EFFECTS OF INCOME SOURCE DIVERSIFICATION ON FINANCIAL PERFORMANCE OF COMMERCIAL BANKS IN KENYA

BY

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DECLARATION

I declare that this research proposal is my original work and has never been submitted anywhere for a degree or qualification in any other university or institute of higher learning.

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DEDICATION

To my parents Mr. Samuel Hugo and Mrs. Nancy Hugo whose foresight in education and constant encouragement drove me to this level of education. To my husband Mr. John Muiru and daughter Amy for your love and understanding throughout the period. I love you all.

ABSTRACT

Financial institutions generate increased portion of their income from non-intermediation activities (DeYoung & Rice, 2004) and this could be associated to financial liberalization policies. Commercial banks exist to inter-mediate the transactions between demanders and suppliers of money at a given consideration. Earnings from these transactions form commercial banks traditional income generating activities. However, critical analysis of financial statements for commercial banks reveal a different trend, where over 40% of their net operating income comes from non-intermediation income generating activities (Stiroh, 2004a). By engaging in these non-interest sources, banks have been able to diversify their income source. Shaped by structural forces of change, banking in emerging markets has recently experienced a decline in its traditional activities, leading banks to diversify into new business strategies. Generally, it is believed that diversification of income sources should reduce total risk, as diversification should stabilize operating income if income streams are negatively or imperfectly correlated. Financial performance of an organisation is of utmost importance in determining its success. The objective of this study was to establish the effects of revenue diversification into non-interest income on financial performance of commercial banks in Kenya. This research adopted descriptive design as the information was collected from secondary sources. The population of interest was drawn from the commercial banks in Kenya for the period 2008 to 2012. In pursuance of the objective of the study, the study sampled 6 largest (most profitable) commercial banks in Kenya in terms of market share. The study used secondary data which was collected using audited financial statements of commercial banks in Kenya. Both descriptive and inferential statistics were used with the aid of Statistical Package for Social Science (SPSS) programme at 95% confidence level. The researcher employed regression model to study the relationship between the commercial banks financial performance and income diversification into non-interest incomes by banks. HHI was used to measure diversification while bank performance was measured by ROA. The study utilized chi-square test in testing the significance of variables in the study which showed significant relationship of variables with financial performance of commercial banks. According to the results, each of the independent variables which are fees and commissions on loans and advances, foreign exchange earnings, government securities income and sales and lease of assets income contribute positively to financial performance of commercial banks in Kenya. It is evident from the study that without diversification of income sources by commercial banks in Kenya most of them would have struggled with their objective of maximizing profit. The study recommends that CBK should offer environment where the commercial banks operations are not interfered with so as to attain diversification of income sources.The study recommends another study be done to establish the other non-interest incomes that the banks diversified into that influenced financial performance of the commercial banks in Kenya. Further research to augment the study findings on the sustainability of each of the non-interest income source could add value to the profitability of commercial banks and academic literature.

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LIST OF ABBREVIATIONS

BHC – Bank Holding Company

CBK – Central Bank of Kenya

CFROI – Cashflow return on Investment

DEA – Data Envelopment Approach

DIV - Evidence of revenue diversification

EVA –Economic Value Added

FHCs – Financial Holding Companies

GDP – Gross Domestic Product

HHI - Herfindahl Hirschmann Index

NET - Net interest income

NON – Non-Interest incomes

NPL – Non Performing Loans

OECD – Organization for Economic Co-operation and Development

RAROA – Risk Adjusted Return on Asset

RAROE – Risk Adjusted Return on Equity

ROA – Return on Assets

ROE - Return on Equity

SPSS - Statistical Package for Social Science

SVA – Shareholders Value Added

TOI – Total Operating Income

CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

Financial institutions generate increased portion of their income from non-intermediation activities (DeYoung & Rice, 2004) and this could be associated to financial liberalization policies. The growth of non-intermediation income activities suggests intermediation activities are becoming less important part of banking business strategies and strategically, banks have shifted their sales mix by diversifying in income sources. Banks exist to inter-mediate the transactions between demanders and suppliers of money at a given consideration. Earnings from these transactions form banks traditional income generating activities. However, critical analysis of financial statements for commercial banks reveal a different trend, where over 40% of their net operating income comes from non-intermediation income generating activities (Stiroh, 2004a). The growth of non-intermediation income activities suggests intermediation activities are becoming less important part of banking business strategies and strategically, banks have shifted their sales mix by diversifying in income sources.

Deregulation and new technology have eroded banks comparative advantages and made it easier for non-bank competitors to enter these markets, necessitating banks to shift their sales mix and diversify towards non-interest income sources (Angbazo, 1997). Findings from USA studies show that in 1990's non-interest income grew rapidly to be a large part of banks operating profits. Non-interest income accounts for 43% of U.S.A commercial banks net operating income (Stiroh, 2004a). Diversification is importance

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for financial stability. The reason is straightforward, the more unstable a bank's (or any other firm's) earnings stream, the more risky the firm is. Hoggarth, Milne and Wood (1998) drew attention to an example of this, comparing banking sector profitability in Britain and Germany. It was observed that banking profitability in Germany was lower than in Britain, but also less variables, suggesting that the systems had pursued alternative routes to stability.

Financial liberalization of early 1990s in Kenya opened the banking industry to a number of players leading to stiff competition and weakening of financial performance of a number of commercial banks leading to collapse of some. These reforms have brought about many structural changes in the sector and have also encouraged foreign banks to enter and expand their operations in the country (Kamau, 2009). Kenya's financial sector is largely bank-based as the capital market is still considered narrow and shallow (Ngugi *et al*, 2006). Banks dominate the financial sector in Kenya and as such the process of financial intermediation in the country depends heavily on commercial banks (Kamau, 2009). In fact Oloo (2009) describes the banking sector in Kenya as the bond that holds the country's economy together. Sectors such as the agricultural and manufacturing virtually depend on the banking sector for their very survival and growth. In response, commercial banks have changed their behaviour of income sources by diversifying as a possible way of improving performance. Consequently, the performance of the banking industry in the Kenya has improved tremendously over the last ten years, as only two banks have been put under CBK statutory management during this period compared to 37 bank-failures between 1986 and 1998 (Mwega, 2009).

1.1.1 Income Source Diversification

As noted by Busch and Kick (2009) in recent years, deregulation and technological innovation has permitted almost all financial institutions to capture an increasing share of their income stream from non-interest sources. By engaging in these non-interest sources, banks have been able to diversify their income source. Shaped by structural forces of change, banking in emerging markets has recently experienced a decline in its traditional activities, leading banks to diversify into new business strategies. Generally, it is believed that diversification of income sources should reduce total risk, as diversification should stabilize operating income if income streams are negatively or imperfectly correlated.

According to Stiroh (2004a) diversification is usually associated with a change in the characteristics of the company's product line and/or market, in contrast to market penetration, market development, and product development, which represent other types of change in product-market structure. Stiroh notes that there are four basic growth alternatives open to a business. It can grow through increased market penetration, through market development, through product development, or through diversification. A company which accepts diversification as a part of its planned approach to growth undertakes the task of continually weighing and comparing the advantages of these four alternatives, selecting first one combination and then another, depending on the particular circumstances in long-range development planning (Shawn, 2002).

1.1.2 Financial Performance

Financial performance is described as the level of performance of a business over a specified period of time, expressed in terms of overall profits and losses during that time (La Porta, Lopez-de-Silanes, Shleifer, & Vishny, 2002). It is therefore measuring the results of a firm's policies and operations in monetary terms. Profit making is the fundamental dimension for an enterprise to sustain, perform and grow to maximize wealth. Social responsibility is the fundamental accountability of the state that focuses on social enlistment in its totality (La Porta *et al*, 2002). The performance of a company is the result of its overall strategy, innovation, quality, market position and long term view. Hence, organizations are constantly seeking new and improved products, processes, and organizational structures that will reduce their costs of production, better satisfaction of the customer demands, and greater profits. Finance is the life blood of any organization; improvements in the financial sector will have positive direct ramifications throughout the economy.

The capability of a firm to create and sustain organizational wealth depends on the competitive effectiveness of its value chain that in turn, is determined by the firm's relationships with clients, shareholders, employees and other stakeholders (Kotter & Heskett, 1999). Therefore, financial performance of an organisation is of utmost importance in determining its success. According to Helen and Keasey (1999) periodic measurement of firm performance is conducted for several reasons: it helps investors to formulate their expectations concerning the future earning potential of firms; it supplies a plausible feedback on how well the company has achieved its goals; it furnishes the

basis of an adequate bonus plan that gives incentives to achieve the firm's goals and rewards the results of proper decisions.

Financial performances measurements have been described by many authors. Stewart (1991) did a review of the main value-based measures: the economic value added (EVA)

the cash flow return on investment (CFROI) and the shareholder value approach (SVA) described by Rappaport (1986). It has been said that you must measure what you expect to manage and accomplish to create a reference to work with. One way of establishing references and managing the financial affairs of an organization is to use ratios. Ratios are simply relationships between two financial balances or financial calculations. These relationships establish references to understand financial performance. The main application of these ratios is return on equity, liquidity ratios, asset management ratios, profitability ratios, leverage ratios and market value ratios.

By using this monetary link it has been possible to decide whether investment could be justified, a product was made obsolete, or return on capital was acceptable. In fairness financial performance measurement is historically a recording system which is now being used more often to support competitive improvement and guide investment. This study seeks to investigate effects of revenue diversification into non-interest income on financial performance of commercial banks in Kenya. It is therefore going to investigate

how diversification into foreign exchange trading, fees and commissions on loans and advances, government securities and sale and lease of assets owned by the banks influences banks financial performance.

1.1.3 Income Source Diversification versus Financial Performance

Empirical literature on financial firms has produced mixed evidence as to whether and how increased diversification affects performance. In an early survey, Saunders and Walters (1994) review 18 studies that examine whether non-bank activities reduce bank holding company (BHC) risk and indicate no consensus: 9 answer yes, 6 answers no, and 3 are mixed. These, and more recent studies, approach the risk question from a variety of perspectives: creation of synthetic or counterfactual mergers of banks with non-banks, analysis of actual operating results, and analysis of market reactions to diversification.

The most relevant comparisons for this study are the papers that examine the actual performance of banks with varying degrees of concentration and diversification. The general conclusion is that bank expansion into less traditional financial activities is associated with increased risk and lower returns. DeYoung and Roland (2001) found that a shift toward fee-based activities is associated with increased revenue volatility and a higher degree of total leverage, both of which imply greater earnings volatility for commercial banks. Stiroh (2004b) concludes that a greater reliance on non-interest income, particularly trading revenue, is associated with higher risk and lower risk-adjusted profits across commercial banks. A study of loan portfolio diversity by

(Acharya, Hasan, & Saunders, (2002) reports that diversification of loans does not typically improve performance or reduce risk in Italian banks. Morgan and Samolyk (2003) examine geographic diversification and find similarly negative results: diversification is not associated with greater returns (ROE or ROA) or reduced risk. Finally, Stiroh (2005) shows that increased exposure to non-interest income increases the volatility of equity market returns, but not the mean.

A few studies find some potential for gains from expansion into specific activities. Templeton and Severiens (1992) examine 54 bank holding companies from 1979 to 1986 and find that diversification (as measured by the share of market value not attributed to bank assets) is associated with lower variance of shareholder returns. Kwan (1998) examines the returns of banks section 20 subsidiaries and their commercial bank affiliates and finds that Section 20 subsidiaries are typically more risky and not necessarily more profitable than their commercial bank affiliates. Nonetheless, Kwan concludes that some diversification benefits may exist for commercial banks because of the low return correlation between securities and bank subsidiaries. Cornett, Ors and Tehranian (2002) also report that evidence of gains from Section 20 subsidiaries as the industry-adjusted operating cash flow return on assets rises, while risks do not change significantly.

1.1.4 Commercial Banks in Kenya

The Banking industry in Kenya is governed by the Companies Act, the Banking Act, the Central Bank of Kenya Act, and the various prudential guidelines issued by the Central

Bank of Kenya (CBK). The banking sector was liberalised in 1995 and exchange controls lifted. The Central Bank of Kenya, which falls under the Ministry of Finance, is responsible for formulating and implementing monetary policy and fostering the liquidity, solvency and proper functioning of the financial system. Central Bank of Kenya publishes information on Kenya's commercial banks and non-banking financial institutions, interest rates and other publications and guidelines. Commercial banks are custodians of depositor's funds and operate by receiving cash deposits from the general public and loaning them out to the needy at statutorily allowed interest rates. Loans are based on the credit policy of the bank that is tightly coupled with the central bank interest rate policy. These in effect determine the level of financial risk in a particular bank. According to an Annual Bank Supervision report (2005), the Kenyan economy recovered to expand with a GDP growth of 5.2% in 2005 compared to overall 4.3% in 2004. During the year, the economy enjoyed a favourable macroeconomic environment, consistent with low and stable interest rates, strengthening shilling exchange rate and falling inflation.

Banks represent a significant and influential sector of business worldwide that plays a crucial role in the global economy. Commercial banks are financial intermediaries that serve as financial resource mobilization points in the global economy. They channel funds needed by business and household sectors from surplus spending to deficit spending units in the economy. A well-developed efficient banking sector is an important prerequisite for saving and investment decisions needed for rapid economic growth. A well-functioning banking sector provides a system by which a country's most

profitable and efficient projects are systematically and continuously funded. The role of banks in an economy is paramount because they execute monetary policy and provide means for facilitating payment for goods and services in the domestic and international trade (Shawn, 2002).

1.2 Research Problem

According to Wall (2000) diversification improves cost efficiency through lower risk from diversification if it occurs, and lowers the required risk premiums on un-insured debt and other contingent claims, such as derivative contracts. Research findings from developed (USA and Europe) markets on impact of income source diversification on banks financial performance differs greatly. It worsens risk-return trade-off in USA while it increases risk return trade-off in Europeans banks. De Young and Rice (2004); Stiroh (2004a); Stiroh and Rumble (2006) indicate a worse risk-return trade-off for U.S.A commercial banks venturing into income source diversification.

McAllister and McManus (1993) contend that diversification may lower bank risk and reduce the probability of failure; particularly if the returns of assets have relatively low or negative co-variance and beneficial if the worst states of nature for each of the assets do not coincide. Baele, Jonghe and Vennet (2007); Chiarozza, Milani and Salvini (2008); Smith, Staikouras, and wood (2003) show that income source diversification increases risk-return trade-off for European banks. Further, Shawn (2002) financial sector in most developing countries is characterized by fragility, volatile interest rates, high-risk investment and inefficiencies in the intermediation process. The industry

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further differs in: ownership structure, financial liberalization level and accounting treatment of various sources of income. Kenyan baking industry is no exception to the above problems.

Diversification benefits banks from shifting into non-interest income as banks' revenue increases and volatility of banks' profit reduces (Stiroh, 2004a). Diversification worsens the risk- return trade-off for banks (Rumble & Stiroh, 2006) and earnings gained from diversification caused by growth in non-interest income is outweighed by the volatility increases, resulting in a non-commensurate increase in stock returns. Non-interest income and interest income were increasingly growing highly correlated over time in banks (De Young & Roland, 2001; De Young & Rice, 2004) and exists along with, rather than replace each other.

Locally, studies have been done to determine factors that affect financial performance of commercial banks. For example, Birya (2009) conducted a study to investigate the effect of privatization on financial performance of commercial banks listed at the NSE. The study established that the performance of these banks improved after privatisation. Further, Olweny and Shipho (2011) did a study to determine the effects of banking sectoral factors on banks' profitability. The authors recommended revenue diversification as one way of improving financial performance. Aduda and Kingoo (2012) also did a research which established a positive relationship between e-banking and bank performance. On the other hand Kimeu (2012) confirmed that the risks arising from income diversification are not offset by the benefits.

However, despite the excessive research into factors influencing financial performance of commercial banks both locally and globally, there is no consensus on the effect of income source diversification on financial performance of commercial banks. Liberalization and growth in information and communication technology has lead to commercial banks exploring non-interest income so as to remain competitive. Thus effect caused by non-interest incomes on bank performance cannot be ignored. Therefore, the researcher seeks to fill this gap of knowledge by investigating the effects of income source diversification on financial performance of commercial banks in Kenya. This is because Kenya plays a major economic role in Sub-Saharan Africa.

1.3 Research Objectives

The study aims at establishing the effects of income source diversification on financial performance of commercial banks in Kenya.

1.4 Value of the Study

The study will be important to the management of these commercial banks as it will provide an insight on the diversifications that can be made to improve the performance of the organisation. The results of this study will provide information to policy makers and other stakeholders in the financial sector (especially the banks) to come up with strategies that help in income diversification and thus improve on the financial performance of the organisation.

The research results will also be important to scholars and researchers as it will add to the existing pool of knowledge. Further, this study is also significant in that,

academically it will add to the existing knowledge on income diversification strategies that can be used to maintain and improve organisation financial performance thus forming part of academic reference.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This chapter presents a review of related literature on the subject under study presented by various researchers, scholars, analyst and authors. The chapter also reviews the finance theories related to the study. The researcher has drawn materials from several sources which are closely related to the theme and the objectives of the study.

2.2 Theoretical Review

2.2.1 Resource-Based View Theory

The theoretical perspective that has come to be known as the resource-based view of the firm suggests that sustainable competitive advantage often originates inside the firm, and that strategy at the firm level is therefore driven by firm-specific resources and capabilities. The resource-based view of the firm suggests that diversification arises as firms attempt to leverage non-tradable firm-specific resources, among them human resources. Studies of diversification have long been a mainstay of economics as well as strategic management research (Hoskisson & Hitt, 1990). Resource-based view theory generally assumes that firms are organized with a single product focus and face a homogeneous factor market. Based on those assumptions, a market power view (Edwards, 1955) of diversification emphasizes the benefits a firm may reap at the expense of its competitors and customers. More sceptical views offered by agency theorists emphasize the benefits that diversification offers to firm managers themselves, often at the expense of its shareholders.

The effectiveness of firm strategies depends on the utilization and exploitation of existing resources. To the extent that firms have pools of underused resources, these create unique, firm-specific opportunities for exploitation (Montgomery, 1994). Diversification is one such strategy for exploiting existing firm-specific resources: firm diversification can be understood as a process through which managers first identify resources that are unique to their firm, and then decide in which markets those resources can earn the highest rents. Some firm resources are 'indivisible' and therefore 'sticky', and, particularly if they are intangible, difficult or impossible to trade in the market.

2.2.2 Financial Intermediation Theory

Financial intermediation is a process which involves surplus units depositing funds with financial institutions who then lend to deficit units. Stiroh (2004a) identify that financial intermediaries can be distinguished by four criteria: first their main categories of liabilities (deposits) are specified for a fixed sum which is not related to the performance of a portfolio. Second the deposits are typically short-term and of a much shorter term than their assets. Third a high proportion of their liabilities are can be withdrawn on demand. And fourth their liabilities and assets are largely not transferable. The most important contribution of intermediaries is a steady flow of funds from surplus to deficit units.

According to Scholtens and van Wensveen (2003) the role of the financial intermediary is essentially seen as that of creating specialized financial commodities. These are created whenever an intermediary finds that it can sell them for prices which are expected to cover all costs of their production, both direct costs and opportunity costs.

Financial intermediaries exist due to market imperfections. As such, in a 'perfect' market situation, with no transaction or information costs, financial intermediaries would not exist. Numerous markets are characterized by informational differences between buyers and sellers. In financial markets, information asymmetries are particularly pronounced. Borrowers typically know their collateral, industriousness, and moral integrity better than do lenders. On the other hand, entrepreneurs possess inside information about their own projects for which they seek financing. Moral hazard hampers the transfer of information between market participants, which is an important factor for projects of good quality to be financed.

2.2.3 Uncovered Interest Parity Theory

While the purchasing power parity condition applies to the cross border pricing of goods and services, uncovered interest rate parity theory looks into the cross border pricing of financial investments. According to Reid and Joshua (2004), this theory states that, lacking frictions in financial markets, the price of otherwise risk less financial investments or the rate of return received on them, should be identical across borders. The frictions present in the international financial markets are slightly different from those in goods markets. While there are likely to be few frictions in the form of costs to transferring capital across borders, markets for investment capital still include the frictions, causing the imperfect capital mobility such as multiple currencies. Uncovered interest parity requires that overseas returns be expected to equal domestic returns when converted at spot exchange rates. The theory established that in international financial markets, when looking at the domestic currency return on an investment that pays

interest in a foreign currency, exchange rate changes must be added to the own currency return.

2.3 Empirical Studies

Generally, it is believed that diversification of income sources should reduce total risk, as diversification should stabilize operating income if income streams are negatively or imperfectly correlated. While this argument is clear from a traditional point of view, DeYoung and Roland (2001) provide three reasons why non-interest income may increase volatility. First, revenues from fee-based activities might be more volatile than interest income because the customer-bank relationship is stronger in the traditional lending business. Therefore, for many of the new fee-based activities it is easier for customers to switch to another bank. Second, expanding into fee-based services can considerably increase fixed costs for example, investments in technology and human resources whereas, if a lending relationship is already established, the only cost of an additional loan is the bank's interest expenses. Third, in contrast to the lending business, fee-based activities require less regulatory capital, which suggests a higher degree of financial leverage and therefore leads to higher earnings volatility. Indeed, DeYoung and Roland (2001); Stiroh (2004a) find empirical evidence that reliance on non-interest activities increases the volatility of large banks.

Stiroh (2004a) analyzes the potential benefit of income diversification for U.S. banks. Since the growth of net interest and net non-interest income in the period 1984-2001 is increasingly correlated, he concludes that the diversification benefits decreased during the period in question. Furthermore, he shows that at the bank level risk-adjusted returns

are negatively associated with non-interest income shares. De Young and Rice (2004) suggest that there are differences between the European and the U.S. banking sector. They argue that universal banking has been the historic norm in many European banking systems, possibly based on experience as European banks are better informed as to how to exploit the diversification benefit of fee-based activities. Smith, Staikouras, and Wood (2003) likewise empirically confirm that European banks are able to seek diversification benefits through combining interest and non-interest income activities. In the case of European banks, the authors find that non-interest income is indeed more volatile than interest income but, in contrast to U.S. studies, there are negative correlations between these two income streams. Hence, they conclude that non-interest activities potentially stabilize bank earnings, a result that is also confirmed by Davis and Tuori (2000) for a number of European banks, including some in Germany.

Gischer and Jüttner (2003) find a weak negative relationship between ROA and the fee income to interest income ratio for 19 OECD countries. The results for the Australian banking sector are similar. Esho, Kofmann and Sharpe (2005) show that for a sample of Australian Credit Unions the return on assets (ROA) is negatively associated with the increment of transaction fees. Against expectations, risk rises in line with a higher revenue share of this income source. Conversely, revenue shares of fees received for off-balance sheet facilities and fiduciary activities do not seem to have any influence on risk and return, possibly on account of the relatively small share of this income category. Lepetit et al. (2008) find that in the case of 602 European banks during the period 1996-2002 there was a negative correlation between interest margin and non-interest income.

The authors assume that banks use loans as a loss leader to expand their non-interest income via cross-selling.

Chiorazzo et al. (2008); Mercieca et al. (2007); Stiroh (2004b); Stiroh & Rumble, (2006) differentiate between a "direct exposure" effect (a greater reliance on non-interest activity) and an "indirect diversification effect" (change of concentration between the two income streams), whereby the latter is measured by the Herfindahl Hirschmann Index (HHI). Indeed, Mercieca et al. (2007); Stiroh (2004a); Stiroh and Rumble (2006) show that for small European banks, small U.S. community banks and U.S. financial holding companies higher concentration is accompanied by a lower degree of income volatility, while shifting into non-interest income creates an inefficient trade-off between risk and return. Furthermore, all three studies conclude that the banks' financial stability, measured through z-score, is negatively affected by reliance on non-interest income. In contrast to these papers, Chiorazzo et al. (2008) identify a positive relation between diversification and non-interest income activity and risk-adjusted performance for Italian banks between 1993 and 2003. Split samples, grouped by size classes, reveal that large banks, in particular, benefit from non-interest income activities while within the group of small banks only institutions with a low non-interest income share are able to benefit from expanding their non-interest business.

If, indeed, there are only two income streams the question remains, however, as to whether the "direct exposure effect" can be separated from the "diversification effect". In this context, Petersen (2004) complains that in the binary case, where the bank chooses between lending and non-interest activities, the HHI is merely a non-linear form

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of the non-interest income share. In particular, if the bank's non-interest income share is less than 50%, which is true for most of the small banks, the correlation between HHI and non-interest income share is extremely large and, hence, empirically separating these two effects might be impossible.

Until now academic literature has paid only little attention to the fact that non-interest activity and banks' performance are interrelated. On the one hand, there is the suspicion that banks suffering from declining or highly volatile profitability are inclined to expand their engagement in non-interest activities in order to earn a higher or more stable return. On the other hand, shifting banks' business towards non-interest income also has an impact on profitability. In econometric analysis it is necessary to pay attention to the possible endogeneity of non-interest income activities, as otherwise the endogeneity of independent variables leads to inconsistent estimators. Endogeneity in the modeling of non-interest income is considered in cases by Campa and Kedia (2002); De Young and Rice (2004); Laeven and Levine (2005), whereas all studies use an instrumental variable approach to derive consistent estimators.

De Young and Rice (2004) demonstrate the empirical links between banks' non-interest income, business strategies, market conditions, technological change and financial performance for U.S. commercial banks between 1989 and 2001. They show that well managed banks, measured by a relative ROE measure, are less engaged in non-interest income while large banks and banks that focus more on relationship banking are more reliant on non-interest income. They also find that marginal increases in non-interest income engender higher, but more volatile profits, and a decline in risk-adjusted profits.

Craigwell and Maxwell (2006) did a study to investigate the inter-relationship between non-interest income, financial performance and the macroeconomic environment using 19 Jamaican panel data. They found a positive impact of non-interest income on ROA and its volatility for Barbados banks between 1985 and 2001. In contrast to other studies, however, they find no evidence that relative performance helps to explain non-interest income. Surprisingly, in the Barbados study non-interest income - in relative terms - plays a larger role for smaller banks.

In terms of the diversification, banks should not focus highly on an income source. Although interest incomes from traditional activities, such as making different loans, are the major generator of revenues, diversifying income sources from traditional activities to non-traditional activities might be a good strategy for banks. Yet, banks should implement this strategy with caution. Placing emphasis on non-interest income activities and giving up net interest income activities might not be a sound strategy. DeYoung and Rice (2004) indicated some non-interest income activities of banks were related to traditional activities. Banks cannot improve profitability by giving up interest income activities and increasing non-interest income activities. Stiroh (2004, 2006); Stiroh and Rumble (2006) investigated bank performance in terms of the diversification of different income sources. They found diversifying incomes in non-traditional activities improve bank performance. However, risk adjusted performance was not the case. The results also supported the observation that non-interest incomes generated from involving non-traditional activities are profitable but risky.

Huang and Chen (2006) investigated whether the reliance on different sources of non-interest incomes will affect bank efficiency. They employed the Data Envelopment Approach (DEA) to calculate the cost efficiency of Taiwan domestic commercial banks from 1992 to 2004. The findings were that the banks either with relatively higher or lower ratios of non-interest incomes to operating incomes performed more cost efficiently during the examination period. The relative optimal level of non-interest incomes exists in the Taiwan banking industry. The study also revealed there is a trend of a growing percentage of non-interest incomes to operating incomes in the Taiwan banking industry. The findings in this case uphold the reaction of banks in the European economy. Thus it confirms that non-interest income has become an increasingly important part of banks' operating incomes and the same is regarded as a stable source of bank revenue. However, DeYoung and Roland (2001) stated increasing fee-based activities increases the volatility of bank revenues and earnings. Stiroh (2004); DeYoung and Rice (2004) showed an increased reliance on non-interest incomes did not reduce the risk level of the bank.

Kiweu (2012) did a study to establish how income focus verses diversification impacts on bank performance. He examined income diversification effects on bank earnings, for it is claimed that it can reduce risk and volatility. The study focused on banks' primary income sources of interest and non-interest earnings. HHI was used to measure income diversification while ROA, ROE and risk adjusted returns were used to determine financial performance. The findings were that there were few benefits, if any to be expected from income diversification from traditional banking although it also revealed

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importance of growing non-interest incomes during the period of study (2000 – 2010). It was also established that bigger banks are more diversified than small banks and tend to have higher returns. Teimet, Ochieng and Anywa (2011) upheld that bigger banks are more diversified than small banks. On the contrary, they found that diversification level has a positive influence on financial performance of commercial banks in Kenya and the two main revenue streams are positively related. In their study to establish the impact of income source diversification on financial performance of commercial banks in Kenya HHI was used to analyze diversification and focus. They employed longitudinal approach to study the 5 years trends of income source diversification.

In a study to determine and evaluate the effects of bank specific factors; Capital adequacy, asset quality, liquidity, operational cost efficiency and income diversification on the profitability of commercial banks in Kenya Olweny and Shipho (2011) recommended policies that would encourage revenue diversification. The study covered from 2002 to 2008 and adopted an explanatory approach by using panel data research design. The data was analyzed using multiple linear regressions method. The analysis showed that all the bank specific factors had a statistically significant impact on profitability, while none of the market factors had a significant impact.

Aduda and Kingoo (2012) investigated the relationship between e-banking and performance of Kenya banking system. Electronic banking is one of the non-interest income sources in the banking sector. The study revealed that e-banking has strong and significance marginal effects on ROA in the Kenyan banking industry. Thus, there exists positive relationship between e-banking and bank performance. They concluded that

electronic banking has made banking transaction to be easier by bringing services closer to its customers hence improving banking industry performance. The study used both descriptive and inferential statistics in analyzing the data.

2.4 Summary of Literature Review

Until now academic literature has not offered a consensus on the effects of income source diversification on financial performance of commercial banks. While some researchers recommend revenue diversification (Olweny & Shipho, 2011) others have confirmed the risks arising from income diversification are not offset by the benefits (Kimeu, 2012). It is generally believed that diversification by a firm reduces risk, just as diversification of investments by an individual does. Markowitz (1952) quantifies the benefits of diversification also known as not putting all your eggs in one basket. All else equal, an efficient bank should generate higher amounts of noninterest income. For example, a well-managed bank will set its fees to fully exploit market demand, and will cross-sell additional fee-based products to a larger percentage of its core customer base. Thus, holding product mix and banking strategy constant, the intensity of non-interest income is likely to be a forward-looking signal of a bank's financial success (DeYoung & Rice 2004).

It appears to be conventional wisdom that non-interest income is more stable than interest income and that fee based activities reduce bank risk via diversification. The main conclusion of the US studies is that the picture is much more complex than the conventional wisdom suggests. Whether diversification in non-interest income activities

actually increases or decreases risk seems to be an empirical question, with the answer varying from case to case and study to study. Theory alone does not answer this question or strongly support either side of the argument. The growth of non-intermediation income activities suggests intermediation activities are becoming less important part of banking business strategies and strategically, banks have shifted their sales mix by diversifying in income sources Stiroh (2004). According to Kimeu (2012) the benefits of evolution of non-interest income do not seem to fully offset the increase in risk that come with fee based income. A positive correlation between net interest income and non-interest incomes seems to exist, a finding that suggests non-interest incomes may not be used to stabilize total operating income. However, liberalization and growth in information and communication technology has lead to commercial banks exploring non-interest incomes so as to remain competitive. Thus effect caused by non-interest incomes on bank performance cannot be ignored. In order to maintain the relative optimal level in cost efficiency, banks might not only focus on the non-interest incomes related activities, but also emphasize the traditional interest related incomes activities. The researcher will do this study to provide more literature for reference by managers and students of finance.

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

This chapter presents the methodology that was be used to conduct the study. It covers the research design, the target population, data collection instruments and procedures, data analysis method and model specification.

3.2 Research Design

The research design permits the study to meet the purpose of the research. It refers to the overall plan employed by the researcher to obtain answers to the research questions (Hakim, 2000). It is a blueprint of the research as it shows how all of the major parts of the research project coordinate to achieve the research objective. This research adopted descriptive design as the information was collected from secondary sources. The population of interest was drawn from the commercial banks in Kenya for the period 2008 to 2012. The design is deemed appropriate because the main interest is to explore the viable relationship and describe how the factors support matters under investigation in the commercial banks in Kenya. A descriptive method presents an opportunity to fuse both quantitative and qualitative data as a means to reconstruct the "what is" of a topic (Murphy, 2006).

3.3 Target Population

Cooper and Emory (1995) define population as the total collection of elements about which the researcher wishes to make some inferences. Element is the subject on which

the measurement is being taken and is the unit of study, according to Cooper and Emory (1995). Target population is the whole group of elements to which the researcher can legitimately apply the conclusions of the findings. The target population in this study consists of all 43 commercial banks operating in Kenya.

3.4 Sampling and Sample size

According to Kothari (2000) sampling is selection of a given number of subjects to represent the target population. Since the population of interest to the researcher was too large and the time for study was not enough a sample was choosen. Ngechu (2004) underscores the importance of selecting a representative sample. In pursuance of the objective of the study, the study sampled 6 largest commercial banks in Kenya in terms of market share.

3.5 Data Collection

The study used secondary data which was collected using audited financial statements of commercial banks in Kenya. The financial statements (secondary data) were obtained from individual banks websites, CBK supervisory data bank and/or National daily newspapers (Nation and Standard). These sources are authentic thus reliable, suitable and valid. The study used longitudinal approach to study the 5 years trends of income source diversification.

3.6 Data Analysis

Both descriptive and inferential statistics were used with the aid of Statistical Package for Social Science (SPSS) programme at 95% confidence level. The descriptive

statistical tools helped the researcher to describe the data and determine the extent to be used. Data analysis was done using SPSS version 20 and Microsoft Excel software. Descriptive statistics that is mean score, frequencies and percentages for each variable were calculated and tabulated using frequency distribution tables, or pie charts and/or bar charts. This generated quantitative reports through tabulations, percentages, and measure of central tendency.

The researcher employed regression model to study the relationship between the bank financial performance and income diversification into non-interest incomes by banks. Descriptive statistics were taken to ensure the variables data is close to normal distribution. Correlation matrix and ANOVA was used to ensure none of the variables was highly correlated to each other.

The relationship of the equation was a multiple linear equation as shown below;

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon \text{ Where;}$$

Y= Financial Performance; β_0 = constant term; $\beta_1 - \beta_4$ = Beta coefficients (intercepts for independent variables); X_1= Foreign Exchange Earnings; X_2= Fees and Commission on Loan and Advances; X_3= Government securities income; X_4 = sales and lease of assets income and ε = Error term.

Bank performance was measured by return on asset (ROA) while the researcher followed the basic HHI used in Morgan & Samolyk, (2003); Stiroh (2004a); Thomas (2002) to measure diversification. The ROA was calculated by dividing banks' net profit after taxation by the total assets held by the bank over the study period.

The primary measure of evidence of revenue diversification, DIV, accounts for variation in the breakdown of net operating revenue into two broad categories: net interest income, NET, and non-interest income, NON. Using this breakdown, the researcher measured revenue diversification of the banks as:

$$DIV = 1 - (SH_{NET}^2 + SH_{NON}^2)$$

Where: SH_{NET} is the share of net operating revenue from net interest sources and SH_{NON} is the share of net operating revenue from non-interest sources defined as;

$$SH_{NON} = \frac{NON}{NON+NET} \qquad\qquad SH_{NET} = \frac{NET}{NON+NET}$$

DIV measures the degree of diversification in a bank's net operating revenue. A higher value indicates a more diversified mix: 0.0 means that all revenue comes from a single source (complete concentration), while 0.5 is an even split between net interest income and non-interest income (complete diversification). These measures are then averaged over a period of 5 years to get a measure of average revenue diversification, DIV, average net interest income shares, SH_{NET}, and average non-interest income shares, SH_{NON}.

Chi-square test was also applied. Chi-square is a quantitative measure used to determine whether a relationship exists between two categorical variables. Categorical variable yield data in the categories and numerical variables yield data in numerical form.

These tests are always testing the null hypothesis, which states that there is no significant difference between the expected and observed result. Testing of the null hypotheses is based on the fact that if the p value for the calculated Chi-square is $p > 0.05$, then the null hypothesis is accepted.

CHAPTER FOUR: DATA ANALYSIS, RESULTS AND DISCUSSION

4.1 Introduction

This chapter presents analysis and findings of the study as set out in the research methodology. The results were presented on effects of income source diversification on financial performance of commercial banks in Kenya taking a case of 6 largest (most profitable) banks in Kenya.

4.2 Descriptive statistics

Table 4.1: Revenue diversification (DIV)

	Mean	S.D
Standard Chartered Bank	0.472	0.03600
Kenya Commercial Bank	0.46	0.01789
Equity Bank Limited	0.476	0.02498
Co-Operative	0.474	0.01744
Barclays	0.476	0.00490
CFC Stanbic	0.464	0.03929

Source: Research, (2013)

From the findings, averages for revenue diversification for the 6 largest commercial banks in Kenya from 2008- 2012 in terms of market share was extracted from the financial and annual statements reflects that Barclays and Equity Bank Limited have the highest values of 0.476

Table 4.2: Return on asset (ROA)

	Mean	S.D
Standard Chartered Bank	0.05278	0.00401
Kenya Commercial Bank	0.04384	0.00918
Equity Bank Limited	0.0659	0.00625
Co-Operative	0.0381	0.00520
Barclays	0.06084	0.00959
CFC Stanbic	0.02108	0.00764

Source: Research, (2013)

From the findings, averages for return on asset (ROA) for the 6 largest commercial banks in Kenya from 2008- 2012 in terms of market share was extracted from the financial and annual statements reflects that Equity Bank and Barclays Limited have the highest values of 0.0659 and0.06084 respectively.

4.2.1 Herfindahl–Hirschman Index

To measure the diversification of the 6 commercial banks, the study used the basic Herfindahl–Hirschman Index (HHI) which is also used in Morgan and Samolyk (2003); Stiroh (2004a) and Thomas (2002). The study measured revenue diversification of the banks using the following formula.

$$DIV = 1 - (SH_{NET}^2 + SH_{NON}^2)$$

Where: SH_{NET} is the share of net operating revenue from net interest sources and SH_{NON} is the share of net operating revenue from non-interest sources calculated as shown below.

$$SH_{NON} = \frac{NON}{NON+NET} \qquad\qquad SH_{NET} = \frac{NET}{NON+NET}$$

DIV measures the degree of diversification in a bank's net operating revenue. A higher value indicates a more diversified mix: 0.0 means that all revenue comes from a single source (complete concentration), while 0.5 is an even split between net interest income and non-interest income (complete diversification). These measures are then averaged over a the period of 4 years to get a measure of average revenue diversification, DIV, average net interest income shares, SH_{NET}, and average non-interest income shares, SH_{NON}. The NET and NON figure used in this analysis are in millions (KShs'000,000)

The table 4.1 and figure 4.1 indicates DIV of 0.49 for four years from 2008 to 2011 which then fall to 0.40 in 2012. This indicates that in Standard Chartered bank in Kenya has a high degree of diversification in net operating revenue. However, the bank is biased toward interest income as opposed to non-interest income. It worth noting that in 2012, the DIV falls from 0.49 previous year to 0.40, this implies that the bank shifted its focus to interest income and the contribution of non-interest income fell in that year.

The figure 4.2 shows ROA Standard Chartered Bank this matches the trend in DIV which was steady between 2009 and 2010. This indicates that income source diversification influences performance of bank.

Kenya Commercial Bank

The table 4.2 and figure 4.3 indicates DIV fluctuation in Kenya Commercial Bank. DIV in KCB falls gradually from 0.48 to 0.44 from 2008 to 2012. This fall in DIV indicates

that KCB degree of diversification in net operating revenue is also falling and is now focusing on its core businesses. In other words, KCB is shifting its focus from non-interest income and concentrating with interest income.

The figure 4.4 shows ROA Kenya Commercial Bank this matches the trend in DIV which declined between 2010 and 2011. This therefore indicates that income source diversification contributes to performance of bank.

Equity Bank

Further, the study sought to establish the degree of diversification in net operating revenue in Equity Bank. The table 4.3 and figure 4.5 indicates a fall in DIV in Equity Bank gradually from 0.50 to 0.43 from 2008 to 2012. This fall in DIV indicates that Equity Bank degree of diversification in net operating revenue is also falling and is now focusing on its interest income more as compared to non-interest income. However, it should be noted that DIV is still high almost at even split between net interest income and non-interest income (complete diversification).

The above figure 4.6 shows ROA Equity Bank however, this matches the trend in DIV between 2008 and 2009 which declined. This therefore indicates that income source diversification contributes to performance of the bank.

Co-operative Bank of Kenya

The figure 4.7 and table 4.4 present income diversification data for Cooperative Bank. The data indicates a constant DIV value. In 2008, cooperative bank had a DIV value of 0.49, a DIV value of 0.48 in 2009, 2010 and 2011 and a DIV value of 0.44 in 2012. This

decline in DIV indicates a slight change in banks focus on income sources. It therefore shows that non-interest income in Cooperative Banks has fallen in 2012.

The figure 4.8 shows ROA Cooperative Bank, this matches the trend in DIV between 2008 and 2009 which declined. This therefore indicates that income source diversification contributes to performance of the bank.

Barclays Bank of Kenya

The study sought to establish income source diversification in Barclays Bank. The data findings are as presented on table 4.5 and figure 4.9. Barclays Bank of Kenya has maintained it DIV between 0.48 and 0.47 in the five year period studied. It therefore shows that the bank has diversified to a constant extent. However, interest income precedes non-interest income.

The figure 4.10 shows ROA Barclays Bank, this matches the trend in DIV between 2010 and 2011 which increased. This therefore indicates that income source diversification contributes to performance of the bank.

CFC STANBIC Bank

Finally, the study sought to establish income source diversification in CFC Stanbic Bank. The data findings presented on table 4.6 and figure 4.11 indicates a gradual increase in DIV in CFC Stanbic Bank from 0.4 to 0.51 from 2008 to 2010. This gradual increase in DIV indicates that CFC Stanbic Bank degree of diversification in net operating revenue was also increasing but from 2010 to 2011 as indicated in the table and figure above DIV

falls gradually from 0.51 to 0.48 and a slight increase is noted in 2012 to 0.49. This indicates that CFC Stanbic Bank is now focusing on its interest income more as compared to non-interest income.

The figure 4.12 shows ROA CFC STANBIC Bank, this matches the trend in DIV between 2009 and 2010 which increased. This therefore indicates that income source diversification contributes to performance of the bank.

4.3 Inferential Statistics

4.3.1 Regression Analysis

In addition, the researcher conducted a multiple regression analysis so as to test relationship among variables (independent) on the financial performance of six most profitable commercial banks in Kenya. The researcher applied the statistical package for social sciences (SPSS V 2.0) to code, enter and compute the measurements of the multiple regressions for the study.

Coefficient of determination explains the extent to which changes in the dependent variable can be explained by the change in the independent variables or the percentage of variation in the dependent variable (financial performance) that is explained by all the four independent variables (foreign exchange, fees and commission, government securities and income from lease and sale of assets).

4.3.2 Model Summary

 Table 4.3: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.925	0. 856	0.793	0.6527

Source: Research, 2013

The four independent variables that were studied, explain only 85.6% of the effects of non-interest income source on financial performance as represented by the R^2. This therefore means that other factors not studied in this research contribute 14.4% of the effect. Therefore, further research should be conducted to investigate the other non-interest income source (14.4%) that affects financial performance of commercial banks in Kenya.

4.3.3 ANOVA Results

Table 4.4: ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.517	2	1.267	9.513	.0181
	Residual	9.411	60	2.327		
	Total	3.501	62			

Source: Research, (2013)

The significance value is 0.0181 which is less than 0.05 thus the model is statistically significance in predicting how foreign exchange, fees and commission, government securities and income from sale and lease of assets influence financial performance of commercial banks in Kenya. The F critical at 5% level of significance was 3.23. Since F calculated is greater than the F critical (value = 9. 513), this shows that the overall model was significant.

4.3.4 Coefficient of Determination

Table 4.5: Coefficient of Determination

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.144	1.2187		1.615	0.216
	Foreign Exchange income	0.708	0.1523	0.178	4.219	.0186
	Fees and commissions	0.765	0.3114	0.051	3.697	.0097
	Government Securities income	0.603	0.2009	0.121	3.893	.0248
	Income from sale and lease of assets	0.663	0.1897	0.277	3.231	.0212

Source: Research, (2013)

Multiple regression analysis was conducted to determine the relationship between financial performance and the four variables. As per the SPSS generated table above, the equation ($Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon$) becomes:

$Y = 1.144 + 0.708 X_1 + 0.765 X_2 + 0.603 X_3 + 0.663 X_4$

According to the regression equation established, taking all factors into account (foreign

exchange earnings, fees and commission, government securities income and income from lease and sale of assets) constant at zero, bank financial performance will be 1.144. The data findings analysed also shows that taking all other independent variables at zero, a unit increase in foreign exchange income will lead to a 0.708 increase in financial performance; a unit increase in fees and commission income will lead to a 0.765 increase in financial performance; a unit increase in government security income will lead to a 0.603 increase in financial performance of the banks and a unit increase in income from sales and lease of assets owned by the banks will lead to a 0.663 increase in financial performance. This infers that fees and commissions contribute most to the financial performance followed by foreign exchange. At 5% level of significance and 95% level of confidence, fees and commissions had a 0.0097 level of significance, foreign exchange showed a 0. 0248 level of significance, government securities showed a 0.0248 level of significance, and sale and lease of assets owned by the bank showed a 0.0212 level of significance hence the most significant non interest source of income is fees and commission.

4.4 Significance testing

The study utilized Chi-square test in testing the significance of variables in the study. Chi-square is a statistical test commonly used to compare observed data with data we would expect to obtain according to a specific hypothesis. The chi-square test is always testing the null hypothesis, which states that there is no statistically significant difference between the expected and observed result. Testing of the null hypotheses in this study was based on the fact that if the calculated Chi-square associated p value is greater than α

= 0.05 confidence level (p> 0.05α), and then we accepted the hypothesis.

The objective of the study was to establish the effects of income source diversification on financial performance of commercial banks in Kenya.

4.4.1 Relationship between Foreign Exchange Trading and Financial Performance of Commercial Banks

Table 4.6: Relationship between Foreign Exchange Trading and Financial Performance of Commercial Banks

Chi-Square Tests			
	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	38.322	9	.003
N of Valid Cases	6		

Table 4.13 shows that the chi-square value is 38.322 with an associated p of 0.003. Since p is less than $\alpha = 0.05$ confidence level (p< 0.05α), the null hypothesis is rejected and therefore there is a significant relationship between foreign exchange trading and financial performance of commercial banks listed at NSE in Kenya

4.4.2 Relationship between Loans and Advances Commissions and Financial Performance of Commercial Banks

The analysis also explored the relationship between loans and advances commissions and financial performance of commercial banks.

Table 4.7: Relationship between Loans and Advances Commissions and Financial Performance of Commercial Bank

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	23.883	6	.001
N of Valid Cases	6		

Table 4.14, indicates that the chi-square value is 23.883 with an associated p of 0.001. Since p is less than $\alpha = 0.05$ confidence level ($p<0.05\alpha$), the null hypothesis is rejected and therefore loans and advances commissions has significant relationship with financial performance of commercial banks.

4.4.3. Relationship between Government Securities and Financial Performance of Commercial Banks

The analysis further looked at the relationship between government securities and financial performance of commercial banks.

The following illustrates the statistical relationship between them.

Table 4.8: Relationship between Government Securities and Financial Performance of Commercial Banks

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	23.883	6	.001
N of Valid Cases	6		

Table 4.15 shows that the chi-square value is 23.883 with an associated p of 0.001. Since p is less than $\alpha = 0.05$ confidence level ($p<0.05\alpha$), government securities has significant relationship with financial performance of commercial banks.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter presents summary and conclusion drawn from the findings and recommendations made therefore.

5.2 Summary

The study illustrates that income source diversification for the bank is associated with greater returns and it implies greater earnings volatility for commercial banks. Further, it is indicated that expansion into less traditional financial activities is associated with increased risk.

Foreign exchange was found to influences financial performance to a great extent. Further, the study indicated that unwavering exchange rates stabilises capital movements and also improves the investor's confidence to invest, that attractive exchange rate encourages the process of trade and that foreign exchange plays an important role in determination of balance of trade.

According to the results, fees and commissions on loans and advances influence financial performance of the six most profitable banks in Kenya to a great extent. Also, it was established that banks largely depends on loan portfolio as an asset and the predominate source of revenue, that effective management of the loan portfolio and the credit function

is fundamental to a bank's safety and soundness and that lending is the mainstay of banks' business and therefore influences financial performance.

On government securities income, the study has illustrated that they influence financial performance of the banks to a great extent. It was also established that banks prefers government securities (Government bonds and Treasury bills) since they have low involved risk. Further, it was established that unlike loans which might turn to be non-performing, government securities' returns are guaranteed. Finally, the study indicates that income from assets also influences financial performance of the six banks studied. It also indicated that the banks relied on income from lease and sale of assets owned by the bank. From the regression analysis the following regression equation was formulated; $Y = 1.144 + 0.708X_1 + 0.765X_2 + 0.603X_3 + 0.663X_4$

5.3 Conclusion

The study aimed at investigating how foreign exchange trading income affects financial performance of commercial banks in Kenya. The study concludes that foreign exchange influences financial performance to a great extent. This is based on the fact that unwavering exchange rates stabilises capital movements and also improves the investor's confidence to invest and that attractive exchange rate encourages the process of trade.

On extent to which fees and commissions on loans and advances affects financial performance of commercial banks in Kenya, it was concluded that they affect to a great extent. Further, it was shown that banks largely depends on loan portfolio as an asset and

as a predominate source of revenue and that lending is the mainstay of banks' business and therefore influences financial performance.

The study also concludes that government securities income affect financial performance of commercial banks in Kenya to a great extent. The study indicates that banks would prefer government securities to leading as government securities offered more security compared to loans. Finally the study concluded that sale and lease of assets owned by the banks influences financial performance of commercial banks in Kenya to a great extent.

5.4 Recommendations

On foreign exchange, the study recommends that the government through the Central bank should put in place measures to ensure that exchange rates are stable. With stability in the exchange rates, the commercial banks are able to plan on their income as predictions can be made easily.

Further, the study recommends that CBK should offer an environment where the commercial banks operations are not interfered with. For example, CBK should ensure stability of interest rates so as to encourage lending. Through improved lending, commercial banks are able to earn commissions and fees. Fees and commissions form a significant portion of banks' income.

The study also recommends that commercial banks should embrace opportunities to invest in government securities. This is because, government securities are less risky compared to other avenues that commercial banks might chose to invest in.

Also, it is recommended that commercial banks should invest on other assets such as building that they would use as their premises and lease out the rest to gain an income. Further the study recommends that the commercial banks also invests in assets that they could sell at a profit to boost their income.

5.5 Suggestion for Further Research

The study established that it had not exhaustively researched on non-interest income that commercial banks diversified into that influenced financial performance of the bank. The study therefore recommends that another study be done to establish the other non-interest incomes that the banks diversified into that influenced financial performance of the commercial banks in Kenya. Also, the study recommends that another study should be done to augment the study findings on the sustainability of each of the non-interest income source.

5.6 Limitations of the Study

This research sends light on the effects of income source diversification in commercial banks in Kenya. However, few sources of income source diversification were picked. The researcher acknowledges income diversification can take several dimensions but due to time limitation the study considered four sources.

The second limitation is on the measurement of financial performance. The researcher used ROA to determine financial performance of commercial banks. However, financial performance could be measured using market ratios and ROE.

Thirdly, due to time limitation the researcher sampled six commercial banks covering a period of five years. If the whole population of the 43 commercial banks was used the results could give a more detailed result. In addition the research was based on a single country and the findings can be generalized to the studied banks only.

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APPENDICES

Appendix I: TABLES AND FIGURES

Standard Chartered Bank, Kenya

Table 4.9: Standard Chartered Bank, Kenya

Table 4.1 and Figure 4.1 present DIV for Chartered Bank. The period covered is 5 years

Year	2008	2009	2010	2011	2012
NET	4,965	5,877	7,337	8,116	9,851
NON	3744	4,585	5,614	6,052	3,814
Total	8,709	10,462	12,951	14,168	13,665
SH_{NET}	0.57	0.56	0.57	0.57	0.72
SH^2_{NET}	0.33	0.32	0.32	0.33	0.52
SH_{NON}	0.43	0.44	0.43	0.43	0.28
SH^2_{NON}	0.18	0.19	0.19	0.18	0.08
DIV	0.49	0.49	0.49	0.49	0.40

Source: Research, (2013)

Figure 4.1: Standard Chartered Bank, Kenya
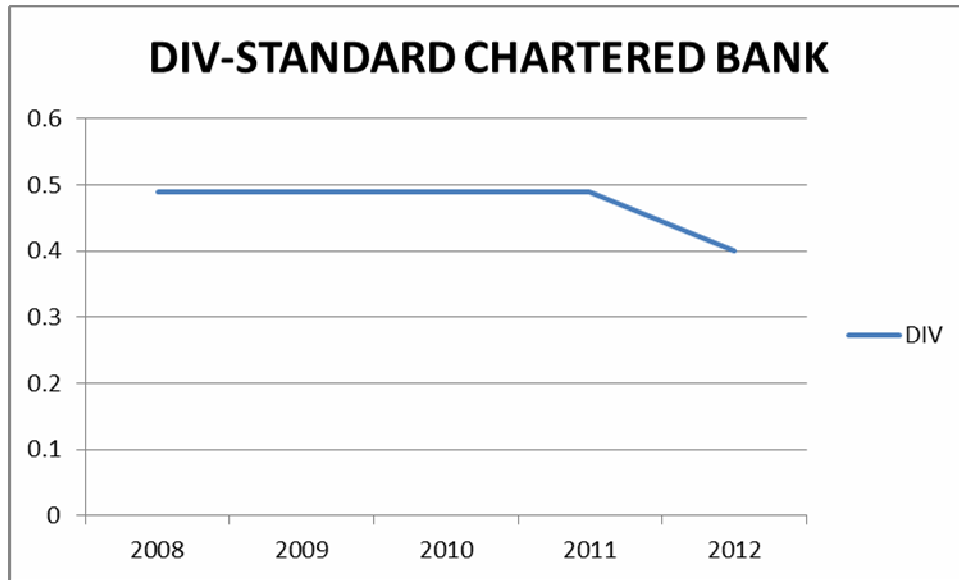
Source: Research, (2013)

Figure 4.2: ROA Standard Chartered Bank
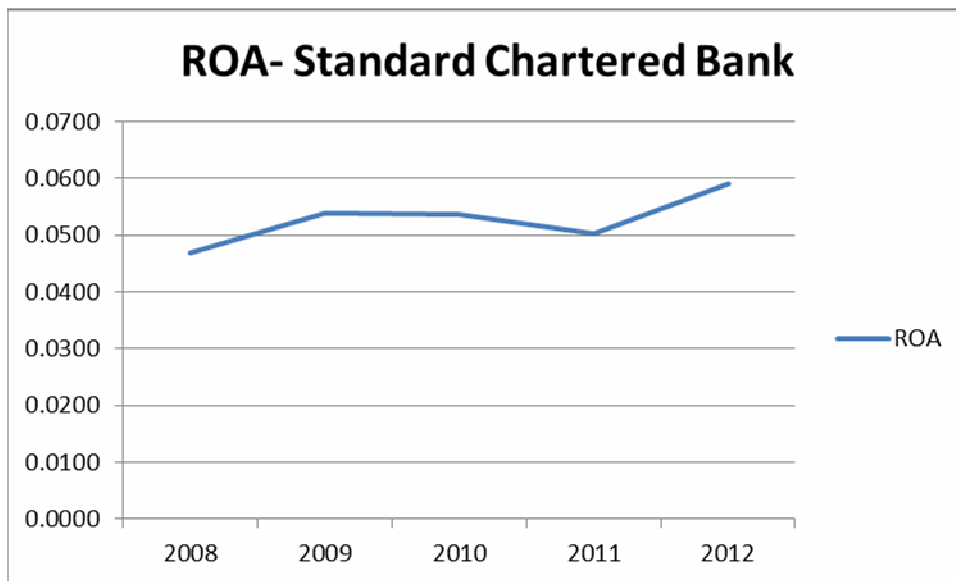
Source: Research, (2013)

Kenya Commercial Bank

Table 4.10: Kenya Commercial Bank

Year	2008	2009	2010	2011	2012
NET	8,452	11,775	14,469	19,645	23,286
NON	5,683	7,652	8,053	9,303	11,175
Total	14,135	19,427	22,522	28,948	34,461
SH_{NET}	0.60	0.61	0.64	0.68	0.68
SH_{NET}^2	0.36	0.37	0.41	0.46	0.46
SH_{NON}	0.40	0.39	0.36	0.32	0.32
SH_{NON}^2	0.16	0.16	0.13	0.10	0.11
DIV	0.48	0.48	0.46	0.44	0.44

Source: Research, (2013)

Figure 4.3: Kenya Commercial Bank DIV
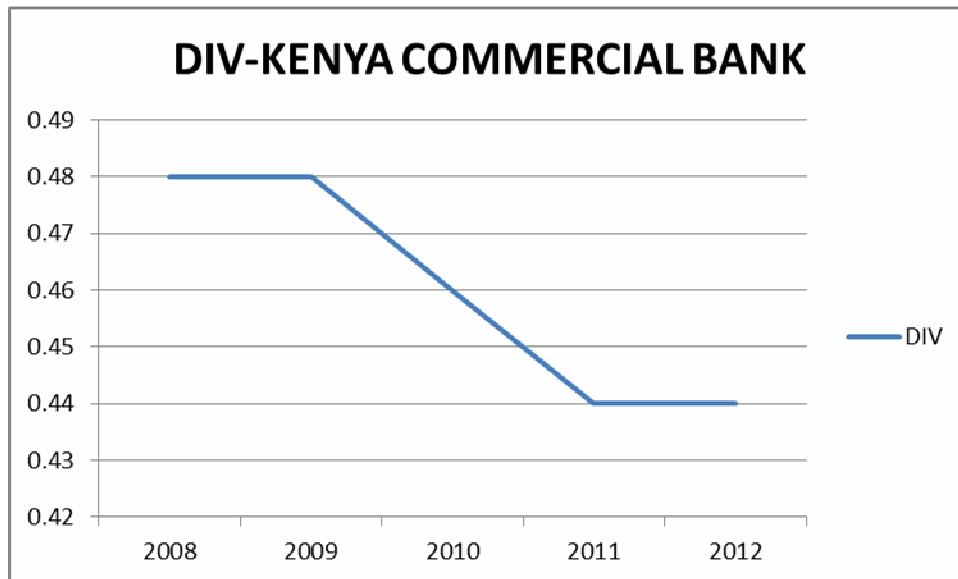
Source: Research, (2013)

Figure 4.4: ROA Kenya Commercial Bank
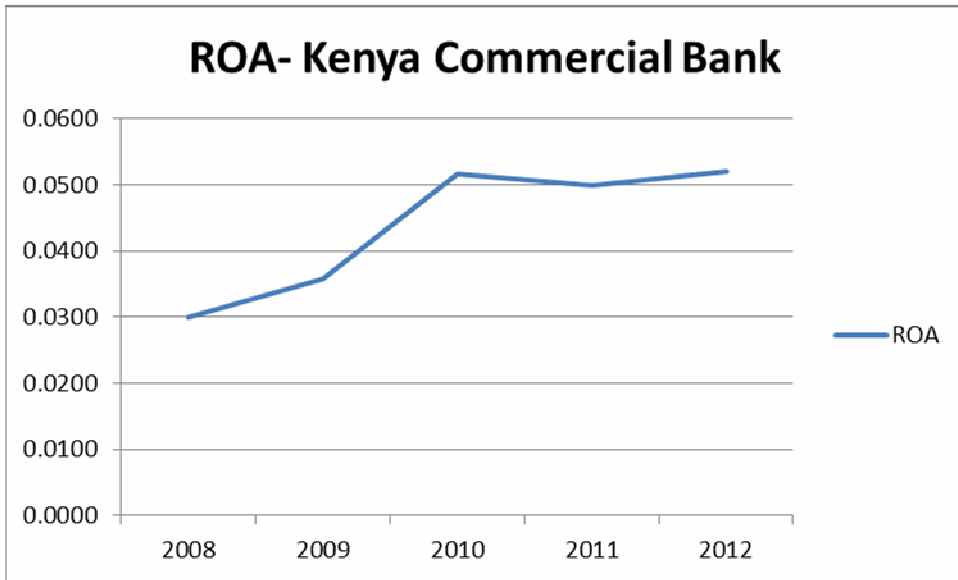
Source: Research, (2013)

Equity Bank Limited

Table 4.11: Equity Bank Limited

Year	2008	2009	2010	2011	2012
NET	2,660	5,952	8,278	11,056	15,561
NON	3,163	8,444	11,241	18,396	33,726
Total	5,823	14,396	19,519	29,452	49,287
SH_{NET}	0.46	0.41	0.42	0.38	0.32
SH_{NET}^2	0.21	0.17	0.18	0.14	0.10
SH_{NON}	0.54	0.59	0.58	0.62	0.68
SH_{NON}^2	0.30	0.34	0.33	0.39	0.47
DIV	0.50	0.49	0.49	0.47	0.43

Source: Research, (2013)

Figure 4.5: Equity Bank Limited DIV
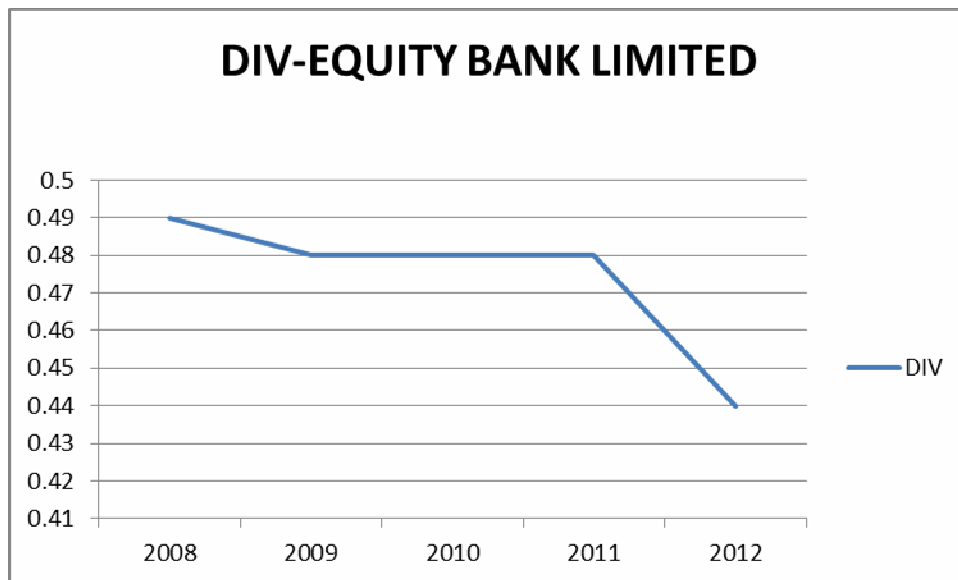
Figure 4.6: ROA Equity Bank
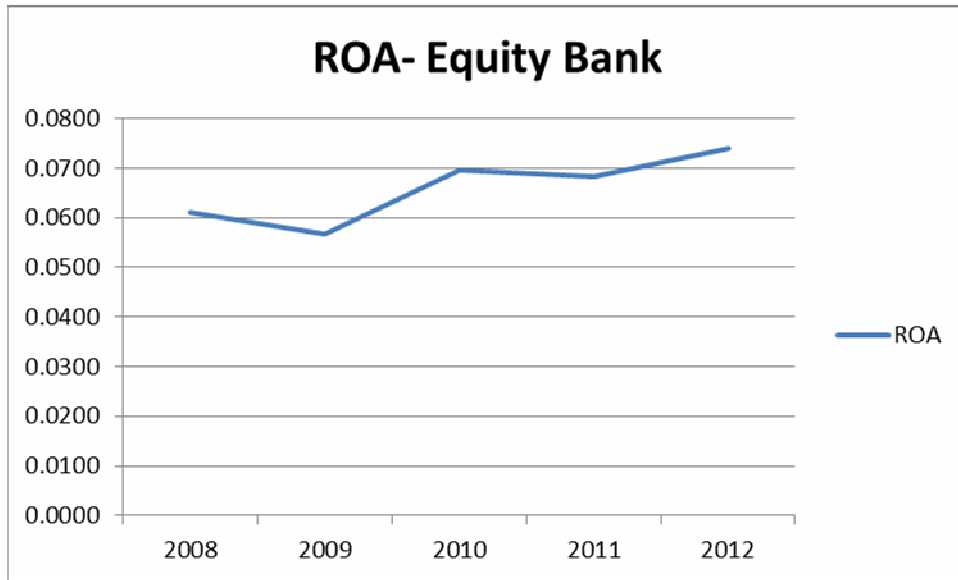
Co-operative Bank of Kenya

Table 4.12: Co-Operative Bank of Kenya

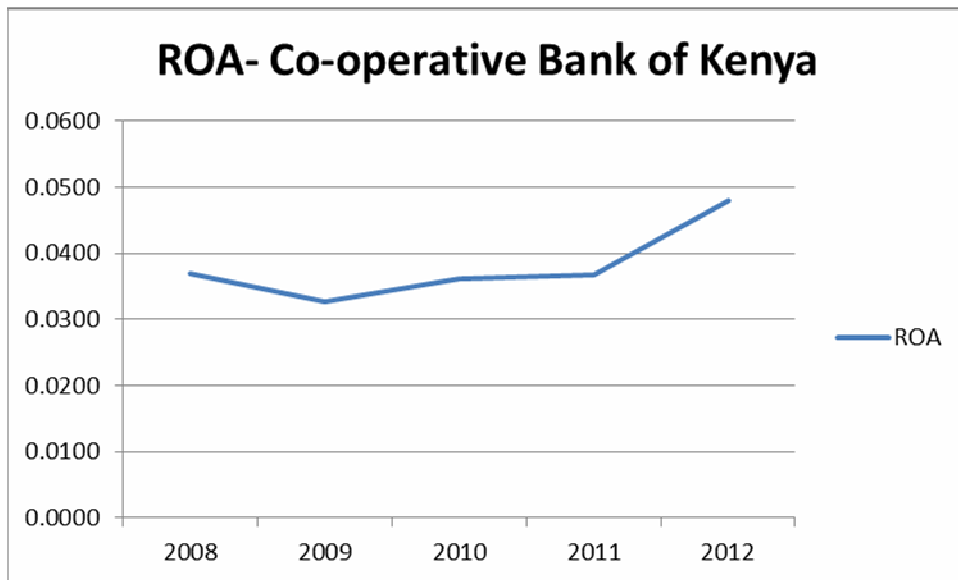| Year	2008	2009	2010	2011	2012
NET	4,850	5,696	7,054	9,503	12,370
NON	3,426	3,954	4,664	6,168	5,966
Total	8,276	9,650	11,718	15,671	18,336
SH_{NET}	0.59	0.59	0.60	0.61	0.67
SH^2_{NET}	0.34	0.35	0.36	0.37	0.46
SH_{NON}	0.41	0.41	0.40	0.39	0.33
SH^2_{NON}	0.17	0.17	0.16	0.15	0.11
DIV	0.49	0.48	0.48	0.48	0.44

Source: Research, (2013)

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Figure 4.7: Co-operative Bank of Kenya DIV
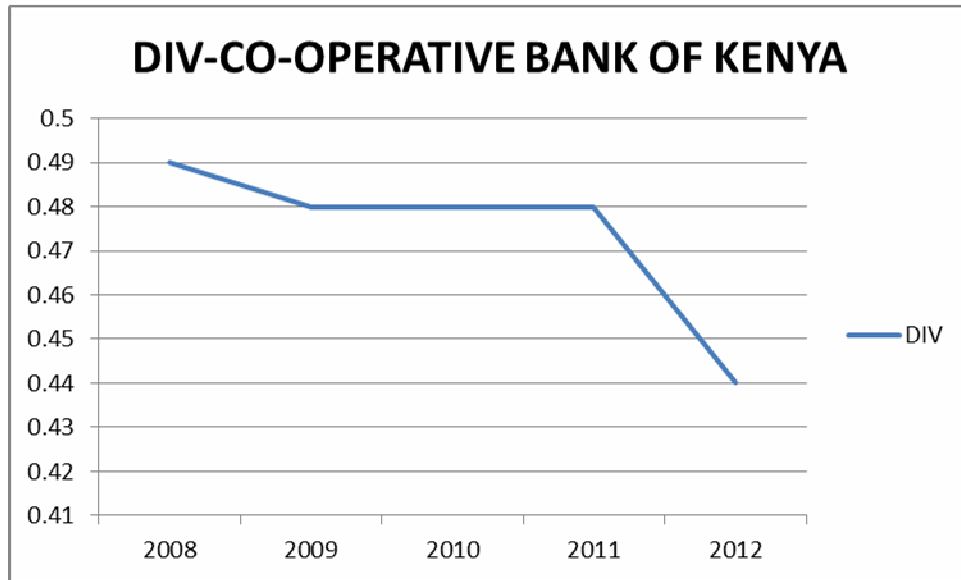
Source: Research, (2013)

Figure 4.8:ROA Cooperative Bank

Barclays Bank of Kenya

Table 4.13: Barclays Bank of Kenya

Year	2008	2009	2010	2011	2012
NET	11,381	14,010	14,770	15,674	16,336
NON	7,500	9,623	9,004	10,742	10,003
Total	18,881	23,633	23,774	26,416	26,339
SH_{NET}	0.60	0.59	0.62	0.59	0.62
SH_{NET}^2	0.36	0.35	0.39	0.35	0.38
SH_{NON}	0.40	0.41	0.38	0.41	0.38
SH_{NON}^2	0.16	0.17	0.14	0.17	0.14
DIV	0.48	0.48	0.47	0.48	0.47

Source: Research, (2013)
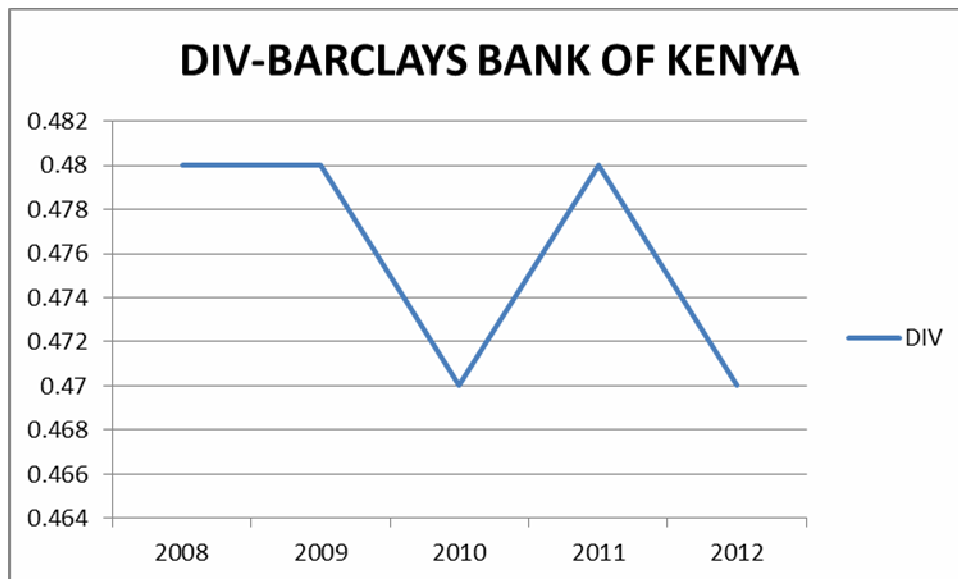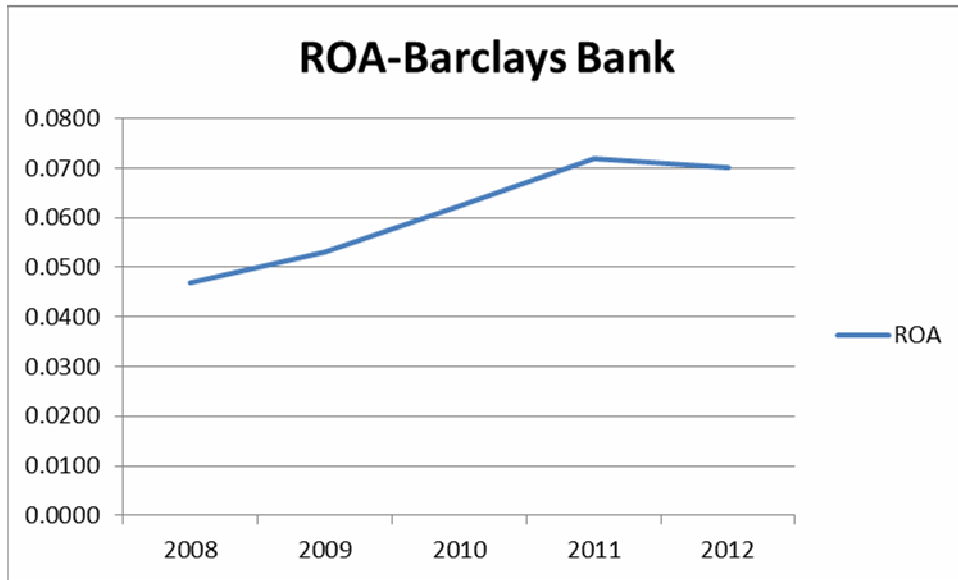
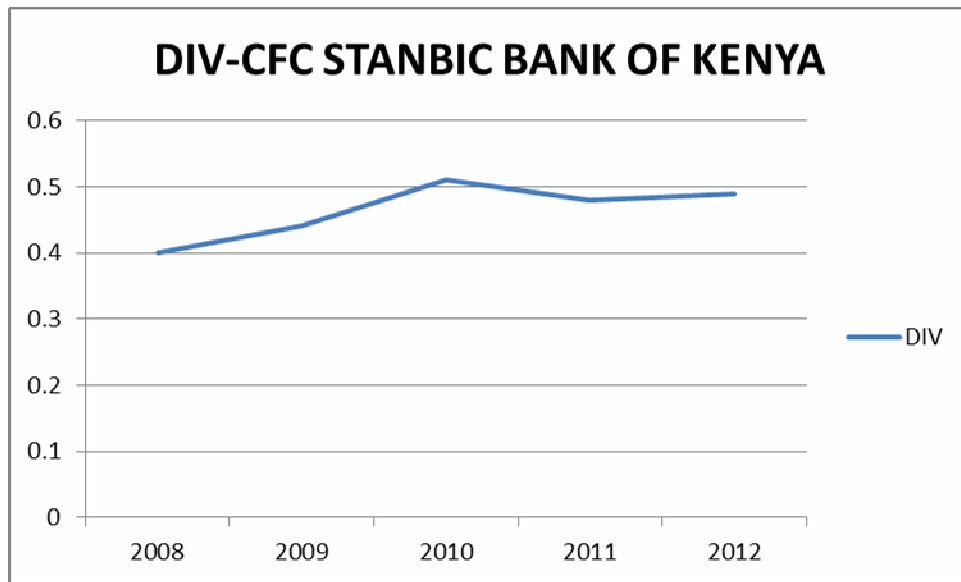**Figure 4.9: Barclays Bank of Kenya DIV**

Figure 4.10: ROA Barclays Bank

CFC Stanbic Bank of Kenya

Table 4.14: CFC Stanbic Bank of Kenya

Year	2008	2009	2010	2011	2012
NET	5,073	6,162	6,079	8,603	11,653
NON	1,844	2,699	4,640	4,756	7,549
Total	6917	8,861	10,719	13,359	19,202
SH_{NET}	0.73	0.69	0.56	0.64	0.60
SH^2_{NET}	0.53	0.47	0.31	0.40	0.36
SH_{NON}	0.26	0.30	0.43	0.35	0.39
SH^2_{NON}	0.07	0.09	0.18	0.12	0.15
DIV	0.4	0.44	0.51	0.48	0.49

Figure 4.11: CFC Stanbic Bank of Kenya DIV

DIV-CFC STANBIC BANK OF KENYA

Source: Research, (2013)

Figure 4.12: ROA CFC STANBIC Bank

ROA-CFC STANBIC BANK OF KENYA
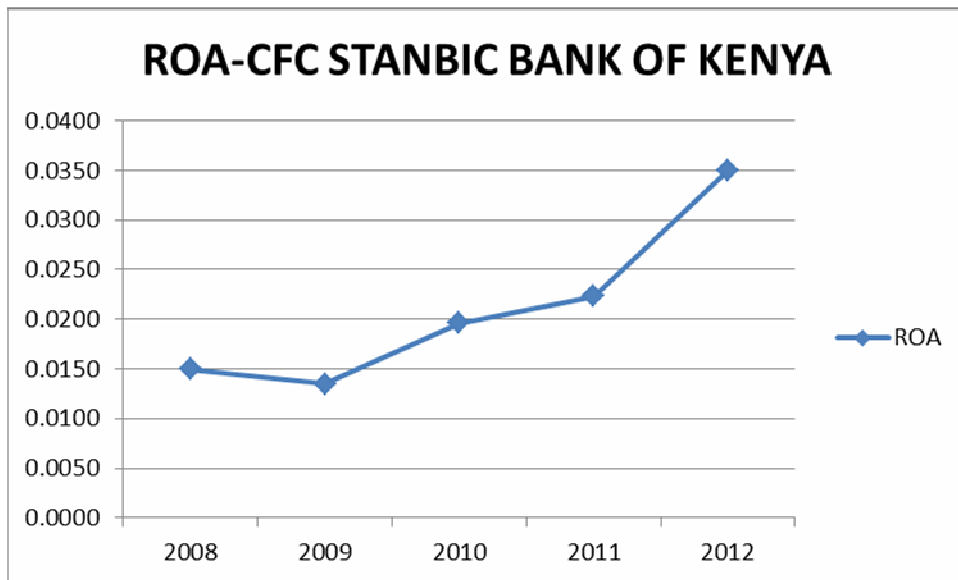
Appendix II: List of Commercial Banks in Kenya

1. Bank of Africa

2. Bank of Baroda

3. Bank of India

4. Barclays Bank

5. Brighton Kalekye Bank

6. ABC Bank (Kenya)

7. CFC Stanbic Bank

8. Chase Bank (Kenya)

9. Citibank

10. Commercial Bank of Africa

11. Consolidated Bank of Kenya

12. Cooperative Bank of Kenya

13. Credit Bank

14. Development Bank of Kenya

15. Diamond Trust Bank

16. Dubai Bank Kenya

17. Ecobank

18. Equatorial Commercial Bank

19. Equity Bank

20. Family Bank

21. Fidelity Commercial Bank Limited

22. Fina Bank

23. First Community Bank

24. Giro Commercial Bank

25. Guardian Bank

26. Gulf African Bank

27. Habib Bank

28. Habib Bank AG Zurich

29. I&M Bank

30. Imperial Bank Kenya

31. Jamii Bora Bank

32. Kenya Commercial Bank

33. K-Rep Bank

34. Middle East Bank Kenya

35. National Bank of Kenya

36. NIC Bank

37. Oriental Commercial Bank

38. Paramount Universal Bank

39. Prime Bank (Kenya)

40. Standard Chartered Kenya

41. Trans National Bank Kenya

42. United Bank for Africa[2]

43. Victoria Commercial Bank