THE EFFECT OF FINANCIAL STRUCTURE ON THE FINANCIAL PERFORMANCE OF CONVENTIONAL AND ISLAMIC BANKS IN KENYA

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DECLARATION

This research project is my original work and has not been presented for a degree in any other university

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DEDICATION

I dedicate this project to my parents, Mr. And Mrs. Ng'ang'a for their support and encouragement during the entire period of my study. To my sisters and grandmother for their continued prayers towards the successful completion of this course.

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LIST OF ABBREVIATIONS

BIMB - Bank Islam Malaysia Berhad

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

CAR - Capital Adequacy Ratio

CBK- Central Bank of Kenya

CORE - Centralised Online Real-time Environment

DER - Debt to Equity Ratio

GDP - Gross Domestic Product

ICT- Information and Communication Technology

IMF - International Monetary Fund

MENA- Middle East and Northern Africa

NIM - Net Interest Margin

ROA - Return on Asset

ROE - Return on Equity

SPSS - Statistical Package for Social Science

ABSTRACT

This study is set out to find the effect that financial structure has on the financial performance of conventional banks as well as that of Islamic banks. The study used secondary data with information obtained from the banks' financial statements as well as the central bank of Kenya's "Bank supervision annual report". The study adopted a descriptive research design which involved a study of sampled conventional banks and Islamic banks. Secondary data was collected from five conventional banks and the two Islamic banks in Kenya. CBK classifies banks into large, medium and small. Since the two Islamic banks in Kenya fall under the small category, the study did a random sampling out of the twenty banks falling under the small category and sampled five for purposes of comparison. This is similar to Halkano (2012) who carried out a comparative case study on the performance of two Islamic banks and five conventional banks in Kenya.

The study found out that conventional banks displayed a clear relationship between all the financial structure variables and financial performance whereas for Islamic banks only the assets had a relationship with the financial performance. The study revealed that Islamic banks did not have debt to equity ratio in their financial structures mix, unlike conventional banks. This exposes Islamic banks to more risks compared to conventional banks. This study recommends that the government should introduce policies that would: provide interest free investment opportunities to Islamic banks, provide fair competition grounds to both Islamic and conventional banks as well as introduce measures that would reduce risks to new Islamic banks such as interest free lending rates from CBK.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Nowadays the banks play a significant role in our society, and it is not even possible to imagine the life without banks, in other words the banks have become a blood vein of our economy. In order to stimulate the economy of any specific country the government does this via banking system by using "Monetary Tools". Moreover, all of the finance and business transactions that we are being involved in are done through the banks.

The requirement of short term funds changes from time to time. Therefore, there is no such rigid policy implemented to proportionate the sources of short term funds. On the other hand, a definite policy is to be required to generate long term funds and it is known as capital structuring of the organization (Sidra et. al., 2013). Decisions about the debt-equity ratio and dividend are the important issue of this policy. The corporate enterprises can get long-term funds from various resources such as share capital (owners' investment) and debentures (creditors' investment). The profit earned from business activities may be distributed to the shareholders in form of dividend or may be retained in the business. The retained profit is a form of reinvestment in the business and it is owners' funds. Therefore, this source is also a part of long term funds available to any business. All these sources construct the capital structure for the business.

1.1.1 Financial Structure

Financial structure comprises of debt and equity used to finance the firm. The ability of the firm to carry out their stakeholders need is closely related to the capital structure. Financial structure in financial context means the way a firm finances its assets across the blend of debt, equity or hybrid securities (Saad, 2010). It is not normally easy to determine. The importance of the capital structure of a firm lies in the power inherent in it. It affects real decisions to a company on production, employment and investment (Haris and Raviv, 1991). This applies to banks as well. Details of the structures such as ownership directly influence the financial structures of the firm (Ongore, 2011).

Demirguc-Kunt and Levine (1999) constructed indices of the organization of the financial structure, for a large set of developing and developed countries. They measure the relative importance of bank vs. market finance by the relative size of stock aggregates, by relative trading or transaction volumes, and by indicators of relative efficiency. Such measures have been useful in determining the level of development of the companies as well economies – and categorized as developing developed. Developing countries are shown to have less developed banks and stock markets in general. The financial sector - banks, other financial intermediaries and stock markets - becomes larger, more active and more efficient, as countries become richer. Further, in developing countries financial systems tend to be more bank-based.

1.1.2 Financial Performance

Investopedia.com defines financial performance as a subjective measure of how well a firm can use assets from its primary mode of business and generate revenues. It adds on that the term is also used as a general measure of a firm's overall financial health

over a given period of time, and can be used to compare similar firms across the same industry or to compare industries or sectors in aggregation.

The Banking profits have gained significant importance in recent years as banks are the institutions, which contribute for overall economic activities that are happening in any country. Post 1990's, due to financial liberalization and deregulation of Banks, there has been entry of foreign banks and some large private sector banks with the huge capital and man power has played a key role in Indian economy. Even public sector has not lagged behind as they have constantly changed and adapted to the new technological innovations (like Centralised Online Real-time Environment-CORE Banking Solutions, Basel Capital Adequacy Norms) and so on.

Banks traditional mode of getting funds at a low cost and the spread between getting funds and providing loans and advances has reduced. Thus, traditional banking activities yielded low profits and banks started looking for new avenues for increasing their bottom-line (Chowdhury A. and S. Chowdhury, 2010). According to Chowdhury, banking conventions usually suggests that with the increase in fee based income, risks can be diversified. Thus, some banking industries, like the Indian banking sector, have to focus on fee based income like other developed nations. According to industry estimates the fee based income has contributed only 25% out of total income as on 31st March, 2008 and expected to increase over years. Thus it becomes important to understand the factors play in total profit, total income, interest income and non- interest income in order to provide stability to business of banking.

The Banks in advanced economies are moving with slow credit growth along with insufficient capitalization and weak funding positions. The customer's confidence in the banking system was severely affected due to changing sovereign risks in the Euro

area. Compared to this, in India, banks are well capitalized, with their asset quality and profitability indicating significant improvement over the previous year. There was fast reformation in credit off take during 2010-11 when compared to the subdued growth in 2009-10 (Reserve Bank of India, 2012).

The Banks liquidity position was severely affected due to increasing mismatches in deposits and credit growth rates, apart from several structural components such as huge gaps in maturity of assets and liabilities due to increasing exposure in infrastructure projects, which are long term in nature. The Banking Stability, when compared to previous period depicted relative movements in risk parameters of the banking system over a period of time, which indicated marginal rise in the risks with reference to liquidity compared to the previous year. However, the Banking Stability Indicator, showed overall improvements in stability compared to the previous reporting period (Reserve Bank of India, 2012).

1.1.3 Effect of Financial Structure on Financial Performance

Krishnan and Moyer (1997) pointed out that a list of factors relative to capital structure decisions include profitability, growth of the firm, size of the firm, debt maturity, debt ratio, tax and tangibility have.However, considerations affecting the capital structure decisions can be studied in the light of minimization of risk. A firm's capital structure must be developed with an eye towards risk because it has a direct link with the value.

The capital structure of a firm directly affects its financial risk, which may be described as the risk resulting from the use of financial leverage. Financial leverage is concerned with the relationship between earnings before interest and taxes and earnings before tax. The more fixed-cost financing, i.e. debt (including financial

leases) and preferred stock, a firm has in its capital structure, the greater its financial risk. Since the level of this risk and the associated level of returns are key inputs to the valuation process, the firm must estimate the potential impact of alternative capital structures on these factors and ultimately on value in order to select the best capital structure.

Chowdhury A. and P. Chowdhury (2010) noted that banks traditional mode of getting funds at a low cost and the spread between getting funds and providing loans and advances has reduced. Thus, traditional banking activities yielded low profits and banks started looking for new avenues for increasing their bottom-line. According to Chowdhury, Banking conventions usually suggests that with the increase in fee based income, risks can be diversified.

The financial structure and financial performance are also important to banks in determining the financial patterns. For instance, in a study by Omet and Nobanee (2001) noticed that large firms held a lot of debt in their capital structure, compared to smaller firms. Such findings would be useful to banks in finding out which financial patterns they would adopt in the short term and the long term. This helps them organize their firms accordingly.

Sathye (2005) noticed that few Studies have revealed that the impact of privatization on banks performance and efficiency shown that privatized banks have performed better than fully public sector banks and they are catching up with the banks in the private sector. Bhaumik and Dimova (2004) reports that the major factors affecting the profitability and efficiency of the banks were directed investments, directed credit, growth in assets, growth in advances and increased proportion of other income in total income of the banks.

1.1.4 Commercial Banks in Kenya

The banking structure in Kenya allows Kenyans to access finance from various sources. As at 31st December 2007, the banking sector in Kenya comprised 45 institutions, 42 of which were commercial banks, 2 mortgage finance companies and 1 non-bank financial institution. Out of 45 institutions, 35 were locally owned and 10 were foreign owned.

A study by Musa (2007) showed that several conventional banks have introduced Shariah compliant deposit products while two fully fledged Islamic banks have been licensed by the Central Bank of Kenya in 2007. It is necessary that Muslims are able to access financial services that do not violate their principles and beliefs. The study reports that the Central Bank of Kenya licensed First Community Bank and Gulf African Bank as Islamic banks that offer Shariah compliant products. The Banking act has also been amended to facilitate exemptions for banks that intend to hold fixed assets in excess of what is required for normal operations. CBK (2007) reports show that the banking industry in Kenya experienced significant growth, in terms of assets that expanded to Kshs 951 billion. This growth in turn propelled a 28.5 per cent growth in profits in 2007 compared to 2006.

Banking institutions were however, confronted by several challenges, the first one being the urgent dictates that the Kenyan economy must substantially grow, income equally distributed across the country, and the large numbers of qualified but, unemployed skilled labour workforce be absorbed into the economy (CBK, 2007). The second key challenge was the practical difficulties in lending to start-up businesses with no risk capital/collateral and limited management expertise and lastly, the adherence to increasing regulatory requirements aimed at maintaining the

soundness of the Kenyan financial sector.

1.2 Research Problem

Today, financial structure is one of the most important financial decisions for any business and firm. This decision is imperative because the organization needs to enhance return to different organizations and also have an effect on the value of the organization, which is evident in the firm's financial performance. The relationship between financial structure and financial performance is paramount in any firm. Saad (2010) points out that financial managers face difficulties in precisely determining an optimal financial structure for their firms. Optimal financial structure means a minimum weighted average cost of capital and thus maximize the value of organization. These points out a correlation between financial structure and financial performance that is important to this study.

Determining an optimal capital structure is very hot issue in the literature of finance. When an investor decides to invest in the stock of any company, the strength of balance sheet helps him in making decision and capital structure is one of the significant evaluators which determine strength of the balance sheet. Basically, the capital structure of any company describes the long-term capital of the company that is the mixture of debt and equity. So it is crucial for the company to have such a mixture that will help in maximizing the company's stock price. Though the company has many financing options, it is essential to choose that option which will increase its overall value, an optimal capital structure of the company.

Studies in the last two decades have shown that commercial banks in Sub-Saharan Africa are more profitable than the rest of the world with an average Return on Assets (ROA) of 2 percent (Flamini et al., 2009). These have been based on the choices on

financial structures such as investment in risky ventures. The other possible reason for the high profitability in commercial banking business in Sub-Saharan Africa is the existence of huge gap between the demand for bank service and the supply thereof.

Kiprotich (2012) studied the effect of financial structure on the performance of commercial banks in Kenya. He found that commercial banks prefer short term leverage as their source of capital. Halkano (2012) compared the performance of conventional vs. Islamic banks in Kenya. They found that conventional banks performed better than Islamic banks. they also learned that Islamic banks were more liquid than conventional banks but had more inherent risks to investors.

Ongore (2011) studied financial performance of the Kenyan banks and found that the sector was quite profitable. One of the factors that influenced the financial performance of the firms lied with various choices on financial structures such as ownership identity. Oloo (2011) also noticed that despite the good overall financial performance of banks in Kenya, there are a couple of banks which were declaring losses and faced bailouts.

Of the banks that were declaring losses, Shariah compliant banks were noticed to be among them. This makes Islamic banks appear not profitable in this profitable venture. Why would they not be profitable? Islamic banks are known to have a different financial structure from other conventional banks that are recording profits in the region. Could this be influencing their financial performance? This study therefore intends to address the following research question: What is the effect of financial structure on the performance of conventional banks and Islamic banks in Kenya?

1.3 Objective of the Study

To establish the effect of financial structure on the performance of conventional banks and Islamic banks in Kenya

1.4 Value of the Study

There are limited studies that have been carried out to measure the performance of conventional banks against Islamic banks. This means that there is little proof to various theories existing in this area of study. This study is therefore a contribution to fostering existing theories in this area of study. It is also a contribution to the few academic papers that have been made in the country and region.

Several financial institutions are introducing Shariah compliant banking products. This is done to improve their financial performance. Findings of this study can provide insights on the differences in the financial structures and its influence on financial performance. This can be used in determining better financial structures, to improve financial performance.

Practicing financial managers could also use the findings of this study as a guide in making financial structure decisions. Another purpose of research is to make people aware of Islamic banks financial position and to make comparison of performance of Islamic and Conventional banks in order to identify, which one has, better financial position. This could also be of great help in influencing policy formulation.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This literature review examines past authors' and scholars' studies, relevant to the research questions set out in Chapter one. The literature review will address the research questions using several authors who are acknowledged and examines the relevant topics.

2.2 Theoretical Review

Academic research shows a wide range for optimal capital structure. However, it is not possible for financial managers to find out any specific method which will help in defining optimal financing mix. But capital structure theories help them in understanding how this mix will have an impact on the value of the organization. The main theories discussed in this study are: the Capital Irrelevance Theory, the Trade-Off theory and the Agency Cost theory.

2.2.1 Capital Structure Irrelevance Theory

Modigliani and Miller (1958) proposed "Capital Irrelevance Theory" by analysing the effect of capital structure on firm's value and they made the base to think about the capital structure. They suggested that under perfect market an organization's value is not affected by its chosen capital structure. In other words, capital structure of the firm is not affected by selling debt or issuing stocks and cost of capital will remain constant.

Modern capital structure theory began by Modigliani and Miller's classical paper (1958) which led to the development of a large number of theoretical and empirical

papers. These papers examine the capital structure of chosen listed companies. The main proposition of this work is that, under a number of restrictive assumptions, the value of a company is independent from its financial structure. These assumptions include the absence of taxes, transactions and bankruptcy costs, equality of lending and borrowing rates and finally the independence of the productive activities of the company from its financing decisions.

Following the classical work of Modigliani and Miller (1958) which argued that the value of a company is independent from its financial structure, the theoretical and empirical capital structure studies, have been extended to incorporate additional factors, such as taxes, bankruptcy cost, agency costs and asymmetric information issues. This theory points out that there is no relationship between a firm's financial structure and its value – which is tied to financial performance measures. It contradicts the presumption in this study which is the existence of an effect of financial structure on financial performance of a firm.

2.2.2 Trade-Off Theory

According to the Trade-Off theory of Myers (1977), a firm must define a target debt-equity ratio after considering nature and requirement of business and then put its efforts to attain that target. This theory suggests that debt financing offers more benefit to an organization as compared to equity financing since it gets tax shield on interest paid on debt while equity income is charged with tax. In relation to this study, this theory suggests that there is a relationship between financial structure and financial performance. In precision, capital structure (debt /equity financing) relates positively with financial performance.

2.2.3 Agency Cost Theory

Jensen and Meckling (1976) were the first who proposed Agency Cost Theory. It is assumed under this theory that there exist two types of conflicts of interest in any organization. First conflict is between the managers and shareholders and second is between the shareholders and bondholders. Between shareholders and managers, conflicts arise due to the reason that managers may take decisions in their own self-interests that are not in line with the aim of maximizing shareholders' wealth. Second type of conflict, between the debt-holders and shareholders, arises due to having different approach for risk and expected return. Debt-holders have more interest in current profit because it guarantees their returns. In contrast, shareholders may be willing to relinquish their current profit in order to get long-term appreciation in capital. This creates an agency problem. This theory is based on the various forms of financial structures that may exist in a company, as well as the various financial performance measures. It shows that different choices of financial structure have different effects on financial performance.

2.3 Conventional Banks vs. Islamic Banks

Islamic banking and conventional banking approach business differently and traced its origin to specific focus groups. conventional banking often traced as 'western banking' as noted by Beck et al (2009), Islamic banking rooted its origin in Middle East as noted by Wilson (2009). The growth of Islamic banking, since inception of Dubai Islamic Bank in 1973, instigated comparative research between conventional banking and Islamic banking.

The scope of these studies were different and included: comparison of leverage and profitability by Toumi et al. (2011), comparison of operational framework by Awan

(2009), comparison of profitability and performance by Ansari and Redman (2011), study on differences and similarities by Hanif (2011), comparison on asset quality, liquidity and profitability by Jaffar et al. (2011), comparison on risk management practices by Hassan (2011), comparison on customer satisfaction by Ahmed et al. (2011) and comparison on liquidity risk management by Akhtar et al. (2011) to name few.

2.3.1 Structural differences between Islamic and Conventional Banks

In order to understand the strength and weakness of Islamic banks with regard to its performance, it is essential to know the basic environment in which Islamic banks operate. It is the difference in environment that makes the Islamic bank unique and distinguished. Abdus (2004) documents that according to the Shariah, Islamic financial institutions must be based strictly on four basic principles; (1) All transactions must be interest free, i.e., free from *riba*. (2) Activities or transactions involving speculation (*gharar*) must be avoided. (3) The implementation of *Zakat*, the compulsory Islamic tax. (4) No involvement in the production or consumption of goods and services which are *haram* (i.e., illegal from the Islamic point of view).

The following is a discussion of these four principles that make the Islamic banking unique. The *Qur'an* explicitly prohibits *riba* but does permit trade (*al-Qur'an*, 2: 185). It does not clearly mention whether *riba* is interest or usury. The lack of clarity led to a controversy among the Muslim scholars in the past. However, there now seems to be a general consensus that the term *riba* includes any amount charged over and above the principal (Abdus, 2004).

The payment of interest or receiving of interest, which is the fundamental principle of conventional banking and financing, is explicitly prohibited in Islamic banking and

finance. Thus, the prohibition of interest, in payment or receipt, is the nucleus of Islamic banking and its financial instruments, while the charging of interest in all modes of transaction whether it is in loan, advances or leasing is the core in the conventional banking. The Islamic banking is not simply interest-free banking. It takes into account issues of *gharar*, *haram*, *Zakat* and *qarè al-úasan*.

Abdus (2004) informs that g*harar* is speculation or gambling and is forbidden in Islam. Islam allows risk-taking in business transactions, but it prohibits speculative activity and gambling. Any transaction involving the element of speculation like buying shares at a low price and selling them at a higher price in the future is considered illegal. Conventional banks, on the other hand, have no constraint in financing investment involving speculation.

Zakat is a compulsory religious payment or tax on the wealth of the rich payable to the poor. It is a built-in mechanism in Islam for ensuring the redistribution of wealth and the protection of a fair standard of living for the poor (Abdus, 2004). *Zakat* is one of the five pillars of Islam. Each Islamic bank must establish a *Zakat* fund and pay Zakat on the profits earned. This does not exist in conventional banking.

Ahmad and Ausaf (1987) point out that in Islam, investment in production and consumption is guided by strict ethical codes. Muslims are not permitted to invest in production, distribution and consumption enterprises involved in alcohol, pork, gambling, illegal drugs, etc., even though these enterprises may be profitable. Providing financing for such activities is illegal in Islam.

Thus, Islamic banks face constraints and operate in a non-friendly environment in most of the Muslim countries. One should keep the underlying differences in mind in order to make a fair comparison between the Islamic and the conventional banks.

2.4 Determinants of Financial Structures

The theory of capital structure is closely related to the firm's cost of capital. Capital structure is the mix of the long-term sources of funds used by the firm. The primary objective of capital structure decisions is to maximize the market value of the firm through an appropriate mix of long-term sources of funds. This mix, called the optimal capital structure, will minimize the firm's overall cost of capital. However, there are arguments about whether an optimal capital structure actually exists. The arguments focus on whether a firm can, in reality, affect its valuation and its cost of capital by varying the mixture of the funds used (Beasley and Brigham, 2000, Ross et al., 2002).

Also, it is important to examine the capital structure of companies because it affects company's real decisions about employment, production, and investment (Harris and Raviv, 1991). Some of the main studies that examined the determinants of the capital structure include Myers (1984), Titman and Wessel (1988), Harris and Raviv (1991), Rajan and Zingales (1995), Bevan and Danbolt (2000), Booth et al., (2001), Huang and Song (2002), Antonion et al., (2002), Caesar and Holmes (2003), Chen (2004), Hall et al., (2004) and Buferna et al., (2005).

According to the above studies, the main determinants of the capital structure are: size of the company, tangibility, profitability, growth opportunities, short-term debt and long-term debt. Both theoretical and empirical capital structure studies have generated many results that attempt to explain the determinants of capital structure. As a result of these studies, some broad categories of capital structure determinants have emerged. Titman and Wessels (1988) and Harris and Raviv (1991) however, point out that the choice of suitable explanatory variables is potentially continuous.

2.5 Determinants of Financial Performance

The determinants of bank performances can be classified into bank specific (internal) and macroeconomic (external) factors (Al-Tamimi, 2010; Aburime, 2005). These are stochastic variables that determine the output. Internal factors are individual bank characteristics which affect the banks performance. These factors are basically influenced by internal decisions of management and the board. The external factors are sector-wide or country-wide factors which are beyond the control of the company and affect the profitability of banks.

As explained above, the internal factors are bank specific variables which influence the profitability of specific bank. These factors are within the scope of the bank to manipulate them and that they differ from bank to bank. These include capital size, size of deposit liabilities, size and composition of credit portfolio, interest rate policy, labour productivity, and state of information technology, risk level, management quality, bank size, ownership and the like. CAMEL framework often used by scholars to proxy the bank specific factors (Dang, 2011). CAMEL stands for Capital Adequacy, Asset Quality, Management Efficiency, Earnings Ability and Liquidity. Each of these indicators is further discussed below.

Capital is one of the bank specific factors that influence the level of bank profitability. Capital is the amount of own fund available to support the bank's business and act as a buffer in case of adverse situation (Athanasoglou et al., 2005). Banks capital creates liquidity for the bank due to the fact that deposits are most fragile and prone to bank runs. Moreover, greater bank capital reduces the chance of distress (Diamond, 2000). However, it is not without drawbacks that it induce weak demand for liability, the cheapest sources of fund Capital adequacy is the level of capital required by the banks

to enable them withstand the risks such as credit, market and operational risks they are exposed to in order to absorb the potential loses and protect the bank's debtors. According to Dang (2011), the adequacy of capital is judged on the basis of capital adequacy ratio (CAR). Capital adequacy ratio shows the internal strength of the bank to withstand losses during crisis. CAR is directly proportional to the resilience of the bank to crisis situations. It has also a direct effect on the profitability of banks by determining its expansion to risky but profitable ventures or areas (Sangmi and Nazir, 2010).

The bank's asset is another bank specific variable that affects the profitability of a bank. The bank asset includes among others current asset, credit portfolio, fixed asset, and other investments. Often a growing asset (size) is related to the age of the bank (Athanasoglou et al., 2005). More often than not the loan of a bank is the major asset that generates the major share of the banks income. Loan is the major asset of commercial banks from which they generate income. 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 and Nazir, 2010).

Management Efficiency is one of the key internal factors that determine the bank profitability. It is represented by different financial ratios like total asset growth, loan growth rate and earnings growth rate. Yet, it is one of the complex subject to capture with financial ratios. Moreover, operational efficiency in managing the operating expenses is another dimension for management quality. The performance of management is often expressed qualitatively through subjective evaluation of management systems, organizational discipline, control systems, quality of staff, and others. Yet, some financial ratios of the financial statements act as a proxy for management efficiency. The capability of the management to deploy its resources efficiently, income maximization, reducing operating costs can be measured by financial ratios. One of this ratios used to measure management quality is operating profit to income ratio (Rahman et al. in Ilhomovich, 2009; Sangmi and Nazir, 2010). The higher the operating profits to total income (revenue) the more the efficient management is in terms of operational efficiency and income generation. The other important ratio is that proxy management quality is expense to asset ratio. The ratio of operating expenses to total asset is expected to be negatively associated with profitability. Management quality in this regard, determines the level of operating expenses and in turn affects profitability (Athanasoglou et al., 2005).

Liquidity is another factor that determines the level of bank performance. Liquidity refers to the ability of the bank to fulfil its obligations, mainly of depositors. According to Dang (2011) adequate level of liquidity is positively related with bank profitability. The most common financial ratios that reflect the liquidity position of a bank according to the above author are customer deposit to total asset and total loan to customer deposits. Other scholars use different financial ratio to measure liquidity. For instance Ilhomovich (2009) used cash to deposit ratio to measure the liquidity

level of banks in Malaysia. However, the study conducted in China and Malaysia found that liquidity level of banks has no relationship with the performances of banks (Said and Tumin, 2011).

The macroeconomic policy stability, Gross Domestic Product, Inflation, Interest Rate and Political instability are also other macroeconomic variables that affect the performances of banks. For instance, the trend of GDP affects the demand for banks asset. During the declining GDP growth the demand for credit falls which in turn negatively affect the profitability of banks. On the contrary, in a growing economy as expressed by positive GDP growth, the demand for credit is high due to the nature of business cycle. During boom the demand for credit is high compared to recession (Athanasoglou et al., 2005). The same authors state in relation to the Greek situation that the relationship between inflation level and banks profitability is remained to be debatable. The direction of the relationship is not clear (Vong and Chan, 2009).

2.6 Measures of Financial Performance

Profit is the ultimate goal of commercial banks. All the strategies designed and activities performed thereof are meant to realize this grand objective. However, this does not mean that commercial banks have no other goals. Commercial banks could also have additional social and economic goals. However, this study focuses on the ultimate goal of all businesses, profitability. To measure the profitability of commercial banks there are variety of ratios used of which Return on Asset, Return on Equity and Net Interest Margin are the major ones (Murthy and Sree, 2003; Alexandru et al., 2008).

2.6.1 Return on Equity (ROE)

ROE is a financial ratio that refers to how much profit a company earned compared to the total amount of shareholder equity invested or found on the balance sheet. ROE is what the shareholders look in return for their investment. A business that has a high ROE is more likely to be one that is capable of generating cash internally. Thus, the higher the ROE the better the company is in terms of profit generation. It is further explained by Khrawish (2011) that ROE is the ratio of Net Income after Taxes divided by Total Equity Capital. It represents the rate of return earned on the funds invested in the bank by its stockholders. ROE reflects how effectively a bank management is using shareholders' funds. Thus, it can be deduced from the above statement that the better the ROE the more effective the management in utilizing the shareholders capital.

2.6.2 Return on Assets (ROA)

ROA is also another major ratio that indicates the profitability of a bank. It is a ratio of Income to its total asset (Khrawish, 2011). It measures the ability of the bank management to generate income by utilizing company assets at their disposal. In other words, it shows how efficiently the resources of the company are used to generate the income. It further indicates the efficiency of the management of a company in generating net income from all the resources of the institution (Khrawish, 2011). Wen (2010) states that a higher ROA shows that the company efficiently uses its resources.

2.6.3 Net Interest Margin (NIM)

NIM is a measure of the difference between the interest income generated by banks and the amount of interest paid out to their lenders (for example, deposits).Relative to the amount of their (interest earning) assets. It is usually expressed as a percentage of

what the financial institution earns on loans in a specific time period and other assets minus the interest paid on borrowed funds divided by the average amount of the assets on which it earned income in that time period (the average earning assets). The NIM variable is defined as the net interest income divided by total earnings assets (Gul et al., 2011).

NIM measures the gap between the interest income the bank receives on loans and securities and interest cost of its borrowed funds. It reflects the cost of bank intermediation services and the efficiency of the bank. The higher the NIM, the higher the bank's profit and the more stable the bank is. Thus, it is one of the key measures of bank profitability. However, a higher NIM could reflect riskier lending practices associated with substantial loan loss provisions (Khrawish, 2011).

2.7 Empirical Review

Studies on the comparison of financial structures of Conventional banks against Islamic banks started when Islamic banking started gaining noticeable popularity in various regions. The first empirical investigations started in the 1990s. The available studies are observed below.

Metwally (1997) evaluated the performance of 15 interest-free banks and 15 conventional banks in terms of liquidity, leverage, credit risk, profitability and efficiency. He concluded that the two groups of banks may be differentiated in terms of liquidity, leverage and credit risk, but not in terms of profitability and efficiency. Interest-free banks rely more heavily on their equity in loan financing and face more difficulties in attracting deposits than interest-based banks. Interest-free bank hold a higher Cash/deposit ratio because they tend to be relatively more conservative in using their loan-able funds and lack lending opportunities. The profit/loss sharing

principle has made it difficult for interest-free banks to finance personal loans and pushed interest-free banks to channel a greater proportion of their funds to direct investment (using Musharaka and Mudaraba tools of finance). Both banks offer their depositors similar returns and direct the largest proportion of their funds towards the financing of durables.

Samad and Hassan (1999) evaluated the inter-temporal and interbank performance of Islamic bank Islam Malaysia Berhad (BIMB) for the period 1984-1997 by using same performance measures and found that in inter-temporal comparison Islamic bank BIMB's made (statistically) significant progress in profitability while the BIMB risk increased. In interbank comparison the study found that BIMB is relatively more liquid and less risky compared to a group of 8 Conventional banks. A study conducted on five Islamic banks from MENA region analyzed their financial statements over the period 1993 – 2002 found that liquidity risk arises because of pre mature withdrawal by account holders due to a mismatch between investor's expectations of return and the actual return. Therefore Islamic banks are required to keep adequate cash or cash equivalents to meet the demand. They identified the other reasons of liquidity risk can be the lack of confidence on the banking system, reliance on few large depositors, reliance on current accounts and restrictions of Islamic banks on sales of debt.

The profitability of Islamic banks is low due to short term investments and low equity base (Badr-El-Din, Ibrahim and Vijaykumar, 2003). In case of Islamic banks, short term Debt financing includes Murabaha, Salam, and Qard fund and long term debt financing includes Sukuk, leasing and Istisna. In case of Conventional banks short term debt financing include treasury bills, trading bonds, short term loan and advances and deposits at other financial institution that mature within one year. Long

term debt financing include non-trading bonds and medium and long term loans (Hussein, 2004).

Iqbal (2001) made comparison of performance of Islamic banks with conventional banks. He compared performance of both types of 12 banks of equivalent size during 1990-1998. In additional to profitability, liquidity, and risk some more variables such as capital adequacy and deployment efficiency were also studied. The performance of Islamic banks has been evaluated using both trend and ratio analysis. He concluded that Islamic banks as a group out-performed the former in almost all areas and in almost all years. He analyzed through ratio analysis. He concluded that Islamic banks are not suffering from excess liquidity and are more cost effective and profitable than their Conventional counterparts. Kader, Janbota, Asarpota and Anju (2007) and Safiullah (2010) found the same results in UAE and Bangladesh respectively.

The conventional banks profitability theories exist in Islamic banking. It is found that determinants such as capital ratio, liquidity, interest rate and money supply have similar effect on Islamic banks. Capital ratio, interest rate and inflation are positively related with the profitability of Islamic banks. However there is negative relationship between market share and profitability (Haron and Ahmad, 2001). The conventional financing system is concerned only with the interest rate, while the Islamic financial system provide loan without interest and collateral or only against an administrative cost (Arif, 1988; Ayub, 2002).

Islamic banks are certainly more profitable than their conventional peers enjoying the same balance sheet structure. The main reason for such a difference is that Islamic banks benefit from a market imperfection. Islamic banks lose on the grounds of liquidity, assets and liabilities concentrations and operational efficiency (Hassoune,

2002). The NIM another indicator of performance measure indicate that Conventional banks are operationally efficient than Islamic banks. The profitability of interest-free banks is positively influenced by high capital and loan-to-asset ratios, favourable macroeconomic conditions, and negatively to taxes (Hassan & Bashir, 2003).

Omet and Nobanee (2001) examined the capital structure of listed industrial companies in Jordan. Using firm level panel data, the mean leverage ratios and the mean ratios of long term debt to total debt are calculated during the time period 1978-1998. Based on the statistical analysis, they found that company size and retained earnings divided by total assets are significant determinants of leverage. Furthermore, it was found that fixed assets to total assets and total assets are the only significant determinant factors of the debt ratios.

Regarding banks' financial structure studies discussed, Bevan and Danbolt (2002) point out that capital structure studies examining the determinants of leverage based on total debts may disguise the significant differences between long-term and short-term debt, this study decompose debt into long-term and short-term debt. The debt ratio is: total debt to total assets, short-term debt to total assets and long-term debt to total debts. On the other hand Bevan and Danbolt (2002) report that size of the firm is found to be negatively related to short-term debt and positively related to long-term debt. Also they found that the more profitability firms should hold less debt, because high levels of profits provide a high level of internal funder.

Huang and Song (2002) have investigated the determinants of capital structure of companies in China, using firm level panel data, the mean leverage ratios and the mean ratios of long-term debt to total debt. They found a significant positive relationship between leverage ratios and the firm size.

Antonion et al. (2002) found that the capital structure decisions of firms were not only affected by its own characteristics but also by its surrounding environment. The surrounding environment may affect the firm's capital structure for different reasons, such as the deterioration or the improvement in the state of economy, the existence of a stock market and the size of a firm for its leverage ratio. Sukkari (2003) analyzed the determinants of the capital structure for Kuwait companies during the time period 1996-2001. Based on company level data, the mean total leverage ratio and the mean long-term debt to total debt are calculated. Based on the empirical results, it found that the leverage ratios were low and that company size and company profitability was the most important determinants of leverage.

Buferna, et al. (2005) investigated the determinants of capital structure of Libyan private and public companies utilising data from 1995 to 1999. Debt was decomposed into three categories: short-term, long-term and total debt. The results indicate that profitable Libyan companies were externally financed and prefer short-term debt sources. The main public companies use both short-term and long-term debt. Growing companies tend to rely on their internal funds and large companies tend to have higher leverage.

The overall financial performance of banks in Kenya in the last two decade has been improving. However, this doesn't mean that all banks are profitable, there are banks declaring losses (Oloo, 2010). Studies have shown that bank specific and macroeconomic factors affect the performance of commercial banks (Flamini et al., 2009). In this regard, the study of Olweny and Shipho (2011) in Kenya focused on sector-specific factors that affect the performance of commercial banks. Yet, the effect of macroeconomic variables was not included. Moreover, to the researcher's

knowledge the important element, the moderating role of ownership identity on the performance of commercial banks in Kenya

Halkano (2012) carried out a comparative case study on the performance of 2 Islamic banks and 5 conventional banks in Kenya. He compared the banks' financial ratios and the results of the study indicated that on the whole, the conventional banks performed better than the Islamic banks during the period under review. The study found Islamic banks to be more liquid than the conventional banks. On risk and solvency, the Islamic banks seemed to perform better but while the trend for conventional banks was showing to be stable, the Islamic banks were showing increasing risks. And therefore considering that the Islamic banks have only been in Kenya for a short period, the fast increase in risk is an indicator they may be more risky than the conventional banks.

2.8 Summary of Literature Review

Very few studies (Fatuma, 2009 and Halkano, 2012) have been dedicated for the comparison of conventional banks and Islamic Banks in Kenya. This study perform's the comparison and sheds some light on the financial performance between Islamic and conventional banks in Kenya based on the financial structures of the two types of banks.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This section is organized under the following subsections: Research design, target population, sample size, data analysis and data presentation.

3.2 Research Design

The research design used in this study is a descriptive research design. Cooper and Schindler (2009) define descriptive research design as one in which information is collected without changing the environment. This study employ's quantitative methods of doing research, which have been practiced, as recommended by management studies in the developing countries. Cooper and Schindler (2009) go ahead and argue that Descriptive studies are also conducted to demonstrate associations or relationships between things in the world around you. These are the aims of this study.

3.3 Population

All the licensed commercial and Islamic banks in the country were the target population of this study. There are 42 registered banks operating in Kenya (Appendix I). Of these, only 2 are fully Shariah compliant. The Central Bank of Kenya classifies banks into three peer groups: small medium and large. Since Islamic compliant banks are in the small peer group, the study only considered comparison of 22 banks in the small peer group.

3.4 Data Collection

This study was based on secondary data obtained from published statements of accounts of the commercial banks in Kenya and CBK for four years from 2009 to 2012.

3.5 Data Analysis

The data was collected using data collection sheet. These were then edited, cleaned and coded. The statistical package for social sciences (SPSS) was used to analyze the data through appropriate statistical tools, which included descriptive statistics and linear regression model.

3.5.1 Analytical Model

In this comparative study ordinary regression equation was employed to measure and evaluate the difference in financial performance of the Islamic and Conventional Banks. This study conducted regression analysis by using SPSS software program to estimate our equation. This study replicated a model used by Raheel et al. (2013) in their study of the effect of financial structure on financial performance of Pakistani firms. The model is:

$$ROE_{i,t} = \alpha + \beta(DER)_{i,t} + \theta(\text{Ln Total Asset})_{i,t} + e_{i,t}$$

Where:

DER = Debt to Equity Ratio

ROE = Return on Equity

Ln Total Asset = Size of firm

$e_{i,t}$ = The error term

There was need to test the significance of proxy of financial structure in measuring the financial performance of the banks. This was achieved by testing the formulated hypotheses below:

H_0: DER and firm size have no significant effect on firm's financial performance.

H_1: DER and firm size have significant effect on firm's financial performance.

CHAPTER FOUR

DATA ANALYSIS AND FINDINGS

4.1 Introduction

This chapter analyses the findings of the study and aims at interpreting them to meet the objective outlined in the first chapter of the study. This section shows how data was collected, analyzed and then discussed.

4.2 Findings

The study sampled 5 conventional banks with a small market share to compare to the 2 Islamic banks that are available in the country. This is similar to Halkano (2012) who carried out a comparative case study on the performance of 2 Islamic banks and 5 conventional banks in Kenya. The conventional banks were randomly sampled out of a population of 20 conventional banks with a small market share. The data retrieved from financial statements to the banks as well as Central Bank of Kenya's "Bank Supervision Annual Report" as the model required. The banks studied listed in the table 1 below.

Table 4.1: Banks Sampled

Conventional Banks	Islamic Banks
1. ABC 2. Consolidated 3. Credit 4. Fina Bank 5. Oriental	1. First Community Bank 2. Gulf-African Bank

Source: Research Findings

Data collected was sorted, cleaned and organized using Microsoft Excel as shown in Appendix II. Statistical Package for Social Statistics (SPSS) was then used to run regression analysis on the variables to estimate the model to the study to Islamic and Conventional banks

4.3 Descriptive statistics

Table 4.2: Descriptive Statistics

type of bank		Minimum	Maximum	Mean	Std. Deviation	Variance
Conventional Bank	ROE in 2009	.03	.22	.1175	.06956	.005
	ROE in 2010	.04	.29	.1556	.09476	.009
	ROE in 2011	.05	.30	.1759	.09014	.008
	ROE in 2012	.07	.26	.1332	.07800	.006
	DER in 2009	2.11	9.25	5.6409	2.71222	7.356
	DER in 2010	1.33	9.68	5.9333	3.65235	13.340
	DER in 2011	1.34	9.68	6.1055	3.29832	10.879
	DER in 2012	3.49	10.44	6.4491	2.80831	7.887
	ln(tot assets in 2009)	21.84	23.23	22.6135	.63743	.406
	ln(tot assets in 2010)	22.23	23.45	22.8704	.59681	.356
	ln(tot assets) in 2011	22.34	23.45	22.9711	.55112	.304
	ln(tot assets in 2012	22.55	23.67	23.1965	.57695	.333
Islamic Bank	ROE in 2009	-.23	-.14	-.1856	.06279	.004
	ROE in 2010	-.28	.04	-.1222	.22656	.051
	ROE in 2011	.12	.13	.1256	.01103	.000
	ROE in 2012	.24	.27	.2560	.02404	.001
	DER in 2009	5.72	5.74	5.7277	.01534	.000
	DER in 2010	6.84	10.29	8.5632	2.43802	5.944
	DER in 2011	8.79	9.45	9.1190	.46486	.216
	DER in 2012	7.69	8.24	7.9624	.39140	.153

	ln(tot assets in 2009)	22.22	22.77	22.4937	.39194	.154
	ln(tot assets in 2010)	22.58	22.98	22.7804	.28847	.083
	ln(tot assets) in 2011	22.89	23.28	23.0875	.27462	.075
	ln(tot assets in 2012	23.02	23.33	23.1761	.21836	.048

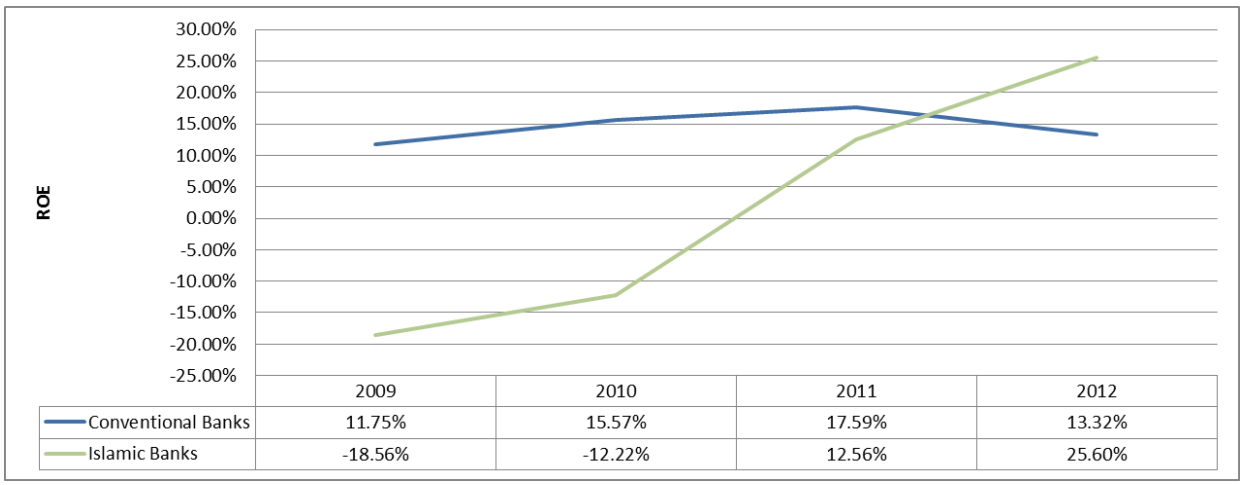
Source: Research Findings

Table 4.2 above shows the descriptive statistics to each of the variables used in the study. It shows general growth in each of the variables among Islamic and conventional banks through the years under study. This shows growing profitability among both groups. However, Islamic banks have negative ROE in the years 2009 and 2010.

The mean ROE for conventional banks through the period is 14.56% while that for Islamic banks is 1.85%. Lower ROE between Islamic banks is due to losses incurred by banks in this category during the period. Islamic banks have a higher average DER compared to conventional banks. Islamic banks have a DER of 7.81 while conventional banks have a DER of 5.57. This shows that Islamic banks are more aggressive and include more debt in their financial structure compared to their conventional counterparts. They are also becoming more efficient in managing shareholders' equity as time goes by. Conventional banks have a higher ln (total assets) of 23.04 while Islamic banks have ln (total assets) of 22.91. This shows that conventional banks have more assets on average compared to Islamic banks.

From Table 4.2, there has been general growth across the variables. This shows growth among the banks. Islamic banks, which are the newest of the banks sampled, started off by recording losses. Through the period, they have recorded growing ROE, higher than conventional banks. This observation has been visualized in figure 4.1 below.

Figure 4.1: Comparison of Conventional and Islamic Banks' ROE.



	2009	2010	2011	2012
Conventional Banks	11.75%	15.57%	17.59%	13.32%
Islamic Banks	-18.56%	-12.22%	12.56%	25.60%

This figure shows the change of the avarage ROE in Islamic and conventional banks from the year 2009 – 2012.

Source: Research Findings

Islamic banks have a higher average debt to equity ratio compared to conventional banks. This reveals that Islamic banks use more debt compared to conventional banks in the acquisition of assets. The size of the banks can be observed to be growing through the years. This can be observed through the growing asset size. Often a growing asset (size) is related to the age of the bank (Athanasoglou et al., 2005).

4.4 Regression Analysis

Appendix II shows the dataset that was used in regression analysis. Regression analysis was run across all the years in the period under analysis. Discussions of the findings are therefore also based on year under study.

For the purpose of testing hypotheses about the values of model parameters, the linear regression model also assumes the following: The error term has a normal distribution with a mean of 0; the variance of the error term is constant across cases and independent of the variables in the model. An error term with non-constant variance is said to be heteroscedastic, the value of the error term for a given case is independent

of the values of the variables in the model and of the values of the error term for other cases.

4.4.1 Comparison of Financial Performance

Before going ahead to compare the effects of financial structure to the financial performance between conventional and Islamic banks, it is important to verify that the models are suitable for comparison. This is done by examining the portion of data that is used in The first part of linear regression is the determination of the portion of data that has been used in predicting the models. This is done by examining the R statistics. From table 4.2 below, the regression models for the years 2010, 2011 and 2012 can be predicted using the models. R values shows the level of correlation between the dependent and independent variables while the R square values show the proportion of independent variables that describe the dependent variable.

From table 4.3 below, the R values for the years 2010, 2011 and 2012 are 97.6%, 96.3% and 74.7% for conventional banks' data and 100% for Islamic banks data.. These indicate high correlation between the dependent and independent variables. The R and square values for the respective models are 95.3%, 92.7% and 55.8% respectively for conventional banks' data and 100% for Islamic banks' data. This means that the dependent variables of the years 2010, 2011 and 2012 in the model have been influenced by 95.3%, 92.7% and 55.8% of the independent variables. For the year 2009, R square value is 0.233. This means that the dependent variable can only be described using 23% of the dataset. This would make the model inaccurate in describing banks under study's performance in that year.

Table 4.3: Regression Model Summaries

Year	Type of bank	R	R Square	Adjusted R Square	Std. Error of the Estimate
2009	Conventional Bank	.483[a]	.233	-.534	.08616
	Islamic Bank	1.000[b]	1.000	.	.
2010	Conventional Bank	.976[c]	.953	.905	.02916
	Islamic Bank	1.000[d]	1.000	.	.
2011	Conventional Bank	.963[e]	.927	.853	.03451
	Islamic Bank	1.000[f]	1.000	.	.
2012	Conventional Bank	.747[g]	.558	.117	.07331
	Islamic Bank	1.000[h]	1.000	.	.

a. Predictors: (Constant), ln(tot assets in 2009), DER in 2009

b. Predictors: (Constant), ln(tot assets in 2009)

c. Predictors: (Constant), ln(tot assets in 2010), DER in 2010

d. Predictors: (Constant), ln(tot assets in 2010)

e. Predictors: (Constant), ln(tot assets) in 2011, DER in 2011

f. Predictors: (Constant), ln(tot assets) in 2011

g. Predictors: (Constant), ln(tot assets in 2012, DER in 2012

h. Predictors: (Constant), ln(tot assets in 2012

Source: Research Findings

4.4.2 Analysis of Variance (ANOVA)

The next part of regression analysis is the (ANOVA). The ANOVA is used in testing hypothesis of the whole model. We compare the calculated F ratio to the significant F

ratio (which is read from the statistical table of critical values), and reject the null hypothesis if the calculated F ratio is greater than the critical F ratio. In our case, the hypothesis to be tested is clearly outlined in chapter three. The results from the ANOVA table in Table 4.4 show that the calculated, absolute F value for the conventional banks is greater than the significant F value in all the years except in 2009. We therefore we reject the null hypothesis for conventional banks at 95% level of confidence for all the years under study except for 2009. This implies that based on our analysis, we are 95% confident that DER and firm size have significant effect on firm's financial performance. This allows us to go ahead to the next level of the analysis, which is the study of the specific regression model for conventional banks.

Table 4.4: ANOVA Table

2009 ANOVA[c]

Year	Type of bank		Sum of Squares	Df	Mean Square	F	Sig.
2009	Conventional Bank	Regression	.005	2	.002	.304	.767[a]
		Residual	.015	2	.007		
		Total	.019	4			
	Islamic Bank	Regression	.004	1	.004	.	.[b]
		Residual	.000	0	.		
		Total	.004	1			

2010 ANOVA[f]

2010	Conventional Bank	Regression	.034	2	.017	20.120	.047[d]
		Residual	.002	2	.001		
		Total	.036	4			
	Islamic Bank	Regression	.051	1	.051	.	.[e]

		Residual	.000	0	.		
		Total	.051	1			

2011 ANOVA[i]

2011	Conventional Bank	Regression	.030	2	.015	12.649	.073[g]
		Residual	.002	2	.001		
		Total	.033	4			
	Islamic Bank	Regression	.000	1	.000	.	.[h]
		Residual	.000	0	.		
		Total	.000	1			

2012 ANOVA[l]

2012	Conventional Bank	Regression	.014	2	.007	1.264	.442[j]
		Residual	.011	2	.005		
		Total	.024	4			
	Islamic Bank	Regression	.001	1	.001	.	.[k]
		Residual	.000	0	.		
		Total	.001	1			

a. Predictors: (Constant), ln(tot assets in 2009), DER in 2009

b. Predictors: (Constant), ln(tot assets in 2009)

c. Dependent Variable: ROE in 2009

d. Predictors: (Constant), ln(tot assets in 2010), DER in 2010

e. Predictors: (Constant), ln(tot assets in 2010)

f. Dependent Variable: ROE in 2010

g. Predictors: (Constant), ln(tot assets) in 2011, DER in 2011

h. Predictors: (Constant), ln(tot assets) in 2011

i. Dependent Variable: ROE in 2011

j. Predictors: (Constant), ln(tot assets in 2012, DER in 2012

k. Predictors: (Constant), ln(tot assets in 2012

l. Dependent Variable: ROE in 2012

Source: Research Findings

The F value for Islamic banks was not computed because the residual sum of squares in the ANOVA tables was zero. This is because one of the variables (DER) could not fit into the model. The regression analysis for Islamic banks' models proceeded without one variable.

The Standard Errors are the standard errors of the regression coefficients. They can be used for hypothesis testing and constructing confidence intervals. The **T** statistic tests the hypothesis that a population regression coefficient is 0 when the other predictors are included in the model. It is the ratio of the sample regression coefficient to its standard error. This statistic is a measure of the likelihood that the actual value of the parameter is not zero. In our case, since the absolute **T** values are greater than the significant **T** values except one; it means that the levels of the variables in conventional banks' models in the years under study except in 2009 have a statistically significant influence on ROE among the banks under study. For Islamic banks, only one variable was used in predicting the model. Therefore, **T** could not be computed.

4.4.1 Financial Structure and Financial Performance

Table 4.5: Models' Coefficients Table

Dependent variable	Type of bank		Unstandardized Coefficients		Standardized Coefficients		
			B	Std. Error	Beta	T	Sig.
ROE in 2010	Conventional Bank	(Constant)	-9.393	1.506		-6.236	.025
		DER in 2010	-.065	.011	-2.506	-5.804	.028
		ln(tot assets in 2010)	.434	.069	2.736	6.335	.024
	Islamic Bank	(Constant)	-18.013	.000		.	.
		ln(tot assets in 2010)	.785	.000	1.000	.	.
ROE in 2011	Conventional Bank	(Constant)	-8.150	1.748		-4.663	.043
		DER in 2011	-.049	.013	-1.783	-3.678	.067
		ln(tot assets) in 2011	.375	.079	2.295	4.734	.042
	Islamic Bank	(Constant)	1.053	.000		.	.
		ln(tot assets) in 2011	-.040	.000	-1.000	.	.
ROE in 2012	Conventional Bank	(Constant)	-3.072	2.482		-1.238	.341
		DER in 2012	-.011	.023	-.405	-.489	.674
		ln(tot assets in 2012	.141	.112	1.045	1.259	.335
	Islamic Bank	(Constant)	2.808	.000		.	.
		ln(tot assets in 2012	-.110	.000	-1.000	.	.

Source: Research Findings

The third and the final part of the regression analysis is the estimation of the models. This is obtained from the coefficients table generated by the SPSS software. These coefficients are shown in table 4.5 above. From table 4.5 above, final model estimates can be drawn by reading the corresponding B values. The final estimates for the models are therefore shown in table 2 below:

Table 4.6: Estimated equations

Year	Conventional Bank	Islamic Bank
2010	ROE= -9.39 - 0.07(DER) + 0.79 ln(total asset) + e	ROE = -18 + 0.79 ln (total assets) + e
2011	ROE=-8.15 - 0.05 (D/R ratio) + 0.38 ln(total assets) + e	ROE = 1.05 – 0.04 ln(total assets) + e
2012	ROE = -3.07 - 0.01(DER) + 0.14 ln(total assets) +e	ROE = 2.81 – 0.11 ln(total assets) + e

Source: Research Findings

From these models, it is clear that in conventional banks, there is a relationship between all the financial structure variables and financial performance of the banks. In Islamic banks, only assets have a relationship with financial performance.

For the year 2010, a decrease in debt/equity ratio by 0.07 led to an increase in ROE by 1 in the sampled conventional banks. An increase in the natural log to the total assets by 0.79 resulted in an increase in ROE by 1 among conventional banks. For Islamic banks, an increase in the natural log by 0.79 led to an increase in ROE by 1. For the year 2011, a decrease in DER by 0.05 increased ROE of the sampled conventional banks by 1. In the same year, an increase in the natural logarithm by 0.38 increased

the ROE of the conventional banks by 1. For Islamic banks, reduction in natural logarithm of the total assets by 0.04 led to an increase in ROE by 1 in 2011. In 2012, a decrease in DER by 0.01 increased the ROE by 1 while an increase in natural log of the total assets by 0.14 increased the ROE by 1 among the conventional banks sampled. On the other hand, decrease in the natural log of the total assets to the Islamic banks by 0.11 increased the ROE by 1

4.5 Interpretation of Findings

Results mentioned in this section show that change in DER have a negative and significant relation to change in ROE. If a firm's level of debt changes it is expected to cause deviations in firm's ROE, ultimately increasing a firm's risk level. R square value indicates that change in DER explains as high as 95 percent of the volatility in returns of firms. This is highly evident in conventional banks, but not common between Islamic banks.

The R values were found to be significant & positive for the association between debt to equity ratio and the natural logarithm of total assets, in all the years under study except in 2009 for both conventional and Islamic banks. debt to equity ratio and natural logarithm of the total assets consisting the R values of 0.976, 0.963 and 0.747 for the years 2010, 2011 and 2012 respectively. This reveals that there is high correlation between debt to equity ratio and the size of the firm in determining the financial performance of banks.

In conventional banks, DER negatively affects ROE of the banks by less than 10%. This means that an optimum financial mix for conventional banks would be one that has minimum DER. On the other hand, acquisition of assets increases ROE. Conventional banks are therefore increasing their ROE by investing in assets. This

finding can be explained by capitalization, a common characteristic of conventional banks (Thorsten, Asli and Ouarda, 2010). However, Islamic banks data show no statistically significant relationship between DER and ROE. However, assets tend to have a negative impact on ROE in 2011 and 2012, but positive impact in 2010. It is notable to point out that the inconsistency in the coefficients of the variables can be attributed to the age and population of the Islamic banks. Banks, like other financial institutions, require time to mature and have consistent results that can be analysed.

All the banks analysed use debt in financing their assets. This is because of the debt to equity ratio values exceed 5. This value is higher in Islamic banks compared to conventional banks. These findings are similar to the explanations of Damodaran (2003) and Fischer (1989) suggesting that increase in firm's debt level increase its risk level. Since debt provides a tax shield, firms increase the level of debt in their financial structure and high debt level in the capital mix increase the risk level of firms.

In summary our conventional banks' results support Fischer's (1989) dynamic trade off theory predicting a negative relation between, capital structure and firm performance, change in DER and firm value and also the level of risk of firms. Fischer continues that banks with large advances have low financial distress costs and easy access to capital market as compare to smaller banks and they prefer debt financing to obtain target capital structure. Moreover, larger banks have low problem of information asymmetry, low monitoring cost which will reduce agency cost and are more diversified with stable cash flows which will lessen the possibility of bankruptcy; therefore they prefer debt financing in their financing structure. Akhavein, Berger, and Humphrey (1997) explains the reason of direct relationship

between size and leverage as banks with large size increase their lending thus allowing banks to run their business with less capital. Gropp and Heider (2010) also predict banks with larger size are more leveraged. Hence, findings of this study are consistent with those of Hassoune (2002), Sukkari (2003) and Halkano (2012) which found that: Islamic banks are more profitable than their conventional banks counterparts, company size is a key determinant of financial structure of a company and Islamic banks face more risks in Kenya compared to their conventional counterparts.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This last section of the study gives a summary of the entire study, conclusions, limitations, recommendations and proposals of areas for future research studies. Having met the objectives of the study,

5.2 Summary

This study compares the effect of financial structure on financial between Islamic banks and conventional banks in Kenya. It seeks to find out the variation in financial structure and the effects on financial performance between conventional and Islamic banks. The study explored a descriptive research design and formulated hypotheses to help achieve the objective of the study. The elements of financial structure studied were debt to equity ratio and the size of the bank. For financial performance, this study considered only one measure: ROE. Data required for the study was collected from audited financial statements of the sampled banks and Central Bank of Kenya's Annual Audit Reports of the banks.

Ordinary Least Squares was used in analysing the collected data. Analysis was done based on four years: 2009 – 2012. The findings revealed an overall growth among the banks sampled. This can also be observed across all the variables through the years. The findings revealed that the effect of debt to equity ratio to ROE was quite low in conventional banks, while it did not exist at all in Islamic banks. the size of the banks, however, had significant effect on ROE of both Islamic and conventional banks. Among the conventional banks, ROE has a negative relationship with debt to equity

while it has a positive relationship with the size of the firm. For the Islamic banks, on the other hand, ROE has no relationship with debt to equity ratio, but a significantly small negative relationship with the size of the firm.

5.3 Conclusion

The intended aim of conducting this study was to compare the influence of financial structure on financial performance between conventional and Islamic banks in Kenya. The findings of study validated a negative relationship between ROE and debt to equity ratio among the conventional banks and an optimistic dependence on bank size. Islamic banks' ROE on the other hand, had no relationship debt to equity ratio and an insignificantly negative relationship with the size of the banks. Now by comparing the models of both Islamic and conventional banks, results of each variable we can conclude that there exist a difference in the financial structure of Islamic banks and conventional banks.

5.4 Policy Recommendations

Islamic banks do not participate in any interest based investment. Even though there are treasury bills and bonds which conventional banks have access to, Islamic banks do not stand such a chance. The government should therefore push for the creation of investment alternatives to Islamic banks.

The current market conditions seem to favour conventional banks compared to Islamic banks. This is because of the numerous interest based investments that conventional banks can access. This places them at an advantage, above their Islamic counterparts. The government should, therefore, come up with strategies that will provide fair competitive markets to both Islamic to conventional banks.

The trends on performance of Islamic banks in Kenya show losses during the first years of operation. This indicates the risks the Islamic banks face in the Kenyan market. The government should therefore take on measures that would lower the risks faced by new Islamic banks in the industry such as interest free lending rates from CBK for a given period.

5.5 Limitations of the Study

There are several issues related to the topic of study. However, most of them have not been touched. This dissertation only focuses on the issue raised in the research question. Here are the limitations:

The analysis does not touch on other performance indicators such as growth opportunities, maturity, sustainability, shareholders‟ wealth maximization and profitability. The analysis is restricted only to one accounting performance measure: ROE.

This study does not tackle the instantaneous effect on corporate performance of any changes in corporate governance structure, but rather concentrates on the relation between capital structure and financial performance.

The effects of the geographical location of the firms and current global economic performance on the capital structure decisions and financial performance of Kenyan firms are not studied as this on its own deserves a separate study.

5.6 Areas for Further Research

Capital structure is a puzzling concept especially so in emerging markets like Kenya. This study has laid groundwork to compare how financial structure influences

financial performance of Islamic and conventional banks. Further study is required to address the following:

Include other measures of financial performance such as ROA, NIM and profitability. The studies should include other performance indicators such as growth opportunities, maturity, sustainability, shareholders‟ wealth maximization and profitability.

Further studies should also formulate new hypothesis as well as design new variables which can reflect the influence of the institution. In addition to this, more detailed work should that will show the effects of geographical location of the banks and current global economic performance.

Finally, this study compared two Islamic banks to five conventional banks. The whole industry consists of two Islamic banks and forty three conventional banks. The same study should be carried out to cover a larger geographic region that would provide a fair representation of both Islamic and conventional banks. The study should also study longer periods and select more established Islamic banks

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APPENDIX I: List of Registered Commercial Banks as of 31st December 2011

	Commercial Bank	Peer Group	Year Licenced
1	African Banking Corporation Ltd	Small	1984
2	Bank of Africa Kenya Ltd	Medium	1980
3	Bank of Baroda (K) Ltd	Medium	1953
4	Bank of India	Medium	1953
5	Barclays Bank of Kenya Ltd	Large	1953
6	CFC Stanbic Bank Ltd	Large	1955
7	Chatterhouse Bank Ltd	Small	1996
8	Chase Bank (K) Ltd	Medium	1991
9	Citibank N.A Kenya	Medium	1974
10	Commercial Bank of Africa Ltd	Medium	1967
11	Consolidated Bank of Kenya Ltd	Small	1989
12	Co-operative Bank of Kenya Ltd	Large	1965
13	Credit Bank Ltd	Small	1986
14	Development Bank of Kenya Ltd	Small	1973
15	Diamond Trust Bank Kenya Ltd	Medium	1946
16	Dubai Bank Kenya Ltd	Small	1982
17	Ecobank Kenya Ltd	Medium	2005
18	Equity Bank Ltd	Large	2004
19	Family Bank Ltd	Medium	1984
20	Fidelity Commercial Bank Ltd	Small	1992
21	Fina Bank Ltd	Small	1986
22	First Community Bank Ltd	Small	2008
23	Giro Commercial Bank Ltd	Small	2008
24	Guardian Bank Ltd	Medium	1992

25	Gulf African Bank Limited	Small	2007
26	Habib Bank A.G Zurich	Small	1978
27	Habib Bank Ltd	Small	1956
28	Imperial Bank Ltd	Medium	1992
29	I&M Bank Ltd	Medium	1974
30	Jamii Bora Bank Limited	Small	1984
31	Kenya Commercial Bank Ltd	Large	1986
32	K-Rep Bank Ltd	Small	1999
33	Middle East Bank (K) Ltd	Small	1980
34	National Bank of Kenya Ltd	Medium	1968
35	NIC Bank Ltd	Medium	1959
36	Oriental Commercial Bank Ltd	Small	1991
37	Paramount Universal Bank Ltd	Small	1993
38	Prime Bank Ltd	Medium	1992
39	Standard Chatered Bank Kenya Ltd	Large	1910
40	Trans National Bank Ltd	Small	1985
41	UBA Kenya Bank Limited	Small	2009
42	Victoria Commercial Bank Ltd	Small	1987

Source: Directory of Commercial Banks And Mortgage Finance Companies – CBK 2011

APPENDIX II: RAW DATA 2008 – 2009

Bank	**2008**						**2009**					
	ROE	Total Debt	Total shareholder equity	**DER**	Total assets '000	**ln (tot assets)**	**ROE**	Total Debt	Total shareholder equity	**DER**	Total assets '000	**ln (tot assets)**
ABC	**23.20%**	5,615,296	968,391	**5.799**	6,583,687	**22.608**	**22.47%**	7,696,218	1,145,025	**6.72**	8,841,243	**22.903**
Consolidated	**10%**	3,811,100	845,692	**4.506**	4,656,792	**22.262**	**12.58%**	9,001,618	1,477,064	**6.09**	10,478,682	**23.073**
Credit	**11.9%**	2,970,493	666,180	**4.459**	3,636,674	**22.014**	**11.34%**	2,937,212	727,736	**4.04**	3,664,947	**22.022**
Fina Bank	**7%**	12,585,567	1,780,682	**7.068**	14,366,249	**23.388**	**9.00%**	11,080,185	1,198,493	**9.25**	12,278,678	**23.231**
Oriental	**7.20%**	1,345,055	944,074	**1.425**	2,289,129	**21.551**	**3.37%**	2,070,029	982,285	**2.11**	3,052,314	**21.839**
First Community	**-39.60%**						**-23.00%**	3,788,869	662,758	**5.72**	4,451,627	**22.217**
Gulf African	**-30.00%**	3,726,592	1,273,305	**2.927**	4,999,897	**22.333**	**-14.12%**	6,598,992	1,149,948	**5.74**	7,748,940	**22.771**

Source: Audited Financial Statements of the Respective Banks

APPENDIX III: RAW DATA 2010 – 2011

Bank	**2010**						**2011**					
	ROE	Total Debt	Total shareholder equity	**DER**	Total assets '000	**ln (tot assets)**	**ROE**	Total Debt	Total shareholder equity	**DER**	Total assets '000	**ln (tot assets)**
ABC	**29.46%**	8,665,990	1,630,571	**5.315**	10,296,561	**23.055**	**30.28%**	10,804,808	1,702,087	**6.35**	12,506,895	**23.25**
Consolidated	**17.45%**	13,883,382	1,434,806	**9.676**	15,318,148	**23.452**	**17.18%**	13,883,382	1,434,806	**9.68**	15,318,148	**23.452**
Credit	**3.55%**	3,582,535	947,559	**3.781**	4,530,094	**22.234**	**5.35%**	4,436,023	958,041	**4.63**	5,394,064	**22.409**
Fina Bank	**11.32%**	12,776,242	1,336,123	**9.562**	14,112,365	**23.37**	**20.22%**	13,094,926	1,535,533	**8.53**	14,630,459	**23.406**
Oriental	**16.07%**	4,558,349	3,420,295	**1.333**	4,558,349	**22.24**	**14.93%**	5,030,090	3,740,031	**1.34**	5,030,090	**22.339**
First Community	**-28.24%**	5,814,846	565,252	**10.29**	6,380,099	**22.576**	**13.34%**	7,903,753	836,576	**9.45**	8,758,568	**22.893**
Gulf African	**3.80%**	8,370,219	1,223,842	**6.839**	9,594,061	**22.984**	**11.78%**	11,595,997	1,319,177	**8.79**	12,915,174	**23.282**

Source: Audited Financial Statements of the Respective Banks

APPENDIX IV: RAW DATA 2012

Bank	**2012**					
	ROE	Total Debt	Total shareholder equity	**DER**	Total assets '000	**ln (tot assets)**
ABC	**26.40%**	16,959,170	2,111,609	**8.031396911**	19,070,779	**23.67142**
Consolidated	**11.20%**	16,426,695	1,574,163	**10.43519318**	18,000,858	**23.61369**
Credit	**6.90%**	5,228,686	1,178,799	**4.435604374**	6,407,485	**22.58073**
Fina Bank	**13.90%**	14,648,770	2,503,675	**5.850907166**	17,152,445	**23.56541**
Oriental	**8.20%**	4,835,380	1,384,526	**3.492444346**	6,219,906	**22.55102**
First Community	**27.30%**	8,880,886	1,077,881	**8.239208224**	9,958,767	**23.02172**
Gulf African	**23.90%**	12,000,420	1,561,398	**7.685689363**	13,561,818	**23.33052**

Source: Audited Financial Statements of the Respective Banks