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CREDIT RISK MANAGEMENT AND ACCESS TO BANKING SERVICES BY ISLAMIC BANKING CUSTOMERS IN KENYA

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Abstract

Purpose: This study sought was to assess the effect of credit risk management on access to banking services by Islamic banking customers in Kenya.

Methodology: Descriptive research design was adopted. The target population for this study was 225 employees working in the head offices of the selected Islamic banks. Stratified sampling and simple random sampling were used in generating the sample. This study made use of primary data collected using structured questionnaires. The collected data was entered into the Statistical Program for Social Sciences for windows version 20 because of its ability to analyze data easily and accurately. Multiple regression analysis was used to obtain the model for the study. The study results were presented using percentages, tables and charts

Results: The study findings revealed that asset quality as measured by the non-performing loans ratio had a negative and significant effect on access to banking service by Islamic customers in Kenya. Capital adequacy, market structure and technology adoption were found to have a positive and significant effect on access to banking service by Islamic customers in Kenya. It was concluded that the level of credit risk management in Islamic banking where the level of credit risk was high was crucial for the banks in Kenya if they were to expand the level of access to Islamic banking by Islamic customers.

Unique contribution to theory, practice and policy: The study recommended that banks needed to develop strategies on how to deal with credit risk by striving to keep the amount of nonperforming loans low. The study also recommended that these banks should expand their capital bases in order to strengthen their resilience and internal strength to withstand losses especially when faced by a crisis. They needed to pursue diversification across individual customers by increasing the breadth of products they coul offer to their customers. The regulators of the market needed to ensure prudent supervision so as to maintaining healthy competition in this market. It was also recommended that banks needed to promote the use of technological innovations within banking area such as internet banking, mobile banking as well as ATM banking by their customers.

Keywords: *credit risk management, access, Islamic banking, capital adequacy, market structure, asset quality, technology adoption*

1.0 INTRODUCTION

Access to banking services is important for development countries and expansion of economic opportunities. Banking services worldwide have been easily available only to the banked leaving out a sizable population. Rajan and Zingales (2003) observe that banking services do not extend beyond the rich yet it is crucial for a thriving democracy and market economy. According to Peachey and Roe (2004), access to banking services is equitable to access to basic needs such as safe water, health services, and education.

After the financial reforms since 2006, access to banking services in Kenya still is at only 63% (CBK, 2013). Banking services can be determined but not made available to bank customers for various reasons. It is up to the economic agents to allow access to financial services by customers or not. Peachey and Roe (2004) observe a difference between availability, access and the possibility to use banking services and actual use of banking services as well as financial services. A major reform in the banking sector is the increase in efficiency to promote access to banking services as well as stability of the banking sector as an integral component of the financial system (Kamau, 2011). Banks play an essential role in the proper functioning of payments systems and their efficiency is directly related to improved productivity in the economy (Ikhide, 2009). The stream of bank failures experienced in the USA during the great depression of the 1940s prompted considerable attention to bank access and the attention has grown ever since then (Heffernan, 2005).

As a way of increasing access to banking services, new banks were licensed including Islamic banks to carter for the Muslim communities particularly but all customers in general. Ayub (2002) observes that Islamic banks are well capitalized, profitable and stable due to their effective use of resources. In comparison to international standards in banking, Islamic banks are at par with them in terms of profitability ratios but their operations are not cost effective. Globally, Islamic banks are growing at between 10% to 15% per annum with global asset in excess of one trillion dollars and operating within more than sixty countries across the world especially in the Middle Eastern and Asian region countries (El-Gamal, 2006). The popularity and appreciation of Islamic banking by Muslims and non-Muslims in Muslim and non-Muslim countries has been evidenced by the spread of most Islamic banks within middle eastern and emerging countries and many universal banks in developed countries increased demand of Islamic financial products (Yudistira 2003).

Islamic financial services industry has experienced a remarkable growth over the last four decades. However, Islamic banks are struggling against conventional banking and non-banking financial institutions, existing pool of Islamic commercial banks and insurance companies. To survive in this strategic rivalry, Islamic banks must understand and use the customer satisfaction issues under existing privileges given by Islamic Shariah (Ismael, 2012). Various earlier studies pointed that religion (Islam) as the main reason for choosing Islamic banks, which has been grounded under the principles of the Qur'an and the traditions (Teaching of the prophet).

In their short period of existence, Islamic banks in Kenya have shown very commendable performance commanding combined market share of the banking sector in terms of gross assets. Muriri (2009) notes that Muslims are estimated to make up to at least 15% of Kenya's population of 36-million. This could provide a strong customer base for the banks. The Muslims who

ordinarily avoided the other conventional banks can tap on this category of banks to increase access to banking services particularly to the unbanked.

The numbers of Islamic banks operating in Kenya currently are two: Gulf African and First Community bank with a loan portfolio of 4.9-billion shillings, deposits totaling 7.5billion shillings and 27270 deposit accounts. The basic principle of Islamic banking is the sharing of profit and loss and the prohibition of riba (usury/interest). The Shariah compliant banks offer a number of products free of interests that include; profit sharing (Mudharabah), safekeeping (Wadiah), joint venture (Musharakah), cost plus (Murabahah), and leasing (Ijarah). In an Islamic mortgage transaction, instead of loaning the buyer money to purchase the item, a bank might buy the item itself from the seller, and re-sell it to the buyer at a profit, while allowing the buyer to pay the bank in installments (Kahf, 2004).

Despite the rapid growth and vast expansion of Islamic banking industry around the world, the fact remains that the provision and use of financial services and products that conform to Islamic religious principles pose special challenges for the identification, measurement, monitoring, and control of underlying risks. Effective and efficient risk management in Islamic financial institutions has assumed particular importance as they endeavour to cope with the challenges of globalization. This requires the development of not only a more suitable regulatory framework, but also new financial instruments and institutional arrangements to provide an enabling operational environment for Islamic finance' (Sundararajan & Errico, 2002).

The difference between Islamic banks and conventional banks is more apparent in the area of risks and risk management. The distinct nature of relationship with customers and different kinds of financing and investing activities entail unique risks besides general risks faced by the Islamic banks. The common risks faced both by Islamic and conventional banks are credit risk, market risk, operational risk and liquidity risk while unique risks such as displaced commercial risk and Shariah compliance risk are related to Islamic banks only (Yousfi, 2015).

According to Elgari (2003), Islamic banks in their present form, carrying huge debts as bank assets, face higher risks as compared to conventional banks. This is because they must use methods for dealing with credit risk within the confines of the Shariah. Elgari notes that some instruments used by conventional banks for risk management are not permitted to Islamic banks. This means that the ability of Islamic banks of dealing with credit risk or profits risk (interest risk) as well as the means available to these banks for balancing claims and assets are limited. The cause of all this, however, is the predominant use of Murabahahas a form of financial intermediation. The contracts of Murabahah have reached more than 90% of the operations of several banks. So much so that those that have been successful in employing other modes are found to focus on modes that also give rise to debts, like istisna (Elgari, 2003).

Access to banking services is not just without challenges. Any potential borrowers have to be evaluated to assess the potential of servicing the services. On the other hand the need to meet regulations as set out in Camel II. Every bank needs to meet credit risk management practices to avoid poor ratings. Because of these requirements, this study seeks to analyse the effect of the credit risk management in access to banking services.

1.1 Statement of the Problem

Access to banking services is critical both individuals and institutions for economic development and growth. Kenya has in the last five years made great strides in improving access to banking services throughout the country (Republic of Kenya, 2010). According to a study conducted by Fin Access in 2010, financial exclusion–that is people without access to any form of banking services–has fallen from 40.4 percent in 2011 to 38.6 per cent of the population. Financial inclusion has risen in recent years, with aggressive expansion by Kenyan banks. Kenya now has 1,072 retail bank branches, up from 534 in 2005 (FinAccess, 2009).

Despite the above achievements, a lot of Kenyans still remain excluded from banking services. Such exclusion if not checked can impede on the achievement of Vision 2030, the Kenya Government Economic Blueprint (KGEB, 2007). The high proportion of population excluded from access to banking services especially in rural areas most likely would affect the Millennium Development Goals and improve the quality of life for a number of Kenyan households. Islamic banking was introduced to expand access to financial services, especially in areas where it has been expensive for banks to maintain a presence, owing to smaller volumes (Beck, Cull, Fuchs, & Getenga, 2010).

However, Islamic banks struggle for customers against conventional banks and non-banking financial institutions. Provision and use of financial services and products that conformed to Islamic religious principles continue to pose special challenges for the identification, measurement, monitoring, and control of underlying risks (Sundararajan & Errico, 2002). A review of existing literature showed that even though much work has been done on credit risk management in the banking sector, much focus has been on conventional banking with very little focus on Islamic banking. For instance, Essendi (2013) focused on the effect of credit risk management on loans portfolio among Saccos in Kenya; Mutua, (2015) focused on the effect of mitigating credit risk on performance of commercial banks in Kenya in the case of Chuka town while Gakure, Ngugi, Ndwiga, and Waithera (2012) investigated the effect of credit risk management techniques on the performance of unsecured bank loans employed commercial banks in Kenya. The few close studies have a different objective from that of the current study. For instance, Kinyanjui (2013) focused on the challenges facing the development of Islamic banking; lessons from the Kenyan experience; Ogle (2010) conducted a comparative analysis of credit risk management practices of Islamic and conventional banks in Kenya while Warsame (2016) focused on credit risk management practices and its impact on banks' financial performance: an empirical study of Islamic and conventional banks in Kenya. There was no study which so far had been done on credit risk management on access banking services which was the focus of this study.

1.2 Research Objectives

i. To determine the effect of assets quality on access to banking services by Islamic banking customers in Kenya.
ii. To establish the effect of capital adequacy on access to banking services by Islamic banking customers in Kenya.
iii. To determine the effect of market structure on access to banking services by Islamic banking customers in Kenya.

iv. To establish the effect of technology adoption on access to banking services by Islamic banking customers in Kenya.

2.0 LITERATURE REVIEW

2.1 Theoretical Review

2.1.1 The Portfolio Theory

The Portfolio theory was proposed by Harry Markowitz in 1952. According to the theory, an investor should choose a portfolio from the efficient set, depending on how risk averse he/she is (Marling, 2012). This model provided banks with a strategy on how to diversify their loans and investments. Before this, banks had no real investment strategy and their only option was to obtain as much collateral as possible and make default an unattractive option (Black & Scholes, 1973). Portfolio theory is used to derive efficient outcomes, through identification of a set of actions, or choices, that minimize variance for a given level of expected returns, or maximize expected returns, given a level of variance. The theory is applied to maximize profits and minimize risk in a wide variety of settings and choices (Barkely *et al.*, 2010).

Portfolio Theory allows companies or investors to diversify their investment so as to minimize risk and maximize gains thus improve on performance (Nzongang & Atemnkeng, 2006). The portfolio theory approach is the most relevant and plays an important role in bank performance studies since a good portfolio points directly to the quality of asset book (Nzongang & Atemnkeng, 2006). In banking, the theory guides the trade-off between high profitability and high risk versus low risk, low profitability decisions. It is often applied as a framework for by loan portfolio manager considering risk return trade-offs (Yang, 2013). The theory recommends diversification to lower the total risk in the bank's loan portfolio. This way, the bank can lend to both low risk and high risk customers (Csongor & Curtis, 2005).

2.2.2 Resource Based View (RBV)

RBV refers a firm as collection of productive tangible and intangible resources (Penrose, 1959). In RBV, resources are defined as anything firms use to conceive or execute market strategies to improve performance (Wernerfelt, 1984; Kraaijenbrink Spender, Groen, & 2 0 1 0). These resources are classified based on either tangibility or what the firm owns/does (Galbreath, 2005). Based on tangibility, resources are classified into tangible and intangible resources. Based on what the firm owns/does, resources are classified into assets and capabilities (Galbreath, 2005). Those resources that can be owned are assets (Sanchez, 2002); on the other hand capabilities refer to a firm's superior way of deploying its assets, tangible or intangible, to perform some task or activity to improve performance (Schreyögg & Kliesch-Eberl, 2007; Amit & Schoemaker, 2003; Grant, 1991; Teece et al., 1997). The sum of tangible assets, intangible assets, and capabilities constitute a firm's corporate being. RBV also specifies that, firms with superior resources are able to produce more efficiently than others (Tang & Liou, 2010; Peteraf, 1993).

RBV argues that, firms' sustainable competitive advantage and subsequent superior performance stem from possession and effective deployment of intangible resources (Sirmon et al., 2008; Hill & Deeds, 1996). In concert with this view, a number of studies that focus mostly on the influence of intangible factors have been carried out. The resources studied by RBV

scholars include intangible elements such as culture (Barney, 1986), reputation (Roberts & Dowling, 2002), organizational network (Fang, 2008) and so on. Researches that test the RBV propositions using a homogenous sample drawn from the banking industry are scarce. Literature search found only two banking studies (Clulow et al., 2003; Mehra, 1996) to be rooted in RBV.

Drawing from Galbreath (2005), a bank's tangible assets mainly consist of capital employed as represented on the balance sheet. Intangible assets are often defined by the current endowment of intellectual property, contracts, reputation, culture, and networks (Clulow, Gerstman, & Barry, 2003; Hall, 1993; Teece, Pisano, & Shuen, 1997; Hall, 1993). Organisational capabilities include innovation and imitation capabilities (Olavarrieta & Friedmann, 2008), managerial efficiency (Williamson, 1991), service delivery capability (Anderson & Sullivan, 1993), organisational learning (Sinkula, 1994; Teece et al., 1997), risk management capability (Liu, 2000; Carey, 2001), and market sensing capability (Foley & Fahy, 2009; Webster, 1988; Dwairi et al., 2007).

2.2.3 The Market Power Theory

There are two distinct approaches within the MP theory; the Structure-Conduct-Performance (SCP) and the Relative Market Power hypothesis (RMP) (Stiroh & Strahan, 2003). According to the SCP approach, the level of concentration in the banking market gives rise to potential market power by banks, which may raise their profitability (Jeon & Miller, 2003). Profitability brings about liquidity and stability which banks require to provide access to services. Banks in more concentrated markets are most likely to make "abnormal profits" by their ability to lower deposits rates and to charge higher loan rates as a results of collusive (explicit or tacit) or monopolistic reasons, than firms operating in less concentrated markets, irrespective of their efficiency (Tregenna, 2009). Unlike the SCP, the RMP hypothesis posits that bank profitability is influenced by market share (Heitfield & Prager, 2004). It assumes that only large banks with differentiated products can influence prices and increase profits. They are able to exercise market power and earn non-competitive profits (Dick, 2006).

The Relative Market Power (RMP) hypothesis is empirically proved when concentration introduced in the explanatory equations of performance is found non-significant in contrast to market share which should be positively and significantly correlated with price and/or profitability (Beck, 2006). Nevertheless, it is not obvious that employing market structure in these equations produces unambiguous results. A bank with a strong position in the market may either reinforce its domination over the market or achieve a higher efficiency (Tregenna, 2009).

Some empirical studies test the SCP and RMP hypotheses by analyzing the profit-concentration relationship (market share). However, these studies are incapable of favoring one of the two hypotheses (Nzongang & Atemnkeng, 2006). The reason is that the effects of market power and efficiency might be simultaneously present in the variables describing market structure and they are neutralized at the level of the concentration coefficient (market share) (Nzongang & Atemnkeng, 2006). Nzongang & Atemnkeng, (2006) further argue that another problem might arise, inconsistently with the theory; efficiency and concentration are negatively correlated. In this case, a significant and positive coefficient of market structure might be fallacious. These

studies cannot confirm either of the SCP and RMP hypotheses without ambiguity, due to the combined effect of market power and inefficiency (Beck & Fuchs, 2004).

A particular case of market power hypothesis should be mentioned. It is the Quite Life hypothesis according to which a bank management unit with a large market share is less centred on efficiency as the exploitation of market power in terms of fixing prices allows deriving automatically benefits (Hicks, 1935). An increase in market power comes with a deterioration of efficiency which makes banks unable of earning higher profitability (Clarke, Cull, Martinez, & Sanchéz, 2003).

2.2.4 Diffusion of Innovation Theory

Innovation is a relatively diverse subject. It can refer to ground breaking new discoveries or it can simply mean an improvement of an already existing process (Greenhalgh, Robert, Macfarlane, Bate, & Kyriakidou, 2004). Adopting an idea already implemented in another industry, field or geographical location still falls within the realm of innovation (Greenhalgh et al, 2004). Innovation generally arises out of existing or emergent needs (Faniela & Majchrzakb, 2007). When an innovator creates a solution to a need, the solution is first adopted within his/her area of operation but this later spreads to other users experiencing the same challenge both within the same industry or a different industry all together (Faniela & Majchrzakb, 2007).

Diffusion of Innovations is a theory that seeks to explain how, why, and at what rate new ideas and technology spread through cultures (Mansourov, 2005). Everett Rogers, a professor of rural sociology, popularized the theory in his 1962 book Diffusion of Innovations. He said diffusion is the process by which an innovation is communicated through certain channels over time among the members of a social system. The origins of the diffusion of innovations theory are varied and span multiple disciplines (Mitchell, 2007). It seeks to explain how new ideas or innovations are adopted, and this theory proposes that there are five attributes of an innovation that affect adoption: relative advantage, compatibility, complexity, trialability, and observability (Mitchell, 2007).

Relative advantage is the degree to which an innovation is perceived as being better than the idea it supersedes (Rogers & Agarwala-Rogers, 1995). Rogers' theory suggests that innovations that have a clear, unambiguous advantage over the previous approach will be more easily adopted and implemented (Rodgers, 1962). It can be measured in terms that matter to those users for instance prestige, convenience, economic advantage or general satisfaction (Rodgers, 1962). For Argote (1999) if a potential user sees no relative advantage in using an innovation, it would not be adopted because adoption depends on the particular perceptions and needs of the user group.

Compatibility is the degree to which an innovation fits with the existing values, past experiences, and needs of potential adopters (Argote, 1999). According to Argote (1999) the more compatible an innovation, the greater the likelihood of adoption. Complexity is the degree to which an innovation is perceived as difficult to understand and use, the easier it is to understand or use, the more rapidly it can be adopted. Trialability refers to the degree to which the innovation can be tested or experimented; the more testable it is the more the uncertainty about its use and hence the more the adoption. Observability refers to the visibility of the innovation results, the more the results can be seen the more the innovation will be easily adopted (Argote,

1999). Visual results stimulate discussions among potential users and elicit requests for more information regarding the subject innovation.

2.2 Empirical Review

A study by Yike and Chiu (2011) conducted in Nepal on analyzing for profit efficiency of banks with undesirable output found that many indicators can be used to measure the quality of assets held by commercial banks. Loans were one of the major outputs provided by a bank, but as loan was a risk output, there was always an ex ante risk for a loan to eventually become non-performing (Yike et al., 2011). However, here, only one simple indicator – nonperforming loan ratio was used to measure the quality of assets being held by the banks. Chisti (2012) showed that a bad asset ratio is negatively associated with banking operating performance and hence managers in banks needed to keep a special eye on credit-enquiring effectiveness. This study will use access to banking services as an indicator of efficiency of Islamic banking.

The quality of loan portfolio determines the profitability of banks. The loan portfolio quality has a direct bearing on bank profitability. The highest risk facing a bank is the losses derived from delinquent loans (Dang, 2011). Thus, nonperforming loan ratios are the best proxies for asset quality. Different types of financial ratios used to study the performances of banks by different scholars. It is the major concern of all commercial banks to keep the amount of nonperforming loans to low level. This is so because high nonperforming loan affects the profitability of the bank. Thus, low nonperforming loans to total loans shows that the good health of the portfolio a bank. The lower the ratio the better the bank performing (Sangmi & Nazir, 2010). This study is useful in guiding the measurement of asset quality in this study.

Mwega (2009) in his study on *Global Financial Crisis* with a focus of Kenya found that poor asset quality led to many bank failures in Kenya in the early 1980s. During that period 37 banks collapsed following the banking crises of 1986-1989, 1993-1994 and 1998 (Mwega, 2009). According to Waweru and Kalani (2009) who conducted a study on the causes and remedies of the banking crises in Kenya found that many of the financial institutions that collapsed in 1986 failed due to non-performing loans (NPLs) and that most of the larger bank-failures, involved extensive insider lending, often to politicians. The CBK measures asset quality by the ratio of net non-performing loans to gross loans (CBK, 2009).

Gavila and Santabarbara (2009) in a study on *What Explains the low Profitability in Chinese Banks* found that, although capital is expensive in terms of expected return, highly capitalized banks face lower cost of bankruptcy, lower need for external funding especially in emerging economies where external borrowing is difficult. Thus well capitalized banks should be profitable than lowly capitalized banks (Gavila *et al.,* 2009). This is consistent with the view that capital adequacy can be used in efficiency accessing Islamic banking services in Kenya. Sufian and Chong (2008) in their study on the determinants of bank profitability in a developing economy also reported the same results after assessing the impact of capital to the performance of banks in Philippines from 1990 to 2005. The study therefore concluded that it was important that banking managers re-organize the capital adequacy, establish good relationship with customers in order to facilitate accessing of Islamic banking service in Kenya.

Agbeja, Adelakun and Olufemi (2015) found a positive and significant relationship between capital adequacy and bank's profitability which suggested that banks with more equity capital

were perceived to have more safety and such advantage could be translated into higher profitability. The higher the capital ratio, the more profitable a bank would be. It was recommended that there should be a constant review of minimum capital requirement of deposit money banks in Nigeria to the optimal level and Nigeria banks should be capitalized to enable them enjoy assess to cheaper sources of funds with subsequent improvements in profit levels. This would go a long way in helping the public maintain confidence in the banks with the latter acquiring corresponding enablement to accommodate the credit needs of customers and safeguard depositors' funds. The positive and significant relationship between capital adequacy and bank's profitability suggests that banks with more equity capital are perceived to have more safety and such advantage can be translated into higher profitability.

Scherer and Ross (1990) postulated the definition of the market structure as characteristics of market organization, such as, the numbers of consumers and the degree of market power. Market structure involves the nature and degree of competition in the market for goods and services. The structures of market both for goods market and service (factor) market are determined by the nature of competition prevailing in a particular market. Under diversification by industry, banks seek to diversify across individual customers. Diversification across customers is justified, considering the MPT, if the customers' repayment abilities (which have earlier been defined as the general ability to make profits), have low correlation. It is possible that firms' profit making abilities have low correlations with others in the market (Maubi & Jagongo, 2014). Kenyan or local banks have not shown stability since many have collapsed. This reduces access to banking services.

The study by Obiri-Yeboah, Kyere-Djan, and Kwarteng (2013) evaluated the types of technological facilities used by bank customers, the benefit of technology and its challenges to customers. In order to achieve this, a mixed method approach was used to collect data using structured and semi-structured questionnaires. The results indicated that IT facilities used most by customers were ATM, Internet banking, and Electronic Fund Transfer at Point of Sale. ATM, direct deposit, withdrawal services and branch networking were the facilities that were highly used and offered by all the banks. The introduction of IT services by the banks had positively impacted the rate at which customers' visited banking halls and services received. The study showed that the introduction of technology facilities by the banks impacted positively on banking services delivery. Benefits accruing to banks as a result of introducing IT based products were: increase in competition, fast and efficient operations, customer retention, making services reliable, accessible and convenient (makes banking easier for customers), increased in usage of bank's product, introduction of new product, creation of value to customers, reduction in manual work, less waiting time, it improved storage of information, improved services and growth

3.0 RESEARCH METHODOLOGY

The study adopted a descriptive research design. The target population for this study was all the staff working at the headquarters of the First Community Bank, Gulf African Bank, KCB, National Bank and Barclays Bank in Nairobi. Stratified and simple random sampling methods were then used to select the sample of 96 employees. The study used primary data which was collected using a structured questionnaire. The quantitative data collected was entered into the

Statistical Program for Social Sciences (SPSS) for windows version 20 because of its ability to analyze data easily and accurately. Quantitative data was first presented descriptively using percentages, tables and pie charts. Multiple regression analysis was carried out to determine the form of the mathematical model that defined the relationship between the dependent variable and the significant independent variables previously determined through correlation analysis

4.0 RESULTS AND DISCUSSIONS

4.1 Response Rate

A total of 96 questionnaires were administered. The number of questionnaires that were properly filled and returned was 73 and this represented an overall successful response rate of 76.04% .

4.2 Descriptive Statistics

4.2.1 Asset Quality

The first objective of the study was to determine the effect of assets quality on access to banking services by Islamic banking customers in Kenya. The respondents were asked to respond to some questions and statements regarding asset quality and access to banking services by Islamic banking customers in Kenya. The respondents were asked to state whether asset quality affected access of Islamic banking service in Kenya. The results showed that a majority of the respondents, 91.8%, noted that asset quality did affect access to banking services by Islamic banking customers in Kenya.

Table 1: Does asset quality affect access of Islamic banking service in Kenya?

	Frequency	Percent
No	6	8.2
Yes	67	91.8
Total	**73**	**100**

The respondents were also asked to indicate the extent to which asset quality affected access to banking services by Islamic banking customers in Kenya. The results showed that 4.1% of the respondents indicated that it did affect at a very low extent, 15.1% indicated a low extent, 12.3% indicated a moderate extent while 26.0% and 42.5% indicated that it did affect at a high and very high extent respectively. This implied that a majority of the respondents, 68.5% (26.0+ 42.5%) noted that asset quality affected access to banking service by Islamic customers in Kenya to a very high extent.

Table 2: Asset Quality and Access to Islamic Banking Service

	Frequency	Percent
Very low	3	4.1
Low	11	15.1
Moderate	9	12.3
High	19	26.0
Very high	31	42.5
Total	**73**	**100**

The respondents were further asked to respond to some statements on asset quality. Results in Table 3 show that a majority of the respondents, 87.7%, agreed that their banks strived to keep the amount of nonperforming loans low. The results also showed that a majority of the respondents, 76.8%, agreed that the amount of nonperforming loans affected the profitability of their banks while 89.10% of the respondents, also representing a majority agreed that the amount of nonperforming loans affected a bank's chances of failure. The results further indicated that 71.20% of the respondents who were the majority agreed that their banks considered the level of risk to the assets in making decisions on the allocation of resources to asset deals while 72.60% also a majority agreed that their banks normally undertook screening and monitoring to reduce exposure credit risk. On a five point scale, the average mean of the responses was 3.939 which means that majority of the respondents were agreeing with most of the statements and that the responses were clustered around the mean as shown by a standard deviation of 0.968.

Table 3: Asset Quality

Statement	Strongly disagree	Disagree	Neutral	Agree	Strongly Agree	Mean	Std Dvn
Banks strive to keep the amount of nonperforming loans low	4.10%	5.50%	2.70%	41.10%	46.60%	4.205	1.02
The amount of nonperforming loans affects the profitability of the bank	2.70%	6.80%	13.70%	52.10%	24.70%	3.890	0.95
The amount of nonperforming loans affects a bank's chances of failure	1.40%	4.10%	5.50%	64.40%	24.70%	4.068	0.77
The bank considers the level of risk to the assets in making decisions on the allocation of resources to asset deals	6.80%	11.00%	11.00%	53.40%	17.80%	3.644	1.11
The bank undertakes screening and monitoring to reduce exposure credit risk	1.40%	9.60%	16.40%	43.80%	28.80%	3.890	0.98
Average						**3.939**	**0.96**

These findings are in line with that of Dang (2011) who found that the quality of loan portfolio determined the profitability of banks and hence it was the major concern of all commercial banks to keep the amount of nonperforming loans to low level. The lower the ratio the better the bank

performing (Sangmi & Nazir, 2010). The findings were also in line with that of Mwega (2009) who in his study on *Global Financial Crisis* with a focus of Kenya found that poor asset quality led to many bank failures in Kenya in the early 1980s. The findings further support that of Kosmidou (2008) who found that banks could improve their asset quality through screening and monitoring of credit risk. Hence, the way these banks maintained their asset quality affected the access to Islamic banking services because Islamic banking was associated with very high credit risk compared to conventional banking.

4.2.2 Capital Adequacy

The second objective of the study was to establish the effect of capital adequacy on access to banking services by Islamic banking customers in Kenya. The respondents were asked to respond to some questions and statements regarding capital adequacy and access to banking services by Islamic banking customers in Kenya. The respondents were asked to indicate whether capital adequacy affected access to banking service by Islamic customers in Kenya. The study findings revealed that a majority of the respondents, 94.5%, indicated that capital adequacy did affect access to banking services to Islamic customers in Kenya.

Table 4: Does Capital Adequacy affect Access of Islamic Banking Service

	Frequency	**Percent**
No	4	5.5
Yes	69	94.5
Total	**73**	**100**

The respondents were also asked to rate the extent to which capital adequacy affected access of Islamic banking service in Kenya. The study results showed that a majority of the respondents, 76.7% (45.2%+31.5%) noted that capital adequacy affected access of Islamic banking service in Kenya to a high extent.

Table 5: Capital Adequacy and Access to Islamic Banking Service

	Frequency	Percent
Very low	3	4.1
Low	5	6.8
Moderate	9	12.3
High	33	45.2
Very high	23	31.5
Total	73	100

The respondents were also required to respond to some statements on capital adequacy. The results in Table 6 reveal that 80.80% of the respondents, a majority, agreed that the amount of capital of a bank influenced its resilience and internal strength to withstand losses in crises. An equal number of respondents, 76.70% who were the majority also agreed that the amount of capital of a bank influenced its profitability and that the amount of capital of a bank also affected the costs faced in case of bankruptcy. The results further revealed that 84.90% of the respondents, a majority, agreed that the amount of capital of a bank affected its expansion to

risky but profitable ventures or areas while 78.10%, also a majority, agreed that the amount of capital of a bank affected its returns on assets. On a five point scale, the average mean of the responses was 3.898 which means that majority of the respondents were agreeing with most of the statements and that the responses were clustered around the mean as shown by a standard deviation of 0.977.

Table 6: Capital Adequacy

Statement	Strongly disagree	Disagree	Neutral	Agree	Strongly Agree	Mean	Std Dvn
The amount of capital of a bank influences its resilience and internal strength to withstand losses in crises	4.10%	5.50%	9.60%	46.60%	34.20%	4.014	1.021
The amount of capital of a bank influences its profitability	1.40%	6.80%	15.10%	54.80%	21.90%	3.89	0.875
The amount of capital of a bank affects the costs faced in case of bankruptcy	6.80%	4.10%	12.30%	49.30%	27.40%	3.863	1.084
The amount of capital of a bank affects its expansion to risky but profitable ventures or areas	2.70%	8.20%	4.10%	64.40%	20.50%	3.918	0.909
The amount of capital of a bank affects its returns on assets	5.50%	5.50%	11.00%	58.90%	19.20%	3.808	0.995
Average						**3.898**	**0.977**

These findings were also in line with that of Gavila and Santabarbara (2009) who found that although capital was expensive in terms of expected return, highly capitalized banks faced lower cost of bankruptcy. The findings also agreed with that of Sufian and Chong (2008) who asserted that banking managers needed to re-organize the capital adequacy, in order to facilitate accessing of banking services. The findings also agreed with that of Neceur (2003) who conducted a study on the determinants of the Tunisian banking industry profitability and found a strong positive impact of capitalization to ROA. The study findings also concurred with that of Dang (2011) and Sangmi and Nazir (2010) who asserted that capital adequacy ratio was directly proportional to

the resilience of the bank to crisis situations and had also a direct effect on the profitability of banks by determining its expansion to other profitable ventures.

4.2.3 Market Structure

The third objective of the study was to determine the effect of market structure on access to banking services by Islamic banking customers in Kenya. The respondents were asked to respond to some questions and statements regarding market structure and access to banking services by Islamic banking customers in Kenya. The respondents were asked to indicate whether market structure affected access to banking services by Islamic customers in Kenya. The results show that 86.3% of the respondents, a majority, indicated that it did affect access to Islamic banking services in Kenya.

Table 7: Market Structure

	Frequency	Percent
No	10	13.7
Yes	63	86.3
Total	**73**	**100**

The respondents were also asked to rate the extent to which the market structure affected access of Islamic banking service in Kenya. The results in Table 8 shows that 22.0% of the respondents noted that market structure affected access to Islamic banking service in Kenya to a low extent, 21.9% indicated a moderate extent while 56.2% of the respondents indicated a high extent. This implied that a slight majority of the respondents noted that market structure affected access to banking service by Islamic customers to a high extent.

Table 8: Market Structure and Access to Islamic Banking Service

	Frequency	Percent
Very low	8	11.0
Low	8	11.0
Moderate	16	21.9
High	27	37.0
Very high	14	19.2
Total	**73**	**100**

The respondents were further asked to respond to some statements on market structure. The results in Table 9 reveal that a majority of the respondents, 76.70% agreed that the market share of their bank had been increasing. 78.0% of the respondents representing a majority also noted that the number of customers in this industry were many. It was found that 67.20% of the respondents who were the majority agreed that there was considerable level of competition in this banking area while 61.70% of the respondents, a majority agreed that their banks had ensured diversification across their individual customers. 67.10% of the respondents, a majority, were also in agreement that prudential supervision was crucial in maintaining healthy competition in the market. On a five point scale, the average mean of the responses was 3.773 which means that majority of the respondents were agreeing with most of the statements and that the responses were clustered around the mean as shown by a standard deviation of 1.141. The

findings were in line with that of Maubi and Jagongo (2014) who found that diversification across customers was justified, considering the Modern Portfolio Theory (MPT), if the customers' repayment abilities had low correlation. It was possible that firms' profit making abilities had low correlations with others in the market. The findings supported that of Ngugi, Amanja and Maana (2006) as well as Beck and Fuchs (2004) who noted that unhealthy competition was harmful to the stability of banks. The findings also concurred with that of Claessens and Jansen (2000) who found that market structure could be used in imposing healthy competitive pressure on banks, thus increasing efficiency of financial intermediation and they provide more stability to the financial system. The above mechanisms would therefore affect the ability of these banks to offer banking services to their customers.

Table 9: Market Structure

Statement	Strongly disagree	Disagree	Neutral	Agree	Strongly Agree	Mean	Std Dvn
The market share of the bank has been increasing	1.40%	8.20%	13.70%	41.10%	35.60%	4.014	0.979
The number of customers in this industry are many	6.80%	2.70%	12.30%	43.80%	34.20%	3.959	1.098
There is considerable level of competition in this banking area	9.60%	13.70%	9.60%	42.50%	24.70%	3.589	1.267
The bank has ensured diversification across its individual customers	4.10%	21.90%	12.30%	32.90%	28.80%	3.603	1.233
Prudential supervision is crucial in maintaining healthy competition in the market	2.70%	17.80%	12.30%	41.10%	26.00%	3.699	1.127
Average						**3.773**	**1.141**

4.2.4 Technology Adoption

The fourth objective of the study was to establish the effect of technology adoption on access to banking services by Islamic banking customers in Kenya. The respondents were asked to respond to some questions and statements regarding technology adoption and access to banking

services by Islamic banking customers in Kenya. The respondents were also whether adoption of technology affected access of Islamic banking service in Kenya. The study findings indicated that a majority of the respondents, 97.3%, noted that technology adoption affected access to banking services by Islamic banking customers in Kenya.

Table 10: Does technology affect access of Islamic banking service in Kenya?

	Frequency	Percent
No	2	2.7
Yes	71	97.3
Total	**73**	**100**

The respondents were further asked to rate the extent to which technology affected access to Islamic banking service in Kenya. The results revealed that 38.3% of the respondents indicated that it affected access to Islamic banking service at a low extent, 19.2% indicated a moderate extent while 42.4% of the respondents indicated a high extent.

Table 11: Technology Adoption and Access of Islamic Banking Service

	Frequency	Percent
Very low	12	16.4
Low	16	21.9
Moderate	14	19.2
High	16	21.9
Very high	15	20.5
Total	**73**	**100**

The respondents were further asked to respond to some statements on technology adoption. It was shown that 79.40% of the respondents, a majority indicated that the number of their bank's customers using internet banking had increased. 75.40% of the respondents also a majority also agreed that the number of their bank's customers using mobile banking had increased while 69.90% of the respondents also a majority agreed that the number of online transactions within their banks had increased. It was further found that 73.90% of the respondents who were the majority agreed that the amount spent on improving/advancing the technology used in the bank had increased. 79.40% of the respondents, a majority, were in agreement that the ratio of ATMs as a percentage of total branches of their banks had been increasing. On a five point scale, the average mean of the responses was 3.838 which means that majority of the respondents were agreeing with most of the statements and that the responses were clustered around the mean as shown by a standard deviation of 1.14. These findings were in line with that of Berger and Mester (2003) who observed that combination of technological change increases productivity in the banking industry and hence many banks were adopting these new technologies. The study findings also concurred with that of Isik and Hassan (2003) who demonstrated that with the inclusion of non-traditional activities, the technical efficiency and pure technical efficiency of the private owned banks in Turkey improved significantly and suggested that the non-traditional activities had greater impact on the private and foreign owned banks, as the groups had engaged more in these activities

Table 12: Technology Adoption

Statement	Strongly disagree	Disagree	Neutral	Agree	Strongly Agree	Mean	Std Dvn
The number of the bank's customers using internet banking has increased	5.50%	8.20%	6.80%	45.20%	34.20%	3.945	1.12
The number of the bank's customers using mobile banking has increased	9.60%	12.30%	2.70%	42.50%	32.90%	3.767	1.29
The number of online transactions within the bank has increased	2.70%	9.60%	17.80%	42.50%	27.40%	3.822	1.03
The amount spent on improving/advancing the technology used in the bank has increased	4.10%	12.30%	9.60%	47.90%	26.00%	3.795	1.09
The ratio of ATMs as a percentage of total branches of the bank has been increasing	8.20%	6.80%	5.50%	4.9.30%	30.10%	3.863	1.17
Average						**3.838**	**1.14**

4.2.5 Access to Banking Services by Islamic Customers in Kenya

The study also sought to assess the access to banking services by Islamic customers in Kenya. The respondents were asked to respond to the statements on access to Islamic banking service. Results in Table 13 revealed that a majority of the respondents, 72.60% of the respondents indicated that the number of customers receiving loans from their banks had increased in the last three years. 79.40% of the respondents also a majority agreed that the amount of loans advanced to customers by their banks had increased in the last three years. The results further showed that 69.90% of the respondents also a majority agreed that the numbers of customers who had received advice on various services within their banks had increased while 76.70% of the respondents , a majority, also agreed that the breadth of financial services of their banks had expanded in the last three years. On a five point scale, the average mean of the responses was 3.740 which means that majority of the respondents were agreeing with most of the statements and that the responses were clustered around the mean as shown by a standard deviation of 1.187.

Table 13: Access to Banking Services by Islamic Customers in Kenya

Statement	Strongly disagree	Disagree	Neutral	Agree	Strongly Agree	Mean	Std Dvn
The number of customers receiving loans from the bank have increased in the last three years	8.20%	6.80%	12.30%	47.90%	24.70%	3.740	1.155
The amount of loans advanced to customers by the bank have increased in the last three years	9.60%	4.10%	6.80%	53.40%	26.00%	3.822	1.159
The numbers of customers who have received advice on various services within the bank have increased	12.30%	5.50%	12.30%	50.70%	19.20%	3.589	1.223
The breadth of financial services of the banks has expanded in the last three years	8.20%	9.60%	5.50%	46.60%	30.10%	3.808	1.209
Average						**3.740**	**1.187**

These findings agreed with that of the World Bank Group (2009) that the best indicator for measuring access to financial services was the number of depositors and borrowers. The finding also agreed with that of Warsame (2015) who found that significant number of Muslims transferred their banking allegiance to Shariah compliant banks following the introduction of such banks in Kenya.

4.3 Inferential Statistics

Inferential analysis was conducted to generate correlation results, model of fitness, and analysis of the variance and regression coefficients.

4.3.1 Correlation Analysis

The study sought to explore the association between asset quality, capital adequacy, market structure, technology adoption and access to banking services by Islamic customers in Kenya. Pearson's correlation coefficients were used to show the direction, strength of the association and

the significance of the coefficient were also presented. Table 14 below presents the results of the correlation analysis. The results revealed that asset quality and access to banking services by Islamic customers were negatively and significantly related (r= -0.593, p=0.000). The results further indicated that capital adequacy and access to banking services by Islamic customers were positively and significantly related (r= 0.471, p=0.000). It was further established that market structure and access to banking services by Islamic customers were positively and significantly related (r= 0.573, p=0.000). The results also showed that technology adoption and access to banking services by Islamic customers were positively and significantly related (r= 0.655, p=0.000). This implies that an increase in any unit of the variables except asset quality led to an increase in access to banking services by Islamic customers.

Table 14: Correlation Matrix

		Access to Islamic Banking service	Capital Adequacy	Asset Quality	Market Structure	Technology adoption
Access to Islamic Banking Service	Pearson Correlation	1				
	Sig. (2-tailed)					
Capital Adequacy	Pearson Correlation	0.471**	1			
	Sig. (2-tailed)	0.000				
Asset Quality	Pearson Correlation	-0.593**	-0.209	1		
	Sig. (2-tailed)	0.000	0.075			
Market Structure	Pearson Correlation	0.573**	0.259*	-0.340**	1	
	Sig. (2-tailed)	0.000	0.027	0.003		
Technology Adoption	Pearson Correlation	0.655**	0.385**	-0.449**	0.473**	1
	Sig. (2-tailed)	0.000	0.001	0.000	0.000	

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

4.3.2 Regression Analysis

The results presented in Table 15 present the fitness of model used of the regression model in explaining the study phenomena. Asset quality, capital adequacy, market structure and technology adoption were found to be satisfactory variables in explaining access to banking services by Islamic customers. This is supported by coefficient of determination also known as

the R square of 64.2%. This means that asset quality, capital adequacy, market structure and technology adoption explained 64.2% of the variations in the dependent variable which is access to banking services by Islamic customers. These results also imply that the model applied to link the relationship of the variables was satisfactory.

Table 15: Model Fitness

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.801a	0.642	0.621	0.460731

a Predictors: (Constant), Technology Adoption, Capital Adequacy, Asset Quality, Market Structure

In statistics, significance testing using the p-value indicates the level of relation of the independent variable to the dependent variable. If the significance number is found to be less than the critical value also known as the probability value (p) which is statistically set at 0.05, then the conclusion would be that the model is significant in explaining the relationship; otherwise the model would be regarded as non-significant. Table 16 provides the results on the analysis of the variance (ANOVA). The results indicate that the overall model was statistically significant. Further, the results implied that the independent variables were good predictors of access to banking services by Islamic customers. This was supported by an F statistic of 30.533 and the reported p value (0.000) which was less than the conventional probability of 0.05significance level.

Table 16: Analysis of Variance

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	25.925	4	6.481	30.533	.000b
	Residual	14.435	68	0.212		
	Total	40.36	72			

a Dependent Variable: Access to banking services by Islamic customers

b Predictors: (Constant), Technology Adoption, Capital Adequacy, Asset Quality, Market Structure

Regression of coefficients results in Table 17 show that asset quality and access to banking services by Islamic customers were negatively and significantly related (r= -0.2750, p=0.000). An increase in the unit change in asset quality would lead to a decrease in access to banking services by Islamic customers by 0.2750 units. These findings agree with that of Chisti (2012) showed that a bad asset ratio was negatively associated with banking operating performance and hence managers in banks needed to keep a special eye on credit-enquiring effectiveness. Low performance would then trickle down to inaccessibility of banking services for customers.

The results also show that capital adequacy and access to banking services by Islamic customers were positively and significantly related (r=0.2610, p=0.007). An increase in the unit change in capital adequacy would lead to an increase in access to banking services by Islamic customers by 0.2610 units. These findings support that of Agbeja, Adelakun and Olufemi (2015) who found

that a positive and significant relationship between capital adequacy and bank's profitability and this would go a long way in helping the public maintain confidence in the banks with the latter acquiring corresponding enablement to accommodate the credit needs of customers and safeguard depositors' funds.

The results further showed that market structure and access to banking services by Islamic customers were positively and significantly related (r=0.3300, p=0.002). An increase in the unit change in market structure would lead to an increase in access to banking services by Islamic customers by 0.3300 units. The findings were in line with that of Doyran (2012) who found that market share (relative market power) had significant associations with bank profitability and that prudential supervision aimed at balancing market forces(competition) and credit riskiness could enhance the soundness and stability of institutions in this sector. This then would ensure that customers were able to access the financial services from the bank.

It was also found that technology adoption and access to banking services by Islamic customers were positively and significantly related (r=0.3700, p=0.002). An increase in the unit change in technology adoption would lead to an increase in access to banking services by Islamic customers by 0.3700 units. The findings were in line with that of Sufian and Ibrahim (2005) who found that technology adoption in the banking area led to increased productivity and efficiency in offering services and hence this would trickle down to accessibility of services by customers.

Table 17: Regression Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	0.9570	0.6420		1.4910	0.141
	Capital Adequacy	0.2610	0.0940	0.219	2.7800	0.007
	Asset Quality	-.2750	0.0700	-0.322	-3.9180	0.000
	Market Structure	0.3300	0.1050	0.264	3.1560	0.002
	Technology Adoption	0.3700	0.1130	0.300	3.2820	0.002
a Dependent Variable: Access to banking services by Islamic customers						

Access to Islamic Banking Service by customers =0.9570-0.2750 Asset Quality+ 0.2610 Capital Adequacy+ 0.3300 Market Structure+ 0.3700 Technology Adoption

5.0 SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Summary of Findings

The first objective of the study was to determine the effect of assets quality on access to banking services by Islamic banking customers in Kenya. The findings revealed that asset quality has a negative and significant effect on the access to banking service for Islamic customers in Kenya. The study found that the banks under study strived to keep the amount of nonperforming loans low and that the amount of nonperforming loans affected the profitability of the banks as well as their chances of failure. It was also found that the banks considered the level of risk to the assets

in making decisions on the allocation of resources to asset deals and they undertook screening and monitoring to reduce exposure credit risk.

The second objective of the study was to establish the effect of capital adequacy on access to banking services by Islamic banking customers in Kenya. The study findings showed that capital adequacy had a positive and significant effect on the access to banking service for Islamic customers in Kenya. The study further found that the amount of capital of a bank influenced its resilience and internal strength to withstand losses in crises, its profitability and the costs faced in case of bankruptcy. It was also found that the amount of capital of a bank affected its expansion to risky but profitable ventures as well the return on assets.

The third objective of the study was to determine the effect of market structure on access to banking services by Islamic banking customers in Kenya. The study findings showed that market structure had a positive and significant effect on the access to banking service for Islamic customers in Kenya. The study also found that the market shares for the banks had been increasing and that the number of customers in the industry were also many. It was found that there was considerable level of competition in this banking area and that the banks had ensured diversification across their individual customers. The study found that prudential supervision was crucial in maintaining healthy competition in the market.

The fourth objective of the study was to establish the effect of technology adoption on access to banking services by Islamic banking customers in Kenya. The study findings showed that technology adoption had a positive and significant effect on the access to banking service for Islamic customers in Kenya. The study further found that the number of the banks' customers using internet banking as well as mobile banking had increased. The study also found that the number of online transactions within the banks has also increased and that the amount spent on improving/advancing the technology used in the banks had increased. The ratio of ATMs as a percentage of total branches of the banks had been increasing.

5.2 Conclusions

The main purpose of this study was to assess the effect of credit risk management on access to banking services by Islamic banking customers in Kenya. Based on the study findings, the study concluded that capital adequacy had a positive and significant effect on the access to banking service for Islamic customers in Kenya. The amount of capital of a bank influenced its profitability, the costs faced in cases of bankruptcy and its returns on assets. Similarly, the study concluded that market structure and technology adoption affected the access to banking service for Islamic customers in Kenya positively. However, asset quality as measured using the non-performing loans ratio was found to have a negative effect on access to banking service for Islamic customers in Kenya by affecting the profitability of the banks as well as their chances of failure. Based on the responses given by the study participants in the study, it was concluded that maintaining a low non-performing loans ratio was crucial for these banks if they were to survive and ensure continuous services for their customers. It was also concluded that it was important for banks to increase their capital adequacy ratios. A large market share and healthy competition as well as increased effort towards technology adoption in this banking area were crucial for the banks.

5.3 Recommendations

Based on the research findings the study recommended that banks offering Islamic banking services needed to develop strategies on how to deal with credit risk in their banks by striving to keep the amount of nonperforming loans low. These banks needed to make considerations on the level of risk attached to their assets before decisions on the allocation of resources to asset deals were made. The banks needed to improve and adopt rigorous screening and monitoring to reduce exposures to credit risk.

The study also recommended that these banks should expand their capital bases in order to strengthen their resilience and internal strength to withstand losses especially when faced by a crisis. This could be done by accumulating large amounts of capital that would enable them to expand to profitable ventures.

Based on the findings, the study recommended that these banks needed to develop strategies to increase their market shares and mechanisms to effectively compete in this market. They needed to pursue diversification across individual customers by increasing the breadth of products they could offer to their customers. The regulators of the market needed to ensure prudent supervision so as to maintain healthy competition in this market.

The study also recommended that these banks needed to promote the use of technological innovations within banking area such as internet banking, mobile banking as well as ATM banking by their customers. These banks also needed to be upfront in the adoption of the ever growing innovations in the banking space in-order to reach the untapped market especially in the rural areas. The amount set aside for improvement/advancement of the technology used in the banks needed to be expanded.

5.4 Areas for Further Studies

The study focused on the credit risk management and access to banking services by Islamic banking customers in Kenya. The issue of credit risk management had not been given much focus with much concentration being on the conventional banks. Hence an in-depth analysis of credit risk management within the banks offering Islamic banking services in Kenya needed to be undertaken.

REFERENCES

Ahmad, W. (2008). *Islamic banking in the UK: Opportunities and challenges* (Unpublished Dissertation, Kingston Business School, Kingston University)

Amit R, Schoemaker PJH (2003). Strategic assets and organizational rent. *Strategic Management Journal, 14*(1), 33-46.

Anderson, E. W., Sullivan, M. W. (1993). The antecedents and consequences of customer satisfaction for firms. *Journal of Marketing Science, 12*(2), 125-143.

Athanasoglou, P. P., Brissimis, S. N., & Delis, M. D. (2008). Bank-specific, industry-specific and macroeconomic determinants of bank profitability. *Journal of international financial Markets, Institutions and Money*, *18*(2), 121-136.

Ayub, M. (2002). *Islamic banking and finance: theory and practice*. State Bank of Pakistan.

Bala, A. (2004). *Comparative analysis between Islamic banking system as an alternative to the western banking system* (Unpublished BSc Thesis, Bayero University, Kano).

Barkley, A., Peterson, H. H., & Shroyer, J. (2010). Wheat variety selection to maximize returns and minimize risk: An application of portfolio theory. *Journal of Agricultural and Applied Economics, 42*(1), 39–55.

Bellalah, M., & Ellouz, S. (2004). Islamic finance, interest rates and Islamic banking: A Survey of the literature. *Finance India*, *18*, 533.

Central Bank of Kenya, CBK (2010). *Bank supervision report; Kenyan banking Sector for the period ended December 2010.* Retrieved on 10th August 2012 form: www.centralbank.go.ke/downloads

Chapra, M.U. (1985). Towards a just monetary system, London. *The Islamic Foundation*.

Clulow, V., Gerstman, J., & Barry, C. (2003). The resource-based view and sustainable competitive advantage: The case of a financial service firm. *Journal of European Industrial Training*, *27*(5), 220-232.

Dar, H. A., Harvey, D. I., & Presley, J. R. (1999). Size, profitability and agency in profit-and loss sharing in Islamic banking and finance. The Second Harvard University Forum on Islamic Finance: Islamic Finance into the 21st Century.

Dick, A. A. (2006). Nationwide branching and its impact on market structure, quality, and bank performance. *The Journal of Business*, *79*(2), 567-592.

Dusuki, A. W., & Abdullah, N. I. (2007). Why do Malaysian customers patronize Islamic banks? *International Journal of Bank Marketing*, *25*(3), 142-160.

Dwairi, M., Bhuian, S.N., & Jurkus, A. (2007). Revisiting the pioneering market orientation model in an emerging economy. *European Journal Marketing*, *41*(7-8), 713-721.

El-Gamal, M. A. (2006). *Overview of Islamic finance*. US Department of the Treasury.

Elgari, M. A. (2003). Credit risk in Islamic banking and finance. *Islamic Economic Studies*, *10*(2), 1-25.

Essendi, L. K. (2013). *The effect of credit risk management on loans portfolio among Saccos in Kenya* (Doctoral dissertation, University of Nairobi).

Faniela, I. M., & Majchrzakb, A. (2007). Innovating by accessing knowledge across departments. *Decision Support Systems*, 43(4), 1684-1691.

Finney, R. Z., Campbell, N. D., & Powell C. M. (2005). Strategies and resources: Pathways to success? *Journal of Business Research*, *58*, 1721-1729.

Foley, A. J. (2009). Seeing market orientation through a capabilities lens. *European Journal Marketing*, *43*(1-2), 13-20.

Gakure, R. W., Ngugi, J. K., Ndwiga, P. M., & Waithera, S. M. (2012). Effect of credit risk management techniques on the performance of unsecured bank loans employed commercial banks in Kenya. *International journal of business and social research*, *2*(4), 221-236.

Galbreath, J. (2005). Which resources matter the most to firm success? An exploratory study of resource-based theory. *Technovation, 25*, 979-987.

Grant, R. M. (1991). The resource based theory of competitive advantage: Implications for strategy formulation. *California Management Review*, *33*(3), 114-135.

Greenhalgh, T., Robert, G., Macfarlane, F., Bate, P., & Kyriakidou, O. (2004). Diffusion of innovations in service organizations: systematic review and recommendations. The Milbank Quarterly, 82 (4), 581–629.

Heitfield, E. A., & Prager, R. A. (2004). The geographic scope of retail deposit markets. *Journal of Financial Services Research*, *25*(1), 37-55.

Hill, C. W., & Deeds, D. L. (1996). The importance of industry structure for the determination of firm profitability: A neo-Austrian perspective. *Journal of Management Studies*, *33*(4), 429-451.

Honohan, P. (2001). Islamic financial intermediation: economic and prudential considerations. *Development Research Group of Financial Sector Strategy and Policy Department, World Bank.*

Ikhide, S. I. (2008). Measuring the operational efficiency of commercial banks in Namibia, *South African Journal of Economics*, *76*(4), 586 – 95.

Iqbal, Z. (1999). Financial engineering in Islamic finance. *Thunderbird International Business Review*, *41*(4-5), 541-559.

Kamau, A. W. (2009). *Efficiency in the banking sector: An empirical investigation of commercial banks in Kenya* (Doctoral Dissertation, University of Nairobi, Nairobi).

Khan, M. M., & Bhatti, M. I. (2006). Why interest-free banking and finance movement failed in Pakistan? *Humanomics, 22*(3), 145-161.

Khan, M. M., & Bhatti, M. I. (2008). Development in Islamic banking: A financial risk-allocation approach. *The Journal of Risk Finance, 9*(1), 40-51.

Kinyanjui, S. N. (2013). Challenges facing the development of Islamic banking. lessons from the Kenyan experience. *European Journal of Business and Management, 5*(22), 94-102.

Kraaijenbrink, J., Spender J. C., & Groen, A. J. (2010). The resource-based view: A review and assessment of its critiques. *Journal of Management, 36*(1), 349-372.

Lee, J., & Marlowe, J. (2003). How consumers choose a financial institution: Decision-making criteria and heuristics. *International Journal of Bank Marketing, 21*(2), 53-71.

Mansourov, A. Y. (2005). Bytes and bullets: Information technology revolution and national security on the Korean Peninsula, *APCCS Asia-Pacific Center for Security Studies* Honolulu, Hawaii.

Maubi, A. M., & Jagongo, A. (2014). Corporate loan portfolio diversification and credit risk management among commercial banks in Kenya. *International Journal of Current Business and Social Sciences, 1*(2), 81-111.

McIver, C., & Naylor, G. (1986). Marketing of financial services. *Managerial Finance, 5* (3).

Mehra, A. (1996). Resource and market based determinants of performance in the U.S. banking industry. *Strategic Management Journal, 17*, 307- 322.

Mingala, M. S. (2002). *Financial markets and institutions.* Addison Wesley, New York.

Mugenda, O. M., & Mugenda, A. G. (1999). *Research methods, quantitative and qualitative approaches.* Nairobi: Acts Press.

Mutua, J. M. (2015). Effect of mitigating credit risk on performance of commercial banks in Kenya: A case of Chuka town. *European Journal of Business and Social Sciences, 4*(07), 113-125.

Nzongang, T., & Atemnkeng, J. (2006*). Market structure and profitability performance in the banking industry of CFA countries: The case of commercial banks in Cameroon*. Available from: http://www.jsd-africa.com/Jsda/Summer_2006/PDF [Accessed: 14 September 2012]

Obiri-Yeboah, K., Kyere-Djan, R., & Kwarteng, K. O. (2013). The Role of Information Technology on Banking Service Delivery: A Perspective from Customers in Ghana. *International journal of Innovative Research in Management*, *2*(6), 1-12.

OGLE, A. I. (2010). *A comparative analysis of credit risk management practices of Islamic and conventional banks in Kenya* (Doctoral dissertation, School of Business, University of Nairobi).

Olavarrieta, S., & Friedmann, R. (2008). Market orientation, knowledge-related resources and firm performance. *Journal of Business Research*, *61*, 623-630.

Peteraf, M. A. (1993). The cornerstone of competitive advantage: A resource-based view. *Strategic Management Journal, 14*, 179-191.

Rammal, H. G., & Zurbruegg, R. (2007). Awareness of Islamic banking products among Muslims: The case of Australia. *Journal of Financial Services Marketing 12*(1), 65-74.

Roberts, P. W., & Dowling, G. R. (2002). Corporate reputation and sustained superior financial performance. *Strategic Management Journal*, *23*(12), 1077-1094.

Schreyögg, G., & Kliesch-Eberl, M. (2007). How dynamic can organizational capabilities be? Towards a dual-process model of capability dynamization. *Strategic Management Journal*, *28*, 913-933.

Sinkula, J. M. (1994). Market information processing and organisational learning. *Journal of Marketing, 58*, 35-45.

Sirmon, D. G., Gove, S., & Hitt, M. A. (2008). Resource management in dyadic competitive rivalry: The effects of resource bundling and deployment. *Academic Management Journal*, 51(5), 919-935.

Stiroh, K. J., & Strahan, P. E. (2003). Competitive dynamics of deregulation: Evidence from U.S. banking. *Journal of Money, Credit and Banking*, *35*(5), 801-828.

Tang, Y. C., & Liou, F. M. (2010). Does firm performance reveal its own causes? The role of Bayesian inference. *Strategic Management Journal*, *31*, 39-57.

Teece, D. J., Pisano G, Shuen, A. (1997). Dynamic capabilities and strategic management. *Strategic Management Journal*, *18*(7), 509-533.

Tregenna, F. (2009). The fat years: the structure and profitability of the US banking sector in the pre-crisis period. *Cambridge Journal of Economics*, *33*(4), 609-632.

Usmani, I. A. (2002). Guide to Islamic banking. *Karachi: Darul-Ishaat Urdu Bazar*.

Warsame, M. (2016). Credit Risk Management Practices and Its Impact on Banks' Financial Performance: An Empirical Study of Islamic and Conventional Banks in Kenya. *Proceedings of Business and Social Sciences Research Conference 11 - 13 April 2016, University of London, London, UK*

Webster, F. E. Jr. (1988). The rediscovery of the marketing concept. *Business Horizon*, *31*(3), 29-39.

Wernerfelt, B. (1984). A resource-based view of the firm. *Strategic Management Journal*, 15, 171-180.

Yousfi, I. (2015). Risk Management Practices and Financial Performance in Jordan: Empirical Evidence from Islamic Banks.

Yudistira, D. (2003). Efficiency in Islamic banking: An empirical analysis of 18 banks. *Islamic Financial Architecture*, 479.

Zaman, M. R., & Movassaghi, H. (2001). Islamic banking: A performance analysis. *Journal of Global Business*, *12*(22), 31-38.