue of questionnaires. The study used questionnaires to collect raw data from the respondents. The questionnaires were guided by objectives and research questions in this study.

Descriptive statistics with the use of frequencies and percentages were used to analyze the entire data. Presentation was done in the form of tables, charts and graphs, which facilitated easy understanding and interpretation of the results .There after discussions followed immediately explaining on the same

Findings

Planning and timely completion of CDF Projects : Most of the respondents, 80%, agreed that planning affect the timely completion of CDF project, while the remaining 20% of the respondents disagreed. This shows that most of the projects are not completed in time due to lack of planning. This therefore calls for the management to plan for the projects before they are implemented to ensure that projects deliver on time.

Planning factors affecting the completion of CDF Project: Most of the respondents (50%) had the opinion that poor scope plan and poor budgeting were the major planning issues affecting the timely completion of CDF projects, while 20% of the respondents said it was poor scheduling that caused the delay. 10% of the respondent gave other planning problems which included poor resource utilization planning and poor logistics planning. Therefore, the management of the CDF

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Projects should ensure that proper scope plan is done, finances are well budgeted and time is properly managed to ensure that projects deliver in time.

The Person responsible for Planning: Most of the planning (50%) is done by the CDF Committee, while 25 % of the respondents (representing others) said it was the Project Management Committee (PMC), who were responsible for the planning. This shows that, in as much as the area Member of Parliament has influence to the CDF projects, he/she is not involved in the planning process. The people concerned with the planning of the CDF Projects are the CDF committee and The Project Management committee.

Financial procedure and the timely completion of CDF Projects: The research found out that all respondents were of the opinion that financial procedures used in the disbursement of CDF funds, greatly affects the completion of the projects. Therefore, there is need for the government to streamline the financial procedures used to disburse funds to ensure that funds flow effectively to avoid further delays.

Financial issues affecting the completion of CDF Projects: The research found out that most of the respondent (55%), said that embezzlement of funds was the major finance issue, whereas (25%) and (15%) of the respondents said that inadequate and late disbursement of funds respectively affected the completion of the CDF projects.

.Therefore, there is need for the Government to ensure that any form of corruption is dealt upon to avoid further delays of projects.

Influence of political interference on completion of CDF Projects: The researcher found out that most of the respondents (50%) said that corruption by politicians greatly paralyzed the timely completion of projects, while 25% of the respondents were of the opinion that it was political patronage that caused the delay.

Extent of political interference on timely completion of CDF Projects: The researcher found out that most of the respondents, (50%) said that corruption had affected the completion of CDF Projects to a great extent, while (25%) of the respondents said that lack of political goodwill affected the completion of the projects at a least extent.

Influence of community participation in the completion of CDF Projects: The researcher found out that most of the respondents (70%) said, yes, that participation of the community in the CDF Projects greatly influences their completion, while 25% of the respondents said no. This clearly indicates that the more involved the community is toward the completion of the projects, the less the time used.

Community issues affecting the timely completion of CDF Projects: The researcher found out that most of the respondents (80%) attributed poor participation and lack of interest from the community to the untimely completion of the CDF projects. While (20%) of the respondents said that the community's view that CDF funds as "gifts" from the government, posed a hindrance in the completion of the projects.

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Summary of Major Findings

The purpose of the study was to find out the factors affecting the timely completion of CDF Projects in Subukia Constituency.

On planning factors, it emerged that 50% of the respondents attributed poor scope planning and poor budgeting to the untimely completion of CDF Projects, 20% of the respondents said that it was poor scheduling that caused the delay.

On political interference affecting the timely completion of CDF Project, 50% of the respondents said that corruption greatly paralyzed the completion of the projects, 25% of the respondents said that political patronage caused the delay.

Regarding the community factors affecting the timely completion of CDF Projects, 80% of the respondents said that poor Community participation and lack of interest from the community were the major causes to the untimely completion of the CDF Projects, while 20% of the respondents said that community's view that CDF funds are "gifts" from the government paralyzed the timely completion of CDF Projects.

Conclusion

From the findings of the study it is evident that CDF projects in Subukia Constituency fail to be completed in time due to the below named factors;

Planning factors- this encompassed; poor project scope definition, poor scheduling of CDF activities, poor budgeting and finally poor resource utilization planning.

Financial factors- this included; inadequate disbursement of funds, late disbursement of funds from the CDF kitty, embezzlement of funds by corrupt individuals and finally misappropriation of funds by CDF officials.

Political factors- this included; corruption by politicians, political patronage, use of undue political influence and lack of political goodwill by politicians.

Community factors- this included; poor community participation in CDF projects, ignorance and lack of interest by the community and finally, the community's perception that CDF funds are "gifts" from the government.

Recommendations

Based on the research findings, it is evident that there is need for the Government's intervention in the matter regarding CDF Projects.

First, the government should ensure that proper planning is done .This includes good project scope plan, good resource utilization planning and proper scheduling.

Secondly, the researcher recommends that the government should come up with financial procedures which will ensure that CDF funds are disbursed adequately and on a timely manner.

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Thirdly, the researcher recommends that the community around the projects should be empowered so that they can actively participate in the project activities. This includes educating them that CDF funds are not "gift" form the government, but the project are meant to benefit them.

Finally, the researcher recommends that corrupt individuals, who embezzle CDF funds, should be apprehended and made to face the law. This will save the government millions of shillings, which are channeled to individuals' pockets.

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FACTORS AFFECTING THE IMPLEMENTATION OF MANAGEMENT INFORMATION SYSTEM IN SELECTED FINANCIAL COOPERATIVES IN NAIROBI.

Irene W. Munene*, G.S.Namusonge & Mike Iravo
Jomo Kenyatta University of Agriculture and Technology
Email: shikumunene@gmail.com

Abstract

Management Information System (MIS) provides information which is needed to manage organizations efficiently and effectively and involves people, technology and information. The main purpose of this study was to examine the factors affecting implementation of MIS in selected financial cooperatives in Nairobi. The theories for this study were; Technology Acceptance Model (TAM) which deals with behavior element as well as Unified Theory of Acceptance and use of Technology (UTAUT). The study employed survey study as its research design with a target population of five (5) organizations from a total population of 52. The sample consisted of one hundred and four (104) support staff and five (5) senior staff members from the selected organizations. The sampling design was simple random sampling procedure which was used to select the support staff, however, senior managers were selected using purposive sampling technique. Structured questionnaire was the main research instrument used to solicit data from the support staff. The collected data were analyzed quantitatively by descriptive and inferential statistics. The study revealed that the factors: training, cost, infrastructure and regulations affected the implementation of MIS in selected financial cooperatives in Nairobi. The study recommends favorable regulations for effective implementation of MIS in organizations such as provision of internet bundles and lowering of prices. However, further research could be on ineffectiveness of MIS implementations, extend of legal provisions during its implementation and challenges that affect the organization outputs.

Key words: Implementation Factors, Management Information System, Nairobi Financial cooperatives.

Introduction and background of the study

The terms Management Information System (MIS), Information System (IS) and Information Technology Management (ITM) are often confused. ITM concerns the operation and organization of information technology resources independent of their purpose. A MIS provides information which is needed to manage organizations efficiently and effectively. It involves three primary resources: people, technology, and information (Kenneth, 2009).Academically, the term is commonly used to refer to the group of information management methods tied to the automation or support of human decision making (O'Brien, 1999).

Global information systems development can be closely attributed to the process of globalization in which the IT industry is becoming more and more globally interconnected. A number of scholars have argued that the existing local, socio-cultural context is a critical factor in mediating

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the globalization process in a specific context and, in turn, has an impact on the complexity of globalization. (Avgereu, 2002)

In Kenya, Financial Management Systems (FMS) are used to provide receivable management solutions to financial service institutions both in the government and private sector.

Statement of the Problem

Implementation of MIS at financial organizations is one of the effective tools needed to effectively eliminate the logging of jobs and enhance the smooth running of the Sacco's operations. According to Bwisa (2009) organizations and especially the small ones should embrace the application of MIS for effective return to members of the organization.

The study by Barki & Ewusi in regard to MIS implementation, postulated that lack of expertise, including lack of development expertise, lack of application on specific knowledge and lack of user experience on IS, contributes to MIS project risk (Barki et al.1993; Ewusi-Mensah, 1997) This indicates that for managers to work efficiently in implementing the Management information system in their organizations, then they must have a hand and experience in IT systems.

Organizations, as they implement MIS are also guided by certain regulations that are meant to protect the privacy and security of private financial information that financial institutions collect, hold, and process (Dhillon, 2007). Small organization may lack capacity of validating the reports released through their systems. There is therefore need to examine the extent to such organizations adhere to the legal provisions during the implementation of MIS. This is attributed to various factors that are subject to investigation. Review of literature further reveals that there are a number of studies that have been conducted on MIS (Kenneth, 2009; Laudon, 1999; Hsu, 1995; Beaumaste, 1999; Namusonge, 2005 and Rodrigues, 2003).

However, there is no attention that has particularly been made on the factors facing the implementation of MIS in Financial cooperatives. Therefore, there is need to examine the factors affecting the implementation of MIS in the Financial Cooperatives in Kenya.

Objectives of the study

The general objective of this study was to examine factors affecting the implementation of MIS in small scale financial cooperatives in Kenya.

This study was guided by the following specific objectives:

To find out the effect of training in Information Communication Technology on the implementation of Management Information System in Financial Cooperatives in Nairobi.

i. To establish the effect of cost on the implementation of MIS in Financial Cooperatives in Nairobi.

ii. To find out the effects of technology infrastructure on the implementation of MIS in Financial Cooperatives in Nairobi.

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iii. To find out how regulatory environment affects the implementation of MIS in Financial Cooperatives in Nairobi.

Importance and Justification of the Study

The study was expected to be of significance to a number of stakeholders: These include the management of financial organizations, policy makers, and system developers. The study was also expected to contribute to global knowledge on the challenges facing the implementation of MIS in financial movements. The findings of this study were of benefit to the management and administrators of the various financial cooperatives in terms of shedding light on various issues that affect the effective implementation of MIS. The findings of this study on the training needs, cost involved in buying, installing, and maintaining information systems, regulatory mechanisms and infrastructure issues that may hinder effective implementation of MIS are areas that shed more light to system developers in designing tailor made applications for financial institutions.

Scope of the Study

The study focused on the factors that are affecting the implementation of MIS at the various selected Financial Cooperatives in Nairobi. The factors that were dealt with will be; training of personnel, cost of the Information System, infrastructure, and the regulatory environment. The management staff and office employees was the key informants since they were directly involved with the day today running of the organization.

Limitations of the Study

Limitations were those conditions which were beyond the control of a researcher that placed restriction on the conclusion of the study and their application to the situations (Best and Kahn, 1993).The key limitation that was encountered in this study was failure of some respondents who were mainly administrators and managers of the various organizations to truly answer the asked questions on the factors affecting the implementation of MIS at their respective organizations. This attributed to the fact that many administrators did not want to disclose the negative side in their organizations operations.

Theoretical Framework

There are various theories and models that are associated with the acceptance and take-up of ICT innovations. These models/ theories on ICT acceptance and implementation have been developed in association with commercial products and business organizations. This section reviews some of the theories that are associated with the adoption and implementation of ICT adoption in organizations. Some of these theories reviewed include Technology Acceptance Model (TAM) and Unified Theory of Acceptance and Use of Technology (UTAUT).

Technological Acceptance Model (TAM)

The Technology Acceptance Model (TAM) was developed by Davis to explain technology-usage behavior. The theoretical basis of the model was Fishbein and Ajzen's Theory of Reasoned Action (TRA). Both of these theories have strong behavioral elements; assume that when

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someone forms an intention to act, they will do so without limitation. However, in real life situation, there will be many constraints that limit freedom to act (Bagozzi & Warshaw 1992).

Unified Theory of Acceptance and Use of Technology (UTAUT)

This model was formulated by Venkatesh and others. The model aims to explain user intentions to use an information system and subsequent usage behavior. The theory holds that four key constructs, namely performance expectancy, effort expectancy, social influence, and facilitating conditions are direct determinants of usage intention and behaviour. Gender, age, experience, and voluntariness of use are posited to mediate the impact of the four key constructs on usage intention and behavior.

The conceptual framework of this study shows the interaction between the dependent and independent variables. This study conceptualizes that the implementation of MIS being a dependent variable depends on training, cost, infrastructure and the regulatory factors.

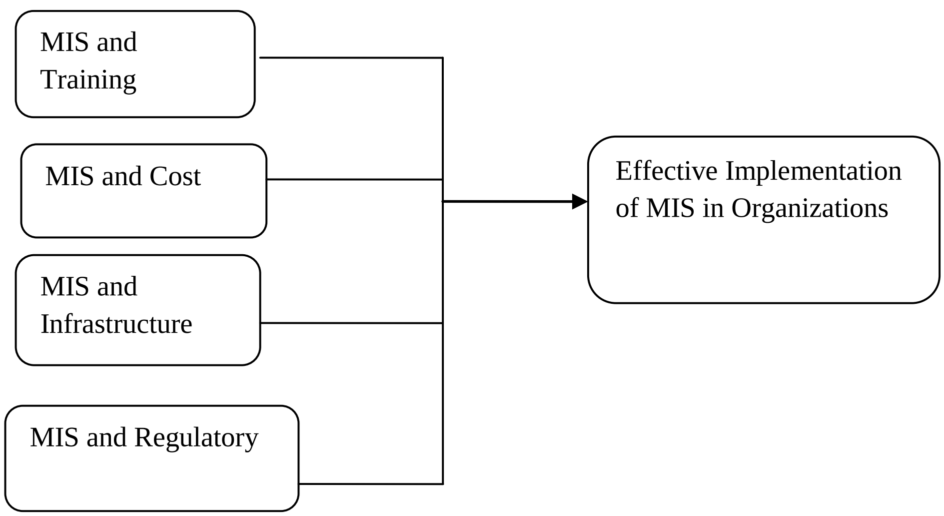

Figure 1: Conceptual Framework

Research Gaps

IS has become part of the function of many financial organizations today. Like many businesses, a number of organizations rely heavily on IT infrastructure in their management. However, (MIS) is still a relatively young technology especially to small scale organizations. Besides the notable exception of operational IS, little empirical research exists on the application of MIS in the management of these organizations. There is generally lack of concern for the improvement (Argyr’s, 1976).

Mugambi (2011) studied factors influencing implementation of IFMIS using the Kenya Institute of Education as a case study. He found that effective training of technical staff and end users was effective although user manuals were not provided. The study did not provide for the

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establishment of the project cost. No attempt was made at establishing whether the implemented system had achieved the aims for which it was initiated. Based on the results, it is possible to conclude that the implementation of IFMIS was successful although room exists to improve the process further

Review of literature showed that there are a dozens of studies that have been conducted in the field of the factors affecting MIS implementation in organizations (Kenneth, 2009; Laudon, 1999; Hsu, 1995; Beaumaste, 1999 and Rodrigues, 2003). From the literature reviewed, these factors (training, cost, infrastructure and regulatory environment) were found to be directly or indirectly influencing MIS implementations in organizations. Most of the studies some used only questionnaires method and lacked triangulation. In general, the reviewed studies are wide in scope, having considered various organizations from international perspective.

Research design

Research design used was a survey design was used since the study collected data from different organizations within Nairobi. This design which was descriptive in nature assisted the researcher in collecting data from respondents based in different organizations as well as in estimating population parameters. The design was also appropriate in collecting data from a big sample. The sample consisted of internal staff of the sampled financial cooperatives in Nairobi and the senior managers. The target population for this study consisted of all the financial cooperatives in Nairobi area (n=52), the support staff members (n=1040) and senior staff members (n=52). In total, the target population was one thousand and ninety two (N=1092). This population was expected to provide information that assisted in answering the research problems.

Sample Size and Sampling Technique: This study used simple random sampling procedure to obtain the sample of respondents from the selected organizations. In total, the sample of this study included 5 financial cooperatives, five senior managers in these organizations and one hundred and four (104) support staff members in the organization.

Sampling Financial Cooperatives: There are fifty two (52) financial cooperatives enlisted as members in Nairobi Association of financial Cooperatives. The study used simple random sampling technique from the list to select 10% of the organizations. This translates to five (5) organizations. According to Gray (1996), at least 10% of the total population is held to be representative.

Sampling Senior Management Staff: Purposive sampling technique allowed a researcher to use cases that have the required information in respect to the objectives of the study (Mugenda and Mugenda, 1999).

Table 1: Sample Size

Cadres of Staff	Population Estimation	Sample Size (10)
Support staff members	1040	104
Senior staff members	52	5
ICT Experts	25	15
Total	**1117**	**124**

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Pilot Test: The piloting was done to test whether: the aim of the study was achieved, if there was any ambiguity in any item, if the instrument elicited the type of data anticipated, and also to indicate whether the research objectives were appropriately addressed thus enhancing reliability and validity. The instruments were piloted with two (2) micro-financial institutions in Nairobi which was not part of the sample. Both management and support staff were targeted in the pilot test.

Data and Analysis and Presentation: In this case, the following model will be used to measure the relationship between the dependent variable and independent variables.

Research Model

$Y = a + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + e$

Where

Y = Effective implementation of MIS, a= Constant, X_1= Management information systems training, X_2= Management information systems costs, X_3= Management information systems Regulation, X_4= Management information systems infrastructure, e= Random error term

Personnel Training(X_1): Since much of the information systems involve the application of ICT knowledge, personnel who have no or poor training in that line would not be very effective in implementing the same. Hence training and re-skilling managers and other administrators in ICT facilities are paramount for an effective MIS application. MIS training was measured by computing the mean of all the responses comprising (MIS training on upgrading skills, on job training and refresher courses) where No=0 and Yes=1.

Cost factor (X2): Other people or organizations especially smaller ones would not afford the cost of acquiring, installing and maintaining ICT equipments. Others would prefer low cost equipments which might be less efficient in information transmission and acquisition. Cost variable was measured by computing the mean of the responses (1-Not Applicable; 2- Very Low; 3- Low; 4- High; 5 – Very High in linker scale) for all the aspect listed in the questionnaire.

Regulatory environment(X3): The organization's management or government policy in regard to the use of certain MIS systems in certain areas can also hinder the effective implementation of MIS. Thus, this study conceptualizes that certain legal provisions may hinder effective implementation of MIS in small financial institutions. Regulatory environment was measured by computing the mean of the responses (1-Not Applicable; 2- Very Low; 3- Low; 4- High; 5 – Very High in linker scale) on competence for all the components listed in the questionnaire.

Infrastructure(X4): These pertains physical and system infrastructure. Without such, it would be difficult for organizations to effectively implement MIS. Infrastructure was measured by computing the mean of the number of ICT tools/ resources needed and available.

Response Rate: A total of 124 questionnaires were distributed to the selected respondents in Nairobi County. A total of 120 questionnaires were duly filled and collected making a 96.8%

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response rate. This was an acceptable rate and could be attributed to the fact that the questionnaires were physically dropped to the respondents and collected at an agreed date.

Discussion of key Findings and summary

This analysis indicates that, there exist an association between cost factor and effective implementation of MIS. For instance, it was found that, 4 out of 120 respondents cited high cost, affects effective implementation of MIS thus achieving between 0-40percent. Indeed, 5 out of 120 respondents said that cost factor was not applicable, thus implementation status was above 61%. This implies that, high cost of ICT systems and installation affects implementation of MIS in a significant way.

Summary

The study revealed that, majority of the respondents had on-job training. The respondents with on-job training had achieved implementation status of more than 40%.This result implies that ICT training (on-job training) in an organization has effect on implementation of MIS at 5% significance Level.

The research tested the significance of the association between cost factor and MIS implementation. and concluded that cost factor has effects on implementation of MIS in an at 5% significance level according to the given information.

The research found that in an organization where regulations are not applicable, implementation status of MIS is almost 100%. However, moderate regulatory environment is essential for the implementation of MIS in an organization and concluded that regulations have effects on implementation of MIS in an organization.

The study found that, there exist a slight significant between infrastructure and Implementation of MIS. About, more than half of the respondents who mentioned inadequate infrastructure stated that implementation level of MIS was between 41-60%. However, result indicated that, even with inadequate infrastructure, it was possible to achieve 100% implementation level and concluded that ICT infrastructure has slight effects on effective implementation of MIS. Thus, the association was marginally significant at 5% significance level according to the given information.

The findings revealed that majority of the respondents indicated that MIS implementation level was between 41-60% whereas 25.8% of the respondents quoted implementation level of more than 60%. It was found that, in the cases where implementation level was low, the performance of MIS was poor. Also it was observed that in the cases where implementation level was between 41-60%, performance of MIS was quite good. The study found that performances and how effectively an organization applies MIS implementation in an organization were significant.

Finally, the study found that only cost factor and regulatory environment were statistically significant in the multiple regression models at 5% significance level according to the data given.

Conclusion

The study revealed that training in general has improved implementation of MIS since most of the respondents were able to interact with the system. However, some respondents said that training has not improved MIS since objectives were not achieved due to lack of vigilance.

The study found that effective implementation of MIS could be achieved if the cost factor is at affordable margin. In the case where the cost factor was not applicable effective implementation of MIS was not achieved. Therefore, low cost of ICT systems and installation can enhance effective implementation of MIS in an organization.

The study revealed that tough regulations hinder effective implementation of MIS in an organization. However, some respondents prefer lack of regulations in order to achieve effective implementation of MIS in an organization. In the few of the researcher, favorable regulations deemed essential for effective implementation of MIS in an organization.

Infrastructure has improved implementation of management information system in the sense that efficiency and neatness has been improved, reduced paper work and access of resources. Nevertheless, some of the respondents are of the opinion that implementation of MIS has affected earlier accustomed organization of the system and performance is poor. In general, inadequate ICT infrastructures hinder effective implementation of MIS in an organization.

Finally, in the model it was found that cost factor and regulations were statistically significant at 5% significance level, thus very crucial in the prediction effective MIS implementation in an organization. The model was not sufficient enough to be relied upon.

Recommendations

Based on the data analysis, findings and conclusions, the researcher wishes to make the following recommendations:

It is evident that cost factor impacted on the implementation of MIS in organizations. In this case, the study found that effective implementation of MIS could be achieved if the cost factor is at affordable margin.

The study found that there exists inadequate ICT infrastructure that hinder effective implementation of MIS, thus the study recommends provision of ICT systems by the management in order to improve the performance of MIS in an organization.

Since some respondents were of the opinion that lack of regulations enhance effective implementation of MIS. The study recommends favorable regulations for effective implementation of MIS in an organization such as provision of internet bundles at lower price.

Area for further research

Improvement of factors affecting implementation of MIS gives financial cooperatives a sense of direction that helps in focusing on the desired goals. Hence more study can be done to explore

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more opportunities in the following area: A study to find out factors contributing to ineffective of MIS implementations.

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**Main Author*

MACROECONOMIC DETERMINANTS OF REMITTANCES IN KENYA

Irene Wandati*
Jomo Kenyatta University of Agriculture and Technology
Email: **iwandati@yahoo.com**

ABSTRACT.

In most of the developing countries remittances have been increasing over time and are playing a critical part in economic development of these countries. In Kenya specifically, remittances have shown an increasing trend though with some fluctuations in a number of periods. The main objective of the study was to investigate the major macroeconomic factors having a great impact to the amount of remittance in Kenya. The study proposed to analyze the long run relationship between remittances and economic growth on remittances in Kenya for the period starting from 1970 to 2011. The study analyzed two theories on Altruistic motives of remittances as well as numerous empirical journals on various determinants of remittances in different countries. The study used time series techniques whereby diagnostic testing was conducted for each series, for example, unit root tests and further specified the appropriate model that was used to study macroeconomic determinants of remittances in Kenya. Further the study employed co integration technique to establish whether there is a long run relationship between remittances and economic growth. The study found that real gross domestic product, real interest rate and gross capital formation were the main macroeconomic determinants of remittances. The findings from this study recommended that the Kenyan government ought to device policies aimed at increasing the economic growth rate and should also create an enabling environment for investment by developing basic infrastructures, for example, roads, electricity, among others. Finally the study hoped that the findings would play an important part in understanding, establishing and in devising appropriate policies that would encourage more inflow of remittances in Kenya.

Key Words: Remittance, Real GDP, Real Interest Rate, Gross Capital Formation.

Introduction

For the longest time people have been migrating from one country, or region to another in search for better opportunities, and this has mainly been attributed to high levels of unemployment and poverty. This movement has had positive effects for the respective countries or regions, in that capital-rich countries gain an influx in labor, and labor rich countries receive capital when migrants remit money home.

Recently Ojapinwa (2012) used time series data for the period 1977 to 2009 to study the determinants of migrants' remittances in Nigeria. The paper used unemployment rate and population growth as proxies for labor market situation, and consumer price index as a proxy for inflation. The result showed that real GDP, population growth, financial deepening and exchange rate were positively related to migrants' remittances while unemployment rate, openness, inflation and debt-income ratio were negatively related to migrants' remittances.

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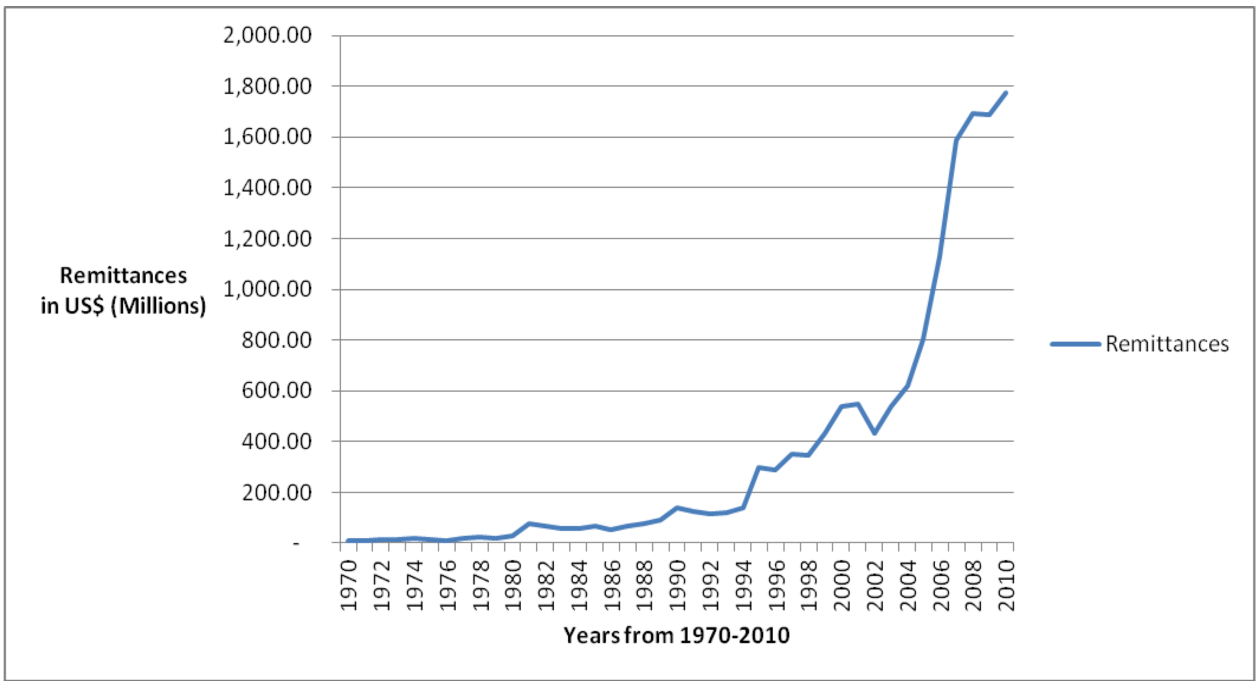
Ziesemer (2011) observed that remittances have a strong positive relationship with levels of GDP per capita, rate of savings and public expenditure. Lueth et al. (2006) observed that around 70% of the variation of remittance was influenced by inflation, growth, exchange rate, trade, financial sector development, dual exchange rates and current account restrictions explains about 70 percent of the variations.

Ojapinwa (2012) results showed that real GDP, population growth, financial deepening and exchange rate were positively related to migrants' remittances while unemployment rate, openness, inflation and debt-income ratio were negatively related to migrants' remittances. Furthermore the cause of low levels of remittances could be explained by Nigeria's unstable and unfavorable policy environment.

In Kenya, there has been an upward trend in worker remittances over the past forty years. It can be seen that from 1970 to early 1990's remittances in Kenya stood below US$200 Million. Apart from a big drop in 2002 the trend has been an upward until 2008. In year 2010, remittances to Kenya amounted to US$ 1,777 million. This represents 5.4 percent increase over the level recorded in the year 2009 (World Bank, 2011).



Source: ADI 2012

Figure 1: Trend of Remittances in Kenya for the period 1970 to 2010

The increased remittances can be attributed to improvement in data collection techniques and proper classification of remittances by some commercial banks, outreach to the Diaspora to invest in Government's Savings Development and Infrastructure bonds and increased competition among money transfer service providers that has reduced transaction costs.

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Methodology

Model Specification: This study sought to estimate the macroeconomic determinants of remittances in Kenya for the period ranging from 1970 to 2011. To achieve these objectives the study followed Adenuga et al., (2005) and Ojapinwa (2012) but modifed their model to include macroeconomic shocks, specifically the financial crisis as shown in Equation 1 below.

$$LnR_t = \beta_0 + \beta_1 LnRGDP_t + \beta_2 LnOpp_t + \beta_3 LnPG_t + \beta_4 LnRIR_t + \beta_5 LnCPS_t + \beta_6 LnINF_t + \beta_7 FC_t + \beta_8 EL_t$$
$$\beta_9 LnEXCH_t + \beta_{10} LnGCF_t + \varepsilon_t \quad \text{..........(1)}$$

Where

R denotes remittances

RGDP denotes real GDP

RIR denotes real interest rate

EXCH denotes Official Exchange rate

GCF denotes Gross capital formation

β 's are the parameters to be estimated

ε denotes the error term that is assumed to be a white noise

Ln denotes natural logarithm and subscript t denotes time which is measured in years

Remittances: Remittances comprises of current transfers by migrant workers and wages and salaries earned by nonresident workers. The data series was recorded per year from 1970 to 2011 but transformed into logarithm using the natural logarithm function.

Real Gross Domestic Product: GDP was calculated without making deductions for depreciation of fabricated assets or for depletion and degradation of natural resources. Data was in constant 2000 U.S. dollars but also transformed into logarithm using the natural logarithm function. It was that GDP would have a positive effect on remittance in Kenya.

Real Interest Rate: Real interest rate was transformed into logarithm and expected to have a negative impact on remittances in Kenya.

Official Exchange Rate: The official exchange rate is computed as the local currency relative to the U.S dollars (World Bank, 2012). It was converted to annual average based on monthly averages. In this study these annual averages were transformed using the logarithm transformation.

Gross Capital Formation: Gross capital formation consists of outlays on additions to the fixed assets of the economy plus net changes in the level of inventories. This series was transformed into logarithm so as to smoothen the data.

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Data sources and Sample: Data on remittances, real GDP, exports, imports, population Growth, real interest rate, credit to the private sector and inflation rate were sourced from the World Bank database, specifically from the African Development Indicators (ADI). Data on financial crisis was from various government publications. The sample size was composed of 41 years ranging from 1970 to 2011. This period was chosen since the data for remittance was not available for periods before 1970.

Diagnostic Tests: To run the regression model of Equation 1, it was necessary to make sure that the classical linear regression assumptions were not violated in order to get unbiased and consistent estimates. This Section presents the classical linear regression assumptions and the methods of accounting for the violations, if any, of these classical linear regression assumptions.

Empirical Results and Discussions

Table 1: Descriptive Statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
R	41	3.53e+08	5.09e+08	7260000	1.78e+09
GDP	42	1.04e+10	4.35e+09	3.28e+09	1.98e+10
RIR	41	6.224243	7.771204	-10.64196	21.09633
EXCH	42	39.27425	30.03224	6.9	89.12731
GCF	42	2.21e+09	1.75e+09	3.91e+08	8.45e+09

Where: R denotes Remittance, GDP denotes real Gross Domestic Product, RIR denotes Real Interest Rate, EXCH denotes official exchange rate, GCF denotes gross capital formation.

Diagnostic Test Results

The study conducted various diagnostic tests and the results are presented as follows. Multicollinearity does not exist hence Multicollinearity was not a problem. The study further tested for serial Autocorrelation using the Breusch-Godfrey Serial Correlation LM Test. The test reports the F statistic showed that there was no serial correlation in the data. The result from the White Heteroskedasticity Test showed that Heteroskedasticity was not present in the data.

The study also tested for ARCH effects and the results indicated that the data did not have the problem of Autoregressive Conditional Heteroskedasticity. The study tested for model misspecification using the Ramsey RESET Test and the results implied that the data in the model was correctly specified.

Finally the study conducted the unit root test using the Augmented Dickey Fuller test and the results indicated that the analysis would run a regression of the first difference of remittance, real gross domestic product, openness, real interest rate, official exchange rate, gross capital formation, credit to the private sector, and population growth and inflation at levels to avoid the problem of spurious results.

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Regression Results and their Interpretation

Having conducted the diagnostic tests, the study run an OLS regression but in the first difference of remittance, real gross domestic product, openness, real interest rate, official exchange rate, gross capital formation, credit to the private sector and in levels for population growth and inflation in order to avoid the problem of spurious results. The results from this regression were presented in Table below.

Table 2: OLS Regression Results

Dependent Variable: D_LNREMITTANCE

Method: Least Squares

Sample (adjusted): 1972- 2008

Included observations: 29 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
Constant	0.27005	0.501389	0.5386	0.59676
D_LNGDP	5.1559	2.27084	2.2705	0.03569
D_LNRIR	0.129412	0.0779957	1.6592	0.11439
D_LNEXCH	1.03223	0.4089	2.5244	0.02120
D_LNGCF	0.712221	0.40215	1.7710	0.09349

R-squared	0.560217	Mean dependent var	0.160072
Adjusted R-squared	0.315893	S.D. dependent var	0.304314
S.E. of regression	0.251700	Akaike info criterion	10.45562
Sum squared resid	1.140352	Schwarz criterion	25.49587
Log likelihood	5.772191	Durbin-Watson stat	2.028182
F(10, 18)	2.292929	P-value(F)	0.060265

(*), (**) and (***) denotes 10%, 5% and 1% level of significance respectively

From Table 2 the R squared was 0.560217 and the adjusted R square was 0.315893 implying that 56.02 percent of the variations in remittances were explained by real gross domestic product, openness, real interest rate, official exchange rate, gross capital formation.

The model used Akaike information criterion and Schwarz criterion to choose the minimum lags and the minimum values for these tests were 10.45562 and 25.49587 respectively. The Durbin Watson test had a value of 2.028182 which was very close to 2 implying there was no first order serial correlation. The weakness of Durbin Watson test was that it did not test for higher order autocorrelation and thus the study used a more general test, the Breusch-Godfrey Serial Correlation LM Test. Further, the F statistic was statistically significant at 10 percent level of significance with a value of 2.292929 implying that jointly all the independent variables explained remittances.

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The macroeconomic determinants of remittances in Kenya that were statistically significant as reported in Table 2 are real gross domestic product, official exchange rate and gross capital formation but real interest rate was insignificant in explaining remittances.

Since an increase in the official exchange rate implies the local currency is depreciating, this therefore implied that for every one unit of foreign currency, for example, the USD, the person remitting the money received more Kenya Shilling as compared to when the local currency was appreciating. Thus depreciation of Kenya shilling acts as an incentive to remit more. The coefficient for gross capital formation was 0.712221 and was statistically significant at 10 percent implying that a one percentage change in gross capital formation would lead to about 0.71 percentage changes in remittances into the country. This could be explained by the fact that government and private investments opens more new areas for investments and that most of the remittances could go into investments especially in real estate.

The study tested for the long run relationship between remittances and economic growth using co integration test. The test results for unit root of the residuals showed that the residuals had no unit root for models with intercept, and intercept and trend implying that there was long run relationship between remittance and real gross domestic product, real interest rate, official exchange rate and gross capital formation.

In summary, the macroeconomic determinants of remittances that were found to be significant in Kenya were; real gross domestic product, official exchange rate and gross capital formation while real interest rate did not determine the amount of remittances into the country.

Conclusion and Recommendations

To determine the major macroeconomic factors having a great impact to the amount of remittance in Kenya.

The study found that real gross domestic product, real interest rate, official exchange rate and gross capital formation were the main macroeconomic determinants of remittances. Specifically, real gross domestic product, official exchange rate and gross capital formation had a significant positive effect on remittances in Kenya. These results were in line with what Adenuga et al., (2005) and Ojapinwa (2012) got in their analysis.

To investigate the link between remittances and macroeconomic factors in Kenya.

The study gave an introduction of the remittances into the country and specified the hypothesis to be tested. As specified in the hypothesis the study used time series technique and run an OLS regression to analyze the macroeconomic determinants of remittances in Kenya for the period 1970 to 2011. The findings of the study showed that macroeconomic factors were indeed linked to the amount of remittance received in the country.

To analyze the long run effects of macroeconomic factors on remittance in Kenya.

Finally the study found out that remittances had a long run relationship with real gross domestic product, real interest rate, official exchange rate and gross capital formation in Kenya.

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Recommendation

Based on the findings and the analysis of the macroeconomic determinants of remittance in Kenya, the study recommends the following:

The Kenyan government ought to device policies that are aimed at increasing the economic growth rate since economic growth is positively related to remittances into the country. Some of the policies that the country could pursue to enhance growth are focusing on improving agricultural productivity since about 70 percent of the population relies on agriculture for their livelihood.

The central bank should focus on enhancing macroeconomic stability and minimize real interest rate volatility in order to increase more investments financed by remittances. Uncertainties in the real interest rate discourage investments thus reducing the amount of remittances in the country.

The central bank should focus on maintaining stability in the official exchange rate since a deprecation of the local currency may encourage more remittances but more inflows of remittances may lead to appreciation of the local currency thus resulting to an offsetting effect. Further, depreciation of the local currency acts as incentives for more remittances but hurts imports which are vital for propelling economic growth. Thus there is need for stability in the exchange rate in order to balance the two effects.

The government should create an enabling environment for investment by combating corruption, developing basic infrastructures, for example, roads, electricity, schools and water systems among others. These would lead to increased participation by the private sector in development of the economy and accumulation of wealth resulting to more investments and more remittances.

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EFFECTS OF CURRENT ACCOUNT BALANCE, REAL EXCHANGE RATES & REAL INTEREST RATES ON EAST AFRICAN COMMUNITY ECONOMIC OUTPUT – GDP (1980 - 2011)

Chacha James Machage*
Jomo Kenyatta University of Agriculture and Technology

Abstract:

This research paper uses cointegration estimates and vector error correction models to identify long-run and short-run relationships of identified variables (Interest rates, exchange rates and current account balance) for each EAC member country, vis a vis the combined East African Community GDP from the year 1980 to 2011. According to the cointegration test, the findings indicate that all variables have significant existence in cointegrated vector with at least three cointegrating equations per variable. This means that all variables have long-run equilibrium existence. Granger causality examined the casual relations between all the variables and EAC GDP. The findings indicated that EAC GDP granger causes Tanzanian and Ugandan current account balances, and Uganda real interest rates granger cause EAC GDP. There was no granger causality between EAC GDP and real exchange rates or vice versa. All vector error correction coefficients have negative directions, indicating that when there is a deviation from long-term equilibrium, the error correction terms play a negative role in adjusting. The paper also carried out a Vector Autoregression (VAR) estimation to determine the volatility of East African economic output (GDP) in terms of periodical responses, to shocks from Real Exchange Rates, Interest Rates and Current Account Balance per country. The analysis revealed that for current account balance, the shocks on EAC GDP were more lasting than shocks from other variables. For the real interest rates, it was found that all the responses elicited by these shocks from all countries within the community on EAC GDP, were of no statistical significance. Finally for real exchange rate, Kenya real exchange rate shock was of highest intensity, 0.7% above baseline bottoming out at 6 years.

Key words: Real Exchange Rate, Real Interest Rate, Current Account Balance, Cointegration, Vector Autoregression, Shock.

Introduction:

The East African Community (EAC) is an intergovernmental organization comprising of the five countries in east Africa: Burundi, Kenya, Rwanda, Tanzania and Uganda. The community has area coverage of approximately 1.82 million hectares and had a population of 1.33 million as at 2010 (EAC secretariat).Existing within a dynamic and an ever interacting economic globe, the EAC does not exist in a vacuumand economic changes in other parts of the world(especially among major trading partners) can have adverse effects on these east African economies. AccordingIMF world economic outlook (October, 2012),low growth and uncertainty in advanced economies are affecting emerging markets and developing economies through both trade and financial channels, adding to home-grown weaknesses. To beginning to address this challenges, an analysis of the EAC economic short-run, long-run trendand volatility to economic shocksisa necessity as the

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community faces future economicuncertainties and preparing to assume more responsibilities from national governments.

As to the achievement a single currency, the economic bloc still faces a lot of challenges notably, establishing an East African Central Bank to take charge of monitoring and implementation of monetary policy within the EAC with most governments within the community having negative balance of payments,real exchange rates and real interest rates within the EAC remain unsynchronised.

However, on indications of economic integration,show that tendencies of bilateral exchange rates and interest rates in the region offers the best indication of economic integration and that the maintenance of market based interest and exchange rates has been a significant achievement. The currency convertibility of local currencies to a foreign currency such as dollar, Euro, pound sterling and as well other regional currencies is another achievement, but the stability and convergence of bilateral exchange rates, studies have expressed concerns due to a lack of exchange rate mechanism between countries (Kuteesa, 2011).So the March 2010 joint meeting of the EAC Ministers adopted a road map which includes milestones such the adoption of an Exchange Rate Mechanism (ERM), creation of the regional central bank, and finally the establishment of the EAMU by 2015. However, macroeconomic convergence in the EAC has been limited. Questions have thus emerged about the countries form anEast African Monetary Union (EAMU) within the agreed time frame, especially in light of slow implementation of common market elements such as free mobility of labour, capital and goods (Mafusire and Brixiova 2012).

The recent discovery of oil and gas deposits can be of economic boost to the entire region. Never the less, the past has also shown that, with poor management, this can be a natural resource curse to an economy, a Dutch Disease. According to (Ismail, 2010) Dutch disease is the process by which a boom in a natural resource sector results in shrinking non-resource tradables i.e. it leads to increased specialization in the resource and non-tradable sectors leaving the economy more vulnerable to resource-specific shocks.

Due the emphasis placed on sustainable economic growth, equitable development and people-centred mutual development of citizens within the community, EAC GDP is of special significance as output tends to go hand in hand with these objectives. Thus the volatility of the EAC GDP is likely not only to indicate as to what extent these objectives are being met, but would also mimic the overall success of the existence of the community. Extensive studies and research has been carried out on different factors that affect EAC GDP however, these studies have at times fallen short to offering a proper analysis of the vital economic variables that affect the level of EAC output, then affecting the attainability of set objectives. The research will determine the long-run and short-runrelationshipsof the selected variables (Real Exchange Rate, Current Account Balance and Interest rate shocks) to the output of the EAC and then determine theeffects of Real Exchange Rate, Current Account Balance and Interest rate shocks, on EAC economic output (GDP) as measured by impulse response functions.

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Theoretical Literature

Convergence Criteria: The convergence criteria is an important element into the formation of an EA monetary union and (Adam et al., 2012), conceptualized the transition to a union as a two-phase process. First the convergence phase, then the conversion phase. The initial convergence phase, where the partner states would work to achieve a set of preconditions designed to limit the union's exposure to internal economic strains. These included macroeconomic convergence criteria and explicit understandings on surveillance mechanisms and fiscal responsibilities post-union. The duration of this face they stated was uncertain, because it depended at the pace at which the member states can put the requisite preconditions in place. When the preconditions are satisfied, the partners would choose to enter the final conversion phase, marked by the announcement of a predetermined date for the union. According to the paper, the most important components of convergence were commitments to fiscal discipline and debt sustainability. They mentioned that quantitative benchmarks should be achieved in these areas prior to the entry into monetary union, and a surveillance mechanism should be put in place both to prevent costly divergences once the union had been formed and to allocate fiscal responsibilities in the event of a fiscal or debt crisis. A system of union wide prudential regulations of capital flows and the financial system were also important, given the proliferation of cross-border risks associated with greater financial integration.

Real Exchange Rate: Exchange rates are essentially a monetary phenomenon because an exchange rate is the price at which the currency of one country is exchangeable for another. The main causal influences on exchange rates are money and interest rates although real economic activity and the expected returns on real assets also have a bearing. The consequences of changes in exchange rates are chiefly on prices at least in the long run but there are also important effects on economic activity, especially in the sectors most exposed to international competition (Crawford, 1996). There are five ways through which the exchange rate affects the economy having diverse macroeconomic and development impacts. These are: resource allocation, economic development, finance, external balance and inflation(Frenkel and Taylor, 2006).

Current Account Balance: An examination into the empirical relationship between current account balance and output volatility in a static panel data framework., found that a larger current account deficit is associated with a higher volatility, particularly so in emerging market economies (Elgin and Kuzubas 2013).Persistent large net current account positions may also be an indicator of macroeconomic imbalance (Issing, 2008). In the short term current account deficit may enable a country to import capital goods which are vital in the country's development process. However a persistent current account deficit (as is the case of EAC countries) may be problematic to a country as in implies an increasing reliance on imports by both producers and consumers in a given country. This may hinder the development of domestic industries which would probably have had the capacity to produce some of the inputs being imported.

Real interest rate: The interest rates channel effect on output has been considered the traditional channel of monetary policy since the first developments in macroeconomic theory and can be summarized in the standard Keynesian IS-LM framework; whereby an expansionary monetary policy leads to a fall in the real interest rate, thus decreasing the cost of capital and stimulating investment, which then results in an increase in aggregate demand and output (Davoodi, Dixit

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And Pinter, 2013). They stated that real spending decisions are only affected by changes in the real interest rate, whereas the monetary policy authority has direct control only over the short-term nominal interest rate and the crucial factor linking the monetary base with the real interest rate and ultimately determining the effectiveness of the interest rate channel is the slow adjustment of the price level. Price stickiness causes movements in the monetary policy rate to have a significant effect on short-term real interest rates.

Model Estimation Methods

Testing for Cointegration using Johansens Methodology: According to (Hjalmarsson&Österholm, 2007), Johansen method has the advantage over the Engle-Granger and the Phillips-Ouliaris methods in that it can estimate more than one cointegration relationship, if the data set contains two or more time series. They also stated that, although Johansen's methodology is typically used in a setting where all variables in the system are I(1), having stationary variables in the system is theoretically not an issue and that Johansen (1995) states that there is little need to pre-test the variables in the system to establish their order of integration. If a single variable is I(0) instead of I(1), this will reveal itself through a cointegrating vector whose space is spanned by the only stationary variable in the model. (Enders, 2010) also adds that it is possible to find equilibrium relationships among group of variables that are integrated in different orders, a case of multicointegration.

Vector Error Correction Model (VECM): Cointegration is detected between series we know that there exists a long-term equilibrium relation between them so we apply VECM in order to evaluate the short-run properties of the correlation series(Asari, et al. 2011). The regression equation form for VECM is as follows:

$$\Delta Y_t = \square_1 + P_1 e_1 + \sum_{i=0}^{n} \Delta Y_{t-i} + \sum_{i=0}^{n} \delta_i \Delta Y_{t-i} + \sum_{i=0}^{n} \gamma_i Z_{t-i}$$

$$\Delta X_t = \square_1 + P_2 e_1 + \sum_{i=0}^{n} \beta_i Y_{t-i} + \sum_{i=0}^{n} \beta_i \Delta X_{t=i} + \sum_{i=0}^{n} \gamma_i Z_{t-i}$$

Vector Autoregression Estimate: This paper follows the general convention in the empirical literature on the transmission of monetary shocks by estimating a VAR with four variables for all East African Community Partner states: the level of output (GDP), Real Exchange Rates, Interest Rates and Current Account Balance. The data span the period from 1980 to 2011.(Ramaswamy and Sloek, 1997). They estimated the VAR model of the reduced form:

$$\mathbf{X_t = A_t\, X_{t-1} + \ldots\ldots + A_p H_{t-p} + u_t}$$

Where $X_t$is a vector of variables at time t and with the variance covariance matrix $\boldsymbol{E[u_t, u_t\,']} = \boldsymbol{\Omega}$ *of* the innovations, $\boldsymbol{u_t}$.

Granger causality: According to (Johnston and Dinardo, 1997) granger causality or non-causality, is concerned with whether lagged values of y do or do not impose on the explanations of x obtainable from only lagged values of x itself. A simple test is to regress x on lagged values of itself and lagged values of y. if the latter are jointly insignificant y is said not to granger cause x. the test, however, is often very sensitive to number of lags included in the specification. Changing lag length can result in changed conclusions. However, granger non-causality is neither a necessary nor sufficient for exogeneity(Maddla, 1992).

Empirical model review: Thus the paper will estimate three long-run relationships. For Current Account Balance, Real Exchange Rates and Real Interest Rates in the following order:

Current account balance (CAB):

$$LN\_GDP=\sum_{i=0}^{n}\alpha_i CABB_{t-i} + \sum_{i=0}^{n}\alpha_i CABK_{t-i} + \sum_{i=0}^{n}\alpha_i CABR_{t-i} + \sum_{i=0}^{n}\alpha_i CABT_{t-i} +$$

$$\sum_{i=0}^{n}\alpha_i CABU_{t-i} + \square_i$$

Where by: LN_GDP is the logged value of EAC GDP, CABB is the current account balance for Burundi, CABK is the current account balance for Kenya, CABR is the current account balance for Rwanda, CABT is the current account balance for Tanzania and CABU is the current account balance for Uganda. □iis the white noise. The rest of the variables also follow the same order as follows:

Real Exchange Rates (RER):

$$LN\_GDP=\sum_{i=0}^{n}\alpha_i RERB_{t-i} + \sum_{i=0}^{n}\alpha_i RERK_{t-i} + \sum_{i=0}^{n}\alpha_i RERR_{t-i} + \sum_{i=0}^{n}\alpha_i RERT_{t-i} +$$

$$\sum_{i=0}^{n}\alpha_i RERU_{t-i} + \square_i$$

Real Interest Rates (RIR):

$$LN\_GDP=\sum_{i=0}^{n}\alpha_i RIRB_{t-i} + \sum_{i=0}^{n}\alpha_i RIRK_{t-i} + \sum_{i=0}^{n}\alpha_i RIRR_{t-i} + \sum_{i=0}^{n}\alpha_i RIRT_{t-i} +$$

$$\sum_{i=0}^{n}\alpha_i RIRU_{t-i} + \square_i$$

From the nature of the times series, the above equations contain non-stationary variables which on being differences become stationary. However, this could imply that the long run theoretical model properties are lost. Therefore to recover the long run information parameter, each equation need to be reset into a vector error correction model (VECM), assuming that the non-stationary variables are integrated of the first order.

Therefore the above equations differenced into the following equations:

$$\Delta LN\_GDP = \Delta\sum_{i=0}^{n-1}\beta_{1i}\,\Delta CABB_{t-i} + \Delta\sum_{i=0}^{n-1}\beta_{2i}\,\Delta CABK_{t-i} + \Delta\sum_{i=0}^{n-1}\beta_{3i}\,\Delta CABR_{t-i} + \Delta\sum_{i=0}^{n-1}\beta_{4i}\,\Delta CABT_{t-i} + \Delta\sum_{i=0}^{n-1}\beta_{5i}\,\Delta CABU_{t-i} + \beta_1\,(LN\_GDP - CABB + CABK - CABR + CABT - CABU) + \square_1$$

$$\Delta LN\_GDP = \Delta\sum_{i=0}^{n-1}\beta_{1i}\,\Delta RERB_{t-i} + \Delta\sum_{i=0}^{n-1}\beta_{2i}\,\Delta RERK_{t-i} + \Delta\sum_{i=0}^{n-1}\beta_{3i}\,\Delta RERR_{t-i} + \Delta\sum_{i=0}^{n-1}\beta_{4i}\,\Delta RERT_{t-i} + \Delta\sum_{i=0}^{n-1}\beta_{5i}\,\Delta RERU_{t-i} + \beta_1\,(LN\_GDP - RERB + RERK - RERR + RERT - RERU) + \square_1$$

$$\Delta LN\_GDP = \Delta\sum_{i=0}^{n-1}\beta_{1i}\,\Delta RIRB_{t-i} + \Delta\sum_{i=0}^{n-1}\beta_{2i}\,\Delta RIRK_{t-i} + \Delta\sum_{i=0}^{n-1}\beta_{3i}\,\Delta RIRR_{t-i} + \Delta\sum_{i=0}^{n-1}\beta_{4i}\,\Delta RIRT_{t-i} + \Delta\sum_{i=0}^{n-1}\beta_{5i}\,\Delta RIRU_{t-i} + \beta_1\,(LN\_GDP - RIRB + RIRK - RIRR + RIRT - RIRU) + \square_1$$

Research Results and Discussion

Empirical Data Estimates

This paper follows the general convention in the empirical literature on in estimating the relationships and stating the transmission of shocks from the stated variables (CAB, RER, and RIR) by estimating a VAR with four Variables for all five EAC countries. The data span the period from 1980 - 2011.

Unit root Test (With Trend and Intercept): The ADF test shows that all of the Current Account Balance (CAB) variables areintegrated in the order of one i.e. I(1), while for Real Interest Rates (RIR) only RIR-B and RER – UareI(1) while RIR – K, RIR - R and RIR - T were I(0). For Real Exchange Rates (RER) all variables areI(1) except for RER – U that is I(0).

Johansen CointegrationTest: (Long Run Association): Both Trace and Eigenvalue tests indicated cointegration and thus existence of a long-run relationship of all the variables in the series with at least 3 cointegrating equations. Therefore, the normalized cointegrating equations are as follows:

Current Account Balance

LN_GDP= 9.33 BCAB - 2.43 KCAB + 9.53 RCAB + 0.83 TCAB + 0.53 UCAB

Real Exchange Rates

LN_GDP = 0.002 BRER + 0.03 KRER – 0.002 RRER – 0.001 TRER – 0.002 URER

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Real Interest Rates

LN_GDP= -0.122 BRIR – 0.219 KRIR + 0.191 RRIR - 0.12 TRIR + 0.01 URIR

Granger causality: According to the Pairwise Granger causality test,LN_GDP granger causesboth the Tanzanian current account balance and the Ugandan current account balance. For Real Interest Rate (RIR) variables vis a vis the East African Community GDP, only the Uganda real interest rates granger cause LN_GDP and for Real Exchange Rate (RER) variables vis a vis the East African Community GDP: The test indicates that all variables are independent of each other i.e. no granger causality between RER and EAC GDP.

Vector Error correction Models (VECM) – (Short-run association)

Table 1.1 below shows the vector error correction model for Current Account Balance (CAB):

Error Correction:	D(LN_GDP)	D(BCAB)	D(KCAB)	D(RCAB)	D(TCAB)	D(UCAB)
CointEq1	-0.011198	-0.083480	-0.695128	0.024968	-0.592626	-0.127009
	(0.07470)	(0.05003)	(0.20893)	(0.04313)	(0.18729)	(0.06952)
	[-0.14989]	[-1.66845]	[-3.32710]	[0.57892]	[-3.16420]	[-1.82696]

Error correction coefficient is -0.011198 and the direction is negative, which indicates when there is a deviation from long-term equilibrium the error correction term plays a negative role in adjusting and it reduces the deviation extent i.e. draw non-equilibrium state back to equilibrium state with the adjustment of -0.011198.

Table 1.2 below shows the vector error correction model for Real Exchange Rates (RER):

Error Correction:	D(LN_GDP)	D(BRER)	D(KRER)	D(RRER)	D(TRER)	D(URER)
CointEq1	-1.768729	41.20372	-30.72421	-25.96411	131.1050	-113.8582
	(0.40700)	(86.6329)	(39.4942)	(81.4398)	(84.6769)	(84.7485)
	[-4.34580]	[0.47561]	[-0.77794]	[-0.31881]	[1.54830]	[-1.34348]

Error correction coefficient is -1.768729 and the direction is negative, which indicates when there is a deviation from long-term equilibrium the error correction term plays a negative role in adjusting and it reduces the deviation extent.

Table 1.3 below shows the vector error correction model for Real Exchange Rates (RIR):

Error Correction:	D(LN_GDP)	D(BRIR)	D(KRIR)	D(RRIR)	D(TRIR)	D(URIR)
CointEq1	-0.100153	-53.62669	-0.319257	-24.91655	-2.920612	3.326088
	(0.16777)	(9.89624)	(8.75069)	(7.75451)	(3.86566)	(19.2785)
	[-0.59696]	[-5.41889]	[-0.03648]	[-3.21317]	[-0.75553]	[0.17253]

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Error correction coefficient is -0.100153 and the direction is negative, which indicates when there is a deviation from long-term equilibrium the error correction term plays a negative role in adjusting and it reduces the deviation extent.

Vector Autoregression Estimates and Impulse responses: An unrestricted VAR is estimated with two to three lags based on both Akaike and Schwartz criteria.The shocks are of the same dimension for all EAC countries and for all variables i.e. one standard deviation shock to the orthogonalized error term of a variable (CAB, RER or RIR) equation in the VAR.

Impulse response results

Current Account Balance: In general, current account balance shocks cause longest lasting effects and, Burundi and Kenya being at the helm of this effects. For Burundi, the effect is about 0.2% above base line at its peak point and lasts for about 11 years before dissipation. The Kenyan current account balance shock also elicits a positive GDP response to about 0.3% above baseline, an innovation that lasts for about 10 years as well. The Rwandan current account shock also causes a positive response lasting for about 7 years at 0.1% above baseline. On the other hand, GDP has a less than 0.1% response to a Tanzanian current account balance shock that lasts only between 3 years. Finally, there is little or no effect of the Ugandan current account balance shock to GDP. The effects remain minimal if not existent for ten years bottoming out at the 11th year.

Real Interest rate: GDP has a positive response to Burundi and Kenya real interest rate shocks. To Burundi there is a steep response to the shock in the first 3 years and continues to 0.2% above baseline dissipating after 10 year. The GDP response to Kenyan real interest rate shock is minimal for the first 3years but peaks at 0.2% above baseline at 9 years the dissipating. The GDP response to Rwanda real interest rate shock a fall to about 0.1% below baseline, dissipating after 10 years then begins to rise but stays below the baseline after 20 years. However,GDP has a positive response to Tanzanian real interest rate lasts for 4 years just above baseline then bottoms out thereafter. Finally, the response of GDP to a Ugandan real interest rate shock lasts for 7 years beginning to adjust at 0.05%above baseline.NOTE:Despite these findings, all responses do not revert back to the zero line. This implies that real interest rate shocks are of no statistical significance on EAC GDP.

Real exchange rate: GDP has similar positive and steep response to both Burundi and Rwanda real exchange rate shocks. To a Burundi shock, there is an immediate rise followed by a decline lasting for nine years bottoming out at 0.9% below baseline. As for Rwanda, an immediate rise in GDP is followed by a fall to about 0.8% below baseline after 7 years the bottoming out.Tanzania and Uganda real exchange rate shock have somewhat similar effects on EAC GDP. Both fall to about 0.25 below baseline then rising and dissipating at 0.5% above baseline after 6 years. To Kenya real exchange rates shock, there is an immediate positive response rising to about 0.7% above baseline bottoming out at 6 years.

Conclusion

The paper has established long-run and short-run equations as given in the text. For current account balance short-run association, Kenya and Tanzania coefficients were significant. For real exchange rates the coefficient for EAC GDP was significant, while for real interest rates the coefficient for Rwanda and Burundi were significant. The impulse response from the respective unrestricted VARs, indicate that EAC output is highly volatile to Burundi and Kenya shocks which had some of the longest adjustment periods. For all variables, Tanzania shocks had the shortest readjustment periods while Uganda shocks caused minimal volatility to EAC output compared to other countries. Rwandan shocks cause varying volatility from variable to variables. For countries seeking to enter into a monetary union, symmetry of shocks cannot go without mention. For current account balance shocks have slight symmetry. But this could be because all countries are running on negative current account balances. It is also important to note that the effects of this variable on EAC economic output deserve special study considering the extent that public debt borrowing and actions of donors that finance large portions of the public budget (of all the five countries only one does not depend on external donors to provide substantial debt stock relief). This, to some extent, conceals the true effect of the variable.

Recommendations

Current Account Balance: The deficits affecting current account balance for the EAC countries need to be dealt with because the liquidity of the EAC is dependent on this. Improving intraregional trade is one of the ways of addressing this problem. Improving the amounts trade will also assist in adjustments when responding to some of the shocks experienced by countries dependant on the EAC for trade such as Burundi and Kenya. In addressing budget deficit reduction, (Kuteesa, 2011)recommends that countries identify and capitalize on the key economic drivers and formulate appropriate plans to stimulate economic activity and related sector for sustained economic growth.

Real Exchange Rates: By now real exchange rate policies within the region should begin to indicate a process towards convergence while taking to account inflation and interest rates as well as assets prices such as land, housing etc. Even though countries within the community are within different stages of development, it cannot go without mention the importance of fiscal disciplineand debt sustainability.According to (Adamet al, 2012), quantitative benchmarks need to be achieved prior to entry into the monetary union and a surveillance mechanism put in place to prevent divergences once the union is formed.

Real Interest Rates: Even though the effects of interest rate shocks have been found to be statistically insignificant, the EAC should be careful and not to rush the formation of the EAMU. There’s great interlink between real interest rates and real exchange rates andunnecessary shockswill result innot only readjustment costs but also require long periods to stabilise the EAC GDP. Not to mention the confusion interms of policy choice if proper macroeconomic convergence is not achieved. According to (Mafusire and Brixiova, 2012), structural reforms and harmonized macroeconomic policies that would raise synchronization of business cycles need to be in place before a move to the monetary union.

Political and Social Convergence: The East African Community is fast tracking the formation of an east African monetary union. As this takes shape, the community moves closer to their goal for political integration. Never the less in recent past this push has focused more on economic development in expense of political and social aspects of development. This will become a major hurdle to the new monetary union after formation. For a start, on political aspect of integration; Basic democratic and human rights should be established though out the union.

Peace and Security: Peace and security are fundamental for foreign direct investment and confidence of EAC as a stable market. East African community is faces by several security challenges. These challenges cause major disruptions and a headache to long-term planning for the community. All countries desiring to join the monetary union should be required to have established peaceful relations to all their neighbours if the monetary policy implementation within the region is to succeed.

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**Main Author*

CORPORATE REPUTATION TOOLS AND EMPLOYEE COMMITMENT IN KENYAN PUBLIC UNIVERSITIES.

Joyce Daudi Nzulwa* & Rukia Atikiya
Jomo Kenyatta University of Agriculture and Technology
Email: godessjoys@gmail.com

Abstract

Effective management of human resources is one of the critical and key outcomes of people management in every organization. Human resources have been singled out as a capital asset towards competitive advantage for top performing organizations around the globe. Configuring an intervention that ensures that human resources stay committed to the organization has been elusive for most organization with average employee turnover rates reaching the highest levels in the last decade. This study sought to determine the influence of corporate reputation tools on employee commitment in public universities. A cross sectional survey design was adopted with 4 universities considered for the sample. Stratified random sampling was applied among manager level staff in the four universities. The findings indicate that corporate reputation tools positively and significantly influenced employee commitment levels. There is need for human resource managers in public universities to engage newer sources of competitive advantage in human resource management outcomes like employee commitment through intangible assets like corporate reputation.

Key words: Corporate Reputation Tools, Employee Commitment, University

Introduction

The 21st century business environment has been highly complex and competitive (Heller, 2010). Consequently modern firms have been put under pressure to seek new ways to gain strategic advantage (Asch and Salaman, 2002). Translating strategic intents into tangibles to achieve competitive advantage for the corporate is tied to employee commitment (Armstrong, 2010). Employee commitment remains a challenge for employers despite the various generic commitment interventions that firms have employed (Patrick, 2010).

This has led to a deliberate search for newer sources of competitiveness in employee commitment, with emergent research suggesting use of intangible resources such as corporate reputation. The move is informed by the knowledge that intangible assets are perfectly immobile, socially complex and difficult to imitate as sources of competitive advantage. Pancheva and Zarkada (2005) posit that corporate reputation can deliver multiple advantages to the firm. Employee commitment is one of the key human resource management (HRM) outcomes (Abbasi and Hollman 2007). Presenting an effective proposition that ensures that employees are committed towards achieving corporate goals is crucial for all firms including the Public Universities, currently embroiled in high staff mobility. Scholars in HRM advance that firms with highly committed employees are likely to achieve sustained competitive advantage.

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Literature Review, Conceptual Model and Hypotheses

Corporate Reputation Tools: Corporate reputation is relatively a new concept in people management due to its traditional placement in the fields of marketing (Shapiro, 2003). Progressive research indicates that it influences the workplace community outcomes and decisions variously (Pancheva & Zikarda et al., 2008). Researchers among them (Dowling 2001; Fletcher 2004 and Rindova 2006) defined corporate reputation as the perceptual representation of a company's past and current actions and future prospects which appeal to key constituents including employees. This representation occurs through its various tools (Beder, 2002). The corporate reputation tools hold central importance for stakeholders to either or not merge organizational 'words' in congruency with actions.

All stakeholders including employees seek congruence between the promises through corporate reputation tools and the reality of firm actions (Huille and Catchpole 2006). Keller and Van Deben (2006) outlined the most critical tools of corporate reputation as ideology, image, tradition and visual corporate identity. They argued that the disposition of the four tools determined organizational reputational capital. Ideology is composed of firm's leadership, vision, mission and values. Employees can develop emotional appeal from admiration of a firm's leadership, vision, mission and values. Leadership is also a tool for modeling, coaching and benchmarking (Kotter, 2005).

Employees may develop commitment because the ideological appeal is found to be mollifying, inspiring and empowering (Heller et al., 2010). Image signifies the mental picture formed out of stakeholders' experience with an organization. Image formation is both cognitive and affective (Arlnold, 2006). Researchers explain that all organization's brand efforts are geared towards distinct image formation to entice stakeholders (Herbig and Milewicz, 2002). A strong image can elicit affective commitment from employees. Firm history as put forward in literature depicts the journey that the organization has travelled over the period of its existence as well as the lessons and milestones realized (Harrison, 2010). Good history makes employees believe, esteem and resonate with an organization (Keller et al., 2000). The tacit or documented knowledge built from historical disposition helps form a social identification tool for employees.

Corporate Visual Identity (CVI) refer to the physical and aesthetic representation of particular organizational philosophy, ways, items and objects. Bickerton (2000) outlined CVIs to comprise aspects like the name, symbols, logo and colour code. Bennet and Kottasz (2000) extended the concept of CVIs' to cover branded clothing, vehicles, buildings and stationery. CVIs make firms visible and express firm characteristics (Fombrun and Rindova, 2000). Barrow and Ambler (1990) used the term 'Employer brand' to connote a recognizable set of characteristics such as quality mark, distinct features or practice which can appeal to employees. Employer brand also infers superior functional, economic and psychological benefits that employees attach to firm (Orme, 2005). Employees form strong emotional bonds with firms that care and treat them in special ways (Manuel 2008).

Employee Commitment: Employee commitment refers to the psychological attachment, involvement and identification of individuals to their organizations. Research depicts commitment as an antecedent to a number of organizational outcomes particularly employee retention and organizational performance (Allen and Meyers, 1993; Adams, 2006). Commitment

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generally disposes through willingness to exert effort on behalf of and a desire to maintain voluntary membership with the organization (Armstrong et al., 2010). Allen and Meyer et al.,(1993) presented three levels of employee commitment including affective commitment, which is employee's emotional attachment to organizational goals;

continuance commitment which is an employees need to continue working for the organization based on a calculative evaluation of costs of leaving the organization and thirdly normative commitment being an employee's desire to stay with the organization based on the evaluations of societal norms and perceived obligation. Committed employees believe that their organization has satisfied their expectations which influence their commitment orientation. While commitment is an antecedent to employee retention and firm performance, it is also an outcome by its own standing which can be influenced by many a firm processes. This dimension of employee commitment is not often brought out in literature.

Corporate reputation tools and employee commitment: Researchers have established that employees join organizations because of the promises offered, but stay because of the fulfillment of the promise through credible reputational cues (Fombrun and Rindova et al., 2000). Corporate reputation is not only an employee attraction tool but one that has the potential to influence employee decisions towards commitment (Harrison et al., 2010). Progressive research confirms that corporate reputation is a valuable intangible asset able to deliver critical success outcomes to organizations including stable psycho-social capital among employees (Puncheva & Zarkada et al., 2008). Abbasi and Hollman et al., (2007) argued that corporate reputation is a positive social identity tool for employees. The ensuing 'niceness' towards the firm can result to employee commitment.

Scholarly evidence also points out that good corporate reputation harbors appealing benefits like good work environment which may influence employees' decisions to commit to the organization (Bennet and Kottasz et al., 2000). Ziggler (2008) argued that employees view of corporate reputation as displayed by the corporate reputation tools would most likely make them supportive or not of a firm. Research suggests that employee commitment has a consistent statistically significant and negative relationship with employee turnover (Bennet and Kottasz et al., 2000). This implies that employee decisions to stay in a firm are influenced by their commitment levels.Evidently, employee commitment is crucial and it is important for organizations to look for newer ways to commit employees. The thinking positioning corporate reputation tools as influencing employee commitment is founded on the resource based view which espouses unique configuration of firm resources for competitive outcomes like employee commitment.

Corporate reputation tools can also be underpinned in the social identification theory whereupon the tools are viewed as positive identity focus which employees can espouse through the obligatory behavior of commitment. The Manchester business school (2010) scored corporate reputation as the most undervalued strategic asset in organizations influencing employee decisions for voluntary commitment with the organization. The encounter of the organizational brand (promises, vision, values, products etc) is said to result to brand trust, brand acceptance and finally brand loyalty which may lead to employee commitment (Armstrong et al., 2010).Literature therefore paints a possible relationship between corporate reputation tools and employee commitment. This points to a need for scholarly and research clarity on the matter. The hypothesized relationship is presented in the conceptual model below:

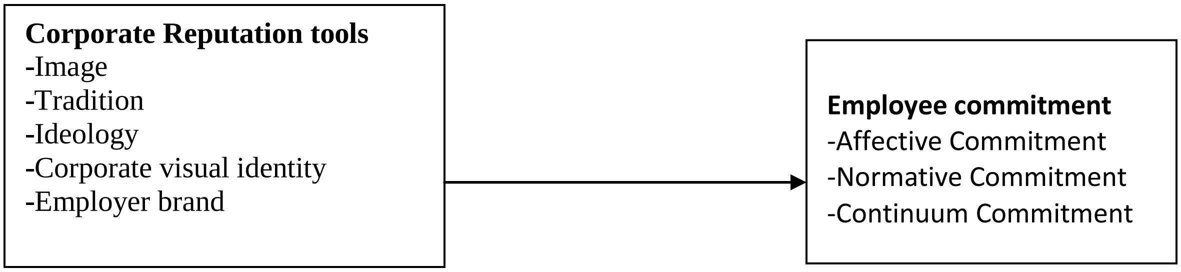

Figure 1: Conceptual framework

Conceptual Hypotheses

There is no relationship between corporate reputation tools and employee commitment.

1a. there is no significant relationship between corporate reputation tools and affective commitment

1b. there is no significant relationship between corporate reputation tools and continuance commitment

1c. there is no relationship between corporate reputation tools and normative commitment.

Overall Objective

Establish the relationship between corporate reputation tools and employee commitment in public universities in Kenya.

Statement of the problem

Researchers in HRM recognize the need for organizations to proactively seek newer sources of competitive advantage to drive organizational outcomes. This resulted out of the realization that generic sources of advantage in employee engagement outcomes have waned over the years and commitment remains a great challenge to firms globally. Corporate reputation tools are currently touted as influential intangible resources for competitiveness in organizations. Advocates of corporate reputational tools capital argue that it increases pro-social behavior of commitment among employees (Dunbar, 2004).

Corporate reputation is also said to incentivizes employees to be more cooperative, selfless and socially obligated towards organizations. Convincing research findings confirm that over 80% of modern organizations struggle with low employee commitment (Ivanovichi, 2008). This is in spite of organizations having put in measures, enormous efforts and resources through conventional motivation commitment drivers like pay, promotion, training and development. Low employee commitment trends contradict sound human resource management practice.

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Scholars among them (Harrison et al., 2010) opined that well performing firms attributed their success to sustained employee commitment. Cross-disciplinary theorists profess that a good corporate reputation has the ability to drive multiple values for organizations including employee commitment (Walsh, Dinnie and Wieldman, 2006).

Deloitte (2010) confirmed that employee commitment remained a critical element in maximizing value for top firms including public universities in Kenya. Despite the debate around corporate reputation, research efforts linking corporate reputation tools directly to employee commitment are lacking. This is attributed to the passivity by HRM researchers in pushing the debate on corporate reputation to actual research work (Heller et al., 2010). Alternately, a section of researchers are anxious using corporate reputation tools to drive HRM outcomes. Locally, research to explain the relationship between the two especially within public universities is also scanty. The current study was motivated by this need and sought to answer the question: 'what is the relationship between corporate reputation tools and employee commitment in public universities in Kenya?'

Value of the study

The findings provide a better understanding of the relationship between corporate reputation tools and employee commitment currently not adequately explored in literature especially in the local context. They also provide a general applicability of the variables in the local context and help managers to understand the importance of corporate reputation in the context of people management, especially in employee commitment. Policy makers in public universities can use the study's results to address their context specific challenges in the areas of corporate reputation and employee commitment. The findings may also be generalized for use in other sectors of the business community. Future researchers can use the findings of this study for relevant desk and literature reviews to model or align their studies appropriately.

Research Design

This study carried out a cross-sectional survey of employees in selected public universities in Kenya. Cross sectional surveys have been found to be robust in relationships studies due to their ability to capture the population characteristics in their free and natural occurrence (O'Sulliva and Abel, 2007; Cooper and Schindler, 2008).

Measures of Key Constructs: Corporate reputation tools were measured using a modified version of the Eight Corporate Reputation index used by scholars (Roberts & Dowling, 2002) while employee commitment was measured using a modified instrument by scholars (Meyers et al., 1993 and Adams et al., 2006). These tools all had reliability values ranging from .82 to .93.

Study Population: The target population for this study comprised all employees in public universities in Kenya. These served as the sampling frame. The target population was constituted among mid level manager employees of the four oldest public universities of Nairobi, Kenyatta, Moi and Egerton who also have reasonably big campuses within the central business district of Nairobi city.

Sample Design: The study's sample was derived from two categories of university staff in the mid level management including lectures and non teaching staff. A proportionate number of 200 staff was picked from each stratum through simple random sampling to form the final study sample.

Data Collection

Both primary and secondary data were collected for this study. Primary data was gathered by use of a semi-structured questionnaire and captured through a 5-point type Likert scale on the two variables. The questionnaire was most preferred because it could reach and capture data from many respondents at the same time. Trained research assistants were used. Secondary data drawn from published sources on public universities from 2010 to 2012. The study achieved a 51% response rate.

Data Analysis

Both descriptive and inferential statistics were employed to analyze and test the research hypotheses. Descriptive statistics including the mean and standard deviation were used to capture the characteristics of the variables under study while inferential statistics including simple regression analysis and Pearson's Product Moment Coefficient (r) were used to test the nature and magnitude of the hypothesized relationships

Findings of the study

The results of the various hypothesized relationships are presented as follows:

Table 1 A: Corporate Reputation Tools

Item		Mean	SD
1.	We provide unique and highly quality goods	4.44	.625
2.	am happy that customer service is top priority here	4.32	.651
3.	I admire my organization's leadership vision and mission statement	4.20	.678
4.	Our organization is choice employer who value employees and keeps it promises	3.99	.835
5.	Our organization has outstanding name, practices, tradition and history	4.16	.729
6.	Our organization has a strong record of revenue turn over and profitability	3.61	.898
7.	Our organization encourages support innovation and new ideas	4.15	.750
8.	Our organization is appropriately caring and invest in good cause	3.91	.918
9.	Equipment , items and facilities bears the organization great brand	3.93	.961
10.	This organization distinctively and effectively advertises in key media	3.90	.932
	Grand Mean	4.061	

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Table 1B: Employee Commitment

Item	Mean	SD
Affective Commitment		
My values/goals are similar to those of the organization	4.22	.674
I feel inspired to do my best for this organization	4.30	.622
I am excited to work here and believes my career will grow here	4.03	.672
I feel a great sense of belonging in this organization	4.02	.681
I derive personal meaning from my work here	4.11	.651
Mean	**4.13**	**.659**
Continuance Commitment	**4.13**	
I have a strong desire to stay here for the rest of my working life	3.92	.946
Even if I had a choice or job offer, I would not leave	3.90	.954
My life would greatly be disrupted if I left this organization	4.00	.690
I have put in so much and are proud to be an employee here	3.89	.977
I feel that no other organization would offer a better employment alternative than this one	3.78	.982
Mean	**3.89**	**.839**
Normative Commitment		
I talk about this organization to my friends as a great place to work in	3.99	.899
This organization has done a lot for me and I owe it a great deal of my work success	3.96	.892
I see myself working in this organization in the next three years	4.00	.689
I am respected for working in this organization.	4.01	.686
I take it personally if something bad happens to this organization	3.90	.937
Mean	**3.97**	**.989**
Overall Mean-Commitment	**4.00**	

Table 2: Effect of Corporate reputation tools on Employee commitment

Corporate reputation tools	t	β	R	R^2	Adjusted R^2	F Statistic	P-value
Employee Commitment	16.855	1.081	.723	.522	.520	284.108	0.000

Employee commitment was positively and significantly affected by corporate reputation tools with a correlation coefficient; r value of 0.723. The coefficient of determination r2 value was 0 .522. This demonstrates that corporate reputation tools accounted for 55.2 % of the variation in employee commitment. The regression coefficient (β) value of 1.081 indicates that an increase in corporate reputation tools by one unit caused an increase in employee commitment by 1.081 units. The F ratio of 284.108 and t value of 16. 855 show that the model was fit. The probability value of 0.000 was less than the conventional probability of 0.05, confirming the significance of the relationship.

**Main Author*

These findings are consistent with earlier findings that portrayed reputation tools like employer branding, social corporate responsibility and image as influencing employee decisions for affective, continuance and normative commitment (Ziggler et al., 2009; Kaari, et al.2008; Harrison et al., 2010).

Table 3: Correlation of Corporate Reputation Tools and the three Levels of Commitment

Affective Commitment	0.934**
Continuance Commitment	.872**
Normative Commitment	.928**

Table 4: Regression of corporate reputation tools and 3 levels of employee commitment

Variable		N	Mean	Std. Deviation	Std. Error	F Statistic	P value
Corporate Reputation tools	Affective	102	4.13	0.61	0.08	16.29	0.00
	Continuance	102	3.90	0.72	0.06		
	Normative	102	4.00	0.66	0.10		
	Total		**4.02**	**0.66**	**0.05**		

The foregoing results portray and confirm that a statistically positive and significant relationship between corporate reputation and affective, continuance and normative commitments. Further the results confirm that corporate reputation tools had a higher statistically significant effect on affective commitment, followed by normative commitment whereas continuance commitment came third.

These results are in tandem with previous finings affirming that among the three forms of employee commitment, continuance was the one likely to be less among employees because the modern employee keeps their options open in search for better opportunities (Armstrong et al., 2010).

Summary of the findings

The findings portrayed a strong and positive significant relationship between corporate reputation tools and employee commitment. Corporate reputation tools also had a strong positive and significant relationship with affective, continuance and normative commitments.

Conclusion

It can therefore be concluded that corporate reputation tools have a strong, positive and significant relationship with employee commitment. Further, the research findings revealed that corporate reputation tools strongly, positively and significantly influenced the outcome of affective, continuance and normative commitments.

**Main Author*

Limitations of the study

The major challenge was the retrieval of the information from the respondents given the perceptual nature of the variables as well as the bureaucratic nature of the university administrative system in regard to allowing the commencement of data collection. These addressed appropriately.

Recommendations

This study results appeals for more empirical affirmations to augment the application of the concept of corporate reputation in employee commitment and spread it to other human resource management outcomes. A study of the same stature focusing on private universities needs to undertaken. Future studies can employ case study approach to help in understanding the relationship between corporate reputation and employee commitment as well as consider possible viable moderators and use of other data collection methods such as interviews.

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**Main Author*

MACROECONOMIC VARIABLES AND VOLATILITY OF COMMON STOCK RETURNS IN KENYA

Gatebi MercylineWanjiru*
Jomo Kenyatta University of Agriculture and Technology

Abstract

The research study sought to investigate the effect of Macro-economic factors on the volatility of common stocks returns in the Nairobi Securities Exchange, Kenya. The study focused on the effect of inflation rates, money supply, economic growth and interest rates fluctuations on common stock returns volatility at the Nairobi Securities Exchange. It used monthly time series data for a five years period between January 2007 and December 2011. The study undertook explanatory survey research with the aim of answering the puzzle of the effect of macroeconomic factors on the common stock returns volatility in the Nairobi Stock Exchange which had been much of a concern. In conducting data analysis we employed statistical soft wares such as E views 7.0 and models such as EGARCH. Data presentation was done in tables and graphs. Most studies done previously by other researchers in other countries found out that there was a positive correlation between inflation and money supply against common stock returns volatility and a negative correlation between interest rates and economic growth against the common stock returns volatility. Therefore the study sought to establish whether these results also hold in our Kenyan stock market. From the data analysis the researcher observed that all the macroeconomic factors had a negative correlation against the common stock returns volatility which is different from what other researchers had obtained from their studies. Several conclusions were drawn from the study which included; leverage effects were significant, volatility of returns was not highly persistent, the news impact was asymmetric and bad news had a larger impact than good news. The researcher wished to make the following recommendations; Policy makers in the government need to come up with policies that will help stabilize the economic growth rate, interest rates, money supply rates and the inflation rates fluctuation rates. There is also the need for the market players to comply with the policies and regulations in a bid to ensure efficiency and effectiveness of the bourse

Key words- Macroeconomic, common stock returns, volatility, EGARCH, TGARCH.

Introduction:

Recently, many studies had been conducted to investigate the relationship between stock market and real economic activities. Interest in this area was mainly because stock market had been recognized to have a prominent role in a country's macroeconomic development. Theoretically, stock market should be closely related with the macroeconomic variables of the country simply because stock prices are the discounted present value of expected future cash flows. According to fundamentalists, the price of a security at any time is equal to the discounted value of the stream of income from the security. They believed that the value of a security depends on the underlying economic factors and hence the value of a stock was determined by analyzing variables such as current and future earnings, cash flows, interest rates and risk variables (Reilly et al, 2000).

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According to (Olweny, 2011),the fair value of any security should be equal to the discounted value of cash flows expected to be produced by that security. Similarly, the volatility of stock prices should also depend on the volatility of expected future cash flows and future discount rates. Since the value of corporate equity at the aggregate level depended on the state of economic activity, it is likely that any changes in the level of uncertainty of future macroeconomic conditions would have caused a change in stock return volatility. In other words, stock markets may be volatile simply because real economic activities fluctuate.Since the nature of stock market volatility gives some important implications for policy makers, economic forecasters and investors, the purpose of this research was to investigate the connection between common stock returns volatility and a number of macroeconomic variables, based on Kenyan data. The study investigated into the factors that cause stock prices to be volatile in the stock exchange and how they affected the behaviors of the various investors trading in the exchange market. In the current economic status stock exchange has become important in determining the economic structures and therefore it's affected by existing economic variables. The law of demand and supply had been a major factor in determining the movements in prices of commodities in all markets.

The NSE has seen drastic volatility in its performance such that for example in the last six months of the year 2011 the NSE 20 share index has recorded a variance from a high of 4495 points to a low of 3733 points with market capitalization declining from Sh1192.28 billion to Sh1049.56 billion (NSE, 2011). Between the years 2008 to 2010 the NSE index saw a variation of between a high of 5444 points to a low of 2800 points. The changes in stock prices and the trend of changes are always of interest in the capital market given their effect on the stock market stability and strategies adopted by investors (Wang, 2010). Rational investors will have an interest to track general and specific factors having a bearing in their investments instruments and as such they would question what is behind the volatility of their shocks. In Kenya several macroeconomic factors had been observed to have some impact on the stock returns volatility in the NSE and therefore the study will therefore seek to examine factors that drive the NSE bourse and can be used to provide a basis of decision making for both the investors and policy makers. The research effort in the NSE has concentrated on development of the exchange, investor confidence, and liquidity.

Literature Review and Conceptual Framework:

Inflation volatility and Stock Returns Volatility: (Alagidede and Panagiotidis, 2010) investigate the relationship between the stock price and inflation for selected African stock markets. For South Africa, they reveal that the elasticity of the stock price with respect to the consumer price is 2.264 and that the stock price shows a transitory negative response to the consumer price in the short run and a positive response in the long run. Hence, stocks are a hedge against inflation in the long run. (Arjoon et al, 2010) analyze the relationship between stock prices and inflation for South Africa. They find that real stock prices are not affected by a permanent change in the inflation rate in the long run and that any deviation in real stock prices in the short run will be adjusted toward real stock prices in the long run.

Interest Rates Fluctuations and Stock Returns Volatility: (Chen et al, 1986) indicated that interest rate had positive impact on stock return. (Wongbangpoet al, 2002) observed interest rate had a negative impact on southeast Asian countries In the industrial analysis, (Nguyen, 2007)

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found interest rate spreads had a significant effect on the riskiness of capital-intensive industries. (Jefferis and Okeahalam, 2000) studied the relationship between stock prices and selected economic variables for South Africa, Zimbabwe and Botswana. For South Africa, they show that the stock market is negatively influenced by the long-term interest rate. (Chinzara, 2011) studied on the relationship between macroeconomic uncertainty and stock market volatility for South Africa and found that stock market volatility is significantly affected by macroeconomic uncertainty. The findings showed that financial crisis raised stock market volatility, and the volatilities in exchange rates and short-term interest rates were the most influential variables in affecting stock market volatility.

Money Supply and Stock Returns Volatility: According to (Tyler Cowen, 1997), money supply growth should raise stock returns. (Cornelius, 1993) examined the relationship between money supply changes and stock prices through bi-variate Granger causality tests. He found evidence against the informational-efficiency hypothesis for the Malaysian market.

Economic Growth and Stock Market Volatility: Higher economic growth or better prospects for growth will help firms be more profitable because there will be more demand for goods and services. This will help boost company dividends and therefore share prices. (Schwert, 1989) attempted to study the relationship between economic activity and stock returns by examining the correlation between volatility in economic activity and volatility in stock prices. Schwert finds evidence that stock market volatility depends on the health of the economy. Using monthly data the model showed that average volatility increased by a significant 189 per cent in times of recession. Hence, given these divergent views and results, the debate in the literature on the link between stock prices and the economy remains inconclusive (Campbell et al, 2001).

Data and Methodology:

The study considered secondary data sources to acquire data. The main data sources for this study included Nairobi Securities Exchange, Capital Markets Authority publications and Kenya National Bureau of Statistics (KNBS).The study used high frequency (time series) monthly data for the period between January 2007 and December 2011 to achieve the stated objectives.

Egarch Model: The Exponential Generalized Autoregressive Conditional Heteroskedascity (EGARCH 1, 1) was used in determining the effect of macro-economic factors on common stock return volatility in NSE. This was most often preferred to the GARCH (1, 1) model in studying financial markets.

EGARCH model took the form:

$$R_t = \beta_0 + \beta_1 \Delta GDP + \beta_2 \Delta INF + \beta_3 \Delta INT + \beta_4 \Delta MS + \varepsilon_t \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots 1$$

$$\log(\delta_t^2) = \omega + \beta \delta_{t-1}^2 + \alpha \left|\frac{\varepsilon_{t-1}}{\sigma_{t-1}}\right| + \lambda \left|\frac{\varepsilon_{t-1}}{\sigma_{t-1}}\right| + \delta_t \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots 2$$

$$R_t = logNSE_t - logNSE_{t-1} \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots 3$$

The mean and variance equations were stated in equations (1) and (2) respectively

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Where
Rt represented the returns of the NSE 20 share Index
NSEt represented the prices of the NSE 20 share Index
$\log(\delta_t^2)$= log of conditional variance of stock market returns.
β = Vector of coefficient
$\varepsilon_{t=}$ Error Term
λ = Leverage effect
δ_t =Interest rate volatility

The stock returns were calculated from NSE 20 share index as, $\log\mathrm{NSE_t} - \log\mathrm{NSE_{t-1}}$ since the index is usually the benchmark on measuring stock market performance.

Tgarch Model: TGARCH model was developed independently by Zakoian (1994) and Glostenet al. (1993). It explained the impact of news on volatility and its generalized version was given as:

$$\delta^2_{t=\omega+\alpha\varepsilon^2_{t-1}+\beta\delta^2_{t-1}+\lambda\varepsilon^2_{t-1}\Gamma_{t-1}}$$

In the model, good news, $\varepsilon^2_{t-1} > 0$, and bad news $\varepsilon^2_{t-1} < 0$, had differential effects on the conditional variance. αrepresented the impact of good news while $\alpha + \lambda$represented the impact of bad news. If, $\lambda > 0$, this was an indication that bad news increased volatility in the market suggesting existence of leverage effect of the first order. If , $\lambda \neq 0$, the indication was that the news impact is asymmetric. This model was used to prove the results of EGARCH model on the impact of news on the stock return volatility.

Other tests used included Descriptive statistics and tests for variables normality, test for stationary and tests for autocorrelation.

Results and Findings:

	CPI	GDP	M1	TBILL	NSE
Mean	188.778	118377.5	452763.6	6.837400	4163.998
Median	191.500	117673.5	427483.0	7.235000	4236.690
Maximum	243.800	135581.0	661745.0	17.89800	5774.240
Minimum	146.200	105084.0	289727.0	1.600000	2474.800
Std. Dev	26.387	8078.077	104936.4	3.101900	864.7118
Skewness	0.1260	0.264035	0.440906	1.037618	0.043843
Kurtosis	2.3890	2.324752	1.971020	5.952109	1.770121
JarqueBera	1.0910	1.837045	4.514467	32.55389	3.800729
Probability	0.5800	0.399108	0.104640	0.000000	0.149514

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Following the statistical tests performed on the data, we were able to establish the probability for CPI is 0.5795, GDP 0.39911, M1 0.10464, TBILL 0.0000 and NSE 0.149514 (for normal distribution probability should be greater than 0.1). Therefore all the variables above except T bill were normally distributed. Skewness for CPI is 0.12612, GDP 0.264035, M1 0.440906, T bills 1.037618 and NSE -0.043843 (for normal distribution, skewness=0). From these results CPI, GDP, M1, TBILLS were positively skewed while NSE index was negatively skewed. Kurtosis of CPI is 2.38944, GDP 2.324752, M1 1.971020, TBILLS 5.952109 and NSE 1.770121 (for normal distribution, kurtosis=3).

The table above shows that the minimum mean of all variables was 6.837400 and the maximum was 118377.5. The standard deviation of M1 was considered to be the highest compared to all the other variables at 104936.4. Therefore M1 is said to have the highest volatility compared to all the other variables. TBILL had the highest skewness of 1.037618 and the highest kurtosis of 5.952109 but had recorded a probability of zero.

Correlation Analysis:

	RETURNS	**GDP**	**CPI**	**M1**	**TBILL**
RETURNS	1	-0.391784	-0.64175	-0.353836	-0.317100
GDP	-0.391784	1	0.813657	0.837937	0.117850
CPI	-0.641750	0.813657	1	0.926821	0.219556
M1	-0.353836	0.837937	0.926821	1	-0.089874
TBILLS	-0.317100	0.117850	0.219556	-0.089874	1

From the correlation table above it's evident that some variables are highly correlated for instance GDP and M1 has a correlation of 0.837937, CPI and M1 0.926821and CPI and GDP 0.813657.Since the presence of multicollinearity does not affect the robustness of the model the researcher decided to leave the model as it is. However it is evident that the returns are negatively correlated with GDP, CPI, M1 and TBILLS. The results show that when economic growth rate increases by 1%, stock return decreases by 39.17%. This implies that when economic growth rate increases, investors shy away from the market and offload stock thereby resulting in the decrease of stock return.

When interest rate increase by 1%, stock returns decreases by 31.71%. This might be prompted by investors selling off the stocks held and invest in T-bills. The test shows that when inflation rate increase by 1%, stock return decreases by 64.17%. Rise in price levels over time triggers investors to lose confidence in the market. When money supply increases by 1%, stock returns decreases by 35.38%. From the tests above, inflation rate fluctuations affect stock return volatility more than economic growth rate, money supply rate and interest rate fluctuations.

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VARIABLE		ADF Test Statistic	Cv at 1%	Cv at 5%	Cv at 10%	Remarks
CPI	None	3.676000	-2.6026	-1.9462,	-1.6187	Non-stationary
	Intercept	1.656276	-3.5457	-2.9118	-2.5932	Non-stationary
	Intercept &trend	-1.017153	-4.1219	-3.4875	-3.1718	Non-stationary
GDP	None	0.547757	-2.6026	-1.9462	-1.6187	Non-stationary
	Intercept	-2.404968	-3.5457	-2.9118	-2.5932	Non-stationary
	Intercept & trend	-5.045384	-4.1219	-3.4875	-3.1718	Stationary
TBILL	None	-0.889150	-2.6026	-1.9462	-1.6187	Non Stationary
	Intercept	-0.077069	-3.5457	-2.9118	-2.5932	Non Stationary
	Intercept & trend	-0.428607	-4.1219	-3.4875	-3.1718	Non Stationary
M1	None	3.482019	-2.6033	-1.9463	-1.6188	Non-stationary
	Intercept	-0.257463	-3.5478	-2.9127	-2.5937	Non-stationary
	Intercept & trend	-1.526599	-4.1249	-3.4889	-3.1727	Non-stationary
NSE	None	-1.284229	-2.6026	-1.9462	-1.6187	Non-stationary
	Intercept	-1.444134	-3.5457	-2.9118	-2.5932	Non-stationary
	Intercept & trend	-1.527732	-4.1219	-3.4875	-3.1718	Non-stationary

Unit Root Test:

ADF statistical analysis

The table above gives a summary of ADF where the researcher first test for unit root without differencing at a lagged difference of 1 at different criterion such as the intercept, intercept and trend and without either. The results show that all variables are non-stationary at all observed critical values apart from GDP's trend and intercept observation.

Unit root test with first level differencing

Differencing is performed to obtain stationarity for the variables which are non stationary. The researcher tested for unit roots at first level differencing and at a lag difference of 1 at different levels that is with intercept, intercept and trend and without either. The results show that all variables are integrated of order 1 (I1) apart from CPI and TBILL which are non stationary at none and intercept, intercept and trend respectively, hence the other variables are stationary at all observed critical values. The second table below gives a summary of ADF at 1 (I1). Due to some variables not being stationary the researcher went ahead to perform second differencing under all criteria.

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VARIABLE		ADF Statistic	Test Cv at 1%	Cv at 5%	Cv at 10%	Remarks
CPI	None	-2.166817	-2.6033	-1.9463	-1.61888	Non stationary
	Intercept	-3.930480	-3.5478	-2.9127	-2.5937	*I*(1)
	Intercept &trend	-3.994215	-4.1249	-3.4889	-3.1727	Non Stationary
GDP	None	-4.527345	-2.6033	-1.9463	-1.6188	*I*(1)
	Intercept	-4.584985	-3.5478	-2.9127	-2.5937	*I*(1)
	Intercept & trend	-4.538493	-4.1249	-3.4889	-3.1727	*I(1)*
TBILL	None	-3.164225	-2.6033	-1.9463	-1.6188	*I(1)*
	Intercept	-3.309227	-3.5478	-2.9127	-2.5937	Non stationary
	Intercept & trend	-3.789283	-4.1249	-3.4889	-3.1727	Non stationary
M1	None	-4.647560	-2.6040	-1.9464	-1.6188	*I*(1)
	Intercept	-6.267635	-3.5501	-2.9137	-2.5942	*I*(1)
	Intercept & trend	-6.173687	-4.1281	-3.4904	-3.1735	*I*(1)
NSE	None	-5.038040	-2.6033	-1.9463	-1.6188	*I*(1)
	Intercept	-5.096875	-3.5478	-2.9127	-2.5937	*I*(1)
	Intercept & trend	-5.035224	-4.1249	-3.4889	-3.1727	*I*(1)

Unit root test with Second level differencing

VARIABLE		ADF Test Statistic	Cv at 1%	Cv at 5%	Cv at 10%	Remarks
CPI	None	-9.472175	-2.6040	-1.9464	-1.6188	*I(2)*
	Intercept	-9.443368	-3.5501	-2.9137	-2.5942	*I*(2)
	Intercept & trend	-9.391332	-4.1281	-3.4904	-3.17235	*I(2)*
GDP	None	-4.872687	-2.6040	-1.9464	-1.6188	*I*(2)
	Intercept	-4.826981	-3.5501	-2.9137	-2.5942	*I*(2)
	Intercept & trend	-4.784420	-4.1281	-3.4904	-3.1735	*I(2)*
TBILL	None	-11.09419	-2.6040	-1.9464	-1.6188	*I(2)*
	Intercept	-11.06229	-3.5501	-2.9137	-2.5942	*I(2)*
	Intercept & trend	-11.23173	-4.1281	-3.4904	-3.1735	*I(2)*
M1	None	-9.794110	-2.6048	-1.9465	-1.6189	*I*(2)
	Intercept	-9.704136	-3.5523	-2.9146	-2.5947	*I*(2)
	Intercept & trend	-9.651118	-4.1314	-3.4919	-3.1744	*I*(2)
NSE	None	-9.359162	-2.6040	-1.9464	-1.6188	*I*(2)
	Intercept	-9.270990	-3.5501	-2.9137	-2.5942	*I*(2)
	Intercept & trend	-9.181928	-4.1281	-3.4904	-3.1735	*I*(2)

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After performing the unit root test on second differencing level, we achieved stationarity for all the variables at all criterion. Thus it is said that the variables are integrated of order 2 i.e. I (2).

Testing for the Exponential Generalised Conditional Heteroscedasticity (EGARCH) Model

Results of the EGARCH model on the effect of Inflation rate, Economic growth rate, Money supply rate and Interest rate on stock return volatility (Mean equation)

	Coefficient	**Probability**
CPI	-80.95152	0.0000
GDP	-0.017110	0.0674
M1	0.017150	0.0000
TBILL	43.06609	0.0125

Inflation rate and Economic growth rate from the results shown above, provide evidence of a negative relationship with stock returns. The results also reflect that inflation rate is significant since the probability is 0 (zero). Interest rate has inverse relationship with the stock returns. When 91 day treasury bills rate increases, it attracts more investors and this prompts them to sell off their stock and invest in Treasury bill and vice versa. Interest rate has a probability of 0.0125 and this is close to zero, therefore the effect is significant.

Results of the EGARCH model on the effect of Inflation rate, Interest rate, Money supply rate and Economic growth rate on stock return volatility (Variance Equation)

	Coefficient	**Probability**
ω	4.287149	0.1003
β	0.417585	0.2064
α	0.220530	0.3275
λ	0.599227	0.0085

In the table above, β is found positive, as expected, and significant at a conventional level of testing. The high estimated parameter is an indication that the magnitude of the shocks has an insignificant impact on volatility. The estimated parameter α, of 0.220530, shows that persistence of volatility is quite high. These findings are similar to those of Misati and Nyamongo, (2010) whose finding was that volatility persistence at the NSE is highly persistent. In terms of the decay process of volatility it is found that the effect of a shock in the returns is significant but takes a short duration to lose its effect on the variance of the returns. The direction of effect $\lambda < 1$ is significant at the conventional levels of testing. However, being significant implies that these effects are pronounced during the sample periods and that bad news has significant impact on stock return volatility than good news. Misati and Nyamongo, (2010) found that leverage effect is not significant.

Testing the TGARCH Model:

Results of the TGARCH model on the effect of Economic growth rate, Interest rate, Money supply rate and Inflation rate on stock return volatility

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	Coefficient	Probability
ω	96043.35	0.0204
β	0.867083	0.0616
α	-0.760879	0.2153
λ	-0.318407	0.4649

The TGARCH test was carried out so as to determine the impact of news on stock return volatility in comparison to the results of EGARCH model .The findings of the TGARCH model as shown above provide evidence that news impact is asymmetric since $\lambda \neq 0$. The results are also consistent with those of EGARCH model as $\lambda < 0$, -0.318407. This is an indication that bad news increases volatility in the market suggesting existence of leverage effect and this is the same results obtained in the study conducted by Misati and Nyamongo, (2010). The probability for the TGARCH test shows that leverage effect is significant since its close to 0 (zero). The results contradict that of Misati and Nyamongo, (2010) who found leverage effect to be insignificant at the Nairobi Stock Exchange

Summary of Findings and Conclusions:

The main findings of this study are as follows: the common stock returns are asymmetric but leptokurtic and thus not normally distributed. The macroeconomic variables also did not produce a normal distribution though they were leptokurtic apart from the T-bills which produced a platykurtic relation due to the value of the kurtosis being higher than 3;volatility of returns is not highly persistent; the leverage effects are significant. Misati and Nyamongo, (2010) and Olweny and Omondi, (2011) found out from their studies: the stock returns were symmetric but leptokurtic and thus not normally distributed, volatility of returns was not highly persistent, the leverage effects were significant.

The findings from this study are consistent with other studies as discussed earlier and although stock return volatility is an important aspect in the expectations and decisions of investors in the stock market, the role played by the Nairobi stock exchange market cannot be overlooked. The NSE plays a very important role towards determining the returns to be obtained by the investors in the bourse though a greater impact is from the macroeconomic variables and the economy at large. The findings of the TGARCH model suggest that the news impact is asymmetric. The results also provided evidence that bad news has a larger impact on stock return volatility than good news. The findings are consistent with the results of the EGARCH model. This therefore shows the immense potential that the Nairobi stock exchange may have towards fostering the country's economy should the Kenyan government promote a saving culture and consequently improve investments income of the Kenyan population through appropriate policies.

The Capital Markets Authority as a regulator should work to ensure that impediment to stock market growth such as legal and other regulatory barriers are properly monitored. The findings from this research emphasize on the role of the stock exchange market in directing economic growth i.e. the Nairobi stock exchange has been found to be a leading indicator for economic growth. Therefore there is need to identify factors that have significant effect on stock market return. This will enable investors make rational decisions in order to maximize returns. The regulator will also ensure that measures are put in place to ensure fair play in the market.

*Main Author

Recommendations:

A recommendation is made to the government through this study that the policy makers should come up with policies that will help stabilize economic growth rate, interest rates, money supply rate and the inflation rates fluctuations thus enhancing investor confidence in the securities market. This will bring about a significant impact on the performance of the Nairobi Securities Exchange thus fostering economic growth.

The regulator should ensure that all the market players comply with the policies and regulations in a bid to ensure efficiency and effectiveness of the bourse. The study recommends survey carried from time to time on macro-economic factors affecting volatility of stock returns. This may be facilitated by availing data for free to students and other researchers with interest in studying the stock market, factors affecting the market returns and market efficiency. Further studies on persistence of news on stock return will be useful to investors in making rational investment decisions and aid the regulator in policy form

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THE IMPACT OF FINANCIAL INCLUSION ON THE ECONOMIC GROWTH: EVIDENCE FROM KENYA

Peter Mwaura Kimani*
Jomo Kenyatta University of Agriculture and Technology

Abstract

The study examined the impact of financial inclusion on economic growth in Kenya. Gross Domestic Product (GDP) data was used as a measure of economic growth, while domestic savings, domestic credit to private sector and insurance were used as measures of financial inclusion. Foreign direct investment, gross fixed capital formation and general government final consumption expenditure are included in this study as control variables. The study adopted explanatory research design and used time series data over the period from 1975 to 2011 to establish the relationship between financial inclusion and economic growth. The research data was obtained from the World Bank, Association of Kenya insurers and central bank of Kenya. Augmented Dickey fuller test (ADF) statistics was used to ensure data stationerity, while the Ordinary least square (OLS) was applied to ascertain the impact of financial inclusion on economic growth. Results of the analysis revealed that domestic credits to private sector; insurance; gross fixed capital formation; and general government final consumption expenditure had statistically significant effect on economic growth, meaning that they were important determinants of economic growth in Kenya. On the other hand, domestic savings and foreign direct investment were found to have no significant effect on economic growth in Kenya. The paper recommends to the government several policies that promote savings, credit, payment system and insurance in order to improve further the economic growth. In conclusion, financial inclusion is often seen as an important catalyst for economic growth in the developing countries through reduction of persistent income inequality by enabling more people to access formal financial services. The government should support through all means possible the Kenya Financial Sector Deepening (FSD) programmes that promote the development of financial markets in Kenya as a means of stimulating wealth creation and poverty reduction.

Key words: Financial inclusion, Economic growth, savings, credit, insurance.

Introduction

The world is rapidly moving toward an economic system based on the continuous and ubiquitous availability of inclusive formal financial system that is accessible and that which incorporates all citizens within an economy. This kind of a well functioning system, serves a vital purpose in the provision of savings, credits, payment system, and risk management among other products to people with a wide range of needs.

Inclusive financial system which allows broad access to financial services, without price or non-price barriers to their use, is especially likely to benefit poor people and other disadvantaged groups. Without inclusive financial system, the poor part of the population must rely on their own limited savings and earnings to invest in their education or become entrepreneurs. This only

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provides little incentive to pursue promising growth opportunities, resulting to persistent income inequality and slower economic growth (World Bank, 2012).

The role of financial inclusion in enhancing economic growth has been a subject for dialogue in the current economic affair across world economies, international and national institutions. Arguments are that the development of a modern nation to its full potential in contemporary world can never be attained without adequate financial inclusion, but of course accompanied by the necessary technological innovations. According to the United Nation, financial inclusion involves a timely delivery of financial services to disadvantaged sections of society. It also deals with eliminating barriers that lead to inability of the disadvantaged to access formal financial services. In most developing countries, a large segment of society, particularly low-income people, have very little access to financial services, both formal and semi-formal. As a consequence, many of them have to depend either on their own or informal sources of finance and generally at an unreasonably high cost. The situation is worse in least developed countries (LDCs), where more than 90 per cent of the population is excluded from access to the formal financial system (United Nations, 2006).

Evidence from other countries suggests that it can improve the economic growth of a country especially if proper policies about specific variables relating to financial inclusion are put into place. There is also evidence that its impact differ among countries and that each variable has a differing impact on the economic growth over time. In line with this development, Kenya has not been left behind in the race for rapid development. The Kenya Financial Sector Deepening (FSD) programme was established in early 2005 to support the development of financial markets in Kenya as a means to stimulate wealth creation and reduce poverty. Working in partnership with the financial services industry, the programme's goal is to expand access to financial services among lower income households and smaller enterprises. But despite the fact from developed and emerging high income countries, no proper assessment has been made to extent of growth in national output due to the growth in financial inclusion as defined by savings, credit, payment system and insurance in Kenya. This study therefore examined the socio-economic effect of financial inclusion in Kenya. It presents empirical testing based on the data collected and for the purpose of investigating if there is a significant link between financial inclusion and economic growth. To measure the changes in economic growth, the study will focus mainly on the changes in Gross national Product (GDP) whereas financial inclusion will be measured by changes in savings, credit and insurance.

Statement of Problem

This paper seeks to empirically measure the economic effects of financial inclusion in Kenya and suggested appropriate policies in order to promote the development of the financial sector in order to improve economic growth. To this end, the following study targeted to investigate whether Changes in; domestic Savings, domestic credit to private sector and insurance have any direct impact on economic growth in Kenya.

Objectives

i. To establish the impact of domestic savings on economic growth in Kenya
ii. To establish the impact of domestic credit to private sector on economic growth in Kenya

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iii. To establish the impact of insurance on economic growth in Kenya

Literature Review

Building inclusive financial sectors improves people's lives, in particular those of the poor. A small loan, a savings account or an insurance policy can make a great difference to a low-income family. Inclusive finance enables people to invest in better nutrition, housing, health and education for their children. It eases the strain of coping with difficult times caused by crop failures, illness or death. United Nations stated that improving access to finance for the poor is an effective tool for achieving the Millennium Development Goals (United Nations report, 2006).

A large body of empirical literature suggests that developing the financial sector and improving access to financial services may accelerate economic growth along with a reduction in income inequality and poverty. Without an inclusive financial system, poor individuals and small enterprises have to rely on their own limited savings and earnings to invest in their education and entrepreneurship to take advantage of growth opportunities (World Bank, 2008).

Savings: The life cycle theory of saving and consumption predicts that changes in an economy's rate of economic growth will affect its aggregate saving rate. In the simplest version of the model-in which young people save for retirement and old people consume their previously accumulated assets; an increase in the rate of economic growth will unambiguously increase the aggregate saving rate, because it increases the lifetime resources (and saving) of younger-age groups relative to older-age groups. The study noted that changes in the rate of economic growth may in some circumstances have large effects on the aggregate saving rate (Angus and Christina, 2010). In neoclassical economics, economic growth depends on savings contrary to Solow-swan model growth which concludes that savings rate does affect the rate of growth.

Some studies suggest a very strong association between savings and investment such as Feldstein and Horioka (1983); Penati and Dooley (1984); Feldstein (1983); Obstfeld (1986); Dooley et al. (1987); Haque and Montiel (1991); Tesar (1991); Feldstein and Bacchetta (1991); Sinha and Sinha (1998); Narayan (2005); Ang (2007) and, Jiranyakul and Brahmasrene (2008). But Empirical findings indicate that in some economies, for example, Pakistan, there is a weak correlation between savings and investment. The study suggests that in the presence of inadequate capital mobility within the country, domestic investors have financed investment projects from international market. Furthermore, devaluation and inflation have stimulated investment activities in the country and significantly contributed in closing the gap between domestic savings and investment (Shahbaz et al, 2010)

Additional empirical evidence using cross-country regressions based on the Penn World Table (and other international data) show a significant positive and robust relationship across countries between saving rates and growth, whether interpreted as the effects of investment on growth, e.g. Levine and Renelt, (1992) and Mankiw et al (1992), or as growth driving saving, many studies since Modigliani (1970). If saving is merely the passive adjunct to growth or to investment, then policies for growth should presumably be directed at investment (in people, plant, or equipment) or at the efficiency of such investment, with saving allowed to look after it. But if saving is the prime mover, the focus would move to policies that improve incentive to save (Deacon, 1997).

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Credit: The literature on financial economics provides support for the argument that countries with better/efficient credit systems grow faster while inefficient credit systems bear the risk of bank failure (Kasekende, 2008). The empirical investigation indicates a positive effect of economic growth on credit market development of the country; a relatively developed credit market improves the efficiency of resource allocation thereby contributing to higher economic growth of a country. Conversely, an economic growth push makes credit markets more valuable for participants, stimulates financial development and strengthens the initial growth effect (Mishra et al, 2009).

A better functioning credit system alleviates the external financing constraints that impede credit expansion, and the expansion of firms and industries (Mishkin, 2007). The financial intermediaries although regulated, still determine the strategies for allocating funds, and as such they play a significant role in determining the type of investment activities, the level of employment generation, and the distribution of income (Gross, 2001). The availability of credit function optimistically allows the realization of this role which is often essential and significant for the growth of an economy.

Insurance: Although a large amount of research and investigation content are available on the part played by other services such as banking, transport, communication, public administration, defence, and many others in accelerating the countrywide earnings of an economy, there is a scarcity of material that map the specific contributions of insurance to the economic growth process as well as to the well-being of the poor. But the few empirical studies that have bee carried out suggests that insurance contributes positively to economic growth by improving the investment climate and promoting a more efficient mix of activities than would be undertaken in the absence of risk management instruments. This contribution is magnified by the complementary development of banking and other financial systems (Lael Brainard, 2008). Additional empirical study shows that, insurance is causally linked to growth and makes a positive contribution in both developing and higher income economies (Arena, 2008). But some research suggests that the positive contribution of life insurance to growth is primarily through the channel of financial intermediation and long term investments (Adams et al, 2005). The study finds that banking sector growth and not insurance market growth preceded growth in Sweden. While in some specifications life and non-life insurance do not appear to be significant contributors to growth in the presence of an interaction term with banking, subsequent research suggests the independent contribution of insurance is robust to the inclusion of banking sector variables, and higher levels of insurance and banking penetration jointly produce a greater effect on growth than their individual contributions combined (Webb et al, 2002).

Despite this contradiction, the evidence suggests there is substantial potential for insurance to make a greater contribution to economic growth and social welfare in many lower and middle income countries. Indeed, industry experts argue that insurance lags behind other financial services in the extent of globalization, providing substantial growth opportunities (Gibbons, 2007). The large variation in insurance coverage among countries at similar income levels, strong trend aggregate growth and stability in a large number of lower and middle income economies, and diminishing domestic market concentration in several countries all point to significant growth potential for insurance, with associated benefits for productivity, growth, and welfare.

Methodology

The paper deploys Ordinary least square (OLS) to ascertain the impact of financial inclusion on economic growth. Augmented Dickey fuller test (ADF) statistics was used to ensure data stationerity, while normality test and serial correlation tests were also conducted to ascertain the reliability of the results. The normality test was used to examine whether the disturbances are normally distributed or not

Model specification

This section present some sample specification of models, which permits the qualification of economic relationship between economic variables. Economic variables such as the domestic Savings, domestic credit to private sector, insurance, foreign direct investment, gross fixed capital formation and general government final consumption expenditure contributions to gross domestic product are the independent variables while the economic growth measured as GDP becomes dependent variable.

Our definitional econometric models for this study can be specified as follows:

Y= f(dcps, gds, nli, fdi, gfcf, ggfce) ………… (i)

Where Y = Gross Domestic Product (GDP)

dcps = domestic Savings; gds= domestic credit to private sector; nli= insurance; fdi= foreign direct investment; gfcf= gross fixed capital formation; ggfce= general government final consumption expenditure

Following from our theoretical perspective, the model are specified such that we can be able to test for the multivariate economic relationships as stated in the objectives of the study. While the equation (i) served as the main models, the equation (ii) is in linear form.

$$\mathbf{Y_t = Ł_0 + Ł_1 dcps_t + Ł_2\, gds + Ł_3\, nli_t + Ł_4\, fdi + Ł_5\, gfcf_t + Ł_6\, ggfce_t + \mu_t} \text{ ………… } \mathbf{(ii)}$$

In equation (ii), $Ł_0$, $Ł_1$, $Ł_2$, $Ł_3$, $Ł_4$, $Ł_5$ and $Ł_6$ are the magnitude while μ_t is the error term. This study intended to show the effect of financial inclusion on economic growth

Sources of data: Time series data used for the estimation covering 1975 to 2011 were obtained from the World Bank, Association of Kenya insurers and central bank of Kenya.

Data analysis and discussion: In this subsection, all the necessary data and analysis are presented in the following tables for clarity.

Stationerity test: The first step was to conduct a unit root test on each variable to find out whether the variables were stationery and at which order.

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Table 4.1: stationerity tests for the variables

Augmented Dickey-Fuller Unit root test for sample period 1975-2011 At 1st difference					
Variable	ADF:t	1%	5%	10%	p-values
Y	-3.51	-3.62	-2.94	-2.61	0.00
dcps	-5.50	-3.62	-2.94	-2.61	0.00
gds	-7.36	-3.62	-2.94	-2.61	0.00
nli	-4.87	-3.62	-2.94	-2.61	0.00
fdi	-6.18	-3.62	-2.94	-2.61	0.00
gfcf	-5.75	-3.62	-2.94	-2.61	0.00
ggfce	-4.90	-3.62	-2.94	-2.61	0.00

The table shows that the variables in this series are stationery at 1%, 5% and 10% significant level.

Autocorrelation test: The test shows the growth rate of the independent variables when the dependent variable is assumed to grow at one percent. The analysis also tests for possible degrees of multicollinearity (this a case of multiple regression in which the predictor variables are themselves highly correlated, therefore a problem of autocorrelation) among the variables.

Table 4.2: Correlation matrix

	Y	dcps	gds	nli	fdi	gfcf	ggfce
Y	1.000000						
dcps	0.287041	1.000000					
gds	-0.329900	-0.112853	1.000000				
nli	0.041590	0.178829	-0.128670	1.000000			
fdi	0.033674	-0.155920	-0.068168	-0.033521	1.000000		
gfcf	0.429188	0.507925	-0.395459	0.202353	-0.085772	1.000000	
ggfce	0.634551	0.466887	-0.214801	0.081033	-0.079278	0.436984	1.000000

The correlation matrix shows that all the variables are not higly correlated in relation to output.

Testing the OLS Model: The study runs regression analysis to examine whether there is a significant relationship between domestic credit to private sector (dcps), gross domestic savings (gds), non-life insurance (nli), foreign direct investment (fdi), gross capital formation (gfcf) and general government fixed consumption expenditure (ggfce) contribution t0 Gross Domestic Product (y) in Kenya. Table 4.5 presents the OLS estimate of the effects of financial inclusion to GDP. The tests determines the impact independent variables on the dependent variable by comparing the results of the model.

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Table 4.3: OLS analysis

Dependent Variable: Y				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
dcps	0.257413	0.066418	3.875666	0.0005
gds	0.009473	0.032419	0.292195	0.7721
nli	-0.371173	0.131983	-2.812284	0.0086
fdi	-0.006112	0.006598	-0.926423	0.3616
gfcf	0.165361	0.077597	2.131026	0.0414
ggfce	0.208714	0.104340	2.000333	0.0546
c	19.88329	0.489051	40.65684	0.0000
R-squared	0.986990		Adjusted R-squared	0.984387

Results of the analysis revealed that the coefficients of domestic credits to private sector, domestic savings, gross fixed capital formation and general government final consumption expenditure, were positive, meaning that they had direct relationship with economic growth. This also means that an increase in any of these variables result to positive change or increase in output. On the other hand, coefficients of foreign direct investment and insurance were negative, meaning that they had an inverse link with output. This also implied that they were decreasing as the economy grew.

Domestic credits to private sector and insurance had statistically significant effect on economic growth at 1%, gross fixed capital formation at 5%, and general government final consumption expenditure at 10%. This meant that they were all important determinants of economic growth in Kenya at 10% significance level. On the other hand, domestic savings and foreign direct investment had no statistically significant effect on economic growth at 10% significance level, meaning that they were not important determinant of growth in Kenya. This can be attributed to the unpredictability of both variables due to their wide fluctuations. This may also imply that savings and insurance were not converted into investments which had a potential of spurring growth. It might be people were savings for other reasons like precautionary purposes other than for investments, and that compensation rate may have been very high taking a good chunk of rather what could have been invested. It might also be that part of these savings and insurance fund ends up in the government kitty through government borrowing.

Summary and conclusion

The results of this work provided evidence to support the earlier work that domestic credit to private sector and domestic savings have positive effects on economic development. The conclusion drawn from this study was directly relevant and similar to studies carried in other countries. The study also reveals that though insurance had a negative effect on growth contrary to our earlier findings, it had significance influence on economic growth in Kenya. Many factors other than financial inclusion were critical to growth, but the lack of attention on financial inclusion hinders growth no matter what resources are dedicated in other areas of the economy. Therefore, there is need to create a conducive competitive climate for the growth of the financial sector in order to allow more inclusion. Also, considering the relevance of the financial inclusion to economic growth and development, policy makers should ensure that financial based policies are transparent and stable. Policies and regulations should be made to promote a conducive and competitive climate for foreign investment, gross capital formation and government expenditures so that the capital required for building financial infrastructure can be met.

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**Main Author*

A COMPARATIVE STUDY OF FACTORS INFLUENCING EQUAL EMPLOYMENT OPPORTUNITIES PRACTICES IN PUBLIC UNIVERSITIES: A Case of Non-Teaching Staff in U.O.N, K.U and J.K.U.A.T

Rose M. Ndegwa*
Kenyatta University

Abstract

Kenyan public Universities plays an important leading role in today's global marketplace. To continue that role, they must make full use of the University's human capital by promoting workplace practices that allow all workers to achieve their highest potential. The promise of equal opportunity is a legal right afforded to all of our nation's workers and job applicants, and should be woven into the fabric of every organisation's dream. On Equal Employment Opportunity (EEO) and Affirmative Action, the Universities are not to condone discrimination against any individual on the basis of race, religion, color, sex, age, national origin or ancestry, marital status, parental status, sexual orientation, disability, or status such as a disabled. This is a comparative study to analyze and evaluate the factors that influence EEO practices in various public universities in Kenya. The study targeted the non-teaching staff of three public universities near Nairobi, which include University of Nairobi, Jomo Kenyatta University of Agriculture and Technology (JKUAT), and Kenyatta University (KU). The study focused on those in the middle and senior level cadres. The study was descriptive survey research and used both secondary and primary data. The researcher used closed–ended and open-ended questionnaires and interviews as instruments of data collection and data management software Statistical package for social sciences (SPSS) was used for data analysis. Results indicated that factors such as corporate planning, organization culture, work policies and procedures, leadership and external environment influences EEO practices in public Universities. The public Universities should be committed to adapt a culture that supports EEO practices and also promulgate policies and programs to ensure that all persons have equal access to employment opportunities in all aspects of the employment relationship. *Keywords: Jomo Kenyatta University of Agriculture and Technology (JKUAT), University of Nairobi (UON), Kenyatta University (KU), Non-teaching staff, Equal Employment opportunities(EEO), discrimination*

Introduction

The genesis of public Universities in Kenya can be traced back to the early 60s when the University of Nairobi then known as Royal Technical College was transformed into the second University College in East Africa on 25th June 1961. Since the year 2002 higher education in Kenya has undergone tremendous transformation and public Universities that were initially six (7) in 2002 have currently expanded to twenty two (22). The public Universities have for a long time relied on Government funding till late 90s when the self-sponsored University courses were introduced due the growing demand of higher education, this has allowed the universities to generate income that subsides the government funding. There has been rapid growth in public universities and this has led to increased demand of personnel both teaching staff and the non-teaching staff. This study is focused on the public universities non-teaching staff whose employee population is double that of the teaching staff in most Universities.

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Public Universities have major challenges of managing large numbers of the non-teaching staff that comprises of the largest population of its employee. This group of staff is further broken down into various categories such as unskilled and semi-skilled workers, middle grades, senior library, technical and administrative staff. This therefore calls for well-established work policies and procedures that ensure that the Human Resource is well catered for by providing work policies and procedures that are fair and allow for equitability in employment opportunities.

The continued litigations in Industrial courts from various categories of staff represented by their Unions such as KUDHEHIA, UNTESU is enough evidence that the non-teaching staff in public universities have grievances related to the HR practices. Each public University may have its unique way of handling the Human Resource matters; however the purpose of this study was to find out whether public universities give equal employment opportunities in regard to HR practices to its entire staff and what are the factors that influence EEO practices in public universities.

Statement of the problem

The rapid growth in public universities has called for increased demand of personnel not only for the teaching staff but also the non-teaching staff who offer the required support in learning institutions. The questions are, are the universities management prepared for this rapid personnel growth? Are there are clear-cut work policies and procedures in regard to training, career development, promotion and compensation for the non-teaching staff in the universities?

There has been a continued complaint by the non-teaching staff of inequitable access in most aspects of employment relationship and particularly training, professional development, promotion and compensation in public universities. The public universities work policies and procedures do not satisfactorily cater for all categories of staff. The culture in the public university is that which do not fully recognize the input of the non-teaching staff towards the progression of the university mandate.

Many staff members in the universities are not clear of what is expected of them due to the different forms of promotion/appointment criteria and the varying academic and professional requirements of the various categories of staff under consideration. The appraisal systems within the university are not regular or systematic and are likely to contribute to unequal employment opportunity and this lead to a de-motivated, unproductive workforce. Training for staff policies also need to be examined and every member of staff should have equal opportunities for training, scholarships or sponsorships that are made available.

There are distortion and discrepancies in the compensation of mainly the middle level non-teaching staff at the country's public universities. UNTESU, the non-teaching staff union is demanding that salaries be regularized and rationalized evidenced by the public Universities national wide strikes called for all non teaching staff in November 2011 and September 2012.

Every staff member is a critical strategic asset to the University goal and necessary for corporate success. A management concerned to reinforce equal opportunity policy must not only check its formal procedures but must discover by a process of questioning what is really going on, what are the real reasons for the perpetuation of discrimination. Lynn and Erika (2004).

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Purpose of the study

The purpose of this study was therefore to find out the emphasis given by top management on the non-teaching staff on EEO in all aspects of the employment relationship and particularly training, professional development, promotion and compensation. The research focuses was mainly on the middle level and the senior level staff and also establish the factors that affect EEO practices in public Universities.

Research questions

The study was guided by the following research questions.

i. Do the public universities include EEO strategies in corporate planning?
ii. Are there discrepancies that exist in various public universities in regard to EEO for the non-teaching staff?
iii. Does top leadership influence EEO practices?
iv. Are there workplace cultures (behaviors and attitudes) that hinder Equal employment opportunity for the non-teaching staff?
v. Are the non-teaching staff given EEO when it comes to employment relationship aspects such as training, promotion and compensation?
vi. Are there employment policies and procedures that allow for discriminatory workplace practices for the non-teaching staff?
vii. Do the environmental changes influence EEO demands for non-teaching staff?

Literature Review

The study was a comparative study for three Kenyan public universities. Empirical and secondary literatures related to Equal Employment Opportunities, workplace Discrimination, were reviewed to investigate the factors influencing EEO practices and expected outcomes in EEO strategies.

Equal Employment Opportunity (EEO)

Equal Employment Opportunity (EEO) is about making sure that workplaces are free from all forms of unlawful discrimination and harassment. This means having workplace rules, policies, practices and behaviors that are fair and do not disadvantage people because they belong to particular groups. In such an environment, all workers are valued and respected and have opportunities to develop their full potential and pursue a career path of their choice. New South Wales Public Sector,(2011). According to Kenyan Constitution (2010), a person shall not discriminate directly or indirectly against another person on any of the grounds including race, sex, pregnancy, marital status, health status, ethnic or social origin, colour, age, disability,

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religion, conscience, belief, culture, dress, language or birth. Women and men have the right to equal treatment including the right to equal opportunities in political, economic, cultural and social spheres.

The challenges of discrimination in the labour market that encircle equality of opportunity in promotion, training and recruitment have been persistent and this end up affecting the performance of staff and de-motivating work force in the work place. The Equal opportunity standards (EOS) has stressed the importance of all relevant parties including government department nationalized industries, local Research entities, professional organization of the employers and trade unions, playing a positive role in implementation of equality of opportunity rather than merely compliance with the law. Therese Mac, D. (2002).

According to the United States Equal Employment Opportunity Commission the Discriminatory Practices Under Title VII of the Civil Rights Act of 1964, the Americans with Disabilities Act (ADA), and the Age Discrimination in Employment Act (ADEA), it is illegal to discriminate in any aspect of employment, including: hiring and firing; compensation, assignment, or classification of employees; transfer, promotion, layoff, or recall; job advertisements; recruitment; testing; use of company facilities; training and apprenticeship programs; fringe benefits; pay, retirement plans, and disability leave; or other terms and conditions of employment.

Discriminatory practices under these laws also include:

i. harassment on the basis of race, color, religion, sex, national origin, disability, or age;
ii. retaliation against an individual for filing a charge of discrimination, participating in an investigation, or opposing discriminatory practices;
iii. employment decisions based on stereotypes or assumptions about the abilities, traits, or performance of individuals of a certain sex, race, age, religion, or ethnic group, or individuals with disabilities; and
iv. denying employment opportunities to a person because of marriage to, or association with, an individual of a particular race, religion, national origin, or an individual with a disability. Title VII also prohibits discrimination because of participation in schools or places of worship associated with a particular racial, ethnic, or religious group.

Strategies for EEO

According to a study by New South Wales government Sydney (2000) examples of EEO strategies that a leader who values EEO practices would be involved in will include:

i. Include EEO outcomes in business planning
ii. Set targets for EEO group representation and distribution
iii. Insist on EEO group representation on decision-making bodies
iv. Promote diversity in management teams
v. Enforce merit-based selection

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vi. Set and monitor EEO accountabilities for senior executives

vii. Personally communicate EEO progress and hear employees' views

viii. Endorse fair grievance and harassment policies and procedures, and monitor results

ix. Intervene to ensure retention of EEO groups during restructuring

x. Seeking to employ a workforce which reflects the multi-cultural nature of the population.

xi. Using only job related criteria in recruitment and selection.

xii. Ensuring that all aspects of the pay systems are free of bias.

xiii. Providing a workplace which is environmentally compatible and accessible to people with disabilities.

xiv. Treating all employees and job applicants with dignity and respect and provide a working environment free from harassment.

xv. Utilizing the expertise and skills of all employees and ensure their development through training and other career opportunities.

It is important to note that unfair treatment does not necessarily equal unlawful discrimination. Treating a person differently from others violates Equal Employment Opportunity (EEO) laws only when the treatment is based on the presence of a protected characteristic, rather than on job performance or even on something as arbitrary as an employee's personality. Keep in mind, however, that discrimination claims can be highly subjective. To avoid discrimination, you do not have to extend preferential treatment to any employee. The law requires only that you extend the same employment opportunities and enforce the same policies for each employee. Lynn, P. and Erika, H. (2004).

In a study by Inter- University council of E.A (2010/2011) it was found out that African Universities and their leadership need to be reengineered to make them more focused, efficient and effective. According to the study there is urgent need and demand for leadership and management training for leaders and senior Administrators of various universities in the region.

Factors influencing EEO practices in Public Universities

The following variables were considered in this study as the factors affecting EEO practices in Public Universities;

i. Corporate planning

ii. Organisation structure

iii. Leadership

iv. Organisation culture

v. Changing Environments

vi. Work policies and procedures

vii. Funding availability

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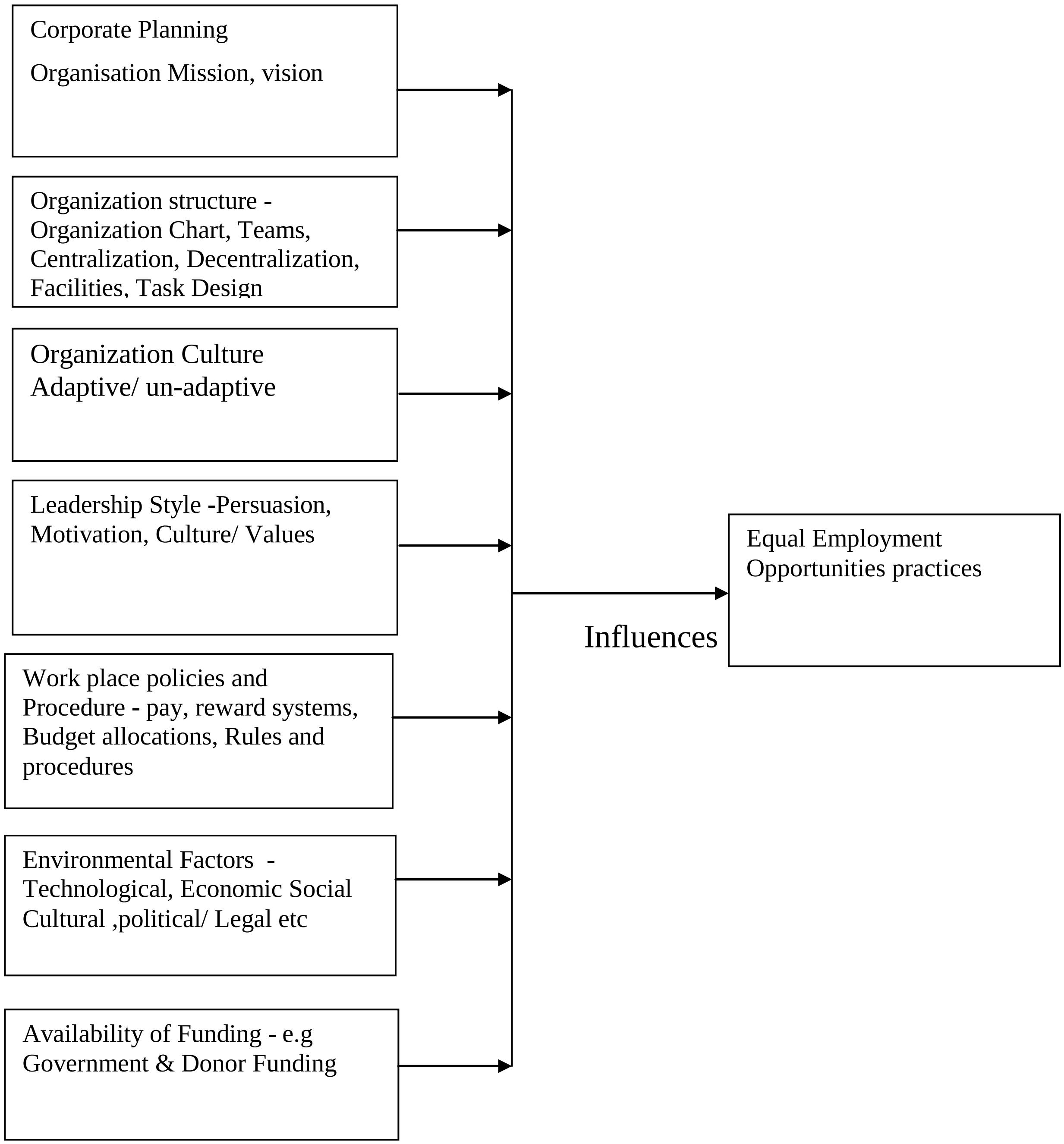

Figure 1: Conceptual Framework

Research Design

The research design that was used is the descriptive survey design. The descriptive survey was considered to be appropriate for this study given the anticipated mass of numerical data to be collected and interpreted. The descriptive survey allows for a considerable amount of information to be obtained from a large sample. The data is organized and summarized in a way that it can be easily understood and communicated using descriptive statistics and figures to compare the factors influencing EEO in sample public universities.

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The study population

The research population constituted of the senior and middle level non-teaching staff of three public universities mainly U.O.N, JKUAT and KU. According to Mugenda et al (2003) population means all elements in research area of interest. The characteristic of the population is as indicated in the table 1.

Table 1: Target population:

Institution (Main Campuses)	SENIOR LEVEL STAFF	MIDDLE LEVEL STAFF (Grade A-F)	Total	Percentages
U.O.N	176	844	**1020**	**44.1%**
JKUAT	111	474	**585**	**25.2%**
KU	152	560	**712**	**30.7%**
TOTAL	**439**	**1878**	**2317**	**100%**

Sampling procedure

By use of the staff data records from the respective universities a simple random sampling was done to select staff participating in the study in order to give an equal chance of inclusion in the sample.

Table 2 Table of the sample size

Institution (Main Campuses)	Total Population of Senior Level Staff	Representative Sample per university at the Ratio of 0.1	Total Population of Middle Level Staff (Grade A-F)	Representative Sample per university at the Ratio of 0.1
U.O.N	176	**18**	844	**84**
JKUAT	111	**11**	474	**47**
KU	152	**15**	560	**56**
Total Representative Sample		**44**		**187**

Data collection instruments

The researcher used closed –ended and open-ended questionnaires and interviews as instruments of data collection. The researcher distributed the questionnaires to the various respondents. Researcher also obtained primary data by conducting oral interviews with some of the respondents. Secondary data, which included books, journals, published and unpublished thesis and dissertations, Magazines, Computer Internet search.

Data analysis

The mass of raw data collected was coded for analysis by scoring questionnaire responses. Descriptive statistics mainly frequencies e.g. Mean, mode, percentages, figures for comparison purposes and cross tabulation was used to analyze the data. To enhance the data analytical process a computer with data management software Statistical package for social scientist

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(S.P.S.S) was used. Content Analysis was used to analyze the qualitative content of data collected. Percentages and Figures was be used to determine the magnitude of issues dealt with in the research. From the findings, appropriate interpretations and recommendations were done.

Findings

The findings on the research questions that necessitated the study as follows:

Integrating EEO plan to Corporate Planning in public Universities

Majority of the respondents agreed that giving Equal Employment opportunities to all staff is a priority of university planning. However, respondents not in agreement at all were in proportion of (34%) in JKUAT, (45.2%) in UON and (45.9%) in KU.

Influence of Top Leadership on EEO practices in public Universities.

The findings in this study indicate that top leadership in all sampled universities greatly influences EEO practices. According to the findings top Leadership/ management influences EEO practices mainly because they are the decision makers in all employment practices. They make decisions on whom to employ, when to advertise, whom to promote, whom to train, which policies to enact, what information to disseminate etc. The largest proportion of very strong agreement is (42%) in UON followed by (38.8%) in JKUAT and (35%) in KU.

Workplace cultures (behaviors and practices) and EEO practices in public Universities

The results indicated that there are workplace cultures in all sampled universities that hinder EEO practices. The respondents (60.7%) in KU indicated that the organization culture does not encourage EEO followed by (54%) in JKUAT and (50%) in UON. The study also indicated that the culture in public universities is un-adaptive (rigid and bureaucratic) and do not encourage EEO practices.

Non- Teaching Staff and EEO Practices in public Universities

The results indicated clearly that Non-Teaching staff are not given EEO in all aspects of employment relationships. Staff in all sampled universities are not in agreement at all that Non-Teaching staff are given EEO in all aspects of employment relationships, the largest proportion is (68%) in KU followed by (56%) in JKUAT and (47.8%) in UON. According to findings the non-teaching felt that most policies in the public universities favor the teaching staff and that they were basically treated as subordinates of the teaching staff. Most of the staff who have undertaken further training in all sampled universities are not sponsored for training, they are not granted study leave, they do not have regular performance evaluations, and have no standard promotions criteria according to the study.

Workplace Policies and procedures and EEO practices in public Universities

According to the results there are employment policies and procedures that hinder EEO in public universities and allow discriminatory work place practices. The results showed (65.0%) in

*Main Author

UON,(58.9%) in KU and (54.6%) in JKUAT agree that they are there. This is mainly due to lack of clear understanding of policies to staff or having policies and procedures that are not clearly stated leading to staff disappointment e.g. the training policy and promotion criteria policy for the non-teaching staff is a major problem in all the sampled universities.

External environmental changes and its influence on EEO demands

The results of this study indicated that external environments affect greatly the non-teaching staff EEO demands in all the sampled universities. JKUAT more than any other sample university seem to be adversely affected by the external forces in most of the factors. New Information and communication Technology has the greatest effect with (59.1%) in JKUAT followed by (58.2%) in UON and (48.9%) in KU. competition from other universities affects to the proportion of (45.5%) in JKUAT and (38.3%) in KU and only (22.4%) in UON. Political Influences adversely affect JKUAT (56.8%) and (44.8%) in UON and KU the least with (34%).

The UON and JKUAT are more conscious of their external environment and its effects on their EEO demands than KU. Information and communication technology is one main factor that is adversely affecting all the sampled universities. Competition from other universities effects is mainly felt at JKUAT followed by KU and least in UON.

Conclusions

1. All sampled Universities do not all consider EEO planning equally in overall corporate planning.
2. Top leadership greatly influences EEO practices in all sampled universities
3. The culture in public universities is un-adaptive (rigid and bureaucratic) and do not encourage EEO practices. There are workplace cultures in all sampled universities that hinder EEO practices.
4. There are employment policies and procedures that hinder EEO in all sampled public universities.
5. External environments affect greatly the non-teaching staff EEO demands in all the sampled universities. External factors also influence EEO practices in all public Universities.

Recommendations

Corporate Planning: It is recommended that public Universities integrate the EEO management plan into broader University strategic planning. Their mission and vision should dictate the EEO strategic decisions in all their planning process.The public universities should formulate a written Equal Opportunities Policy.

Leadership: It is recommended that public Universities top leaders and other senior management officials must demonstrate a firm commitment to equality of opportunity for all employees and applicants for employment. All employees to be represented in decision-making processes.

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Organisation Culture: It is recommended that public universities make a commitment to work toward replacing their cultures and adapt a supportive corporate culture i.e. (a culture that will encourage EEO practices). This culture may be radically different from the old culture that exists and that steps must be taken to cross-gaps between the current and the needed culture. The corporate culture of a firm is a major strength if it is consistent with its organization EEO strategy.

Work policies and procedures: It is recommended that Public Universities work policies and procedures should be regularly reviewed and fair to match EEO objectives, in particular to ensure that policies and procedures do not result to unlawful direct and indirect discrimination. This include policies and procedures affecting: Promotions, open competitive and merit-based recruitment and selection, performance management, study leave, training and development, termination of employment, workload agreement, job evaluation, codes of conduct, workplace communication, voluntary redundancy etc. Work place policies and procedures are meant to provide equity in the way people are treated.

External Environments influence on EEO: It is recommended that public universities recognize the effects of external environments and realizes that management of innovation and change is a challenge to every organization. University management should therefore develop positive attitudes towards changes and to support these by means of appropriate learning and action by facilitating employees to acquire new skills or to modify existing competences in this age of stiff competition. In pursuit of academic excellence all institutions of higher learning should be committed to maintaining an inclusive community which recognizes and values the inherent worth and dignity of every person; fosters tolerance, sensitivity, understanding, and mutual respect among its members; and encourages each individual to strive to reach his or her own potential.

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**Main Author*

UTILIZATION OF SOCIAL MEDIA COMMUNICATION IN PUBLIC UNIVERSITIES

Richard Ng'ang'a Mugera*
Jomo Kenyatta University of Agriculture and Technology
Email: **mugerarichard@gmail.com**

Abstract

Effective Communication is central to any institution or organization. In universities, use of proper chancels to communicate to students is paramount for both teaching and non teaching staff if they are to achieve the set aims and objectives of providing information pertinent in pursuant of students' academic and other endeavors. Communication in universities has for a long time been based on non interactive means where information intended for students is pinned on notice boards, in university websites, daily newspapers or even newsletters. These channels are faced with myriad of challenges as most students due to their busy schedule rarely find time to visit notice boards, have no access to newspapers due to their exorbitant prices, while websites of many universities are rarely updated thus making important information pass them without their knowledge. However, social media promises new ways and means to reach target publics with great interactivity and the current practice is to take advantage of web 2.0 technologies which support social media and make user generated content possible. Social media has come a long way and revolutionalised the way organizations are communicating nowadays. It is important to note that majority of students own mobile phones and are completely engrossed in the social media craze. For this reason, the universities can explore the potential that these media are offering and try to incorporate it in their already existing traditional channels of communication. Despite these new trends, then are various challenges affecting their adoptions which include lack of social media communication policy, the choice of media to use, as well as unwillingness by universities to embrace the new technologies. This study is looking into how universities can utilize the social media and incorporate them into their already existing channels of communication so as to ensure that information reaches intended audience in good time. A review of past literature on utilization of social media communication is going to be done which will be based on at least six journal articles by various authors from peer reviewed journals.

Key words: Social Media, Communication, Universities

Introduction

The history of communication dates back to prehistory, with significant changes in communication technologies evolving in tandem with shifts in political and economic systems, and by extension, systems of power (The New media consortium, 2007). The nature of communication has undergone a substantial change in the past 20years and the change is not over. Email has had a profound effect on the way people keep in touch. Communications are shorter and more frequent than when letters were the norm; response time has greatly diminished (The New Media Consortium, 2007)

The ability to communicate effectively has a great impact on an organization's success. This is because it affects teamwork and collaboration. Effective communication enables positive

**Main Author*

interaction between two or more individuals working together to solve problems; create novel products and master required skills. The importance of effective communication in organizations and institutions is paramount as it facilitates coordination and control of activities, builds teamwork and creates a supportive attitude in organizations (Olembo, 2005)

Murphy (2010) points out that picking the right communication channel for your message will contribute significantly to the success of your message reaching your audience and therefore, it is important to understand the various communication channels available. Communication channels, also known as media, are the delivery vehicle for your message. According to the scholar, traditionally these channels have included Publications like newspapers, magazines, journals; Radio and television; Billboards; Telephones; US Postal Service; face to face among others.

The advent of social media has changed the information environment and the architecture of the Internet significantly over the past 10 years (O'Reilly 2007; Warschauer & Grimes 2007). Boyd and Ellison(2007) notes that social media provides a great space for individual Internet users not only for the basic data storage needs, but even more importantly for the users' psychological experience requirements, such as to "be found", "be authorized" and "be admired". The applications include blogs/micro blogs (e.g. Twitter, Tpeople), wikis/Wikipedia, image sharing (e.g. Flicker), podcasts/video-sharing (e.g. YouTube, Youku), and community forum/social networks (e.g. MySpace, Face book) (Beer, 2008 ; Wilson, 2008). The major social networking tools like MySpace and facebook give people an online identity and an online space to call their own (Rethlefsen, 2007).

Facebook the most popular social network surpassed the 500 million registered users in 2010 (Crunch base, 2010). The network's popularity with digital natives who grew up with the social media is due in part to the networks ability personalize content with interactivity as users share and discuss contents with friends and family (Yaros, 2009). Locally, according to www.bakers.com (2012), there are 1994720 facebook users in Kenya which makes it number 65 in the ranking of all facebook statistics by country. Facebook penetration in Kenya is 4.98% compared to the country's population and 19.01% in relation to the number of internet users.

(Belleghem et al.., 2012) affirms that emerging markets such as Argentina, Brazil and India have the highest penetration of social network usage where they also have the highest usage frequency and intensity as well. According to www.bakers.com , the largest age group of users is currently 25-34 years where there are 64% male users compared to 36% female users. It's different in other countries since in Slovakia there are 48% male users against 52% and 50% against 50% in Costa Rica. A research was done by TNS (2011) revealed much statistics that has made this market more worth to invest in. According their research, globally, people who have online access have digital sources as their number one media channel. 61% of online users use the internet daily against 54% for TV, 36% for Radio and 32% for Newspapers.

Insites consulting (2012) indicates that awareness of social networks sites is very high. Facebook is close to 100%, Twitter reaches 80% awareness, while Google+ is known by 70%. LinkedIn continues to have relatively low awareness where about 4 out of 10 users are familiar with this network. More than 7 out of 10 internet users are members of at least one social network. It is impossible to ignore the influence of social media in our society. While it took media such as

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radio and television more than a decade to reach 50 million users, it took less than nine months for facebook to reach 100 million users. (Patel, 2010).

Mobile technologies including laptops, tablets, and smart phones allow us to be constantly connected, which has had a dramatic impact on how we communicate nowadays. These latest communication technologies if enhanced can help enhance communication among people and institutions (Patel, 2010). Bellingham et al. indicate that 51% of internet population is using smart phones; a majority of them has a data subscription as well. Android is market leader in this marked followed by apple. Over 98%of web access in Kenya is through mobile phones. According to a study by a Kenyan based research firm estimated the combined monthly airtime expenditure for the youth of Kenya, Uganda, and Tanzania at $70 million. This clearly shows that Kenyan youth are active users of mobile phones and online social networks. According to Communications Commission of Kenya (CCK) 2011 report, Kenya had 25.27 million mobile phone subscribers by June 30, 2011 representing 64.2% of the total population. The total internet users' internet users in Kenya are 12.8 million and 98% of these people access the internet through their phones (Mayeku, 2011)

Social networking sites (SNSs) have also attracted increasing scholarly attention as being effective as both means of self-expression and for the management and amelioration of individual and group networks (Barnett 2011). This is particularly applicable to the younger generation in technologically developed countries. SNSs allow individuals to create online profiles, share personal information, and view information created by others, thereby facilitating the formation of social networks among users (Boyd and Ellison 2007; Donath and Boyd 2004).

According to research done by Njuguna(2005), traditional channels of communication being used in University of Nairobi which include face to face communication, newsletters, websites, Emails amongst others are faced with myriad of problems ranging from redundancy of information before reaching its intended audience as well as information not reaching the intended audience promptly. Of all the traditional channels listed, Email was voted as the most effective by over 62% respondents. It is for this reason that organizations and institutions have started embracing social media which promises to reach more people specifically the young people who are engrossed to the social media craze (Njuguna, 2005)

However, the problem of ineffective traditional channels of communication is not only unique to the Kenyan universities but is a global concern. The Colombian educators for example were faced with similar problems and they resulted to incorporating social media like facebook,Twitter,you tube as well as flicker in an attempt to communicate to as many students as possible and promptly. The University of Missouri in United Kingdom on the other hand resulted to using facebook, Twitter, podcast, as well as flicker when they were faced with the challenges of information not reaching their students in good time. If there were announcements to be made, they communicated through these social Networks.

However despite the benefits associated with the use of social media, organizations and institutions often face challenges with the adoption and use of new information systems and social media is no exception. Bughin et al... (2008) points out that despite the possibilities offers for organizations, many companies also associate challenges and problems with its adoption and use. One of the factors affecting full utilization is lack of social media communication policy in

*Main Author

organizations. The social media communication policy provide a framework for participation in social media by university students and staff regarding university matters (Bughin, 2008). The major concern of this research therefore is to find out factors that hinder full utilization of social media in public universities with a view of encouraging them to adopt this latest technology so as to reach all and

Statement of the problem

Effective communication is central to any institution or organization. According to Koontz and O'Donnell (2005), communication is important to all phases of management by every individual within the system and is particularly important in directing and leading any system. McFarland (1994:56) who observes that communication is a central element in all aspects of life further explains this assertion.

In the universities, use of proper channels to communicate to its clientele who are mostly the students is paramount if they are to achieve their set aims and objectives of providing information pertinent in their pursuant of their academic and other endeavors.

Communication between the university staff and their students has for a long time been based in non interactive means where information intended for them is pinned on notice boards, in university websites, daily newspapers or even newsletters. These channels are faced with myriad of challenges as most students due to their busy schedules rarely find time to visit these notice boards, have no access to newspapers due to their exorbitant prices, the websites of most universities on the other hand are rarely updated thus making important information pass them without their knowledge.

Backboard connect (2012), an information-disseminating network confirm that no institution of higher learning can over rely on only these channels of communication. They affirm that these institutions need to stay abreast with new emerging channels to make sure that information intended for dissemination to the university community reaches all sundry and promptly to achieve its desired objective.

According to research done by Njuguna(2005), traditional channels of communication being used in University of Nairobi which include face to face communication, newsletters, websites, Emails amongst others are faced with myriad of problems ranging from redundancy of information before reaching its intended audience as well as information not reaching the intended audience promptly. Of all the traditional channels listed, Email was voted as the most effective by over 62% respondents. However, the problem of ineffective traditional channels of communication is not only unique to the Kenyan universities but is a global concern. The Colombian educators for example were faced with similar problems and they resulted to incorporating social media like facebook,Twitter,you tube as well as flicker in an attempt to communicate to as many students as possible and promptly. The University of Missouri in United Kingdom on the other hand resulted to using facebook, Twitter, podcast, as well as flicker when they were faced with the challenges of information not reaching their students in good time. If there were announcements to be made, they communicated through these social Networks.

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It is for this reason that organizations and institutions have started embracing social media which promises to reach more people specifically the young people who are engrossed to the social media craze (Njuguna, 2005). This has led to positive outcomes like increased interaction between students and staff, information reaching intended audience in real time among other benefits. It's also important to note that majority of students own mobile phones and are completely engrossed in the social media craze where they use them for socialization purposes.

For this reasons, the universities can explore the potential that these media are offering so that they can tap the potential that it has and try to incorporate it in their already existing channels of communication. Social media can be important tools for the University to communicate with its students, staff, communities, and other stakeholders. Social media promises new ways and means to reach target publics and practice is to take advantage of Web 2.0 technologies which support social media and make user generated Content possible (Deidre Quinn-Allan, 2011). Social media has come a long way and revolutionalised the way organizations are communicating nowadays.

However organizations often face challenges with the adoption and use of new information systems, and social media is no exception. Despite the possibilities social media offers for organizations, many companies also associate challenges and problems with its adoption and use (Bughin et al. 2008). One of the factors that could be affecting full implementation is lack of social media communication policy in organizations. The Social Media Communication Policy provides a framework for participation in social media by University staff and students regarding University matters. This in essence ensure that people using social media do so responsibly and in the set out parameters

Globally, universities have gone ahead and introduced social media communication policy in their policy framework. A case in point is the University of Newcastle in Australia where its policy encourages and support staff and students' responsible use of social media use when communicating on one of the University's official social media channels or commenting on University matters on other social media channels. The policy applies to all University staff representing the University on official or external social media channels or commenting on University matters on other channels. It also applies to University students engaging in social media on one of the University's official social media channels or commenting on University matters on external and personal sites. It is against this backdrop that there is need to establish how social media is being utilized in public universities with a view of establishing whether it's being used for useful purpose which will in turn inform the universities of the benefits they are likely to realize by embracing technology.

Objectives this paper

This paper was guided by the following three objectives.

1. To analyze factors that influences the use of social media in public universities

2. To determine the challenges of adopting social media in public universities

3. To find out benefits of using social networks in public universities

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Methodology

This paper focused on an in depth review of past literature on utilization of social media communication in various organizations and sectors. In specific context the paper reviewed various journal articles by various scholars and synthesized those arguments and discussions are related in some manner. The paper focused on thematic areas cited by various articles on the barriers and solutions to food security.

literature Review

This chapter gives literature that is pertinent to the area of social media and which has been done by renowned scholars and researchers. It aims to give an insight on what has been written on social media as well as establish the gaps that have been left by other researchers. The literature review is organized in three areas areas that are the factors influencing social media communication, benefits of using social media and befits of using social media

Factors influencing social media Communication: Although the basic process of communication is similar in many different contexts, one unique feature of organizations has a profound affect the communication process-namely its structure (Greenberg and Baron, 2011). Organizations are often structured in ways that dictate the communication patterns that exist. According to literature reviewed there are various factors influencing social media communication. There are factors that may affect use of social media and online participation (Aghae, 2010). The three main categories are demographical, contextual, and behavioral factors.

Massey and Montoya-weis (2006) says that utility of social media is affected by three imperative factors: geographical dispersion of participant; availability of recipients and accessibility of media. These factors are mentioned by many learners in empirical data findings as important issues in the use of social media and participation in online learning.

When there geographical dispersion in online learning tendencies of using web-based techniques for their interactions. Hrastinaki (2007) as cited by Aghaee (2010) shows that by using synchronous and asynchronous communication tools students seldom meet face to face in geographical dispersion. Hrastinski (2007) as cited by Aghaeel (2010) further says availability of recipients is significant since if recipients are not perceived to be available by a medium, another medium might be preferred. For instance, when students are not available on a specific medium, others choose not to use it.

Accessibility of the media is an issue that stimulates learners' desire to use the media (Aghaee, 2010). In demographic factors, three factors are mentioned namely age, educational level and by learning style. According to Keller and Hrastinski (2006), age is a significant factor to affect perceived participation. The younger generation groups who are digital age learners have more desire of using social medium when compared with the older generation.

Benefits of using social media: Social media is a recent technology that has made it possible to communicate a distance easier, quicker and cheaper is the internet or often by exchanging text is internet and computer mediated communication (Hratinski, 2009.80; Hratinsiki 2007). The web based tools, services or virtual environments, as Magaryan and little John discuss are

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characterized by decentralization of authority in knowledge creation and technology ownership. This enables new forms of collaboration and knowledge sharing for lacunars (Aghaee, 2010).

Daft et.al (1987) blend four factors as media utilities, immediacy of feedback, use of multiple verbal as well as non verbal eves, language and variety and the advantage of being able to personalize messages (cited in Massey and Montoya-Weis, 2006). Interactive websites and social networking makes communication of friends, classmates, and colleagues possible via distance. On one hand, a very common type of communication among learners in online education is a synchronous communication, which provides learners with a higher degree of central and flexibility. It allows learners to log on to the online medium any time they wish, taking into consideration what has been posted and formulate the response with having more time for reflection (Hratinsnki, 2007).

Johnson and Johnson (1996) as quoted by Aghaee (2010) says that there are many advantages using social media in collaborative learning; assisting each other when needed; exchanging resources and documents; classifying complex knowledge sharing existing knowledge with others as well as giving and receiving reflections and feedback from others. Curtis Lawson as cited by Aghaee (2010) further notes that social media advocates for increased effort and perseverance among peers, engaging in-group skills, monitoring each other's efforts and contributions.

Bouwen and Taillieo (2004) as cited by Aghaee (2010) state that ICT development enables globalization that calls forth the perspective of learning in organizations and societies. As Mitchell & Honove (2008) puts it, online learning has recently grown significantly in academics since learners have the possibility of continuous learning besides saving time and reducing travel costs. Social media facilities open communication, leading to enhanced information discovery and delivery (shrm.org). According to this website, social media targets a wide audience making it ideal for communicating with large audiences to institutions.

Challenges of using Social Media: Social Media enriched communication with new and immediate ways of stakeholder interaction. Along with the new possibilities also come challenges as professionals are engaging in real-time conversations with their audiences on facebook twitter, blogs and the like, they have to learn to cope with an oversupply of possibly relevant information, with an invasion of work matters into the private domain and with changing work contents and structures (Bucher, 2012).

In the sphere of education, social media has posed enormous challenges and released its potential as a venue to communicate with stakeholders (Wang, 2013). The role of social media in building social capital, string of legal issues arises when social media has made its way into education. In light of the venue of free speech provided by social media, institutions social media policy makers need to be aware of inherent danger in the infringement on social media users' freedom of speech (Wang, 2013). Clifford (2009) as quoted by Tsuma (2012) says that, given social media's explosive personality it should come as no surprise to employers that employees are accessing this sites and posting on these sites both at home and at work. Employee's inappropriate use of social media can create significant problem for employers' organization (Clifford, 2009). An offensive and unlawful posting may do more than simply embarrass an organization. It can erode public trust, damage funding prospects and may even result in legal

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liability to the employer. Proliferation of social media forms and use has been unprecedented (Lenhart, parcel, 2010). Social media tools, practices, and abuses create additional challenges within workplaces. This new medium does not change the medium, the reach, the speed, and the permanency of their actions, (Jacobson, 2013).

Ulrike, (2013) posits that gaining relevant resonance within social media depends on the ability to information and campaigns that users will forward within their networks, comment on and recommend to other users if information posted on social media does not have a specific viral quality that provoke users to spread it, it will not reach beyond a very circle of users.

(Bucher, et al, 2012) notes that social media enable individuals to interact and connect whenever they want via mobile devices such as smart phones or tables per; whenever they are, However, social media and mobile applications also create situations where individuals can be addressed and reached anytime and anywhere in professional life, this can lead to an apparent need to be connected and hooked to the conversation at all times. In many cases, this entails a blurring of the boundaries between work related and personal context (Taradas et al, 2007).

(Woil & Rosen, 1997 on the other hand says work and communication environment is increasingly shaped by social media, the invasion of work into individuals private lives is one three major mental challenges. They must overcome invasion can lead to increased distress, a less satisfying family life, poor decision making particularly in the course of performing complex tasks and burnout syndrome. On his part, (Bucher, 2012) avers that although social media offer a myriad of playful ways to interact, they also present countless opportunities for distraction and interruption

Conclusion

Various forms of social media such as blogs, microblogs,podcasts,video sharing facilities and social networking sites are used as communication tools in the modern day Kenya. According to the literature reviewed, social networking sites like facebook and twitter are the most commonly preferred mode of communication particularly in the universities that have adopted modern technology. A case in point is the University of Missouri in the United Kingdom which resulted to using facebook, Twitter, podcast, as well as flicker when they were faced with the challenges of information not reaching their students in good time. If there were announcements to be made, they communicated through these social Networks.

Various challenges emerge according to literature by Clifford (2009) as quoted by Tsuma (2012) who says that, given social media's explosive personality it should come as no surprise to employers that employees are accessing this sites and posting on these sites both at home and at work. Employee's inappropriate use of social media can create significant problem for employers' organization (Clifford, 2009). An offensive and unlawful posting may do more than simply embarrass an organization. It can erode public trust, damage funding prospects and may even result in legal liability to the employer. Proliferation of social media forms and use has been unprecedented (Lenhart, parcel, 2010). Social media tools, practices, and abuses create additional challenges within workplaces. This new medium does not change the medium, the reach, the speed, and the permanency of their actions, (Jacobson, 2013).

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Recommendations

Basing on available literature, some form of social networks are more popular that others hence I would recommend that institutions wanting to incorporate social media in their already existing channels of communication should use media that is being used by many people. I would recommend face book and twitter since statistics gathered from available literature puts them ahead of other social networks.

One problem that have hampered utilization of social media is lack of social media communication policy and for this reason I would recommend that universities willing to incorporate social media should put in place social media communication policy to preempt the problem and misuse of the same.

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