Financial Sector Reforms in Bank Regulations and Supervision and its Impact on Banking Competitiveness and Economic Efficiency of Commercial Banks in Tanzania

Lucky Yona[1] Eno L. Inanga[2]

1.Eastern and Southern African Management Institute P.O. Box 3030, Arusha, Tanzania
2.Maastricht School of Management, Endepolsdomein 150, 6229EPMaastricht, the Netherlands

Abstract
This paper examines critically the impact of financial sector reforms in bank regulations and supervision on competitiveness of commercial banks in Tanzania in respect of economic efficiency. The study adopted qualitative method for data collection. Data were collected from bank customers and bank officials from thirty two commercial banks in Tanzania that were already registered by the Bank of Tanzania by the end year 2010. A self-administered questionnaires were distributed to 1600 customers and 184 bank officials. Of these, 893(60%) bank customers and 81(44%) bank officials responded. Data were analyzed using SPSS 17.0 to estimate the mean (SD) scores of economic efficiency variable constructs and chi-square tests to determine the association between reforms on bank regulations and economic efficiency. Results show that there is negative relationship between reforms on banking regulations and economic efficiency leading to conclude that the level of competitiveness of commercial banks has not been impacted by the financial sector reforms.
Keywords: Financial Sector Reforms, Banking Competitiveness. Bank Regulations, Economic Efficiency

INTRODUCTION

Tanzania financial sector was liberalized during the last decade as one of the economic policy following the government desire to revamp its economic strategies in order to achieve economic growth. The reforms on financial sector in developing countries like Tanzania was not a onetime event but on-going event from time to time as need arises. Financial sector reforms in Tanzania was effected on the banking sector with the aim of increasing bank productivity and enhancing banking competitiveness. This study looks out on the impact of financial sector reforms in banking regulations and supervision on banking competitiveness in respect to economic efficiency of commercial banks in Tanzania. It is was motivated by our recent findings from our previous study Yona and Inanga (2014) that investigated the impact of financial sector reforms in banking regulations on service quality on commercial banks in Tanzania. This study motivated us to look further on the other impact the reforms on regulations on the banking sector.

Financial sector reforms in Tanzania covered various areas that aimed at the review of the structural, organization procedures, operational arrangements and policy issues related to financial system. In general, financial sector reforms included reforms on various areas with expectation that the reforms could help to increase competition, diversify ownership of banks and financial restructuring, reforming development finance institutions so as to expand a pool of resources available for investment, reforming other financial institutions so as to improve customer services and ensuring financial sustainability, integrity and sustainability (Nyirabu, 1988). These reforms also enhanced the quality and efficiency of credit allocation as well helped banks to expand branch networks and scope of operations and streamlining the banking industry (Putin's 2013). The banks regulation following the financial sector reforms included Bank of Tanzania Act (2006), Banking Financial institutions Act 2006 and Companies Act 2002. Other regulations include the Risk Management Guideline for banks and Financial Institution 2008, Banking and Financial Institution (Liquidity Management) regulations 2008, Banking and Financial Institution (Capital Adequacy) regulations 2008 and Banking and Financial Institution (Licensing) regulations 2008. The aims of these regulations among others was to allow the operations of institutions that are financially viable to operate in the market. The effect to this regulation it did allow the mushrooming of commercial banks from outside the country and within the country, from four state owned banks prior to 1986 to fifty three banks by end of year 2013. The regulations also aimed at controlling excessive risk taking by management and protection of only small depositors in case of bank failure. Following the implementations of regulations and supervisions requirements we saw the Bank of Tanzania closing one of the failed banks bank (Greenland Bank) in year 2010. All of these convention are based on standards of the BASEL (Basel committee on Banking Regulations and Supervision Practices)

Statement of the Problem

While there are two school of thoughts propagated by various scholars on financial sector reforms on banking regulations there is no specific thought that gives ideal solution to countries that are embarking on their financial sector reforms. The first school of thought is the one that is supported by scholars who argue that regulating the business operations of the banks gives the banks the ability to improve their profitability operational and

economic efficiency. Barth et al (1998) propagated that countries with more restrictive regulations leads to banks with increased and higher profitability. However, the success of restrictive regulation depends on existence of good governance (Barth et al, 2000). The second school of thought propagates the negative effect of restrictive regulation on banking activities. Suen & Chang (2006) argued that bank restriction may hurt the possibility of diversification which in turn increases the risk of banks.

In Tanzania, while the reforms were expected to streamline banking financial performance thus improving financial stability and bank efficiency little is empirically evidenced on whether the reforms had impact on economic efficiency. The focus of our study therefore is to assessing the impact of the financial sector reforms in banking regulations and supervision on banking competitiveness in respect of economic efficiency. This at the end will contribute to the literature on impact of such reforms on economic efficiency. The inadequate number of studies on efficiency of Tanzanian Commercial banks and uniqueness of this study on economic efficiency is relevant in adding contribution to the literature due to the fact that it does not adopt the traditional methods of measuring efficiency of banks [(Data Envelopment Analysis(DEA) stochastic frontier analysis(SFA)] methods. Therefore in order to fill the gap on the empirical evidences of such studies this study will provide answers to this research questions: ***To what extent financial sector reforms on bank regulations and supervision affected the banking competitiveness in respect of economic efficiency of Tanzanian commercial banks***

LITERATURE REVIEW
Financial Sector Reforms
Financial sectors reforms may take different forms from one country to another. According to Martin (1998) many developing countries including Tanzania implemented financial sector reforms as part of a broader market oriented economic reforms. Martin (1998) continues to argue that countries, which implemented reforms, had different level of financial repression or financial sector inefficiency. This argument suggests that financial reforms have different components, which can address the inefficiencies of different countries at different times. A study by Brownbridge and Gayi (1999) on financial sector reforms in eight countries which, included Bangladesh, Laous, Nepad, Malawi, Madagascar, Tanzania, Uganda and Zambia showed many areas for possible reforms. These areas were common in these countries; interest rate liberalization, new entry regulations, prudential reforms on lending, restructuring of government owned banks and directed lending. Specific to Tanzania the lending rates were deregulated, revised banking act in 1991 to allow new entry by private sector, included the provision for minimum capital adequacy and large loan exposure limits and strengthen the central bank supervision department.

Financial sector reforms has benefited many countries in support of positivism on reforms on regulating bank operations in various areas. Reforms can leads to availability of specialized financial intermediation institutions, attract funds from savers of surplus funds (Inanga, 2005), financial intermediation can help to motivate savers of funds to supply capital (Glenn, 1994) and banks having a positive and significant effect on improving competitiveness and production efficiency of the banking sector (Sunil and Bisheng 2007). At the same time financial sector reforms are likely to reduce the distortion of the local financial markets and hence lead to improved allocative efficiency and faster output growth. However financial sector reforms are considered to be harmful if there are no pre-requite conditions to support the reforms. Silvanus & Abayomi (2001) concluded that success or failure of financial sector reform programme depends on among other factors, the implementation of an appropriate sequence of the various policies in the programme package. In any country that is considering financial sector reforms it should be a paramount importance to also consider possible limitations on the implementation of the specific reforms and possible solutions before embarking on them. Ikihide & Alawode (2001) argue that financial sector reforms may lead to financial distress if the reforms are undertaken too abruptly. Inanga (2005) argues that the capacity of the financial sector to aid economic growth depends largely on government policies which are more directed to capital formation and contribute to economic growth, while the banking sector itself for example cannot function effectively if there are unlimited financial repressions. The World Bank study (2007) on Uganda financial sector reform revealed that transportation, communication and information framework can pose impediments to the implementation of financial sector reforms

Banking Competitiveness
Defining banking competitiveness requires us to distinguish between general definition of competitiveness, nation competitiveness and enterprise competitiveness. Nation competitiveness is the ability to produce goods and services that meet the test of international markets while simultaneously maintaining and expanding real income of its people over the long term subject to availability of proper macroeconomic policies and good economic conditions. Porter (2000) further argues that competitiveness depends on increased productivity of a nation enterprises (continuous increase in value added), therefore enterprises need to transform from their methods of competing, shifting from comparative advantages to competitive advantages, namely the ability to compete on cost and quality. In the context of world competitiveness yearbook (WCY, 2003) academic definition states that competitiveness of a nation is a field of economic knowledge which analyses the facts and

policies that shape the ability of a nation to create and maintain an environment that sustains more value creation for its enterprises and more prosperity for its people while business definition states that competitiveness of nations looks on how nations create and maintain an environment which sustains the competitiveness of its enterprises". Arai& Yoshino (2006) argue that competitiveness requires a minimal level of competition to exist within the financial system and competitiveness is an empty word if competition is limited.

Altenburg, Hildebrand & Meyer (1998) define enterprise competitiveness as the ability of the firm to sustain a market position by inter alia supplying quality products on time at competitive prices through acquiring the flexibility to respond quickly to changes in demand and through successfully managing product differentiation by building up innovative capacity and an effective marketing system. Porter (1998) argues that it is the firms not nations which compete in international markets. This means that nations can only compete if their firms can compete. Of course, this is relevant because enterprise competitiveness helps the firm to sustain its market position by inter alia supplying quality products on time at competitive prices through acquiring the flexibility to respond quickly to changes in demand and through successfully managing product differentiation by building up innovative capacity and an effective marketing system while Porter (2000) argues that for enterprises that want to achieve competitiveness setting the business environment, company operations and inter-firm cooperation in order is important. Behkish (2005) defines competitiveness at enterprise level and international level as the quality that is achieved through market dominance and forming activities based on competitive and comparative advantage. A firm is competitive if it can design, produce or market products and services of superior quality at lower costs than its competitors (Sunil & Sigh, 2006). Beverly (1991) study on competitiveness of international financial institutions argued that banks and securities firms compete successfully in international markets by building on strengths which include the existence of an established customer base, technical expertise and innovative ability resulting from specialization in particular domestic market. Competiveness success depends on size of the institution and capitalization. Size of the institution helps to determine whether the bank can take advantage of economies of scale while capitalization may affect institution credit standing. Thomas and Chauseng (2006) as the bank that achieves maximum safety in payment system, efficiency in credit allocation and responds to monetary and fiscal policy changes while customers view a competitive bank as the one which can provide customers with highest paying deposits, lowest interest loans, cheapest and best financial services. Managers of a bank may define a competitive bank as giving high salaries and benefits and offering expanding opportunities for safe career advancement

CONCEPTUAL FRAMEWORK

Based on the theoretical literature discussed above we conceptualize that there is relationship between financial sector reforms in banks regulations and supervision and economic efficiency. We believe that financial sector reforms in bank regulations and supervisions affects variable constructs of economic efficiency of commercial both banks. We do not adopt the traditional methods such as DEA (Data Envelopment Analysis) and Stochastic frontier analysis (SFA) to measure efficiency of the commercial banks .Therefore the Independent variable of this study is financial sector reforms (Bank regulations and supervision) and economic efficiency as dependent variable.

Independent Variable

Regulations and Supervision

Studies on financial sector reforms has underscored that countries do make reforms in different areas in the banking sector, one being on regulations and supervisions of the banks. Fries & Taci (2002) argued about the importance of the state to take a major role of providing prudential regulations and supervision of the banks. The expected outcomes of government's efforts is to enhance and promote bank operations, efficiency and productivity. According to Aziz (2004) study regulations and supervision is a vital component of a well-developed financial system and therefore bank regulations and supervisions should be designed with the objective of promoting efficiency in the banking sector while allowing sufficient flexibility for banks to design their strategies and market niches. Regulations also plays major role in minimizing the entry barriers and facilitating the market entry. According to Berger et al (2008) regulations and supervisory practices helps to promote bank development and facilitate corporate finance. While more benefits are expected from regulations reforms, Beck et al (2006) concluded that proper bank regulations and supervision could enhance banks corporate governance, reduce corruption and improve the operational performance. Isik (2007) study on financial sector reforms in Turkey found that reforms on regulations improved bank productivity. Where banks are more regulated and supervised their operations activities and type of financial assets are likely to be influenced and this might include the capital requirements. Kopeck and Van Hoose (2006) argued that capital requirements influence bank decisions in terms of quality and quantity of loans. This means that lack of regulations may reduce aggregate lending, improve or worsen loan quality. Van Hoose (2007) argued that stricter regulations affect the type and quality of the bank financial assets. Embracing restricted regulations on banks also requires banks to be accountable to the regulators in terms of producing financial reports. Demirguc –Kunt et al (2008)

argue that countries where banks have to report to regular and accurate data to regulator and market participants have sounder banks while Barth (2004) concluded that there is strong association between bank development and bank supervision power. In Tanzania, there are various banking regulations to include the one that prescribe minimum conditions of entry and exist into banking industry and provide minimum capital requirements for banks (BOT, 2008). These regulations are important otherwise the banking industry will not be able to manage risks and financial fragility. Banking regulation also plays major role in determining the cost of services of banks as interest are likely to be unregulated and hence create a great discrepancy from one bank to another (Yona & Inanga 2014) .Based on the literature review discussed above on the banking regulations and supervision we hypothesize the following:

Ho.1: There is negative relationship between reform on bank regulations and economic efficiency

In this research we also hypothesize the following minor hypotheses;

Ho.1a: There is positive relationship bank regulations and banks having adequate number of staff to offer better services

Ho: 1b: There is negative relationship between reform on bank regulations and banks offering different products to meet customers' needs

Ho.1cThere is positive relationship between reforms on bank regulations and bank dealing in high transparency with customers

Ho: 2a.There is positive relationship between reforms on bank regulations on minimum capital and cash requirements and banks financial and operational performance

Ho: 2b.There is positive relationship between reforms on bank regulations and asset quality of the banks.

Ho: 2c. There is no positive relationship between reforms in bank regulations and financial reporting of the banks

Ho: 2d. There is positive relationship between reforms in bank regulations and bank's ability to produce timely and accurate financial reports.

Ho: 2e.There is positive relationship between reforms in bank regulations and bank ability to manage its costs of operation efficiently.

Economic Efficiency

Efficiency has been defined differently by researchers. Chen (2001) distinguishes between technical efficiency (maximizing output from given input) and allocative efficiency (maximizing the revenue mix) which confirms Farrell (1957) original argument of technical and allocative efficiency. Tahir & Sudin (2008) defines efficiency as the way a firm or organization allocates its resources in such a way that it is capable to produce maximum output. High or low efficiency is defined in terms of the efficiency ratio, a commonly used measure of bank performance and competitiveness (Fred et al, 2010).

 According to Fang, Hasan and Marton (2011) efficiency of banks is significantly influenced by ownership, market concentration and institutional variables and Karas et al (2010) study concluded that greater competition leads to higher banking profit efficiency. There are many traditional measurement of banking efficiency. We mention few to include the data Envelope analysis (DEA) developed by Farrell (1957) .This method is used to distinguish between technical and scale efficiency and was first introduced in use by Angler, Lovel and Schmidt (1977). The other measurement technique is the SFA (Stochastic Frontier Analysis) developed by Aigner et al (1977). By using these traditional methods we can measure bank efficiency by using efficiency ratio. Efficiency ratio is measured as non- interest expenses divided by the sum of interest income and non- interest income. Another definition is the one which assumes efficient banks to be the one whose efficiency ratio(ER) is less than 51% and inefficient banks having efficiency ratios greater than 81%. From the efficiency ratio it can be concluded that a higher ratio is an indicator of inefficiency while the lower value indicates greater efficiency. The causes of higher ratio include overstaffing, excessive salaries and benefits, investments in new branches which are not yet profitable due to various reasons. However these definition forces a researcher to measure efficiency quantitatively

Many studies on economic efficiency of commercial banks has adopted quantitative framework such as the DEA and SFA as measurement of economic efficiency. This study does not adopt traditional model of measuring economic efficiency rather uses other qualitative variables aspects of measuring economic efficiency as discussed in the methodology. The traditional methods   quantitative f financial ratios to determine banks efficiency but we adopt efficiency as the ability of the bank to offer different products to meet customer's needs, ability of the bank to deal in high transparency with customers, banks having adequate number of staff to offer better services and banks having proper and accurate disclosure of financial statements. We also adopt efficiency of the banks as operational performance of the banks, assets quality of the banks, timely and accurate financial reporting of the banks as well as management of operations costs. Therefore banks having high scores in these variables will be considered more efficiency than banks having lower scores though Karas et al (2010) research on Russian banks did not find significance difference between efficiency of private banks and state owned banks.

METHODOLOGY

The research adopted quantitative study method to collect and analyze data in order to establish the relationship between reforms in bank regulations and supervision on economic efficiency of commercial banks in Tanzania. Data were collected through structured questionnaires administered to both bank customers and bank officials of Tanzanian commercial banks that were registered by bank of Tanzania at the end of year 2010. The research questionnaires used in this study was based on 5 likert scores requiring customers and bank officials to rank their responses as 1= strongly disagree, 2= disagree, 3= Neutral, 4= Agree and 5=Strongly Agree. Customers were picked by using simple random method as well purposefully sampling to pick bank officials. We collected information from bank customers and bank officials across four regions in Tanzania, namely Mwanza, Arusha, Kilimanjaro and Dar-es-salaam where majority of customers of these banks are situated.

Data Validity

We adopt crobanch alpha to determine the reliability of service quality and economic efficiency dimensions. The rule of thumb is that the Reliability Score (α) should be >0.5 in order to give confidence of relying on the data. If reliability Score (α) is < 0.5 we conclude that there may be variable indicators which are not reliable for measuring service quality and economic efficiency and therefore a need to conduct a factor reduction analysis. Reliability results are presented in Table 1 below. The coefficient results of 0.792 and 0.905 for economic efficiency is an indication that we can rely on variables for measuring economic efficiency.

Table 1.Reliability Scores of Economic Efficiency

Variable Dimension	Items	Reliability Score (α)
Bank Customers Perceptions- Economic Efficiency Variables (Q39-Q42)	4	0.792
Bank Official Perception – Economic Efficiency Variables (Q41-Q45),Q51	6	0.905

Source: Researcher 2014

RESEARCH FINDINGS AND RESULTS

Demographic Characteristics

Figure 1 to Figure 6 provides the demographic characteristics of responses came from customers of both private banks and semi-quasi banks. Of all customers' responses, 25% were customers from private banks and 75% from semi-Quasi banks. In terms of bank locations majority of customers were from Kilimanjaro (56%), Arusha (14%), Dar-es-salaam (19%) and Mwanza (10%). As far as gender is concerned (Figure 6.2) majority of respondents were male (61%) and female were thirty seven percent (37%). The respondent's age group ranged from age of 18 years to sixty years (60) while majority had the age between 18 and 29 years (48%), between 30 years and 40 years 30 (30%), between 41 years and 50 years (13%),between 51 years and 60 Years (6%) and above 60 years (2%). In terms of customer length of relationship with the bank 33.5% of the bank customers had stayed with the bank for a period between 1-3 years, 31% a period between 4-6 years, 7-10 years and 13% a period between 11-20 years. Customers level of deposits (Figure 6.6) ranged from those customers with less than Tanzanian shillings 100,000 (16.8%), Tanzanian shillings 100,000-500,000 (10%), Tanzanian Shillings 501,000-1,000,000 (10%), Tanzanian Shillings 1,000,001-999,000,000 (10%) and Tanzanian Shillings (1,000,000,000 and above (10%).

Table 2 provide data on demographic characteristics of the responses from bank officials. The sample include 81 bank officials of the commercial banks in Tanzania. Male constitute 48% and female 52% of the entire sample. Majority of respondents (69%) came from private banks and 31% came from semi-quasi banks. Majority of respondents which are 67% came from Dar-es-salaam followed by Arusha 17%, Mwanza 11% and Kilimanjaro 5%. In terms of age, majority of bank officials 35% were aged between 41 and 50. The next largest group 24% is aged between 31 and 40. The next group 12% is aged between 21 and 30 and the smallest groups are 4% for group aged 18-30 years, 3% (51-60) and 2% for years above 60 years. As far as gender is concerned (Figure 6.2) majority of respondents were female (57%) and male were forty three percent (43%).

Descriptive statistics

We administered questionnaires to bank customers of both private and semi-quasi banks. Four research questionnaires (q38-q41) were designed to measures economic efficiency of the commercial banks as the results of the reforms on bank regulations and supervision. They were intended to obtain answers whether banks were having adequate number of staff to offer better services (Q38), bank were offering different products to meet customer's needs (q39), banks were dealing in high transparency with customers (q40) and banks have proper and accurate disclosure of financial statements (q41) as the results of the reforms on bank regulations and supervisions. We present the mean scores, standard deviation and P-values of bank customer responses in Table 3.

Table 3 shows that as far as banks having adequate number of staff for offering better services to customers semi-quasi banks had higher mean (SD) scores as compared to private banks [(2.67(1.114) vs. 2.60(1.029), p= 0.414)] respectively. This means that majority of bank customers from semi-quasi banks disagreed that there is adequate number of staff to offer the required services to customers as the results of the reforms on bank regulations and supervision as compared to private banks customers. However the result show that majority of private banks customers perceive that private banks have adequate number of staff as compared to semi-quasi banks. We found that in terms of offering different customers that meet customer's needs, semi quasi banks had higher mean(SD)scores as compared to private banks [(2.87(1.070) vs. 2.74 (1.1060, p=0.121)] respectively meaning that majority of customers from semi-quasi banks disagreed that banks do offer different products to meet customers' needs as compared to private banks. In terms of bank dealing in high transparency with customers we found higher mean (SD) scores for semi-quasi [(287(1.105) vs. 2.79 (1.1060), p=0.347)] has compared to private banks meaning that private banks deals in high transparency with customers as compared to semi-quasi banks. The result also that as far proper and accurate disclosure of Financial Statements is concerned semi quasi banks had higher mean(SD) scores as compared to private banks [(2.71(1.136) vs. 2.59(1.019), p= 0.163)] respectively meaning these banks are lagging behind private banks. Finally we can conclude that these mean score results show that there is no major significance difference in mean responses in terms of economic efficiency between the two groups as the overall responses from participants disagreed on all variables of economic efficiency.

Table 3. Mean Scores and Standard Deviation-Economic Efficiency- Customers Perception

Variable	Bank Ownership	N	Mean	Std. Deviation	P-Values
Adequate number of staff to offer better services	Private	211	2.60	1.029	.414
	Semi Quasi	615	2.67	1.114	
Different Product to meet customers' needs	Private	210	2.74	1.077	.121
	Semi Quasi	613	2.87	1.070	
High Transparency with Customers	Private	211	2.79	1.141	.347
	Semi Quasi	617	2.87	1.105	
Proper and accurate disclosure of financial statements	Private	210	2.59	1.019	.163
	Semi Quasi	619	2.71	1.136	

Source: Researcher 2014

We also analyzed four research variables through questionnaires given to bank officials in order to measure the relationship between the reforms on bank regulations and supervision on economic efficiency of commercial banks. These variables are intended to measure the extent to which minimum capital cash balance requirements affect banks financial and operational performance, the extent to which banks regulations affect asset quality of banks, extent to which the change in regulations and supervision supported financial reporting of the banks, whether regulations reforms supported the banks' ability to produce timely and accurate financial reports and whether banks are able to manage their operational cost efficiently. Table 4 gives the results which shows that as far minimum capital and cash balance requirement and how it affects the operational performance of the banks, private banks had higher mean (SD) scores as compared to private banks [(3.18(1.266) vs. 3.12 (1.236), p= 0.846)] respectively. This means minimum capital and cash requirements affects the operational and financial performance of private banks than the semi-quasi banks. On asset quality private banks had higher mean (SD) scores as compared to semi-quasi banks [(3.11(1.003) vs. 3.00(1.08, p= 0.676)] showing that semi-quasi banks assets quality is much better than private banks. The results on Financial reporting show that private banks have higher score (SD) of [3.30(1.127) vs. 3.04(1.172), p=0.349) as compared to private banks which means that private banks are ahead in preparing the financial reports while on producing timely and accurate financial reports private banks have also higher mean (SD) scores [3.39(1.216) vs. 3.28(1.208), p=0.700] respectively. Finally the results show that private banks have higher mean (SD) scores as compared to semi-quasi banks [(3.23(1.128) vs. 3.23(1.128)], p=0.695)] which means private banks manage their operational costs efficiently than semi-quasi banks. Overall the results shows that there is no major significance of reforms on bank regulations on economic efficiency of commercial banks

Table 4. Mean Scores and Standard Deviation-Economic Efficiency- Bank Officials Perception

Variable	1.Bank Ownership	N	Mean	Std. Deviation	P-Value
Minimum capital and cash balance requirement affect financial and operational performance of the banks	Private	56	3.18	1.266	0.846
	Semi-Quasi	25	3.12	1.236	
Asset quality of the bank	Private	56	3.11	1.003	0.676
	Semi-Quasi	25	3.00	1.08	
Financial reporting of the banks	Private	56	3.30	1.127	0.349
	Semi-Quasi	25	3.04	1.172	
Timely and accurate financial reports	Private	56	3.39	1.216	0.700
	Semi-Quasi	25	3.28	1.208	
Management of operations Costs	Private	56	3.23	1.128	0.695
	Semi-Quasi	25	3.12	1.201	

Source: Researcher 2014

Hypothesis Results

We test the hypothesis by using chi-square to understand the association between change in bank regulations and supervision on economic efficiency and confirm the hypothesis results by comparing the cross tabulation results. We also perform cross tabulations to confirm hypothesis results on the type of relationship between reforms on bank regulations and the variables that affect economic efficiency of the banks.

The main hypothesis of the study was stated as

Ho: 1: There is negative relationship between reforms in bank regulations and supervision and economic efficiency

We also test the following minor research hypothesis

Ho.1a: There is negative relationship bank regulations and banks having adequate number of staff to offer better services

Ho.1b: There is negative relationship between reform on bank regulations and banks offering different products to meet customer needs i

Ho.1cThere is negative relationship between reforms on bank regulations and bank dealing in high transparency with customers

Ho: 2a.There is negative relationship between reforms on bank regulations on minimum capital and cash requirements and banks financial and operational performance

Ho: 2b.There is negative relationship between reforms on bank regulations and asset quality of the banks.

Ho: 2c. There is negative relationship between reforms in bank regulations and financial reporting of the banks

Ho: 2d. There is negative relationship between reforms in bank regulations and bank's ability to produce timely and accurate financial reports.

Ho: 2e.There is negative relationship between reforms in bank regulations and bank ability to manage its costs of operation efficiently.

Association Analysis

In order to understand the association between financial sector reforms on bank regulations and service quality we test the research minor hypotheses by Chi-Square as follows. The rule we adopt to accept or reject the Null Hypothesis is: Ho: P< 0.05 Reject Null Hypothesis or Accept the Alternative hypothesis if Ho: P>0.05. We present the results of the test hereunder (Table 5 [Summary of Table 5.1- 5.5]) and discuss the results below. According to Table 5 chi-square test indicates that there is negative relationship between reform on bank regulations and banks having adequate number of staff to offer better services $x^2 df = 5 = 2.109, p = 0.909$ and therefore we accept the Null Hypothesis. This shows that the banks do employ less number to offer services to customers. The results also indicates that reforms on bank regulations and supervision is not associated to banks offering different product to meet customers' needs $x^2 df = 4 = 5.985, p = 0.308$ and therefore accept the Null hypothesis. Chi-Square results on the association between change in bank regulations and bank dealing in High transparency with customers $x^2 df = 5 = 6.539, p = 0.257 > 0.05$ and accept the Null Hypothesis. This means that means that there is negative relationship between reforms and bank dealing in High transparency with customers. Chi-square results also shows that there is negative relationship between reforms on bank regulations and proper and accurate disclosure of financial Statements by banks as perceived by customer responses $x^2 df = 4 = 6.744, p = 0.240$

Table 5- Chi –Square Results- Bank Regulations and Economic Efficiency –Bank customer's perceptions

Hypothesis	P-Value Results	Decision
Ho.1a: - There is negative relationship between reforms on bank regulations and banks having adequate number of staff to offer better services	P=0.909	Accept
Ho.1b: - There is negative relationship between reform on bank regulations and bank offering different product to meet customers' needs	P=0.308	Accept
Ho.1c: - There is negative relationship between reforms on bank regulations and bank dealing in high transparency with customers	P=0.257	Accept
Ho:1d : - There is negative relationship between reforms on bank regulations and proper and accurate disclosure of financial statements by banks	P=0.240	Accept

Source: Researcher 2014

Further associations between financial sector reforms and economic efficiency is revealed in Table 6. According to Table 6 chi-square test indicates that there is negative relationship between reforms in bank regulations on minimum capital and cash balance requirements and banks financial and operational performance $x^2 df = 4 = 3.150, p = 0.533$ and therefore we accept the Null Hypothesis. The results also indicate that there is negative relationship between reforms on bank regulations and asset quality of the bank $x^2 df = 4 = 1.108, p = 0.893$ and therefore accept the Null hypothesis. This shows that the reforms on bank regulations and supervisions had no significant impact on economic efficiency of banks in terms of asset quality. Chi-square results also indicate that there is negative relationship between reforms in bank regulations and financial reporting of the banks as perceived by bank official responses $x^2 df = 4 = 1.873, p = 0.759$ which means that bank regulations has not impacted the financial reporting of the banks. There is negative relationship between reforms in bank regulations and banks' ability to produce timely and accurate financial reports as indicated by the results $x^2 df = 4 = 1.520, p = 0.823$ and therefore we accept the Null Hypothesis. This shows that banks have improved their ability to produce timely and accurate financial reporting. Finally the results show that there is negative relationship between reforms in bank regulations and banks' ability to manage its costs of operations efficiently $x^2 df = 4 = 1.520, p = 0.971$ and therefore we accept the Null Hypothesis.

Table 6- Chi –Square Results- Bank Regulations and Economic Efficiency –Bank Officials perceptions

Variable	P-Value Results	Decision
Ho: 2a: There is negative relationship between reforms on bank regulations on minimum capital and cash balance requirement and banks financial and operational performance	P=0.533	Accept
Ho:2b.There is negative relationship between reforms on bank regulations and asset quality of the bank	P=0.893	Accept
Ho:2cThere is negative relationship between reforms in bank regulations and financial reporting of the banks	P=0.759	Accept
Ho:2d.There is negative relationship between reforms in bank regulations and banks' ability to produce timely and accurate financial reports	P=0.823	Accept
Ho:2e.There is negative relationship between reforms in bank regulations and Bank ability to manage its costs of operations efficiently	P=0.971	Accept

Source: Researcher 2014

Cross Tabulation Results

The cross tabulation results (Table 5) support hypothesis one (Ho: 1a) that there is negative relationship between reform on bank regulations and banks having adequate number of staff to offer better services majority of both customers from private banks (51%) and semi-Quasi banks (51%) disagreed that banks have adequate number of staff to offer better services. The cross tabulation results also confirms hypothesis two (Ho: 1b) there is negative relationship between reform on bank regulations and banks offering different product to meet customers' needs as it shows that high percentage of customers from private banks (43%) and semi-quasi banks (39%) disagreed that banks are offering different types of products to meet customers' needs while other percentage (35% Private banks and 29% Semi-Quasi banks) were not sure. The results also confirm that there is negative relationship between reform on bank regulations and bank dealing in High transparency with customers as majority of both banks [(Private banks (45%) and Semi-Quasi Banks (39%)] disagreed that banks have high transparency in dealing with customers.Finaly the results confirm that there is negative relationship between reform on bank regulations and proper and accurate disclosure of financial Statements by banks as majority of customers from both banks[[Private banks (51%) and Semi-Quasi Banks (45%)]

Table 7 – Cross Tabulation – Economic Efficiency

Dimensions	Private Disagree N (%)	Neutral N (%)	Agree N (%)	Total N (%)	Semi-Quasi Disagree N (%)	Neutral N (%)	Agree N (%)	Total Total
Adequate number of staff to offer better services	108(51)	61(29)	42(20)	211(100)	311(51)	162(26)	142(23)	615(100)
Different Product to meet customers' needs	90(43)	73(35)	47(22)	210(100)	241(39)	193(31)	179(29)	613(100)
High Transparency with Customers	94(45)	67(32)	50(24)	211(100)	241(39)	202(33)	174(28)	617(100)
Proper and accurate disclosure of financial statements	108(51)	61(29)	41(20)	210(100)	281(45)	183(30)	155(25)	619(100)

Source: Researcher 2014

The cross tabulation results (Table 6) as perceived by bank officials support hypothesis two (Ho:2a) as it shows that high percentage of customers from private banks (39%) and semi-quasi banks (40%) agree that minimum capital requirements do not affect the operational performance of the banks. The cross tabulation results do not support results of hypothesis two (Ho: 2b) that there is no significance relationship between reform on bank regulations and assets quality of the banks as it shows that high percentage of customers from banks (43%) and semi-quasi banks (48%) are neutral about the relationship and 23% of private banks and 24% of semi quasi banks disagreed that financial sector reforms on regulations do affect the asset quality private of the banks. At the same tabulation results do not support results of hypothesis two (Ho: 2c) that there is no significance relationship between reform on bank regulations and financial reporting of the banks as it shows that high percentage of customers from private banks (50%) and semi-quasi banks (36%) agreed that banks are producing the financial reports. The results also do not support the results of hypothesis (Ho: 2d) that there is no significance relationship between reforms on bank regulation and banks producing timely and accurate financial reports as its shows majority of bank customers [(Private (59%) and Semi-Quasi (46%)] agreed that the banks are producing timely and accurate financial statements. Finally the results support hypothesis two (Ho:2e) as it shows that high percentage of customers from private banks (32%) and semi-quasi banks (35%) disagree that regulations reforms has not affected the management of operational costs of the banks.

Table 6- Cross Tabulation-Service Quality –Bank Official Perception

Dimensions	Private Banks Disagree N (%)	Neutral N (%)	Agree N (%)	Total N (%)	Semi -Quasi Banks Disagree N (%)	Neutral N (%)	Agree N (%)	Total Total
Minimum capital amount	17(30)	17(30)	22(39)	56(100)	6(24)	9(36)	10(40)	25(100)
Asset quality	13(23)	24(43)	19(34)	56(100)	6(24)	12(48)	7(28)	25(100)
Financial Reporting	14(25)	14(25)	28(50)	56(100)	9(36)	7(28)	9(36)	25(100)
Timely and Accurate Financial Reports	15(27)	8(14)	33(59)	56(100)	7(28)	6(24)	12(48)	25(100)
Management of operational costs	18(32)	10(18)	28(50)	56(100)	9(35)	5(19)	12(46)	25(100)

Source : Researcher 2014

DISCUSSION AND CONCLUSION

The study aimed at discovering the impact of the financial sector reforms in banking regulations in Tanzania on banking competitiveness of commercial banks in respect to economic efficiency. The study did not adopt the traditional measurements of banking efficiency like the DEA () and SFA that use quantitative data from financial statements rather used other qualitative variables. The mean scores, hypothesis tests and cross tabulation results are used to deduce conclusions about the study. The study provides evidence that the qualitative variable instruments for measuring banking efficiency were valid as the Reliability Score (α) >0.5 for both bank customers instruments and bank official instruments [(0,793) and (0.905)] respectively in order to give confidence of relying on the data. The study findings show that despite of the reforms in bank regulations and supervisions, banks still have less number of bank staff who can offer better services to customer for private banks and semi quasi banks [(2.67(1.114) and2.60(1.029), p= 0.414) respectively. At the same time, banks do offer almost homogenous (no differentiations) products that meet customers different needs [Private banks (2.87(1.070) vs. Semi quasi-2.74 (1.1060), p=0.121)] which means bank reforms has not impacted banks innovation on offering different products to their customer, These results leads us to conclude that ,there is less transparency in dealing with customers [(287(1.105) vs. 2.79 (1.1060), p=0.347)] and there less strength in proper disclosure of financial statements [(2.71(1.136) vs. 2.59(1.019), p= 0.163)]. In general we can there is no major significance impact difference in response from both banks responses in terms of economic efficiency between private and semi-quasi banks as the overall responses from participants disagreed on all variables of economic efficiency.

Conclusion and Policy Implication

This study is an eye opener to policy makers as it highlights the relationship between the impacts of policy reforms that are perceived to impact the financial sector performance. The study critically examined the relationship between reforms in banking regulations and economic efficiency of commercial banks in Tanzania. Even though traditional measurement techniques of banking efficiency by using quantitative data under DEA and SFA methodology have not been adopted by the study, the construct variable of the study revealed that the reforms on banking regulations had no significant influence on some variables that measured economic efficiency of the commercial banks. From this study it obvious to conclude that banks are not employing enough number of staff to address customers' needs as they try to cut down their operational costs, assets quality of banks is not matching with the expectation of the reforms and there is less differentiation of products that banks are offering to their customers. This means that banks in Tanzania are less innovative to come up with different products or services that can address different customer needs. There is high disclosure of financial statement by the banks as the Central Bank requires all commercial banks to publish the interim and final statement. Despite the fact that banks do observe the requirement of the law to publish financial statement banks are still perceived by their customers that they do not have proper disclosure of financial statements this is because of ignorance of majority customers who do not understand what are these financial statements. Regulations of the Banks by the central bank have impacted the minimum capital and cash requirements. To date new banks are required to have a minimum capital of 15 billion Tanzanian shillings in order to commence a business and 50 billion Tanzanian shillings per any bank that needs to establish a branch hence regulating the entry of new banks that are likely to be underperforming. Finally the study concludes that banks are managing well their operational costs as they employ less number of staff to deliver services to their customers.

This research had limitations as the study shows the perception of bank customers and officials on banking efficiency from only four major cities of the country (Arusha, Kilimanjaro, Mwanza and Dar-es-salaam). The total estimated population of bank customers in Tanzania is about forty million people who are scattered in twenty nine regions. This shows that the sample of respondents from only urban areas and ignoring the rural areas is very small hence that further research based on a larger sample might reveal different results. The inadequate literature on financial sector reforms on bank regulations and its impact to economic efficiency pose a challenge in trying to obtain a benchmark across the world.

References

1.   Aigner, D.J, Schmidt (1977). *Specification and estimation of Frontier production, profit and cost function.* Journal of econometrics 6, 21-37

2.   Arai, Y and Yoshino, N (2006), *Cost of Competitiveness in the Financial Sector,* Financial Research Training Centre UK. Discussion Paper Series

3.   Barth J, R, Carpio G & Levine R (1998) – *Finance Regulations and Performance: Cross Country Evidence*'. The world Bank Policy Research Working Paper No 2037

4.   Barth J, R, Carpio G & Levine R (2000).*Bank Supervision and Regulation .What Works best?* Journal Financial Intermediate No 13; 205-248

5.   Beck, T, Demirguc-Kunt A, Levine R (2006) *Bank supervisions and Corruption in Lending.* Journal of Monetary Economics 53 2131-2163

6.   Beverly, H(1991);*Factors affecting the competitiveness of the Internationally Active Financial Institutions;* Federal Reserve Bank of New York; Quarterly Report, 40-50

7.   Behkish, M.M (2005), *Iranian Economy: In the Context of Globalization.* Ney Publishing House, Tehran

8.   Berger, A.N, Klapper, L.F, Turk- Avis R (2008) Banking Structures and Financial Stability. Mimeo

9.   Brownbridge M & Gayi S (1991) ;*Progress ,Constraints and Limitations of financial sector reforms in the least developed countries* , Finance and Development research programme ,working paper no 7, 1-50

10.   Chen, Y (2001).*Three Essays on Banking Efficiency (*Unpublished PhD Thesis).Drexel University Philadelphia, PA.

11.   Fang Hasan I and Marton K (2011), *Bank Efficiency in transition economies: Recent Evidence from South Europe.* Bank of Finland Research Discussion Papers 5,201

12.   Fred H, Stephen L, Arthur G (2010).*Efficiency Ratios and Community Bank Performance.* Journal of Finance and Accountancy pp 1-15

13.   Fries, S, Taci, A (2002). *Banking reforms and Development in Transition countries.* European Bank of Reconstruction and development working papers no 71

14.   Glen, J (1994. *An introduction to the microstructure of emerging markets',* International Finance Corporation Discussion Paper, 24, World Bank

15.   . Ikihide, S.I & Alawode A.A (2001) *Financial Sector Reforms ''Macro-economic instability and the order of economic liberalization.* The evidence from Nigeria'' African Economic Research Consortium Paper No 112

16.   Isik, I (2007). *Bank ownership and productivity development, Evidence from Turkey.* Studies in Economics & Finance 24 115-139

17.   James R, Gerald C & Ross L (2002). *Bank Regulations and Supervision*, What works *best?* World Bank Paper pp 1-61

18.   Kopecky, J.K, Vanhoose, D (2006) Capital Regulations, heterogeneous monitoring costs and aggregate loan activity. Journal of Banking and Finance 30, 2235-2255

19.   Porter, M. (1998).*Clusters and the new economics of competition*, Harvard Business Review, 76: 77–90.

20.   Porter M. (2000) "*The Current Competitiveness Index: Measuring the Microeconomic Foundations of Prosperity*," Global Competitiveness Report 2000. New York/Oxford: Oxford University Press.

21.   Putnis J (2011) The Banking Regulation Review. Law Business Research Limited U

22.   Martin, B (1998*) Progress, constraints and Limitation of Financial Sector Reforms in the least developed countries,* UNCTAD Secretariat, Geneva. Working paper Series No 7

23.   Nyirabu R (1998). Tanzania Presidential Commission on Financial Sector Reform

24.   Sunil, S.P, & Bisheng Q, (2007).*Competitiveness and efficiency of the banking sector and economic growth in Egypt; African* Development Bank Working Paper, 2 52-78

25.   Sushil K & Singh (2006) *Indian Nationalized Banks: An Empirical study on Factors influencing competitiveness.* IJIR, Vol.42 No 1 73-90

26.   Vanhoose, D (2007*) Theories and Bank behavior under capital regulation.* Journal of Banking and Finance 31, 3680-3697

27.   World Bank 2007), *Uganda moving beyond Recovery; Investment and Behavior Change for growth;* Country Economic Memorandum. Report No 39221-UG

28.   Yona L & Inanga E (2014). *Financial sector Reforms in banking regulations and supervision on service Quality of Tanzanian Commercial Banks.* European Journal of Business Management. IJTSE, Vol 6 No 2, 45-57

First Author

Lucky Yona has MPHIL from MsM (Netherlands), MBA in Finance (MsM/ESAMI), BCom (Accounting) from University of Dar-es-salaam, and B.Th. (Christian Life School of Theology-Georgia, USA). Lucky is also a certified public accountant (CPA) and a member of Tanzania National Board of Accountants (NBAA). He has worked with various reputable institutions as Business Manager (International School of Moshi-Tanzania), Financial Admistrator (AMREF-Tanzania). Presently he is undergoing his DBA (Doctor of Business Administration) with MsM (Netherlands). Lucky teaches at ESAMI Business School and specializes in area of financial accounting, corporate finance, international finance and management accounting.

Second Author

Eno L. Inanga is Emeritus Professor and former Head of Accounting and Finance in Maastricht School of Management (MsM), The Netherlands. Before then he was Dean of the Faculty of the Social Sciences, and later Head of the Department of Economics, University of Ibadan, Nigeria. He studied Accountancy at the University of Nigeria as a Federal Government Scholar and, subsequently, Accounting and Finance at the London School of Economics and Political Science in the University of London, as a Commonwealth Scholar. His other research

interests include financial accounting and reporting in the 21st century, and the misuse and abuse of the Pacioli Model, Dividend Policy and Leverage in Indonesian Firms.
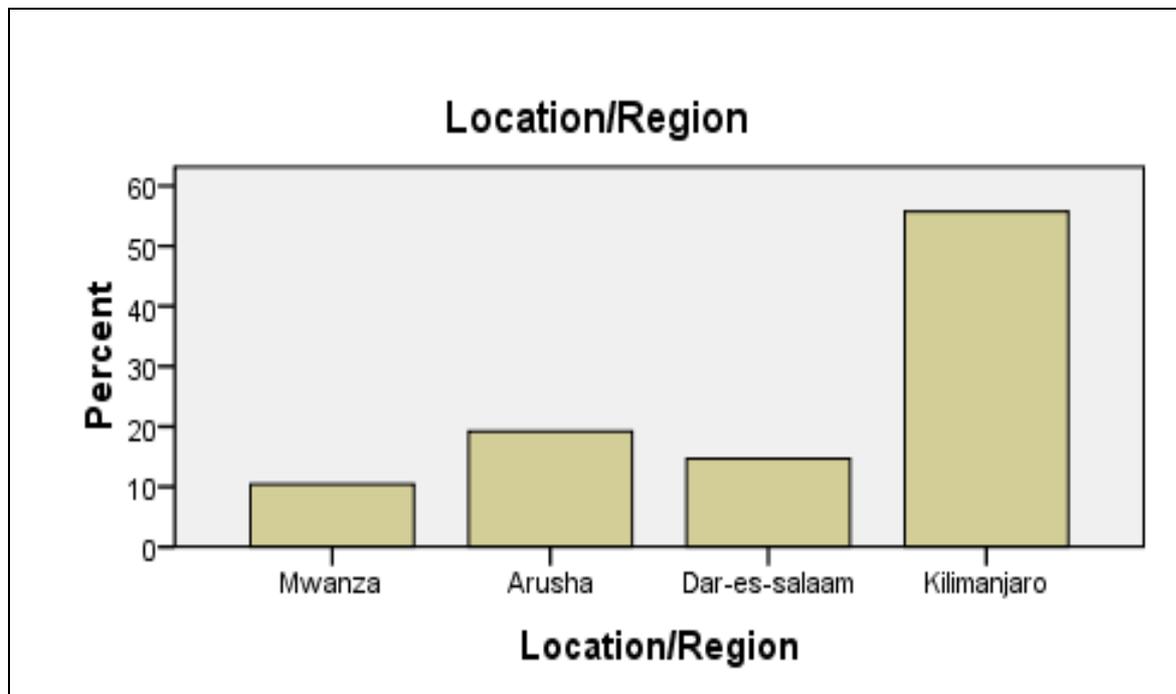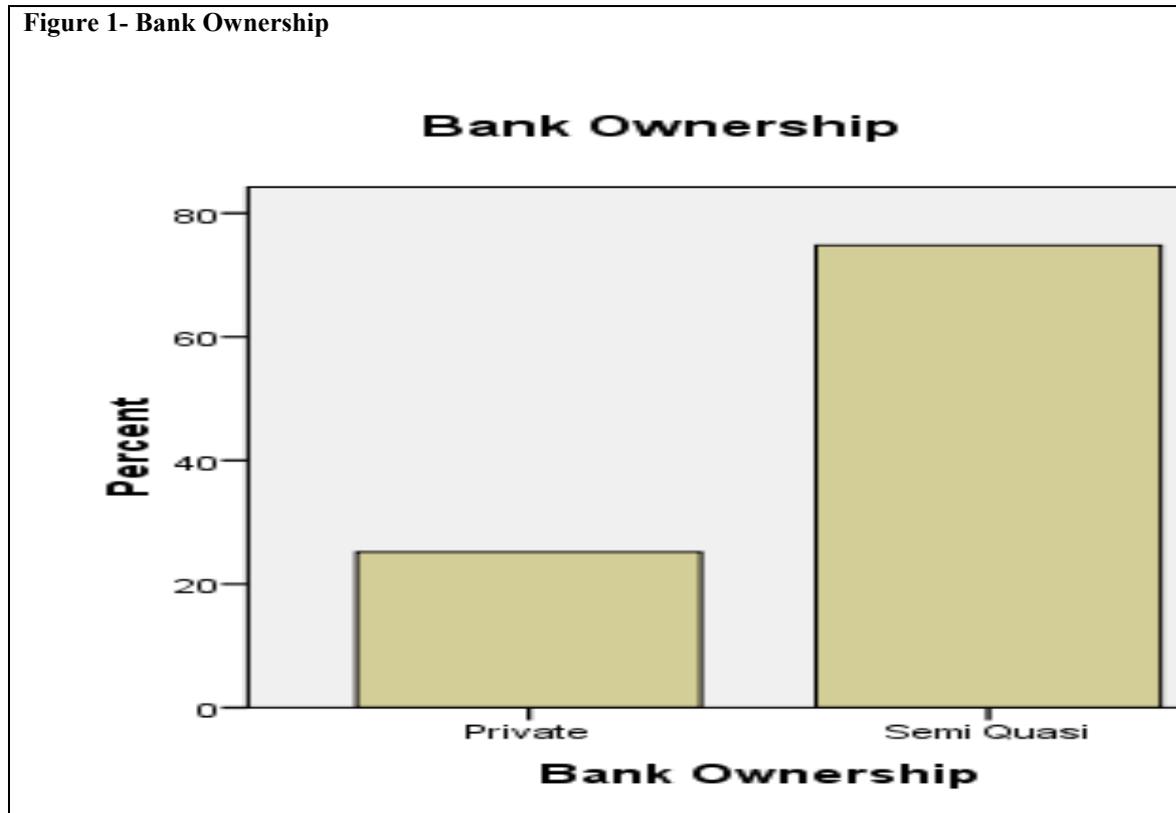
ATTACHMENTS

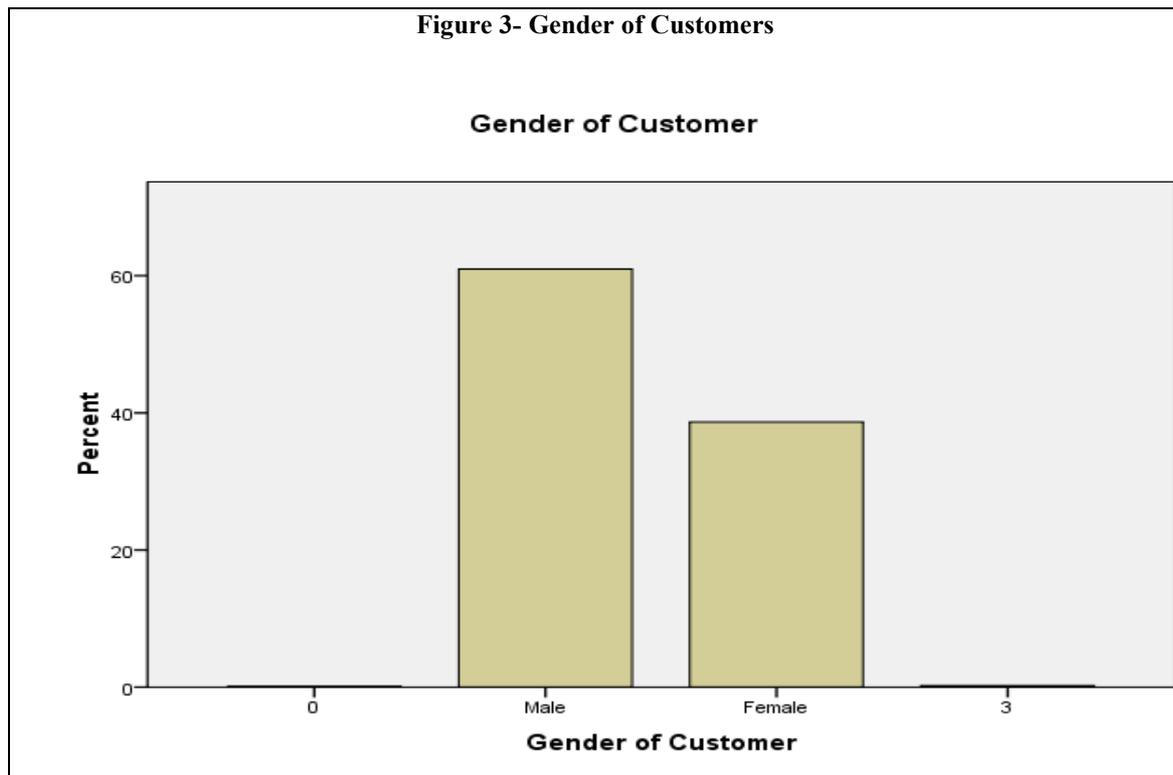**Figure 1- Bank Ownership**

Figure 3- Gender of Customers
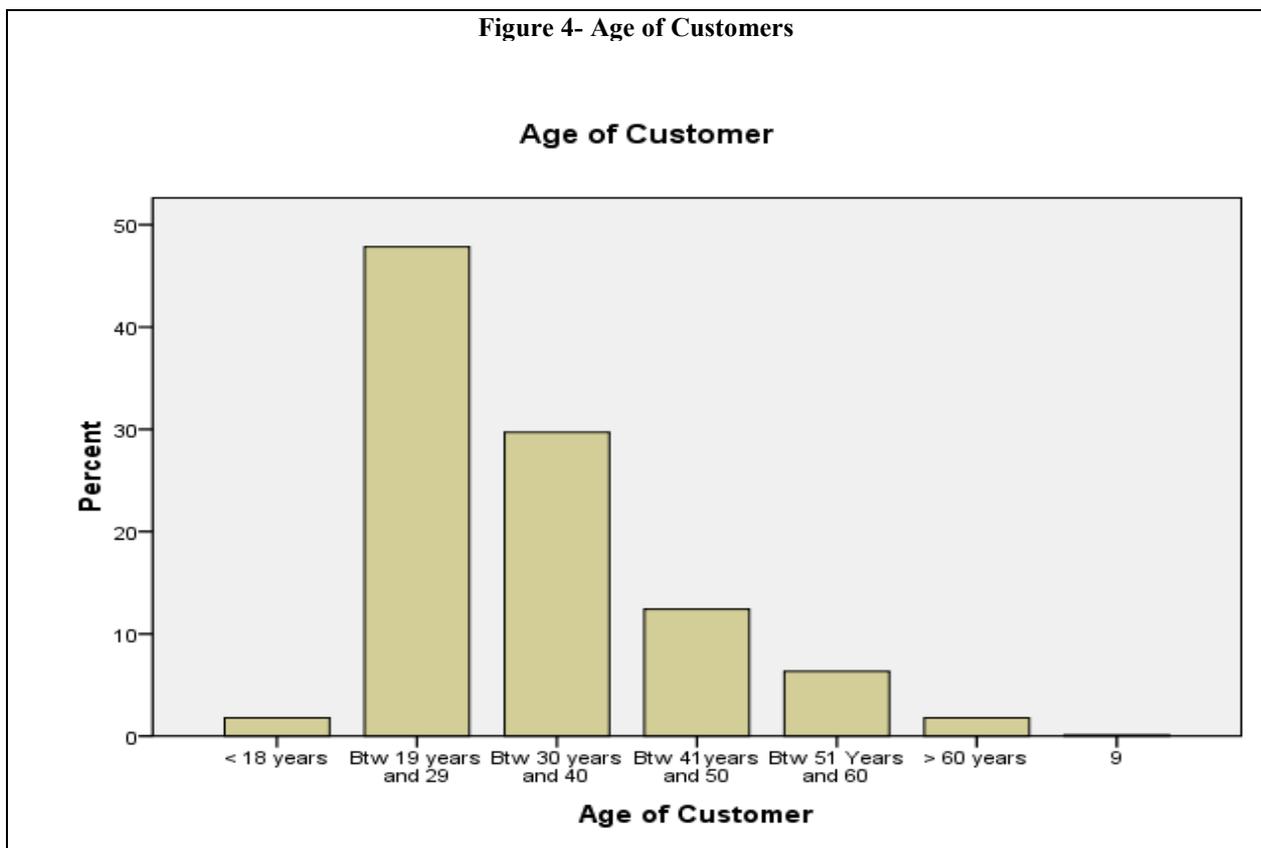

Figure 4- Age of Customers

Figure 5.1 Banking Period
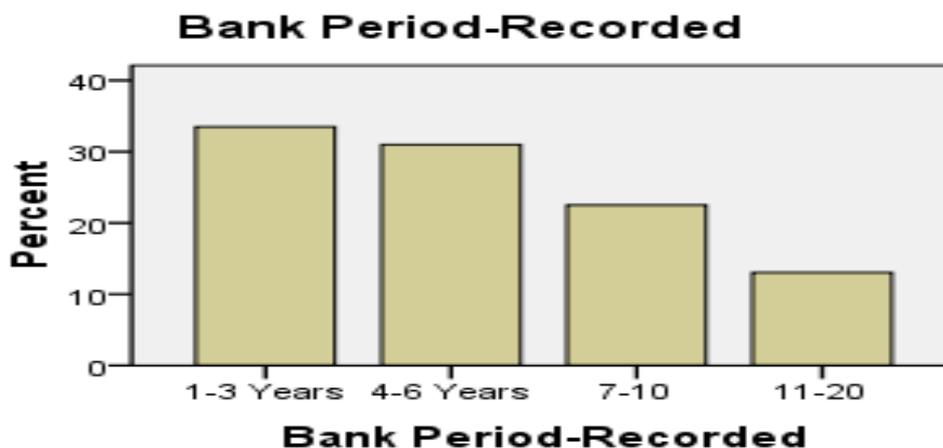
Figure 6-Level of Deposits
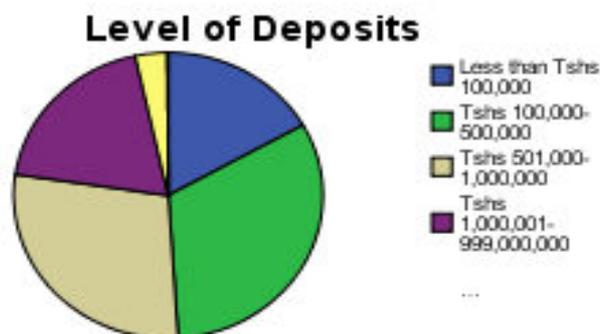
Table 1. List of Tanzania Commercial Banks in Year 2010

Access Bank	Bank of India	DCB- Bank	International Commercial Bank
Akiba Commercial Bank	Barclays Bank	Diamond Trust Bank	Kenya Commercial Bank
Azania Bank	CF Union Bank	Exim Bank	National Bank of Commerce
Bank ABC	Citibank	ECO Bank	National Microfinance Bank
Bank M	Continental Bank	FBME Bank	Mkombozi Commercial Bank
Bank of Africa	Commercial Bank of Africa	Habib African Bank	Savings and Finance Bank
Bank of Baroda	CRDB Bank	United Bank of Africa	Tanzania Postal Bank
Savings and Finance	Commercial Bank	Mwanga Commercial Bank	

www.iiste.org

IISTE

Table 2- Descriptive statistics-Bank official Survey

Variable	Bank Officials Frequency	Percent
Ownership		
Private	56	69%
Semi-Quasi	25	31%
	81	**100%**
Location		
Mwanza	9	11%
Arusha	14	17%
Dar-es-salaam	54	67%
Kilimanjaro	4	5%
Total	**81**	**100%**
Position		
Chief Finance Officer	1	1%
Human Resources Manager	1	1%
Information System Manager	5	6%
Customer Relationship Manager	10	12%
Marketing Manager	5	6%
Branch Manager	5	6%
Finance Officer	14	17%
Bank Officers	40	49%
Total	**81**	**100%**
Sex		
Male	38	47%
Female	43	53%
Total	**81**	**100**
Age		
18-30	4	4%
21-30	12	12%
31-40	24	24%
41-50	35	35%
51 -60	3	3%
60 and ABOVE	2	2%

Source: Researcher 2014

Table 5.1- Chi-square Tests - Bank Regulations and Adequate number of Staff

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	2.109[a]	6	0.909
Likelihood Ratio	2.446	6	0.874
Linear-by-Linear Association	0.669	1	0.414
N of Valid Cases	826		

a. 3 cells (21.4%) have expected count less than 5. The minimum expected count is .26.

Table 5.3- Chi-square Tests - Bank Regulations and Different Products that meet customer's needs

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	5.985[a]	5	0.308
Likelihood Ratio	5.920	5	0.314
Linear-by-Linear Association	3.405	1	0.121
N of Valid Cases	823		

a. 2 cells (16.7%) have expected count less than 5. The minimum expected count is 1.53.

Table 5.4- Chi-square Tests - Bank Regulations and bank dealing in High transparency with customers

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	6.539[a]	5	0.257
Likelihood Ratio	6.746	5	0.240
Linear-by-Linear Association	.886	1	0.347
N of Valid Cases	828		

a. 2 cells (16.7%) have expected count less than 5. The minimum expected count is 1.53.

Research Journal of Finance and Accounting
www.iiste.org
ISSN 2222-1697 (Paper) ISSN 2222-2847 (Online)
Vol.5, No.4, 2014
IISTE

Table 5.5 Chi-square Tests - Bank Regulations and proper and accurate disclosure of financial Statements by banks

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	6.744[a]	5	0.240
Likelihood Ratio	7.226	5	0.204
Linear-by-Linear Association	1.947	1	0.163
N of Valid Cases	829		

a. 1 cells (8.3%) have expected count less than 5. The minimum expected count is 2.53.

Table 6.1 Chi-square Tests – Minimum capital and Cash requirements Vs financial and operational performance

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	3.150[a]	4	0.533
Likelihood Ratio	3.348	4	0.501
Linear-by-Linear Association	.038	1	0.845
N of Valid Cases	81		

a. 3 cells (30.0%) have expected count less than 5. The minimum expected count is 3.09.

Table 6.2 Chi-square Tests - Bank Regulations and Asset Quality of the banks

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.108[a]	4	0.893
Likelihood Ratio	1.100	4	0.894
Linear-by-Linear Association	.190	1	0.663
N of Valid Cases	81		

a. 5 cells (50.0%) have expected count less than 5. The minimum expected count is 1.85.

Table 6.3- Chi-square Tests - Bank Regulations and Financial Reporting

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.873[a]	4	0.759
Likelihood Ratio	1.890	4	0.756
Linear-by-Linear Association	.924	1	0.337
N of Valid Cases	81		

a. 3 cells (30.0%) have expected count less than 5. The minimum expected count is 1.85.

Table 6.4 Chi-square Tests - Bank Regulations and production of timely and accurate financial reports

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.520[a]	4	0.823
Likelihood Ratio	1.487	4	0.829
Linear-by-Linear Association	.151	1	0.698
N of Valid Cases	81		

a. 5 cells (50.0%) have expected count less than 5. The minimum expected count is 2.16.

Table 6.5 : Chi-square Tests - Bank Regulations and bank ability to manage its costs of operations efficiently -

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.520[a]	4	0.971
Likelihood Ratio	1.487	4	0.972
Linear-by-Linear Association	.151	1	0.684
N of Valid Cases	81		

a. 4 cells (40.0%) have expected count less than 5. The minimum expected count is 1.54.