A COMPARATIVE STUDY OF FINANCIAL CONDITION AND PERFORMANCE OF ISLAMIC AND NON-ISLAMIC BANKS IN KENYA

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DECLARATION

This research project is my original work and has never been presented for an award of a degree in any other university or institution of Higher learning.

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This research project has been submitted for examination with our approval as the university supervisors.

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Looking back, it is hard to imagine where I am and where I have come from. Can I say from oblivion to sublime? I have no idea God. Here your divine counsel is pleaded. I have learnt a lot from my first supervisor Mr. Jaob Ooko and not least from Dr. Joshua Wanjare. I cannot thank all of you enough. To my classmates I say kudos to all. To my Family I say glory to God the Almighty. I still reckon with the idea that I am not yet there. Before embarking on PhD, yes and pursuing that ultimate price, to me am yet to be done, help me God.

DEDICATION

This project is dedicated to my late brother Mr.Felix Rojas Olweny who passed on, in my presence and before my eyes, after a ghastly road accident when I was in the middle of my MBA program on 3rd January; 2015.The value of my course almost became meaningless without imagining him around. Death is cruel indeed, a grim reaper they say. To our family, take heart knowing that somehow God is going to recompense us with his divine gift of reparation. My immediate family may have to wait a little bit for my PhD to be realized and get dedicated to them. To my friends, I thank you for your moral support when the chips were down and the crest was falling.

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ABBREVIATIONS AND ACRONYMS

ABC- African Banking Corporation

CAMEL- Capital Adequacy, Asset Quality, Management Efficiency, Earnings, and Liquidity).

CAP- Chapter

CBK- Central Bank of Kenya

CONB- Consolidated Bank Ltd

CRD- Credit Bank Ltd

DTAR- Debt to asset ratio

DTER- Debt to equity ratio

EM- Equity multiplier

EPS- Earning Per Share

FCB- First Community Bank Ltd

FIDCB- Fidelity Commercial Bank Ltd

FRA- Financial Ratio Analysis (FRA)

GAB- Gulf African Bank Ltd

GB- Guardian Bank Ltd

IB- Islamic Bank

IBs- Islamic Banks.

Ksh-   Kenya Shillings

LAR-   Loan to Asset Ratio

LDR-   Loan to Deposit Ratio

MM-   Modigliani & Miller

NIB-   Non Islamic Bank

NIBs-   Non Islamic Banks

PLS-   Profit and Loss Sharing

rANOVA-   One way Repeated measures Analysis of Variance

ROA-   Return on Equity

ROE-   Return on Asset

ABSTRACT

The purpose of this study was to explore and evaluate the financial condition and performance of the Islamic Banks and Conventional Banks in Kenya along the following dimensions; Profitability, Liquidity, Risk and Solvency, as performance measurement criteria. The study applied "descriptive financial analysis" research design and also embraced longitudinal study spanning six years from 2010 to 2015.A sample of seven banks was studied covering two fully fledged Islamic Banks and Five Non-Islamic Banks all under the same "Small Peer Group" according to the CBK bank supervision report of 2015.Data were analyzed using Stata Data Analysis Software. Secondary Data were collected from Financial Statements of the Banks' Websites under review, Journals, Dissertations, Books, and Internet. The study discovered that Non-Islamic Banks were more profitable than Islamic Banks though there was no statistical significant difference. On the financial conditions, Islamic Banks proved to be statistically and significantly more liquid than the Non-Islamic Banks. Non-Islamic Banks were found to be bearing less risk and more solvent than their counter parts but the variation was not statistically significant.

CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

Financial intermediation is of paramount importance to any country as without its proper functioning economic growth becomes an illusion. Attracting deposits from savers for onward lending to deficit units(borrowers) is a major function of banks as it enables investment to take place and thus spur economic development of any nation (Ali, 2011).In the Non-Islamic banking context, it means collection of funds followed by their disbursement based on interest charge. However, interest is prohibited in Islam therefore Non-Islamic banking does not cater for the religious disposition of an Islamic economy. The capital structure of an Islamic bank does not include debts and thus no interest is charged and consequently their returns come from profit and loss sharing arrangements (Hanif, 2011, Ali, 2011). It is majorly on this premise that IBs only concentrate on "trading, leasing, fee based services as well as investment activities ", as seen by Ali. According to Islamic finance, anyone who does not bear any risk should not claim any benefit and this forms the foundation of profits and losses sharing paradigm (Jedidia & Hamza, 2014). While the Islamic Banking model has a distinct calling to fulfill the instructions as per the Holly Quran by being "Fare" and a "Free" system where "Fairness" is the primary objective, Non-Islamic banking model is all about maximizing returns on its investments (Usman & Khan,2012).

In the Kenyan context, both Islamic and Non-Islamic banks(NIBs) are still lumped together under the same Banking Act, Cap 488 of the laws of Kenya, notwithstanding the apparent advantages usually enjoyed by the NIBs over the Islamic banking model such as being paid interest on their reserves held by the Central Bank, a deal that Islamic Banks (IBs) prohibit. Thus IBs have different characteristics; be it in the area of their objectives, operations or

procedures. It is due to the curiosity that these two models conjure up that this study intends to paint a picture about their relative profitability, liquidity, risk and solvency in the Kenya's context.

1.1.1 Financial Condition and Performance

Financial condition refers to "the economic position or state of affairs of a business as at a particular point of time" (Pandey, 1994).This particular information is conveyed by one of the most important financial statements which is the Balance sheet (Statement of Financial Position).For that matter both categories of the banks are assessed on the basis of the value of assets they hold, the degree of risk they run in terms of the liabilities they have incurred ,and the information on owners' Equity as reflected on their Balance sheets.

Financial performance can be defined as how well or bad a firm has done economically over a period of time(Pandey,1994).To form judgment on how a bank has performed financially, one has got to analyze past financial statements and other accounting data in order to understand the underlying strengths and weaknesses (Pandey, 1994).

The stakeholders looking for the results and signs are many and their interests and objectives are myriads and varied. Management, creditors/depositors, owners, regulators, and tax authorities are some of the interest groups. Therefore, financial analysis precedes all other strategies aimed at future plans of a firm such as a bank (Pandey 1994). Financial analysis is defined by Pandey as "the process of identifying strengths and weaknesses of the firm by properly establishing relationships between the items of the balance sheet and the profit and loss account". Ratio analysis is a necessary tool in financial analysis. Ratio is defined as "the indicated quotient of two mathematical expressions and as "the relationship between two or more things" (Merriam, 1975 as cited by Pandey, 1994).A ratio is a relative term hence a

single ratio is meaningless unless it is compared with "some standards" (Antony& Reece, 1975 cited by Pandey, 1994).

Financial analysis can be performed by various stakeholders but the nature of analysis will depend on the interest and the objective of the analyst (Foster, 1986 cited by Pandey, 1994).Pandey (1994) continues by stating that short term-creditors or depositors are in a hurry to be   paid their dues thus their interest is on the immediate payment ability of the firm as can be reflected on the firm's current liquidity position. Long-term creditors on the other hand cast their eyes wide and hence more concerned with the bank's future prospects of "solvency and survival". Shareholders interest is more on the bank's earning ability and on how geared it is and the degree of risk they may have to bear. Regulators may be concerned more about carrying out of business consistent with their rules and regulations while seeking to detect financial woes and prescribing remedies before going out of hand. Tax authorities in the other hand may be angling to see businesses, banks included, fulfilling their fiscal obligations by prompt payment of taxes as a source of revenue to the government. Managers' view of a bank's good financial condition and performance is when they are satisfied that they utilized the resources of the bank economically, effectively, and efficiently in fulfilling the interest and the objectives of all the various stakeholders. (Sources: Moin, 2008, Ibrahim, 2015, Pandey, 1994).

1.1.2. Islamic Banks (IBs)

Islamic banking has been defined as "banking in consonance with the ethos and value system of Islam and governed, in addition to the conventional good governance and risk management rules, by the principles laid down by Islamic law "(Moin,2008). Masruki ,Ibrahim,Osman & Wahab (2011) see Islamic banking as a banking model "that is consistent with Islamic law and guided by Islamic economics". Islamic banks (IBs) proscribe interest as it is considered

exploitative and undesirable. In a nutshell Islam emphasizes on fully following the Quran and not maximizing return on transactions [(Kader,et al,2007 as cited by Widago& Ika(2008)]. IBs are required to follow the decrees of Allah especially on matters to do with exchange of money but *riba* (interest) is considered one of the prohibited elements of economic transactions while others are; *Gharar*(risk or uncertainty) and *Qimar*(speculation) (Usman & khan,2012).

IBs are just like NIBs as they act as intermediaries and trustee of money of their depositors but the difference comes in when you consider the element of profit and loss sharing aspect that is inbuilt in Islamic finance (Dar and Presley, 2000 as cited by Usman & Khan,2012).Islam emphasizes more on *riba* free transactions as evidenced in Quran, "That they took *riba* (usury), though they were forbidden and that they devour men's substance wrongfully-we have prepared for those among men who reject faith a grievous punishment. Sura An-Nisa(4:161)" as cited by Usman & Khan(2012).

1.1.3 Non Islamic Banks (NIBs)

NIBs are those banks whose activities are based on "a fixed rate of interest". Apart from ensuring that a borrower is capable of paying by background check, they also demand that the period of repayment determines the final amount to be paid (Al-Shami, 2009).

NIBs act on the basis of pure financial intermediation from which they make their profits from margins generated from deposits and also interests earned from moneys advanced to investors or individuals (Ryu et al.,2012,as cited by Onakoya & Onakoya,2013).These financial institutions provide a variety of services and these are; saving mobilization from surplus units to deficit units and secondly, they also provide other related services such as; transfer of funds, facilitation of international trade, consultancy services, custody of treasures, and other ancillary services for which they receive payments. NIBs provide deposit services

in which reward is fixed in advance and predetermined unlike IBs (Hanif, 2011). Under the Non-Islamic Banking model, the bank bears the total risk and net return is kept after defraying other expenses and the depositors' interest at a fixed rate. This is different from Islamic banking model where both reward (not interest- *riba*) and risk are shared and they are pegged on the outcome of the investment.

In the field of Financing and Investment, both the institutions provide funds meant for productive services for a reward. The devil is in the details where NIBs do offer loans at fixed predetermined rate of interest while this is repugnant to the Islamic model. In Non-Islamic banking, three types of loans are permissible; short term loans, overdraft, and long term loans. IBs are prohibited from issuing loans unless it is interest free loans (*Qarz eHasna*) but they are allowed to invest by providing clients with the required "tools of trade" (Hanif, 2011).

NIBs can juggle around their liquidity by purchase and sale of financial instruments in the money markets, depending on their present needs. They are also paid interest on the mandatory reserve requirement by the Central Bank but for Islamic financial institutions, though they adhere to the same reserve requirement, they are not rewarded at all and again they are prohibited from engaging in interest (read *riba*) yielding deals (Hanif, 2011).

1.1.4 Islamic Banks versus Non-Islamic Banks

While Non-Islamic banking is interest based, Islamic banking is not but instead Islamic banking is governed by the knowledge of interest free principle and that of profit and loss sharing (Usman & Khan,2012).In addition to that, profit and loss sharing principle creates a contract of trust and partnership between debtor and creditor and intermediary (Yudistira ,2003) as cited by Usman & Khan (2012).

While the Islamic Banking model has a distinct calling to fulfill the instructions as per the Holly Quran by being "Fare" and a "Free" system where "Fairness" is the primary objective, their counterpart is all about maximizing return on its investments (Usman & Khan,2012).

According to Suleiman (2001) as cited by Usman & Khan(2012),there are four rules governing investment behaviour in Islam and these rules are; the banning of interest in trades, the prevention of Gharar (risk and uncertainty),the institution of Zakat (Islamic tax) and finally the limitation of dealing in prohibited merchandises or services.

The proponent of Islamic finance maintain that the idea of "financial risk" applicable to "conventional capital structure" (debt and equity) is irrelevant for Islamic banks because the capital structure of Islamic banks do not include debts and it then follows that their deposit accounts do not qualify to be liabilities but rather joint ventures and thus the bank is not liable for any loss incurred in the process (Al-Deehani, 1999 as cited by Al-Deehani,El-sadi &Al-Deehani,2015).

NIBs use both debt and equity to finance projects and subsequently reap interest in return. In the Islamic banking model, interest is prohibited and instead the idea of equal participation is encouraged. Thus according to the principles of Islamic law, debt is only allowed in sale or lease based financing system (Onakoya & Onakoya, 2013).

Islamic banks have also been accused of being the "Jack of all trade" as they seem not to respect any boundary. This is due to their engagement in commercial banking, investment banking, and commercial financing- all at the same time (Zaman, 2008).This advantage is not enjoyed by their conventional counter parts.

1.1.5 Banks in Kenya and the Regulatory Framework

According to The Banking Act CAP (chapter) 488 of the Laws of Kenya, "bank" means "accompany which carries on, or proposes to carry on, banking business in Kenya".

The role of Central Bank of Kenya (CBK) among others is to license, regulate, and supervise the activities of banking business, financial business or the business of mortgage finance company in Kenya. According to Van Horne & Wachowics, (2005) as cited by Kakakhel, Rahim & Tariq (undated), "a bank is a corporation registered with either the Central Bank or where appropriate, the Federal Government of the Country. They provide the services of deposits, withdrawals, interest dealing, making loans, discount notes, investment in financial securities etc. depending on the bank type."

According to CBK Bank Supervisory Annual Report of 2015, "the banking sector includes the Central Bank of Kenya (CBK) as the regulator and 43 banking institutions, 42 of which are commercial banks and 1 mortgage finance company". Out of the 43 banking institutions, only 11 are listed in the Nairobi Securities Exchange. Charterhouse Bank is under statutory management while Imperial Bank and Chase Bank are under receivership. Dubai Bank in the other hand is in liquidation. (Source: CBK, 2015).

In the Kenyan context, both Islamic and Non-Islamic banks are still lumped together under the same Banking Act Cap 488 of the Laws of Kenya, notwithstanding the apparent advantages usually enjoyed by the conventional banks, as argued elsewhere, over the Islamic banking model such as being paid interest on their reserves held by the Central Bank, a deal that Islamic banks prohibit. An amendment in 2006 to the right direction was done on section 12 of the Banking Act to accommodate sharia compliant practice of trading and holding of fixed assets by removing the previous restrictions. Section 16 of the Banking Act was also amended effective 1st January,2009 to include the term "return" in order to allow Islamic

banks to whom the word interest (*riba*) is offensive, pay their account holders some return on their savings.

1.2 Research Problem

The foundation and development of Islamic finance and by extension, Islamic banking, is Islam itself and the degree and readiness of its adherents to live according to their calling while Non-Islamic banking is based on pure financial intermediations (Ali, 2011).The rapid growth of IBs have been put to question with others suggesting that comparing these models (IBs and NIBs) is not appropriate because NIBs have been there for years and years(Masruki,Ibrahim,Osman and Wahab,2011).Skeptics like Samad (2004) as cited by Masruki,Ibrahim,Osman and Wahab (2011) wonder how Non-Conventional Institutions like IBs that do not accept interest and are required to follow two rules-manmade laws and Islamic laws, seem to be performing unbelievably well as compared to NIBs that are even free to enter into any business transaction as they wish. Islamic Financial Institutions are under obligation to share their profits or losses as the case may be with depositors and other users of their funds something which does not apply to NIBs (see for example, Ali, 2011, Hanif, 2011, Jedidia & Hamza, 2014). According to the conventional capital structure theorists, it was advanced that there were only two sources of capital namely; debt and equity (MM, 1958, 1963, Myer ,1984 ,Miller, 1995).However, the proponents of Islamic finance maintain that the idea of "financial risk" applicable to "Conventional Capital Structure" (Debt and Equity) is irrelevant to IBs because the capital structure of IBs do not include debts (Al Deehani et al.,1999 as cited by Aldeehani,El-sadi &Al-Deehani,2015).

 Usman and Khan (2012) carried out "a comparative analysis of financial performance of IBs and NIBs in Pakistan" between 2007 and 2009 and their study concluded that the IBs were booming as compared to their counterparts. Johnes,Izzeldin & Pappas (2012) "using Data

Envelopment Analysis (DEA)" report no substantial variance in gross (on average) efficacy between the two banking models after the scale is reduced to "a common frontier". Conversely, the outcome differs when they use "Meta-frontier analysis (MFA)" as it reveals that Islamic banking model is less efficient compared to the Non-Islamic model.

Garo (2013) studied "the factors influencing financial performance of IBs as compared to the NIBs in Kenya". Ng'ang'a (2013) carried out a study on "the effects of financial structure on the financial performance of NIBs and IBs". Thomi (2014) did a study to find out "the effects of Islamic banking products on financial performance of commercial banks in Kenya" between 2009 and 2013. Jamal (2013) did "a comparative study of financial performance of IBs and NIBs" (2010 -2012, three year period) using a CAMEL model.

This study intends to include the period 2010 to 2015 (six years) because between those times the pure IBs in Kenya had matured enough to compete in equal footing with the conventional counter parts. Harris (2012) as cited by Jamal (2013) noted that the two IBs in Kenya managed to break even within three years of their operations hence it is only fair to evaluate their performances from the year 2010 onwards with the entrenched NIBs .Jamal (2013) after carrying out a comparative study of financial performance of IBs and NIBs in Kenya (2010 to 2012-three years) also suggested that an expanded period of study should be carried out and hence this study intends to fill that gap. Apart from the above observations, the study adopted a different methodology by using Discriminant Analysis model and One Way-Repeated Measures Analysis of Variance (rANOVA) model which others have not tried out here locally to the researcher's knowledge. The study will answer the question; do these two banking models differ in terms of their financial conditions and performances in Kenya?

1.3. Research Objective

The objective of this study is to compare the financial condition and performance of Islamic banks and Non-Islamic banks in Kenya using three indicators namely; profitability, liquidity, risk and solvency.

1.4. Value of the Study

This study is intended as an eye opener on both categories of banks to improve on their returns for their stakeholders in case they are found to be profit inefficient. For those which will be found to be operating with a lot of risks, they will have an opportunity to rethink on how to reduce their risks in order to be safe from insolvency threats. It is an established fact in finance that too much liquidity is an indication of inefficiency on the side of management of a firm and hence it will be interesting to see which between these two models exhibit culpability in that area and thus needs to adjust for the better.

The study also finds it necessary to add into the body of knowledge of Islamic finance as this being still a nascent phenomenon that requires some nurturing.

To the Regulatory Authorities, the ball will be in their courts in order to consider formulating fair and relevant policies that can enable particularly IBs compete effectively with their Non-Islamic counterparts that currently enjoy unfair head start. Islamic banking model in the final analysis will be the answer to the excesses (read capitalism) of NIBs because of their in-built humane face.

CHAPTER TWO: LITERATURE REVIEW

2.1. Introduction

This chapter focuses attention on the relevant literature on the subject of study. It discusses the financial conditions and performances of IBs and NIBs emanating from studies both from within and outside Kenya. It looks at the theoretical reviews and the determinants of financial condition and performance of the bank categories and finally concludes by giving reasons for the selected topic of the study.

2.2. Theoretical Review

IBs and NIBs have various contrasting features. The main features being that IBs do not allow charging or payment of interest and the prohibition of investing in or funding immoral businesses the likes of; betting, pornography, prostitution, liquor, sedatives among others (Hussein,2010).Thus IBs have different characteristics; be it in the area of their objectives, operations or procedures.

2.2.1. The theory of Capital Structure

According to the conventional capital structure theorists it was advanced that there were only two sources of capital namely; debt and equity (MM, 1958, 1963, Myer, 1984, Miller, 1995). MM (1958) under some assumptions advanced the idea that the worth of a firm was not tied on the sources of funds and thus capital structure was irrelevant. The assumptions were however later relaxed to accommodate the tax effects on debt (MM, 1963, Miller, 1977).Miller (1977) further baffled all by arguing that an optimal capital structure is 100% debt but this dangerous conclusion was disapproved by Graham (2000) as cited by Al-Deehani, El-Sadi &Al-Deehani, 2015) who argued that the extent of the tax compensations from debts must be considered and this paved the way for a trade-off theory. However, the

proponents of Islamic finance maintain that the idea "of financial risk" applicable to "conventional capital structure" (Debt and Equity) is irrelevant to IBs (Aldeehani et al.,1999 as cited by Aldeehani, El-sadi &Al-Deehani,2015).This to them implies that the capital structure of IBs do not include debts and it then follows that deposit accounts do not qualify to be liabilities but rather a joint venture and thus the bank is not liable for any loss incurred in the process.

2.2.2. Islamic theory of Interest (*Riba*)

Interest or usury (in Arabic, *riba*) is perceived to be a price at which lenders sell money given the opportunity cost forgone. It can be defined as "any gain without sharing of risk and by considering time value of money" (Khan, 2011). According to sharia, earnings such as interests only pollute the financial environment with inflation and thus unacceptable. Another borne of contention that Khan sees in interest is the fact that lenders do not care whether borrowers make profit or not and all they expect is repayment as agreed in advance and this perpetrates a wrong. The cornerstone of Islam is to carry out business on higher pedestals of morality and justice where interest is absent (Ali, 2011). The underlying principle in Non-Islamic banking is that money begets money and thus has a premium called interest. The payment or receipt of interest is prohibited in Islam. Islamic law perceives money not as "a commodity but just a medium of exchange and a store of value apart from being a unit of measurement". It is majorly on this premise that IBs only concentrate on "trading, leasing, fee based services as well as investment activities", he concludes.

It has become a trend to condemn NIBs and their sponsors', the Western Nations, as being usurious and yet regulators in such Nations have put in place laws specifically prohibiting excess charges of interest by putting a ceiling on its rate (Zaman, 2008).Again, some of these countries have more developed mechanisms of controlling the excesses of capitalism than the

complaining Islamic states with their sharia compliant banking model. Zaman continues by declaring that a part from announcing that IBs are operating within the precinct of sharia, they are just as guilty as their counterparts.

2.2.3. Profit and Loss Sharing Theory

Islamic financial institutions are under obligation to share their profits or losses as the case may be with depositors and other users of their funds (see for example, Ali, 2011, Hanif, 2011, Jedidia & Hamza, 2014).According to Islamic finance, anyone who does not bear any risk should not claim any benefit. "This principle is called al-ghourm and the Profit and Loss sharing (PLS) paradigm" (Jedidia & Hamza, 2014).They argue that such mutual engagements have the potential of reducing "liquidity risks" and the effect of banking crunches [(Khan,(1986),Siddiqi (1992) as cited by (Jedidia & Hamza, 2014)].It is argued that one of the problems ravaging IBs is the "liquidity management". A study conducted by Ismal (2010) as cited by Jedidia & Hamza (2014) found that "Liquidity Risk Management practices are not optimal".

 This PLS paradigm is advanced in the following type of contracts:

*Musharaka (***Joint stock ownership***):** In *musharaka* arrangements, both parties to the contract (IB and others) bring in money to a joint venture. Profits are shared as agreed in advance but losses are apportioned in relation to the stake held (Meezan bank guide, 2000) as cited by Hanif (2011). This is in line with the principle of sharia, "the sharing of risk and reward in financial contracts" (Ali, 2011).

Mudaraba **(profit and loss sharing contract):** This is the other equity product alternative to partnership contract in which one stakeholder avails finances and another brings in expertise.

Similar to *musharaka*, gains are apportioned as agreed between partners. But in this arrangement, only the supplier of capital (IB) shoulders the financial loss (Hanif 2011).

2.3 Evaluation of the Banks' Financial Condition and Performance

Three financial condition and performance indicators namely; profitability, liquidity, risks and solvency will be used. This approach is similar to the one adopted by Khaskhelly (2015) in Pakistan during the Global financial crisis (2007-2010) using the same three performance indicators as stated above.

2.3.1 Profitability

Profitability is the ability of a business to earn a profit and a profit is what is left after deducting all expenses over a period of time (Pandey,1994). Van Horne and Wachowicsz (2005) as cited by Moin (2008) state that profitability is realized after accounting for other expenses and taxes and this reveals relative "profitability on assets and to the shareholders". To determine profit, profitability ratios extracted from accounting data are computed and results compared for each category of the bank. Profit is considered controversial as its true meaning is subjective to conceptualized [(Ross, Westerfield, & Jaffe, 2005) as cited by Moin,(2008)]. ROE is a measure with more meaning to equity holders as it measures a firm's financial performance based on residual income left after debt holders have been paid the interest on borrowed capital (Damodaran, 2007).The use of book value of equity may present challenges in situations where the firm has accumulated losses as this may result into negative figures conveying unhelpful information as Damodaran argues. This he says can only be remedied by falling back on ROA. According to Klaassen (2015) even ROA has issues still unresolved since the world's financial crunch as assets have proved to be earning less and less. He also contends that some assets may be contributing nothing to bank earnings and thus their inclusion on total assets is questionable. The assets that he says do not

contribute to the earnings are; goodwill, tax dues and other claims that do not yield interest. Pandey (1994) states that although ROA is conventionally calculated by dividing profit after taxes by total assets but the concept is unsound and the most appropriate measure should be to divide earnings before interest and tax by the total assets or net assets. The presence of debt in the capital structure however has been known to magnify ROE and thus brings a significant difference between the two ratios (Ross, Westerfiled, Jaffe, 2005 as cited by Moin, 2008). Notwithstanding the apparent disagreements, most studies have used both ROA and ROE to measure profitability perhaps as a compromise (see for example, Khaskelly, 2015, Halkano, 2012, Widago & Ika, 2008, Moin,2008 etc.). This study will adopt the conventional approach of dividing the net profit by the total assets or shareholders' equity as the case may be for ROA and ROE respectively (Pandey, 1994).

Return on assets (ROA): This ratio measures how efficient the management utilizes the assets of the bank. The higher it is the better for the bank and the reverse is true. ROA=Net profit/Total assets.

Return on Equity (ROE): The ratio appraises the management's efficiency at generating profits per unit of equity. The higher it is the better the prospects. ROE=Net profit/Equity.

2.3.2 Liquidity

Liquidity refers to the ability of a firm to settle its current financial obligations as they become payable (Pandey, 1994).Liquidity ratios are used to evaluate the bank's ability to pay their obligations as they arise. The analysis of these ratios are important as they enable a firm to detect and avoid liquidation at the behest of its creditors if early warnings are promptly acted upon [(Ross, Westerfield, & Jaffe, 2005) as cited by Moin,(2008)].Banks face liquidity risk whenever they fail to strike a balance between deposits on one hand and withdrawals and

loan advances on the other hand [(Samad&Hassan,2000) as cited by Moin (2008)].Liquidity is therefore examined under; loan to asset ratio (LAR) and loan to deposit ratio (LDR).

Loan to asset ratio (LAR): The ratio reveals the percentage of loan to the assets. The higher it is the lower is liquidity and vice versa. However, high ratio may mean high profit but a threat on solvency. LAR=Total loan/Total assets.

Loan to deposit ratio (LDR): Here the ratio indicates how a bank uses its deposits in extending loans. When the ratio is low, it indicates higher liquidity and likely lower profits and the reverse is true. LDR=Total loan/Total Deposits.

2.3.3 Risk and Solvency

Risk in this case is defined as the variability that is likely to occur in future in respect to debt payment ability of a firm and Solvency refers to the ability of a firm to meet its long-term financial obligations (Pandey, 1994).A business must necessarily be Solvent in order to survive. Risk and Solvency ratios are used to measure the extent of gearing in the financial structures of both banking models. The higher the debt relative to equity the greater the danger of financial distress which naturally creates a conflict of interest between the creditors and shareholders [(Ross, Westerfield, & Jaffe, 2005) as cited by Moin,(2008)].Thus the degree of solvency is dependent upon the excess of a bank's assets over its debts. These ratios are used to determine risk and solvency exposures; Debt to Asset Ratio (DTAR), Debt to Equity Ratio (DTER) and Equity Multiplier (EM).

Debt to equity ratio (DTER): It is the extent to which a firm employs debts relative to shareholders funds. The lower it is the better for the bank.

DTER=Total Debt/Shareholders' Equity

Debt to Total Assets Ratio (DTAR): It shows how much of outsiders' funds have been used in financing the assets of the bank. If the ratio is found to be high, then the bank's risk exposure is considered to be high but if it is low then the bank's financial health is sound.

DTAR=Total Debt/Total Assets

Equity multiplier (EM): It shows how many times the total assets belong to Equity holders. It indicates to what extent the bank has utilized debts in financing its assets. The higher it is the riskier for the bank.

EM=Total Assets/Total Shareholders' Equity

2.4 Empirical Studies

2.4.1 The International Evidence

Johnes,Izzeldin & Pappas (2012) used a Sample of 207 NIBs and 45 IBs while investigating the financial performance of IBs against NIBs across 18 Muslim dominated countries(2004-2009) "using Data Envelopment Analysis (DEA)", reported no substantial variance in gross (on average) efficacy between the two banking models after the scale was reduced to "a common frontier". Conversely, the outcome differed when they used "Meta-frontier analysis (MFA)" as it revealed that Islamic model of banking was less efficient compared to the conventional model. The study ends by suggesting that each type of bank model can learn from the other in order to improve on their general efficiency. IBs seem to perform better in management than NIBs and thus the NIBs too have something to learn from their opposite-number.

Usman and Khan (2012) carried out "a comparative analysis of financial performance of IBs and NIBs in Pakistan" (2007-2009) and their study concluded that the IBs growth rate is

higher and lucrative relative to NIBs. Furthermore, IBs are found to be more liquid than counter parts. Three banks from each model on the basis of "equivalent weight of capital invested and number of branches" were taken as a sample. The results were realized after analysing various financial ratios using paired sample t-test. The ratios were; "Return on Assets (ROA), Return on Equity (ROE), Earning Per Share (EPS), Loan to Debtor Ratio (LDR), Cash and Portfolio Investment Ratio (CPIR) and Loan to Asset Ratio (LAR)".The researchers concluded that the poor performance of NIBs could be as a result of the general economic trend in Pakistan at the time affecting majorly the NIBs. They were also surprised that liquidity as was exhibited by IBs could go hand in hand with their profitability.

Onakoya and Onakoya (2013) in United Kingdom (2007-2009) while comparing financial performance between CBs and IBs studied the top four IBs and five CBs. The study is on the basis of selected financial ratios as performance indicators. They report that CBs are more profitable than IBs which however are less prone to liquidity risk and are cost effective. To them there are little substantial variances in business alignment and outcome in terms of "liquidity, profitability, risk and solvency, and efficiency". In their part, there is a need on the side of IBs to sharpen their managerial skills in finance and increase their innovativeness in order to boost their sharia compliant products.

A study was carried out by Tanim-Ul-Islam and Ashrafuzzaman (2015) on the financial performance between IBs and NIBs in Bangladesh using CAMEL test model between 2009 and 2013. "CAMEL is an acronym for; Capital Adequacy, Asset Quality, Management Efficiency, Earnings, and Liquidity". A sample of five banks in each category was selected out of "30 commercial banks listed in Dhaka stock exchange". It reveals that there is no significant difference between the two sets of banks in terms of capital adequacy, management capability, and earnings but reports a significant difference in relations to asset

quality. In view of higher liquidity associated with the IBs, the researcher advised that a proper balance must be struck between liquidity and investment so as to realize more profits as too much liquidity means less investment hence less profits.

And finally on the international scene, a study was carried out by Khaskhelly (2015) in Pakistan during the Global financial crisis (2007-2010) using three performance indicators namely; profitability, liquidity, and soundness. The impact of performance was analyzed using financial ratios. The financial ratios were; "Return on Asset (ROA) ,Return on Equity (ROE), Loan to Asset Ratio(LAR),Loan to Deposit Ratio (LDR), Asset Utilization Ratio(AU), Debt to Equity Ratio (DER) ,and Income to Expense Ratio (IER)".He used percentages for his analysis and displayed his data in the form of tables ,pie charts, frequency distributions and graphs. The result of the study was that there was no major difference in liquidity and profitability in the bank categories. Secondly, it was reported that IBs held more liquid assets compared to the NIBs which affected their profitability. It was also concluded that cost of deposits on the side of NIBs was on the increase as well as the non-performing loans than was the case with IBs.

2.4.2 The Local Evidence

Halkano (2012) studied the "financial performance of IBs and NIBs in Kenya". The two IBs and a sample of five NIBs were taken out of a population of 41 NIBs in Kenya. The banks were within the same level of ranking by the CBK and had an asset base of less than Ksh.10 billion. A mean was compared for each banking model against the industry averages. The financial performance indicators chosen were profitability, liquidity, efficiency, risk and solvency. He reported that on average NIBs performed better than the IBs for the duration of the period under review. IBs were better in liquidity dimension but NIBs on the other hand

outperformed them with respect to profitability and efficiency. Conversely, IBs were better off with regard to risk and solvency.

Jamal (2013) in Kenya did "a comparative study of financial performance of IBs and NIBs" (2010 -2012, three year period) using a CAMEL.A sample of two banks each from both models is picked. He carries out a t-test to establish whether there is any significant difference between the financial performances of the two banking models. Using Ms-excel as a tool for data analyses, he discovers that NIBs overall do better than IBs in terms of financial performances but does not find any significant difference between the two models.

Garo (2013) carried out a study on "the factors influencing financial performance of IBs and NIBs in Kenya" between 2009 and 2012.A sample of two IBs and eight NIBs was taken. The data obtained were analyzed using correlation and regression analysis and results presented in tables and graphs. The study reveals that large banks are more profitable than other categories of banks of small sizes as IBs and the IBs are less profitable than NIBs in the same peer group which the study attributes to "relative market power theory". The study however concludes that Islamic banking model has a bright future notwithstanding their current state of affairs.

Inyangala (2014) carried out "an assessment of the determinants of financial performance of IBs and CBs in Kenya" (2008-2013).A sample of 20 banks listed as "small" by the CBK Bank Annual Supervision Report was used. Two IBs and 18 CBs were studied. The multivariate analysis is applied using statistical package for social sciences (SPSS).The result reported is that CBs show a higher mean than the IBs in terms of financial performance determinants. The study also finds that liquidity plays only a moderate role in the financial performance of the two banking models and that performance is mostly affected by asset quality, capital adequacy, efficiency, and other indicators. The study ends by recommending

to the Islamic banking models to find a way of properly managing their risks in order to curtail their probable losses.

2.5 Summary of Literature Review

From the international scene we find different results emanating from different countries or regions. While there is a mix of results as far as profitability is concerned, there seems to be a consensus that IBs are more liquid than the NIBs. Johnes,Izzeldin & Pappas (2012) investigating the performance of IBs as against NIBs across 18 Muslim dominated countries reported that Islamic model of banking is less efficient compared to the Non-Islamic model. Usman and Khan (2012) in Pakistan concluded that the IBs growth rate is higher and more profitable as compared to their Non-Islamic counterparts. In addition, IBs are found to be more liquid than NIBs. They were however surprised that liquidity as was exposed by IBs could go hand in hand with their profitability. Onakoya and Onakoya (2013) in United Kingdom report that CBs are more profitable than IBs which however are less prone to liquidity risk and are cost effective. A study by Tanim-Ul-Islam and Ashrafuzzaman (2015) reported higher liquidity associated with the IBs.

On the local scene there seems to be a consensus that NIBs are more profitable than the IBs but what causes that have not come out clearly. Halkano (2012) agrees that IBs are more liquid than their counter parts but seem not to connect the liquidity on the side of IBs as an element contributing to their overall poor performance. It was left to Inyangala (2014) study which eventually indicated that the effect of liquidity on performance is not great but only moderate. But Halkano's finding on Risk and Solvency is that IBs are better which is in contrast with Inyangala's finding which ends by recommending to the Islamic banking models to find a way of properly managing their risks in order to curtail their probable losses.

This study intends to investigate liquidity, profitability, risk and solvency aspects of these banking models. This approach is similar to the one adopted by Khaskhelly (2015) in Pakistan during the Global financial crisis of the period 2007-2010.However, Khaskelly (2015) used percentages for his analysis and presented his data in the form of tables, pie charts and graphs but this study intends to go further by adopting a different methodology by using Discriminant Function Analysis model and One Way-Repeated Measures Analysis of Variance (rANOVA) model. The study will also cover a longer period (six years) as compared to what currently obtains locally.

CHAPTER THREE: RESEARCH METHODOLOGY

3.1. Introduction

This chapter outlines the design of the study, highlights the composition of targeted population and population sampling design. The techniques that are used in data collection and analysis are also deliberated with the aim of carrying out a comparative study on the financial condition and performance of IBs and NIBs in Kenya.

3.2. Research Design

The study adopted descriptive research design. "Research design is the blue-print for the collection, measurement, and analysis of data" (Kothari & Garg, 2014).Thus this study applied "descriptive financial analysis" to state, evaluate, relate, and categorize the economic states of these two banking models. It also embraced longitudinal study spanning six years from 2010 to 2015.

3.3 Population

The study targeted 42 commercial banks in Kenya and out of these; only two banks are fully fledged IBs, which are; Gulf African Bank (GAB) and First Community Bank (FCB).CBK categorizes banks into three distinct peer groups of either small, medium or large, based on total assets, total deposits and number of accounts, capital size and loan accounts, among other considerations. According to CBK annual report of 2015, there were 21 small banks, 12 medium ones and 7 large banks operating in Kenya. Charterhouse Bank under statutory management, Dubai Bank in liquidation, Imperial Bank and Chase Bank under receivership have been excluded (Source: CBK, 2015).

3.4. Sample Design

Only two banks are fully fledged IBs in Kenya (Gulf African Bank-17 branches and First Community Bank-18 branches), therefore, the intention was to include them together with other NIBs categorized in the same level. Some NIBs do operate Islamic windows but they were not considered because doing so would be like mixing apples with oranges (Onakoya & Onakoya, 2013). IBs are under the "peer group of small banks" according to the Directory of Commercial Banks and Mortgage Finance Companies of Kenya. NIBs under that category were selected based on the average of between 10 and 18 branches. Usman & Khan (2012) selected each model on the basis of "equivalent weight of capital invested and number of branches". However, as it turned out for our case, only five qualified namely; African Banking Corporation (11 branches), Consolidated Bank of Kenya (18 branches), Guardian Bank Limited (11), Credit Bank Limited (15), and Fidelity Commercial Bank limited (13) (CBK, 2014). One bank (Charterhouse Bank ltd-10 branches) was knocked out as it was under statutory management (CBK, 2015), and another one, Equatorial Commercial Bank Limited with 12 branches, was a perennial loss maker from 2009-2014 making a modest profit only in 2013 and thus also disqualified (www.equatorialcommercialbank). Guaranty Trust Bank (16 branches) was also knocked out because data for some years despite the best efforts, could not be accessed. Consequently; purposive sampling was considered appropriate for the study

3.5 Data Collection

The data was collected from the audited financial statements of the selected banks for the period 2010-2015(six years) under review from their websites. Other sources included; CBK Supervision Annual Reports, books, journals, dissertations, and internet among other secondary sources. The period between 2010 and 2015 was studiously selected because

between these periods, the only Islamic banks to be reviewed were both incorporated in 2008 or thereabout and thus had overgrown their teething problems and therefore able to compete on equal footing with their Non-Islamic counter parts. Harris (2012) as cited by Jamal (2013) noted that the two IBs in Kenya managed to break even within three years of their operations hence it was only fair to evaluate their performances from the year 2010 onwards with the entrenched NIBs. Jamal (2013) after carrying out "a comparative study of financial performance of IBs and CBs in Kenya" (2010 to 2012-three years) suggested an extended period of study, hence this study covered six years.

3.6. Data Analysis

Three broad categories of financial ratios were calculated namely ;(a) profitability ratios, (b) liquidity ratios, and (c) risk and solvency ratios. This approach is similar to the one adopted by Khaskhelly (2015) and has been developed and justified under literature review. The averages of each ratio were computed for each bank category and a comparison made to evaluate the differences. The averages of the ratios for each model were compared to the industry averages as given in the CBK annual report of 2015. The study adopted a different methodology by using Discriminant Function Analysis model. "The Null Hypothesis is that the means of the two groups on the Discriminant Function-the centroids, are equal. Centroids are the mean discriminant score for each group. The standardized discriminant function coefficients serve the same purpose as beta weights in Multiple Regressions (partial coefficient), they indicate the relative importance of the independent variables in predicting the dependent variable. They allow one to compare variables measured on different scales. Coefficients with large absolute values correspond to variables with greater discriminating ability" (http://core.ecu.edu.2015).One Way-Repeated Measures Analysis of Variance (rANOVA) model was another model used in the analysis. Descriptive statistics presented in

form of mean, percentages, and standard deviations was also generated. Correlation analysis was further performed on various independent variables in relation to dependent variable. Stata Data Analysis Software was used as a tool for data analyses.

CHAPTER FOUR: DATA ANALYSIS, RESULTS AND DISCUSSION

4.1 Introduction

This chapter dwells on data analysis and presents the results of the output as it discusses the outcome in relation to the objectives that the study intended to accomplish. Stata Data Analysis Software was used (Version 10.1, Stata Corp, and College Station, Texas).The analysis was meant to bring out if there could be any difference in financial performance and condition of Islamic banks and Non Islamic Banks under the hypotheses;

HO: There is no statistical significance difference between Islamic Banks and Non Islamic Banks in terms of their financial performances and conditions in Kenya.

HA: There is statistical significance difference between Islamic Banks and Non Islamic Banks in terms of their financial performances and conditions in Kenya.

4.2 Descriptive Statistics

The table below provides descriptive statistics for the means, standard deviations, minimum, and maximum of the variables.

Table 4.1 : Summary of Descriptive Statistics   .

Bank Type	N	Mean	Sd	Min	Max
Non-Islamic Banks					
DTER	6	7.474667	0.708439	6.342000	8.358000
DTAR	6	0.875333	0.011639	0.854000	0.886000
EM	6	8.235333	0.786160	7.342000	9.358000
ROA	6	1.090667	0.659872	0.326000	1.972000

ROE	6	8.719333	5.168986	2.494000	15.322000
LAR	6	0.593667	0.049176	0.530000	0.660000
LDR	6	0.754000	0.089933	0.658000	0.902000

Islamic Banks

DTER	6	7.696803	1.017699	6.659821	9.119034
DTAR	6	0.880169	0.015666	0.862829	0.901072
EM	6	8.696803	1.017699	7.659821	10.119030
ROA	6	1.100000	0.844145	-0.380000	2.105000
ROE	6	8.179167	7.919269	-5.605000	18.950000
LAR	6	0.620314	0.062100	0.531591	0.687786
LDR	6	0.733887	0.090723	0.614890	0.848553

Total

DTER	12	7.585735	0.844018	6.342000	9.119034
DTAR	12	0.877751	0.013398	0.854000	0.901072
EM	12	8.466068	0.899882	7.342000	10.119030
ROA	12	1.095333	0.722390	-0.380000	2.105000
ROE	12	8.449250	6.382088	-5.605000	18.950000
LAR	12	0.606991	0.055189	0.530000	0.687786
LDR	12	0.743944	0.086763	0.614890	0.902000

Profitability

The table above reveals as per the means indicated that NIBs are better as measured by ROE(8.72 as against 8.18) but there is no marked difference in terms of ROA(1.090667 as against 1.100000).By looking at the variations as revealed by standard deviations ,there seem

to be more volatility on the side of IBs as compared to NIBs (NIBs;ROA:0.659872,ROE:5.168986 and IBs;ROA:0.844145 and ROE:7.919269).

Liquidity

The table indicates that NIBs are worse off as measured by LDR (0.754000 as against 0.733887) but are better when measurement is in terms of LAR (0.593667 as against 0.620314).Here the lower the ratio the better the liquidity position and the higher the ratio the danger it heralds to the victim bank. When a bank gives out more loans relative to the deposits it possesses, it exposes itself in case of a bank rush by the deposit holders which may and do occur at times. So LDR at 75.4% means that the NIBs may be fiddling with financial risk compared to IBs if they are not prepared for the back lash should depositors decide to withdraw in mass. IBs at 73.33887% are relatively better. LAR reveals the position when loans granted are compared with total assets. The picture here can only become clearer if the assets involved are properly decomposed and severally analyzed. Otherwise on the face value the NIBs seem to be managing relatively well.

Risk and Solvency

The table shows that IBs are worse off with respect to Risk and Solvency ratios (DTER, DTAR and EM: 7.697, 0.880 & 8.697 as against 7.475, 0.875 and 8.235). The less Solvency position of IBs is confirmed by the wide variations of the relevant variables (DTER, DTAR, and EM: 1.017699, 0.015666 & 1.017699 for IBs and 0.708439, 0.011639 and 0.786160 for NIBs) when compared against each other in terms of standard deviations. So the higher debt ratios proved that IBs had aggressively financed their growth with outsiders' funds which might have had negative consequences on their solvency position were the debt holder to demand for immediate settlement of their dues.

4.3 Comparison of Financial Performance and Condition with Industry Ratios and Minimum Statutory Requirements.

Table 4.2 Ratios for Comparison

Detail	Islamic Banks averages	Non Islamic banks averages	Industry ratios As at 2015	Minimum Statutory ratios
ROA	1.10%	1.09%	3.86%	N/A
ROE	8.18%	8.72%	24.4%	N/A
LAR=liquidity ratios	100-62.03 =37.97%	100-59.38 =40.62%	38.3%	20%
LDR=liquidity ratios	100-73.39 =26.61%	100-75.25 =24.75%	38.3%	20%

The table above shows that both categories of the banks (both under peer group of small banks) are performing poorly by making profits below the industry averages. This supports the finding that Bank size positively affects the financial performance of both categories of the banks in Kenya [(see for example Talam (2014) and Thomi (2014)].In terms of Liquidity as measured by LAR, IBs at 37.97 % are slightly below **Industry Averages (38.3%)** while NIBs at 40.62% perform better. Both of the models are far better than **Minimum Statutory Requirements (20%).** However, when liquidity is measured by LDR, they perform less than industry averages but remain more liquid than **statutorily imposed.**

4.4 The Correlation Structure

Table 4.3: Correlation analysis of the dependent and independent variables.

	DTER	DTAR	EM	ROA	ROE	LAR	LDR
DTER	1						
DTAR	0.9763*	1					
EM	0.8812*	0.8906*	1				
ROA	-0.4612	-0.4708	-0.4816	1			
ROE	-0.3319	-0.3297	-0.3459	0.9766*	1		
LAR	-0.5312	-0.3876	-0.4872	0.0877	0.0051	1	
LDR	-0.5814	-0.4562	-0.5745	-0.0359	-0.0992	0.9058*	1

The table above indicates that there is a strong positive linear relationship between DTAR and DTER, EM and DTER, EM and DTAR, ROA and ROE, as well as LDR and LAR across the banks.

The table also indicates that there is a negative correlation between ROA and DTAR. This shows that as debt to asset ratio increases, it brings pressure to bear on the generated bank assets which have to be consumed in order to settle the debts and thus resulting to lowering of the profits at a proximate rate of 47.08 % as measured by the ROA. There is also a negative correlation-ship between ROE and DTER. This means that as DTER increases, it lowers ROE by approximately 33.19%.It means too much debt in the capital structure of banks can have adverse effects on the earnings of Equity holders.

We also find that there is a negative linear correlation between LAR and LDR on one hand and DTER and DTAR on the other hand. It means that debt negatively affects a bank

liquidity position. LAR is weakly positively correlated with ROA and ROE (8.77% and 0.51%) respectively. It means that liquidity position has less effect on the banks in terms of their profitability when considered against the backdrop of LAR.But when the comparison is reduced to LDR, the equation changes and we witness weak negative linear relation-ship with ROA and ROE (3.59% and 9.92%) respectively. It still boils down to one thing that liquidity has less effect on the banks performance.

We also witness a negative linear relationship between DTAR, DTER, and EM on one hand and ROA and ROE on the other side. The lesson being learnt is that as the bank increases debts in its capital structure, it is likely to face volatile earnings due to interest expenses (Onakoya & Onakoya, 2013).

4.5 Results from Repeated Measures Analysis of Variance (rANOVA)

One-way repeated measures analysis of variance (rANOVA) was used to determine if there was a significant difference in the means of each of the seven ratios between the two types of banks over its time course (6-year period). The significance of the difference was measured at 95% confidence level.

The results showed that there were no significant differences in the means of the ratios DTER, DTAR, EM, ROA, ROE and LAR between Islamic and Non-Islamic banks over the six-year period, $F(5,5) = 0.63$, p=0.758; $F(5,5) = 0.56$, p=0.729; $F(5,5) = 1.35$, p=0.374; $F(5,5) = 0.22$, p=0.938; $F(5,5) = 0.37$, p=0.850; $F(5,5) = 4.23$, p=0.070.The results however showed that there was a statistical significant difference in the means of the LDR between Islamic and Non-Islamic banks over the six-year period, $F(5,5) = 8.79$, p=0.016.This indicates that IBs show good financial condition in terms of liquidity as compared to NIBs as measured by Loan to Deposit Ratio(LDR).

Table 4.4: Profitability Under ROA Analysis

```
. anova profitability_roa bank_type years, repeated(years)

                        Number of obs =       12     R-squared     =  0.1820
                        Root MSE      = .969086     Adj R-squared = -0.7996

          Source │   Partial SS    df       MS            F      Prob > F

           Model │   1.04467999     6   .174113331       0.19      0.9682

       bank_type │    .000261332    1   .000261332       0.00      0.9873
           years │   1.04441866     5   .208883731       0.22      0.9377

        Residual │   4.69563874     5   .939127749

           Total │   5.74031873    11   .521847157


Between-subjects error term:  bank_type
                   Levels:  2             (1 df)
    Lowest b.s.e. variable:  bank_type

Repeated variable: years
                                        Huynh-Feldt epsilon          =      .
                                        Greenhouse-Geisser epsilon =   0.2000
                                        Box's conservative epsilon =   0.2000

                                        ─────────── Prob > F ───────────
          Source │     df      F    Regular    H-F      G-G       Box

           years │      5    0.22   0.9377      .      0.7195    0.7195
        Residual │      5
```

ROA---F(5,5) = 0.22, p=0.938; There is no statistical significance difference in terms of return on assets as indicated by the output above.0.938>0.05

Table 4.5: Profitability Under ROE Analysis

```
. anova profitability_roe bank_type years, repeated(years)

                        Number of obs =      12    R-squared      =  0.2721
                        Root MSE      = 8.07605    Adj R-squared = -0.6013

            Source  |  Partial SS   df      MS              F     Prob > F

             Model  |  121.928965    6  20.3214942         0.31    0.9059

         bank_type  |  .875339405    1  .875339405         0.01    0.9123
             years  |  121.053626    5  24.2107251         0.37    0.8496

          Residual  |  326.112526    5  65.2225053

             Total  |  448.041491   11  40.7310447
```

```
Between-subjects error term:  bank_type
                   Levels:  2          (1 df)
    Lowest b.s.e. variable:  bank_type

Repeated variable: years
                                    Huynh-Feldt epsilon         =     .
                                    Greenhouse-Geisser epsilon =     .
                                    Box's conservative epsilon =  0.2000

                                             ————— Prob > F —————
            Source  |   df     F    Regular    H-F      G-G      Box

             years  |    5   0.37   0.8496      .        .      0.6516
          Residual  |    5
```

ROE -----F(5,5) = 0.37, p=0.850;similarly,the the output indicates no statistical significance

difference between the banks when profits are measured by return on equity.0.850>.05

34

Table 4.6 Liquidity Under LDR Analysis

```
. anova liquidity_ldr bank_type years, repeated(years)

                       Number of obs =      12    R-squared     =  0.8993
                       Root MSE      =  .04083    Adj R-squared =  0.7785

          Source |  Partial SS    df      MS              F     Prob > F

           Model |  .074471226     6  .012411871          7.45    0.0218

       bank_type |   .00121357     1   .00121357          0.73    0.4325
           years |  .073257657     5  .014651531          8.79    0.0162

        Residual |  .008335254     5  .001667051

           Total |   .08280648    11  .007527862
```

```
Between-subjects error term:  bank_type
                     Levels:  2          (1 df)
      Lowest b.s.e. variable:  bank_type

Repeated variable: years
                                    Huynh-Feldt epsilon         =    .
                                    Greenhouse-Geisser epsilon =  0.2000
                                    Box's conservative epsilon =  0.2000

                                    ———————— Prob > F ————————
          Source |   df     F    Regular   H-F    G-G      Box

           years |    5   8.79   0.0162     .    0.2071   0.2071
        Residual |    5
```

0.0162<0.05

Here $F_{(5,5)} = 8.79$, p=0.0162; and therefore there is statistical significant difference in liquidity between the banks as measured by LDR.This shows that IBs are more liquid than their counter parts.

Table 4.7: Liquidity Under LAR Analysis

```
. anova liquidity_lar bank_type years, repeated(years)

                      Number of obs =      12     R-squared      =  0.8210
                      Root MSE      = .034634     Adj R-squared =  0.6062

          Source |  Partial SS    df      MS              F     Prob > F

           Model |  .027506221     6   .00458437          3.82    0.0814

       bank_type |  .002130307     1   .002130307         1.78    0.2401
           years |  .025375914     5   .005075183         4.23    0.0697

        Residual |  .005997602     5    .00119952

           Total |  .033503823    11   .003045802


Between-subjects error term:  bank_type
                    Levels:  2           (1 df)
    Lowest b.s.e. variable:  bank_type

Repeated variable: years
                                    Huynh-Feldt epsilon           =    .
                                    Greenhouse-Geisser epsilon =  0.2000
                                    Box's conservative epsilon =  0.2000

                                              ------- Prob > F -------
          Source |   df     F    Regular    H-F      G-G       Box

           years |    5    4.23   0.0697      .     0.2881    0.2881
        Residual |    5
```

0.0697>0.05

$F_{(5, 5)} = 4.23$, 0.0697 this indicates that there is no statistical significant difference in liquidity between the means of the ratios of the banks as measured by LAR.

Table 4.8: Risk and Solvency Under DTAR Analysis

```
. anova risksolvency_dtar bank_type years, repeated(years)

                    Number of obs =      12     R-squared       =  0.3826
                    Root MSE      = .015615     Adj R-squared = -0.3582

        Source │  Partial SS    df       MS              F     Prob > F

         Model │  .000755509     6   .000125918         0.52     0.7778

     bank_type │  .000070154     1   .000070154         0.29     0.6147
         years │  .000685355     5   .000137071         0.56     0.7287

      Residual │  .001219064     5   .000243813

         Total │  .001974573    11   .000179507

Between-subjects error term:  bank_type
                    Levels:  2          (1 df)
    Lowest b.s.e. variable:  bank_type

Repeated variable: years
                                    Huynh-Feldt epsilon        =    .
                                    Greenhouse-Geisser epsilon =    .
                                    Box's conservative epsilon =  0.2000

                                         ───────── Prob > F ─────────
        Source │   df     F    Regular    H-F      G-G       Box

         years │    5    0.56   0.7287      .        .       0.5904
      Residual │    5
```

0.7287>0.05

 F(5,5) = 0.56, p=0.729 this is an indication that there was no statistical significant difference between the means of the ratios as measured by DTAR between the two banking models.

Table 4.9: Risk and Solvency Under DTER Analysis

```
. anova risksolvency_dter bank_type years, repeated(years)

                    Number of obs =        12    R-squared      =  0.3968
                    Root MSE      = .972304    Adj R-squared = -0.3271

        Source  |  Partial SS    df       MS             F     Prob > F

         Model  |  3.10914434     6   .518190723        0.55     0.7576

     bank_type  |  .148033447     1   .148033447        0.16     0.7086
         years  |  2.96111089     5   .592222178        0.63     0.6899

      Residual  |  4.72687694     5   .945375388

         Total  |  7.83602128    11   .712365571


Between-subjects error term:  bank_type
                    Levels:   2          (1 df)
     Lowest b.s.e. variable:  bank_type

Repeated variable: years
                                   Huynh-Feldt epsilon        =     .
                                   Greenhouse-Geisser epsilon =  0.2000
                                   Box's conservative epsilon =  0.2000

                                         ———————— Prob > F ————————
        Source  |   df     F    Regular    H-F     G-G      Box

         years  |    5    0.63   0.6899      .     0.5738   0.5738
      Residual  |    5
```

0.6899>0.05

The result shows that there was no significant difference in the means of the ratios of DTER between Islamic and Non-Islamic banks over the six-year period, $F(5,5) = 0.63$, p=0.6899.

Table 4.10: Risk and Solvency Under EM Analysis

```
. anova risksolvency_em bank_type years, repeated(years)

                    Number of obs =      12     R-squared     =  0.6053
                    Root MSE      = .838562     Adj R-squared =  0.1316

        Source │  Partial SS    df       MS              F     Prob > F

         Model │  5.3917275      6   .898621251         1.28     0.4029

     bank_type │  .638862054     1   .638862054         0.91     0.3843
         years │  4.75286545     5    .95057309         1.35     0.3744

      Residual │  3.5159298      5   .703185961

         Total │  8.90765731    11   .809787028
```

```
Between-subjects error term:  bank_type
                    Levels:   2          (1 df)
       Lowest b.s.e. variable: bank_type

Repeated variable: years
                                      Huynh-Feldt epsilon          =      .
                                      Greenhouse-Geisser epsilon =  0.2000
                                      Box's conservative epsilon =  0.2000

                                              ──────── Prob > F ────────
        Source │     df      F     Regular    H-F     G-G      Box

         years │      5    1.35    0.3744      .      0.4522   0.4522
      Residual │      5
```

0.374>0.05

The result shows that there was no significant difference in the means of the ratios of EM between Islamic and Non-Islamic banks over the six-year period, $F_{(5,5)} = 1.35$, p=0.374;

4.6 Results of Discriminant Function Analysis

Discriminant function analysis was performed using Stata 13.0.for the two groups of the banks. "The Null Hypothesis is that the means of the two groups on the Discriminant Function-the centroids, are equal. Centroids are the mean discriminant score for each group. The standardized discriminant function coefficients in the table serve the same purpose as beta weights in Multiple Regressions (partial coefficient), they indicate the relative

importance of the independent variables in predicting the dependent variable. They allow you to compare variables measured on different scales. Coefficients with large absolute values correspond to variables with greater discriminating ability" (http://core.ecu.edu.2015).

Table 4.11 Standardized Canonical Discriminant Function Coefficients

Variable	Coefficient
DTER	-0.41324
DTAR	0.585958
EM	-0.24826
ROA	-2.41402
ROE	2.895252
LAR	-2.30089
LDR	2.274883

Because there are only two groups in the dataset: Islamic and Non-Islamic types of banks, we have only one discriminant function, which is shown below:

Discriminant_Score_1 = -0.413*DTER + 0.586*DTAR - 0.248*EM-2.414*ROA+2.895*ROE-2.301*LAR+2.275*LDR

From the results, it can be seen that the variable ROE has the largest absolute standardized discriminant function coefficient (loading). The loading for ROE is the largest, indicating that it contributes most to the discrimination between the two types of banks. It has the largest contribution to the discriminating power of the function. It is followed by ROA, LAR ,LDR,DTAR,DTER, and lastly EM.

Table 4.12: Canonical Linear Discriminant Analysis

Fcn	Canon. Corr.	Eigen-value	Variance Prop.	Cumula.	Likelihood Ratio	F	df 1	df 2	Prob>F
1	0.5642	0.467078	1.0000	1.0000	0.6816	2.2687	7	34	0.0523 e

Ho: this and smaller canon. corr. are zero;   e = exact F

The canonical correlation coefficient of 0.56 for the function shows that the predictive power of the variable is somehow weak, with exact F-statistic value of 2.2687 and p-value of 0.0523.

Table 4.13: Reclassification Matrix:

```
Resubstitution classification summary

 ┌──────────┐
 │   Key    │
 ├──────────┤
 │ Number   │
 │ Percent  │
 └──────────┘

True           Classified
bank_type        Islamic  Non-Islamic        Total

    Islamic            9            3           12
                   75.00        25.00       100.00

Non-Islamic            9           21           30
                   30.00        70.00       100.00

      Total           18           24           42
                   42.86        57.14       100.00

     Priors       0.5000       0.5000
```

The matrix shows us that IBs out of twelve trials are 9 times correctly classified and 3 times wrongly classified and thus scored 75% and 25% respectively.On the other side NIBs out of

30 trials are 21 times correctly classified and only 9 times misclassified and hence scored 70% and 30% respectively .Overall, Islamic Banks scored 42.86% and Non Islamic, 57.14% out of 42 trials. Meaning, it may be relatively easier to predict NIBs (above 50% by only 7.14%) than IBs given the discriminating score This further supports the canonical correlation coefficient of 0.56 above that indicates that the predictive power of the variable is somewhat weak, with exact F-statistic value of 2.2687 and p-value of 0.0523 respectively.

4.7 Discussion of Results

The objective of the study was to compare the financial performance and condition of IBs and NBs in Kenya. Secondary data was used originating from the audited financial statements of the relevant banks under the study. The ratios calculated revealed varied results.

On financial performance, the Profitability ratios reveal that NIBs are better as measured by ROE (8.72 as against 8.18) but there is no marked difference in terms of ROA (1.090667 as against 1.100000). Discriminant Function Analysis model also corroborated the results by indicating that ROE has a higher absolute value and thus more predictive than the other variables. Jamal (2013) in Kenya also discovered that NIBs overall do better than IBs in terms of financial performances but does not find any significant difference between the two models which is also supported by Tanim-Ul-Islam and Ashrafuzzaman (2015) in Bangladesh. The Industry ratios confirm that small banks do not perform as well as large banks and that the IBs are less profitable than NIBs in the same peer group which Garo (2013) study attributes to "relative market power theory". Therefore, Bank size positively affects the financial performance of both categories of the banks in Kenya [(see for example Talam (2014) and Thomi (2014)].According to Bhattacharyya et al.,(1997) as cited by Onakoya & Onakoya (2013) ,size normally has a positive correlation with the technical

efficiency in the firms' performance in the banking industry and therefore leads to better profitability prospects.

The liquidity position of IBs was better off on the basis of LDR although slipped on the basis of LAR. It also came out that there was statistical significant difference in liquidity conditions between the banks. LDR between IBs and NIBs over the six-year period was found under analysis thus ;$F_{(5,5)} = 8.79$, p=0.016.This indicated that IBs showed good financial condition in terms of liquidity as compared to NIBs as measured by Loan to Deposit Ratio. This corroborates Halkano (2012) and Jamal (2013) in Kenya, though to both of them there was no statistical significance difference in liquidity between the two models. Usman and Khan (2012) in Pakistan also found IBs to be more liquid than their counter parts and this was also reported by Khaskhelly (2015) in the same country. Tanim-Ul-Islam and Ashrafuzzaman (2015) on the financial performance between IBs and NIBs in Bangladesh also found Islamic Banks to be more liquid than the NIB. Kamaruddin & Mohd (2013) in Malaysia after a similar result attributed it to the need of IBs to be necessarily conformist and strictly adhere to the Islamic laws in safe-guarding the concern of their clients. Onakoya & Onakoya (2013) study in the United Kingdom similarly found IBs to be less prone to liquidity risk as compared to NIBs. Ali (2011) tried to explain the reasons behind large amount of liquidity on the side of IBs and gave two reasons. First, IBs don not have lender of last resort facility and given that they cannot access interbank market and secondly, that excess liquidity is predominant also due to "lack of interest free short term investment". It was also found that LAR is weakly positively correlated with ROA and ROE (8.77% and 0.51%) respectively. It means that liquidity position has less effect on the banks in terms of their profitability when considered against the backdrop of LAR.But when the comparison is reduced to LDR, the equation changes and we witness weak negative linear relation-ship with

ROA and ROE (3.59% and 9.92%) respectively. It still boils down to one thing that liquidity has less effect on the banks performance. This was also the finding of Inyangala(2014) in Kenya.

The financial conditions as revealed by Risk and Solvency ratios indicate that IBs are less solvent as compared to NIB (DTER, DTAR and EM: 7.697, 0.880 & 8.697 as against 7.475,0.875 and 8.235).This is not good news as it confirms the contention of Damodaran (2003) and Fisher (1989) as cited by Ng'ang'a (2013)if it turns out to be true, that an increase in debt level naturally aggravates a firm's financial wellbeing. Nevertheless, this study did not find any statistical significant difference in solvency between the two models. This corroborates the finding of Halkano (2012) in Kenya.

CHAPTER FIVE: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

In this chapter, we summarize the outcomes of our study while sticking to the objectives that was to be achieved. The findings are discussed together with their implications. Recommendations drawn on the findings are also offered while at the same time the limitations of the study are presented alongside the areas that still call for further research.

5.2 Summary of Results

The objective of this study was to compare the financial condition and performance of Islamic banks and Non-Islamic banks in Kenya using three indicators namely; profitability, liquidity, risk and solvency.

The study found out that NIBs were better off on the basis of ROE (8.72% as against 8.18%) but failed to replicate the same on the basis of ROA (1.09% as against 1.10%). On Liquidity aspect, there were mixed results as IBs were better in terms of LDR (73.39% as against 75.40%) but failed to maintain the position on the basis of LAR (62.03% as against 59.38%).But it turned out that the Liquidity position of IBs was statistically significant in terms of LDR. The question now is, does the liquidity position of IBs have something to do with their poor performance?, the answer however is not an emphatic no but found in the correlations matrix that indicated weak linear correlation between ROA and ROE on one hand and LAR and LDR on the other hand. This is corroborated in the study by Inyangala (2014).This however only implies that liquidity has less effect but it cannot be concluded that it has no effect at all. On Liquidity as measured by LAR, IBs at 37.97% perform below Industry Averages (38.3% as at 2015) but NIBs at 40.62% are better off. On the other hand

the liquidity of both streams are better than Minimum Statutory Requirement of 20%. However, when liquidity is measured by LDR, both categories (26.61% and 24.75% for IBs and NIBs respectively) scored less than industry averages of 38.3%   but still more liquid than statutorily imposed. The data also revealed that IBs were less solvent and thus faced more risk as compared to NIBs which were better off. On the basis of the data; (DTER, DTAR and EM: 7.697, 0.880 & 8.697 as against 7.475, 0.875 and 8.235).

5.3 Conclusion

What came out of the study is that IBs seem to be relatively more liquid but less solvent. That means as much as they are able to attract funds from outside which enhances their liquidity, they are not able in equal measure to identify viable investment opportunities in which to invest those funds and as a result they become heavily indebted and as a consequence, the degree of their solvency is reduced. Some people have attributed this to lack of interest free investments in which they are allowed to engage in .The IBs have more debts in their capital structure than their counter parts. Financial leverage portends both benefits and risks at the same time thus act as a double-edged sword because it has the potential of increasing shareholders earnings as well as intensifying their risk exposures. As long as return on capital employed is higher than the interest rate, a firm can borrow more funds as this will benefit the shareholders as they "trade on equity". Conversely, if rate of interest is higher than return on capital employed, the risk outweighs the benefits. The IBs seem to be acting in the contrary in this respect as they are relatively geared but perform below par. There is a negative linear relationship between DTAR, DTER, and EM on one hand and ROA and ROE on the other side. As the bank increases debts in its capital structure, the earnings become volatile due to interest expenses. This is witnessed in both categories of the banks.

5.4 Policy Recommendations

From the study, IBs should strive to be more innovative so as to discover avenues through which they can invest the debts they attract for them to be more profit efficient and reduce their risk exposures. On the other hand both IBs (26.61%) and NIBs(24.75%) should review their liquidity positions considering the hazard it may pose to them in the long run because both streams are less liquid by the industry averages(38.3%) as measured by LDR albeit statutorily compliant.

5.5 Limitations

The number of pure Islamic Banks is limited to only two Banks and this restricted the scope of choice and the result may not meet generalization standards as data was confined to the number available. Again, some of the Banks chosen had negative profits on both sides which might have interfered with the validity of the results as these could not be controlled. The period under study was also restricted to 6 years given the inception of the IBs and of course their teething problems thereafter that had to be taken into account before meaningful comparison could be made with the entrenched NIBs.

5.6 Suggestions for Further Study

An area that may require investigation is to compare Pure Islamic Banks, Pure Conventional Banks and a hybrid of these banking models. This may bring out the effects of Islamic banking products on their performance.

Another area worth looking into which has never been done in Kenya before, to the researcher's knowledge, is to compare the cost efficiency and profit efficiency between these two banking models.

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APPENDICES

Appendix I: A Comprehensive List of Commercial Banks in Kenya as at 2015

LIST OF COMMERCIAL BANKS IN KENYA	NUMBER OF BRANCHES	PEER GROUP			
			21.GUARANTY TRUST BANK	16	SMALL
			22.FIRST COMMUNITY BANK	18	SMALL
1.AFRICAN BANKING CORPORATION	11	SMALL	23.GIRO COMMERCIAL BANK	8	SMALL
2.BANK OF AFRICA	42	MEDIUM	24.GUARDIAN BANK	10	SMALL
3.BANK OF BARODA	13	MEDIUM	25.GULF AFRICAN BANK	17	SMALL
4.BANK OF INDIA	7	MEDIUM	26.HABIB BANK A.G ZURICH	6	SMALL
5.BARCLAYS BANK OF KENYA	108	LARGE	27.HABIB BANK	6	SMALL
6.CFC STANBIC BANK	27	MEDIUM	28.IMPERIAL BANK	26	MEDIUM
7.CHARTER HOUSE BANK	10	SMALL	29.I & M BANK	34	MEDIUM
8.CHASE BANK (K)	44	MEDIUM	30.JAMII BORA BANK	27	SMALL
9.CITIBANK N.A KENYA	3	MEDIUM	31.KENYA COMMERCIAL BANK	193	LARGE
10.COMMERCIAL BANK OF AFRICA	31	LARGE	32.SIDIAN BANK(FORMERLY K-REP)	37	SMALL
11.CONSOLIDATED BANK OF KENYA	17	SMALL	33.MIDDLE EAST BANK	5	SMALL
12.COOPERATIVE BANK OF KENYA	142	LARGE	34.NATIONAL BANK OF KENYA	81	MEDIUM
13.CREDIT BANK	15	SMALL	35.NIC BANK	31	MEDIUM
14.DEVELOPMENT BANK OF KENYA	3	SMALL	36.ORIENTAL COMMERCIAL BANK	9	SMALL
15.DIAMOND TRUST BANK	59	LARGE	37.PARAMOUNT UNIVERSAL BANK	7	SMALL
16.ECOBANK KENYA	31	MEDIUM	38.PRIME BANK	20	MEDIUM
17.EQUATORIAL COMMERCIAL BANK	13	SMALL	39.STANDARD CHARTERED BANK	38	LARGE
18.EQUITY BANK	167	LARGE	40.TRANS NATIONAL BANK LTD	21	SMALL
19.FAMILY BANK	88	MEDIUM	41.UBA KENYA BANK	4	SMALL
20.FIDELITY COMMERCIAL BANK	15	SMALL	42.VICTORIA COMMERCIAL BANK	4	SMALL

Abbreviations used for banks reviewed

1) FCB…First Community Bank Ltd

2) GAB…Gulf African Bank Ltd

3) ABC…African Banking Corporation

4) CONB…Consolidated Bank Ltd

5) CRDB…Credit Bank Ltd

6) FIDCB…Fidelity Commercial Bank Ltd

7) GB…Guardian Bank Ltd

Appendix II: Data Summary

SUMMARY OF THE DATA

	FCB	GAB	AVER			ABC	CONB	CRDB	FIDCB	GB	AVER
ROA					**ROA**						
2010	-1.53%	0.77%	-0.38%		**2010**	3.25%	1.65%	0.75%	3.27%	0.94%	1.97%
2011	0.82%	0.74%	0.78%		**2011**	2.94%	0.98%	0.87%	1.84%	1.32%	1.59%
2012	2.42%	1.79%	2.10%		**2012**	2.13%	-0.20%	0.81%	0.77%	1.31%	0.96%
2013	1.17%	1.78%	1.47%		**2013**	2.45%	-0.65%	0.81%	1.79%	2.15%	1.31%
2014	0.33%	2.04%	1.18%		**2014**	0.66%	-1.15%	-0.97%	1.58%	1.79%	0.38%
2015	-0.08%	2.95%	1.43%		**2015**	0.81%	0.34%	-0.57%	-0.52%	1.57%	0.32%
GROUP	**AVER**	1.10%							**GROUP AVER**		1.09%
ROE					**ROE**						
2010	-17.25%	6.04%	-5.61%		**2010**	19.74%	11.68%	3.57%	33.69%	7.93%	15.32%
2011	8.53%	7.23%	7.88%		**2011**	20.87%	10.42%	4.91%	19.64%	10.95%	13.36%
2012	22.39%	15.51%	18.95%		**2012**	17.74%	-2.71%	4.40%	7.72%	12.61%	7.95%
2013	10.92%	10.63%	10.78%		**2013**	18.16%	-8.75%	4.76%	16.23%	18.43%	9.77%
2014	3.32%	12.78%	8.05%		**2014**	5.70%	-11.09%	-7.47%	15.10%	14.88%	3.43%
2015	-0.75%	18.80%	9.02%		**2015**	6.65%	2.93%	-4.19%	-4.48%	11.56%	2.49%
GROUP	**AVER**	8.18%							**GROUP AVER**		8.72%
LAR					**LAR**						
2010	0.467633883	0.65362	56.06%		**2010**	0.51	0.58	0.43	0.54	0.59	52.95%
2011	0.487150426	0.57603	53.16%		**2011**	0.56	0.60	0.53	0.61	0.69	59.93%
2012	0.54752029	0.69656	62.20%		**2012**	0.51	0.56	0.49	0.56	0.60	54.37%
2013	0.637881479	0.66435	65.11%		**2013**	0.56	0.65	0.59	0.57	0.65	60.28%
2014	0.639186568	0.69827	66.87%		**2014**	0.62	0.61	0.62	0.62	0.66	62.75%
2015	0.751134924	0.62444	68.78%		**2015**	0.68	0.65	0.69	0.65	0.63	65.99%
GROUP	**AVER**	62.03%							**GROUP AVER**		59.38%
LDR					**LDR**						
2010	0.531778087	0.76826	65.00%		**2010**	0.64	0.76	0.59	0.62	0.68	65.60%
2011	0.545069907	0.68471	61.49%		**2011**	0.68	0.77	0.73	0.69	0.80	73.29%
2012	0.617311467	0.80848	71.29%		**2012**	0.65	0.74	0.65	0.63	0.68	66.99%
2013	0.726070106	0.82233	77.42%		**2013**	0.70	0.93	0.79	0.65	0.75	76.02%
2014	0.73212448	0.87341	80.28%		**2014**	0.83	0.87	0.77	0.75	0.76	79.56%
2015	0.885830561	0.81128	84.86%		**2015**	0.94	0.92	0.98	0.93	0.74	90.04%
GROUP	**AVER**	73.39%							**GROUP AVER**		75.25%
DTER					**DTER**						
2010	10.28717457	6.8393	8.56		**2010**	5.07	6.09	3.78	9.30	7.47	6.34
2011	9.447740552	8.79033	9.12		**2011**	6.09	9.68	4.63	9.69	7.30	7.48
2012	8.239208224	7.68569	7.96		**2012**	7.33	12.38	4.44	9.00	8.64	8.36
2013	8.342570625	4.97707	6.66		**2013**	6.41	12.51	4.91	8.08	7.59	7.90
2014	9.066419278	5.27476	7.17		**2014**	7.54	8.62	6.70	8.53	7.30	7.74
2015	8.037328556	5.37404	6.71		**2015**	7.13	7.75	6.39	7.53	6.36	7.03
GROUP	**AVER**	7.70							**GROUP AVER**		7.47
DTAR					**DTAR**						
2010	0.911403869	0.87244	0.89		**2010**	0.84	0.86	0.79	0.90	0.88	0.85
2011	0.904285525	0.89786	0.90		**2011**	0.86	0.91	0.82	0.91	0.88	0.87
2012	0.891765617	0.88487	0.89		**2012**	0.88	0.93	0.82	0.90	0.90	0.88
2013	0.892963078	0.83269	0.86		**2013**	0.87	0.93	0.83	0.89	0.88	0.88
2014	0.90065981	0.84063	0.87		**2014**	0.87	0.90	0.87	0.90	0.88	0.88
2015	0.889347832	0.84311	0.87		**2015**	0.87	0.89	0.86	0.88	0.86	0.87
GROUP	**AVER**	0.88							**GROUP AVER**		0.87
EM					**EM**						
2010	11.28717457	7.8393	9.56		**2010**	6.07	7.09	4.78	10.30	8.47	7.34
2011	10.44774055	9.79033	10.12		**2011**	7.09	10.68	5.63	10.69	8.30	8.48
2012	9.239208224	8.68569	8.96		**2012**	8.33	13.38	5.44	10.00	9.64	9.36
2013	9.342570625	5.97707	7.66		**2013**	0.01	13.51	5.91	9.08	8.59	7.42
2014	10.06641928	6.27476	8.17		**2014**	8.65	9.62	7.70	9.53	8.30	8.76
2015	9.037328556	6.37404	7.71		**2015**	8.14	8.75	7.39	8.53	7.36	8.05
GROUP	**AVER**	8.70							**GROUP AVER**		8.24

Appendix III: Introductory Letter

UNIVERSITY OF NAIROBI

SCHOOL OF BUSINESS

KISUMU CAMPUS

Telephone: 732160 Ext. 208
Telegrams: "Varsity", Nairobi
Telex: 22095 Varsity

P.O. Box 19134-40123
Kisumu, Kenya

Ref: CHSS-SOB D61/75684/2014

August 3, 2016

TO WHOM IT MAY CONCERN

The bearer of this letter Polycap Obote Olweny,

REGISTRATION NO: D61/75684/2014

The above named student is in the Master of Business Administration Degree Program. As part of requirements for the course, he is expected to carry out a study on "**A comparative Study of Financial condition and performance of Islamic Banks and non-Islamic Banks in Kenya**". He has identified your organization for that purpose. This is to kindly request your assistance to enable him complete the study.

The exercise is strictly for academic purposes and a copy of the final paper will be availed to your organization on request.

Your assistance will be greatly appreciated.

Thanking you in advance.

Sincerely,

UNIVERSITY OF NAIROBI
SCHOOL OF BUSINESS
KISUMU CAMPUS

0 3 AUG 2016

RECEIVED

DR. NIXON OMORO
ASST. COORDINATOR, SOB, KISUMU CAMPUS

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Appendix IV: Turnitin Software Summary Report

comparative study of finacial condition and performance of islamic and non islamic banks in kenya

ORIGINALITY REPORT

%13	%11	%3	%8
SIMILARITY INDEX	INTERNET SOURCES	PUBLICATIONS	STUDENT PAPERS

PRIMARY SOURCES

1	chss.uonbi.ac.ke Internet Source	%2
2	Submitted to Strathmore University Student Paper	%1
3	www.managementparadise.com Internet Source	<%1
4	erepository.uonbi.ac.ke Internet Source	<%1
5	www.bue.edu.eg Internet Source	<%1
6	www.casestudiesjournal.com Internet Source	<%1
7	banglajol.info Internet Source	<%1
8	Submitted to Higher Education Commission Pakistan Student Paper	<%1
9	www.scribd.com Internet Source	<%1