

Effect of Enterprise Financial Risk Management on Performance in Kenya Commercial Bank, Western Region.

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ABSTRACT: *The recent financial crisis that hit the entire world raised several questions with respect to the growing awareness and the need for appropriate Enterprise Financial Risk Management (EFRM) in financial institutions. It calls for thorough assessments of the structure and components of the EFRM frameworks and practices of banks by regulators, analysts and financial watchers from time to time, to ascertain the adequacy of the systems, policies and procedures of managing financial risks as well as their conformity to current best practices. It is assumed that banks fell into problems because they took much financial risk. Therefore, there is more pressure for regulations towards EFRM at banks. However, there is no clear consensus about whether the implementation of more EFRM leads to better performance. In other words, it is not proven that more EFRM is effective in helping banks survive a financial crisis. As contribution to this exercise, the general objective of this study sought to find out effect of Enterprise Financial Risk Management on performance in Kenya Commercial Bank. The specific objectives of the study was to determine how financial leverage affects performance in Kenya Commercial Bank, to determine how diversification of products affects performance in Kenya Commercial Bank and to determine how credit policy affects performance in Kenya Commercial Bank. The data of the study was collected from various sources, both primary and secondary. Primary data was collected from 30 branches of KCB; Western Region using stratified random sampling. The sample size was 244 employees. The reason behind the choice of stratified random sampling is that employees in KCB are categorized into three strata which are ; top management, middle management and lower management. Secondary data was collected from journal articles, memos, various reports and the organization website. Data was collected by use of questionnaires and analyzed in form of descriptive and inferential statistics. Descriptive was by use of tables. Inferential was by use of Pearson correlation and regression analysis concerning relationship between the variables. Statistical Packages for Social Sciences (SPSS) soft ware was used to analyze the data. Findings revealed statistically, significant positive relationship between EFRM and performance in KCB, Western Region (0.749; $p= 0.05$). This study was to benefit both the internal customers (employees) and external customers by improving in their performance and increasing knowledge respectively*

I. INTRODUCTION

1.1 Background Information

Risk Management tries to decrease the negative outcomes of uncertainty, and this could be done in different approaches. First, there is traditional risk management (TRM), which handles risk in different separate classes. Further, there is enterprise financial risk management (EFRM), which uses a holistic approach. This approach bundles all the financial risk and only hedges or ensures the residual risks. (Altunas & Berry –Stolzie , 2011). Several researchers have been conducted towards the relationship between EFRM and firm's performance. Under normal conditions, it is assumed that EFRM is valuable for commercial banks, since it enhances the firm's performance (Baxter, Hoitash & Yezegel, 2011) and increase value (Lienberg & Hoyts, Shane, Nair & Rustambekov, 2011). However, this depends on the quality of the EFRM programs and it is suggested that EFRM is only valuable up until a certain level (Shane, et al, 2011).

During a financial crises, EFRM lowers risk (Ellul & Yerramilli, 2010), and leads to better performance (Shane, et al, 2011), it could be argued that it will be valuable for stakeholders, if the company has a further extent of EFRM implemented during a financial crisis. From these propositions, several hypotheses were developed for example, HO: there is no relationship between credit policy and bank's performance. HI: there is relationship between credit policy and bank's performance. However, this improvement in bank's performance will only hold up until a certain extent. This means that when a bank implements EFRM above that level, it will no longer contribute to better performance. In determining the effect of EFRM on bank's performance, also several independent variables are taken into account. These are financial leverage, diversification of products and credit policy. These independent variables are expected to have a positive effect on the bank's performance.

This study therefore sought to answer the following research question. Is there any relationship between EFRM and performance in Kenya Commercial Bank? In an attempt to answer the above question, both qualitative and quantitative approaches were used to develop the concept of the research (Creswell, 2003). A study of related literature and relevant literature formed the major parts of this research and the result was presented using statistical tables. The past decade has seen the world witnessing one of the most shocking financial melt downs. The effects of the crisis were pervasive and hit almost every section of global businesses, the most affected sector was the financial services industry, specifically the banking sector (Campello, Graham & Harvey, 2010). The banking sector did not only witness the framework disappearance of the most recurrent institutions like Leman - Brothers and Bear Stearns, but also became a regular target for tougher regulations, public anger and academic criticism.

There are numerous explanations on the causes of the current financial crisis. One factor that has received significant attention during this crisis is enterprise financial risk management discourse. It seems that enterprise financial risk management has become an important tool, from which banks try to achieve legitimacy in the eyes of the public and regulators. This triggering effect has given stakeholders in the Kenya's banking industry cause not only to consider the returns made in the sector, but also critically examine frameworks used to manage risks in the sector and safeguard their interests. This is because the failures faced by the industry in recent years have been blurred largely on the weaknesses of financial risk management practices of the financial institutions (Wallison, 2009). The greatest impact of the crisis has been on the banking industry where some banks which were higher to performing well suddenly announce large losses with some of them going burst.

Some reasons pose forward for the failures in enterprise financial risk management in this regard include: the limited role of EFRM in the granting of loans in most banks. This is largely because the banks are unable to influence decisions of its borrowers coupled with the fact that their considerations are subordinated to profitability interests and lack of capacity to adequately make timely and accurate forecasts. This has resulted in the floating of basic EFRM rules such as avoiding strong concentration of assets and minimizing the volatility of returns (Smith, Wagner, & Yandle, 2011). Though the impact of the global financial crisis on the banking sector in Kenya has been quite minimal such that it did not threaten the survival of banks in the sector, it serves as a wake up to call to all financial institutions. This is largely because the sector has little exposure to complex financial instruments and relies mainly on low-cost domestic deposits and liquidity unlike banks in the developed countries. However, the deterioration of asset quality (impairment charge) gross loans and advances) of the banks in Kenya, from about 1.5% to 42%, in the past three years due to significant balances of bad and doubtful debts on their books is an indication that all is not well with the sector (Kenya Banking Survey, 2010).

Various reasons have been put forward by Analysts for the deterioration in the quality of bank loans and advances (Chen & Pan, 2012). These include increased cost of funds, inflation depreciation of the credit and the delay by government in paying contractors and other service providers. Kenya Commercial Banks (KCB) is a financial service provider having its headquarters in principle area will improve assets quality and EFRM practices of banks. Nairobi city, Kenya. As of December 2010, it was among the three largest commercial banks in Kenya with assets of more than US\$2.55 billion (KES: 223 billion) and shareholder capital valued at US\$486 million (KES: 40.9billion).

1.2 Statement of the Problem

This research project acknowledges that there are a number of EFRM in various firms globally. However, this study was limited to a research of EFRM in KCB, Western Region. EFRM is considered by researchers as a yard stick for determining failure or success of financial institutions. It has not been given much attention in recent times. This research work sought to bring to light the need for financial institutions to pay attention to the management of Enterprise Financial Risks in relation to firm's performance (Shane, et al, 2011), to come out with definite positive or negative correlation that is to find out the relationship between EFRM and performance in KCB as compared to what other research done on relationship between CRM and in commercial banks of Kenya.

The problem of this study was to identify if the relationship between firm's performance and EFRM and how this can be anticipated and managed to improve performance of the Kenya Commercial Banks. According to Ochola (2009), a study of the relationship between Credit Risk Management and Non-performing Loans, it was proved that there is a close relationship between the CRM and non-performing loans. There has, however, not been any major test to ascertain the resilience of the banking industry to withstand major shocks. This study sought to fill in the knowledge gap by examining the effect of EFRM on performance in KCB. The study sought to answer the following question; what is the effect of EFRM on performance in KCB. There was therefore a vacuum between the general belief on the EFR position of the Kenyan banking industry and the evidence to back this belief. To do this, it required thorough assessment of risks profile of Kenya

Commercial Banks as well as evaluate the EFRM framework to justify the relative stable good risk profile and sound risk management frame.

Objectives

1.3.1 General Objective :To find out the effect of Enterprise Financial Risk Management on performance in Kenya Commercial Bank.

1.3.2 Specific Objectives

1. To determine how financial leverage affects performance in Kenya Commercial Bank.
2. To determine how diversification of products affects performance in Kenya Commercial Bank.
3. To determine how credit policy affects performance in Kenya Commercial Bank.

Research Questions

- 1.What is the effect of financial leverage on performance in Kenya Commercial Bank?
- 2.What is the effect of diversification of products on performance in Kenya Commercial Bank?
- 3.What is the effect of credit policy on Performance in Kenya Commercial Bank?

1.5 Justification of the Study

Since the study was based on the effect of EFRM and how firm performance is affected, the research project was aimed to justify if regulations towards EFRM implementation improved financial institutions' performance or not. Give an example of financial leverage, earlier capital theory structure and latter theories which the former believes that financial leverage is irrelevant that is one source of capital is as good as any other and the value of firm is always constant regardless of the debt - equity mix and the latter view financial leverage as positive influence of firm's performance hence to break such a paradox, research of the same on tier 1 Kenya Commercial Bank perspective would prove necessary.

1.6 Scope of the Study

The research was aimed to find out the effect of EFRM on bank's performance which would determine the profitability of the bank. The scope was focused on effect of financial leverage and bank's performance. How does the capital structure affect the bank's performance that is Debt/Equity ratio and the scope focused on effect of credit policy that is how you can determine someone (borrower) who is credit worthy to avoid default risk. The target population of the study was Kenya Commercial Bank. Data was collected using questionnaires.

1.7 Limitations

The following challenges were encountered during the study;Since issues of commercial banks are confidential, the study was faced with resistance from employees. The respondents were in fear of giving information. There was also another challenge because some of the respondents were not available by the time the researcher wanted to carry out the study.

II. LITERATURE REVIEW

2.1 Introduction

This chapter presents the review of both the Empirical and Theoretical Literature of how EFRM has affected performance in KCB in terms of profitability and stability. It comprises of Empirical Review, Theoretical Literature and Critique of the Review and the Research Gaps of the study.

2.2 Theoretical Review

2.2.1 Capital Structure Theories

Structure theory and also a discussion about the effect of capital structure on KCB performance. The capital structure decision is crucial for any business organization, including Kenya Commercial Bank. This decision is important because of the need to optimize the returns off the firm, and also because of the impact such a decision has on the firm's ability to deal with its competitive environment. The capital structure of a firm is a mix of different securities (Abor, 2007), define capital structure like this: "The relative proportions of debt, equity, and other securities that a firm has outstanding constitute its capital structure"(Marzo, 2007). One of the earliest important paper on capital structure is the work of Modigliani and Miller. In 1958, they published a seminal work in capital structure where they concluded to the broadly known theory of "Capital structure irrelevance" where the capital structure is irrelevant to the value of a firm in perfect capital markets (Abor, 2007; Miller & Modigliani, 1958). The law of one price implied that leverage would not affect the total value of the firm. Instead, it only changes the allocation of cash flows between debt and equity, without changing the total cash flows to the firm.

Several scholars have tried to explain the benefits of diversification using portfolio theory. Modern portfolio theory (MPT) is a theory of investment which tries to maximize portfolio expected return for a given amount of portfolio risk, or equivalently minimize risk for a given level of expected return, by carefully choosing the proportions of various assets. These scholars argue that the allocation of assets across different markets with independent of cash flows reduces the impact of unsystematic risk resulting from external contingencies in each of the various markets (Lewllen, 2001). Hence, diversification reduces firms' exposure to risk. Leontiades (2009) also found that diversified companies enjoy higher leverage and debt capacity.

2.2.3 Adverse Selection Theory

The paper of adverse selection theory of credit markets (Stiglitz & Weiss,1981). The theory rests on two main assumptions: that lenders cannot distinguish between borrowers of different degrees of risk, and that loan contracts are subjects to limited (i.e. if project returns are less than debt obligations, the borrower bears no responsibility to pay out of pocket). This analysis is restricted to involuntary default, i.e. it assumes that borrowers repay loans when they have the mean to do so. In a world with simple debt contacts between risk-neutral borrowers and lenders, the presence of limited liability of borrowers imparts a preference for risk among borrowers, and a corresponding aversion to risk among lenders.

A Conceptual Framework is a structure of concepts and Theories which are pulled together as a map for the study. When researchers use conceptual frameworks to guide their studies, you can expect to find a system of ideas, synthesized for purpose of organizing, thinking and providing study directions (Chinn & Kramer, 1999).The aim of the study was to establish effects of EFRM on performance of KCB in terms of profitability. The independent variables of the study includes: Financial leverage on borrowed capital that is how a bank can finance its assets using its capital and debt. Diversification of products, that is how the bank can diversify its products using non interest income and credit policy, that is how the bank can use credit quality measures to curb or prevent risks. These independent variables were expected to regress against the dependent variable which was bank's performance that is measurement of return on equity and return on asset.

The relationship between these variables is presented graphically in the following figure 2.1

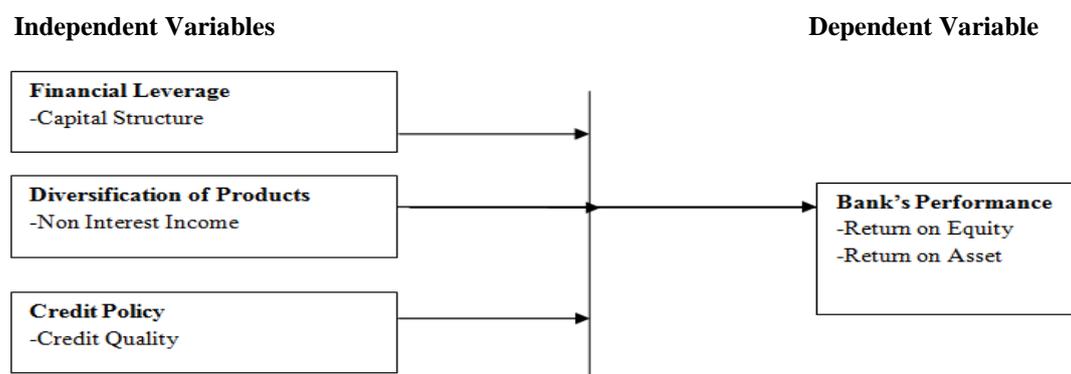


Figure 2.1 Conceptual Framework

2.2.4 Use of Financial Leverage and its effect on firm's performance

Financial leverage is the use of borrowed finances for investment expecting the profits to be greater than the interest payable i.e. the more you borrow in form of debt the more you pay in terms of interest hence it increases the risks of leverage (Abor, 2007). An unlevered firm is an all-equity firm, whereas a levered firm is made up of ownership equity and debt. Financial leverage takes the form of a loan or other borrowing (debt), the proceeds of which are (re) invested with the intent to earn a greater rate of return than the cost of interest. Leverage allows a greater potential returns to the investor than otherwise would have been available, but the potential loss is also greater, if the investment becomes worthless, the loan principle and all accrued interest on the loan still need to be repaid. This constitutes financial risk (Pandey, 2005). The degree of this financial risk is related to the firm's financial structure. Berk and Marzo (2007), defines financial leverage as "The relative proportions of debt, equity and other securities that a firm has outstanding constitute its capital structure". In quest to optimize their objective which hinges primarily on quantifiable performance, financial managers have adopted various capital structures as a means to that goal. A bank can finance its investment by debt and or equity. The use of fixed –charged funds, such as debt and preference capital along with the owner's equity in the capital structure is described as financial leverage or gearing (Dare & Sola, 2010).

An unlevered firm is an all-equity firm, whereas a levered firm is made up of ownership equity and debt. Financial leverage takes the form of a loan or other borrowing (debt), the proceeds of which are (re) invested with the intent to earn a greater rate of return than the cost of interest. An unlevered firm is an all-equity firm, whereas a levered firm is made up of ownership and debt. Leverage allows a greater potential returns to the investor than otherwise would have been available, but the potential loss is also greater; if the investment becomes worthless, the loan principle and all accrued interest on the still need to be repaid (Pandey, 2005).

2.2.5 Effect of diversification of products in banking sector

The Kenyan Commercial industry is one of the broadest and most developed in Sub-Saharan Africa (SSA) with 49 financial institutions, comprising of 43 commercial banks, 1 mortgage finance company and five deposit-taking microfinance institutions (CBK 2011). These institutions, along with the Kenya Post Office Savings Bank, make up Kenya's formal banking sector and serve 22.6 percent of Kenya's adult population, according to Fin Access household survey (Beck, Cull, Fuchs, Getenga, Gatere, & Trandafir, 2010).

Non-bank financial institutions including microfinance institutions (MFIs), savings and credit cooperatives, and mobile phone service providers serve another 17.9 percent of the population, bringing the total served by formal financial services to 40.5 percent. Another 26.8 percent of Kenyans rely on the informal financial sector, including NGOs, self-help groups, and individual unlicensed money lenders, and 32.7 percent of the population does not use any form of financial services.

The profitability of Kenya's banking industry in the recent past has been a subject of public interest and debate. The industry posted Kshs. 89.5 billion pre-tax profits in 2011, a 20.5 percent increase from 2010's Kshs 74.3 billion (CBK 2011). While the profit growth has also been helped by a steady growth in the customer base over the past four years 4.7 million to 15.7 million, the outcome caused public furor, sparking debate that prompted the Kenyan Legislature to make fresh efforts to cap the pricing of bank loans, List of Licensed Commercial Banks in Kenya (<http://www.centralbank.com>). The Kenyan public's concern is that banks, especially the big ones, exploit their customers as they race to report 'super profits' by way of charging high interest rates. However, it is believed that the problem is embedded in over-concentration on one type of income-interest income. This raises the question: can Kenyan banks reduce the effect of this over-concentration to ease the pressure on interest rates? Whether the public view is correct or not is a matter of empirical research and to some extent depends of how independent or interdependent on each other the various earning sources are. A more intriguing question to the banks perhaps is: What other financial product (s) can boost performance or can a shift to fee based income provide the answer? Should Kenyan Banks move away from traditional intermediation to remove focus on sensitive interest rates? The findings of this study will help shed the light on some of these issues and provide motivation to examine Kenyan Banks in the context of non-interest income viability in boosting bank performance.

Generally, banks have two income streams namely interest based income and non-interest income. Academics have given a lot of attention to lending activity that generates interest income due to the link of this traditional activity to bank performance (Bush & Kick, 2009). The heavy focus on interest income has been debated for some time in Kenya. Questions abound on whether profitability of banks is driven by traditional lending activities or there are viable sources away from interest on loans. There is a push in a number of economies for banks to move their business from interest to fee earning activities such as investment banking and insurance services (Bush & Kick, 2009). The reserve Bank of India urged public sector banks to shift to non-interest income in 2002/2003, a move that has paid off in that Pennanthur et al. (2012), studying ownership structures, finds that fee-based income significantly reduced risk. Researchers reveal that diversification benefit India's public sector banks as well as greatly reducing default risk because as non-interest income increases banks shift from lending activities. Perhaps this strategy could be the answer to the fight in Kenyan credit market about high lending rates.

This study test the proposition that income diversification can rebalance income and reduce problem of unreasonable lending rates in the banking industry. Specifically, the paper test if diversified banks in Kenya had stable incomes and reduced risks between 2000 and 2010. Analysts on diversification have tended to argue that in markets that have high competition, diversification reduced chances of financial distress And provides a necessary reduction in risk (Gamra & Plihon, 2011). They further indicate that banks with greater fee-based services charge lower lending rates (Pennaythur et al, 2012).

The debate over diversification however raises questions on whether the shift of bank's business towards non-interest income had a negative or positive impact on sustainability or profitability. Since Kenyan banks are used to reporting increasing profitability, there was need to explore other viable sources of income that would maintain profitability at current levels. This study therefore intended to assess potential fee-based product mix on their potential to boost the performance of Kenyan banks.

2.2.6 Types of Product Diversification

Product diversification focuses on a firm's expansion of its activities into new products markets. According to Ramanujam & Varadarajan (2009), the nature of the organization changes when it enters new products markets as this creates a number of new administrative linkage mechanisms. In general, firms pursue product and international diversification to exploit underutilized resources within the firm and to take advantage of imperfections of markets, which creates new opportunities for growth (Penrose, 1959). Several researchers argued that a firm's diversification strategy can be describe in quantitative (the degree of diversification), and qualitative (the type of diversification) terms. The degree of diversification generally refers to the dispersion of a firm's assets across different markets while the type of diversification refers to diversity between the different businesses, in which the firm is active (Datta, Rajagopalan & Rasheed, 2001).

In other words, the degree of diversification solely refers to dispersion of a firm's activity in terms of its assets or sale among different markets without considering any differences between these markets. Hence, the degree of diversification is generally conceptualized and operationalized as the number and the relative importance of the international or product markets a firm is active in. The type of diversification aims to capture the diversity among the businesses a firm is active in. One such distinction that is often made is the distinction between related and unrelated diversification. Related diversification involves operating businesses in industries that are related to each other and, therefore, offers more opportunities to share operating assets and capabilities as well as financial resources.

Hence, firms are generally better able to enjoy economies of scope when diversification is related. Unrelated diversification involves operating businesses in industries that are not related to each other in straightforward way. As a result, firms are not able to share most of their resources among the different businesses and they might be limited to solely share financial resources (Jones & Hill, 2008). Depending of the context relatedness can refer to various aspects of a firm's businesses: product relatedness (Ansoff, 1957), technological relatedness (Penrose, 1959) Research & Development relatedness, marketing relatedness, advertising relatedness, human resource relatedness, managerial logic relatedness, knowledge relatedness, cultural relatedness and institutional relatedness (Henisz, 2007).

2.2.7 Credit Policy and performance

A bank exists not only to accept deposits but also to grant credit facilities, therefore inevitably exposed to credit risk. Credit risk is by far the most significant risk faced to a greater extent than any other risks (Gieseche, 2004). According to Chen and Pan (2012), credit risk is the degree of value fluctuations in debt instruments and derivatives due to changes in the underlying credit quality of borrowers and counterparties. Coyle (2000) defines credit risks as losses from the refusal or inability of credit customers to pay what is owed in full and on time. Credit risk is the exposure faced by banks when a borrower (customer) defaults in honoring debt obligations on due date or at maturity. This risk interchangeably called 'counterparty risk' is capable of putting the bank in distress if not adequately managed. Credit risk management maximizes bank's risk adjusted rate of return by maintaining credit risk exposure within acceptable limit in order to provide framework for understanding the impact of credit risk management on bank's profitability (Kargi, 2011). Demircug & Huzinga (1999) opined that credit risk management is in tow-fold which includes, the realization that after losses have occurred, the losses becomes unbearable and the developments in the field of financing commercial paper, securitization, and other non-bank competition which pushed banks to find viable loan borrowers.

The main source of credit risk include, limited institutional capacity, inappropriate credit policies, volatile interest rates, poor management, inappropriate laws, low capital and liquidity levels, direct lending, massive licensing of banks, poor loan underwriting, laxity in credit assessment, poor lending practices, government interference and inadequate supervision by the Central Bank (Kithinji, 2010). An increase in bank credit risk gradually leads to liquidity and solvency problems. Credit risk may increase if the bank lends to borrowers it does not have adequate knowledge about.

2.2.8 Credit Risk Management Strategies

The Credit Risk management strategies are measures employed by banks to avoid or minimizes the adverse effect of credit risk. A sound credit risk management framework is crucial for banks so as to enhance profitability guarantee survival. According to Lindergren (1987), the key principles in credit risk management process are sequenced as follows; establishment of a clear structure, allocation of responsibility, processes have to be prioritized and disciplined, responsibilities should be clearly communicated and accountability assigned. The strategies for hedging credit risk include but not limited to these. i). Credit Derivatives, ii). Credit Securitization Risk Management Practices, iii). Adoption of a Sound Internal Lending Policy, and iv). Credit Bureau.

2.2.9 Empirical Review

From empirical findings, (Demirguc & Detragiache, 1999) suggested that bank profitability is an important predictor of financial crises. In accordance with the study of Waymond (2007) profitability ratios are often used in a high esteem as the indicators of credit analysis in banks, since profitability is associated with the results of management performance that is Return on Equity and Return on Asset. According to Risksbanks Financial Stability Report (2002), the measurement of connecting profit to shareholders equity is normally used to define the profitability in the banks. Achou & Jengul (2008) shows there is significant relationship between bank performance (in terms of Return on Asset) and CRM (in terms of Loan performance). According to VanHorne (1998) the firm's credit policies all the chief influences on the level of debtors measuring the manager's position to invest optimally in its debtors and be able to trade profitably with increased revenue.

According to Muasya (2009) analyzed that impact on non-performing loans on the performance of the banking sector in Kenya in the line global financial crises; finding confirmed that NPL do affect commercial banks in Kenya. Wanjira (2010) studied relationship between NPL management practices and financial performance of commercial banks in Kenya. Muthee (2010) conducted a research on the relationship between CRM and profitability in commercial banks in Kenya. Findings and analyses revealed that CRM has an effect on profitability in all commercial banks analyzed. The methodology used was simple regression analysis to establish the relationship between NPLR and ROE. Forecasting models developed and listed for accuracy in obtaining predictions, findings indicated the model was moderately significant i.e. NPLR (Independent Variable) with (ROE) dependent variable thus simple linear regression was used.

2.3 Critique of the Existing Literature

Most of the researchers have concentrated on credit risk management, its effect on firm's performance especially Commercial banks of Kenya. According to Achou and Jengul (2008) showed that there is significant relationship between bank performance (in terms of Return on Asset) and Credit Risk Management (in terms of loan performance). According to Muasya (2009) analyzed that impact on non-performing loans hence found out that it affects commercial banks in Kenya. According to Kargi (2011), the findings showed that there is significant impact on CRM and profitability of Nigerian banks. According to Epure & Lafuate (2012), showed that performance improvements follow regulatory changes and risk explains the difference in banks and non-performing loans negatively affect efficiency and return on assets while the capital adequacy ratio has a positive impact on the net interest margin. They have actually dwelt on how credit risk can be managed in Commercial banks of Kenya using independent variables such as Credit Quality, Asset Quality Tier, Non-performing Loans and Capital Adequacy Ratio and how they affect the firm's performance especially Commercial banks in Kenya. No researcher had thought of studying EFRM and its effects on firms performance especially Kenya Commercial Bank. No researcher had used independent variables such as financial leverage, diversification of products and credit policy to understand its effect on performance of Kenya Commercial Bank.

2.4 Summary

In as much as a lot of researchers have done on the effect of EFRM on firm's performance, most of the local studies have learned reaching towards the various tools and techniques of CRM, ERM, practices and strategies used by various institutions example (Wanjira, 2010; Ochola, 2009). The studies did not give a clear relationship between EFRM and Financial performance in KCB. In addition, and to the best knowledge of the researchers, no other researcher had used financial leverage as independent variable that is how borrowed capital influences its equity (Abor, 2007). Diversification of products, that is how the firm can expand its activities in new products, (Ramanujan & Varadarajan, 2009). Credit policy that is how a bank accepts deposits, grants and credit facilities therefore inevitable exposed to credit risk. (Gieseche, 2004). This therefore existed a gap necessitating this study. The knowledge of this information was used in data collection so as to meet the objectives of the study that is to find out the effect of EFRM on performance in KCB.

2.5 Research Gaps

The studies that have so far been done have focused on effect of credit risk management on firm's performance especially commercial banks on Kenya but nothing has been sought to establish the effect of EFRM in performance of Kenya Commercial Bank. The researcher would propose that future studies should dwell much on EFRM and how its effect on banks performance. Using financial leverage, diversification of products and credit policy to enhance profitability and stability. Since it combines enterprise risk management and credit risk management its high time researchers should dwell on the same to have diversified measures on banks performance profitability, value and size.

III. RESEARCH METHODOLOGY

Introduction

This chapter point out the research design that the researcher intended to use, target population from which the sample was selected from, the sampling frame which included stratus, the sampling size based on the population and sampling techniques applied, instruments such as questionnaires for data collection, date of collection procedures, pilot study that was where the testing for validity and reliability was carried out and data processing models and analysis of the data collected.

3.1 Research Design

The study adopted a descriptive research design. According to (Saunders, 2003), a descriptive research was suitable where the study sought to describe and portray characteristics of an event, situation, and a group of people, community, or a population by gathering accurate information. It enabled the researcher to profile the sample or population. Mugenda & Mugenda (2004) define descriptive research as a process of collecting data to answer questions concerning the current status of the subject in the study.

3.2 The Target Population

Population refers to the entire group of people/objects having common observable characteristics and is of interest to the researcher (Cooper & Schinders, 2008).It's also described as total of all that conforms to a given specifications (Kothari, 2008). The target population of the study was the 670 employees of 30 branches of KCB in Western Region, (Branch Manager ,KCB, Kakamega).

The employees include those in management level, middle level and lower cadre staff.

Respondents	No. of Employees	Sample
Management level	67	24
Middle level	402	147
Lower level cadre	201	73
Total	670	244

Table 3. 1: Target Population and Sample size

3.3 Sampling Frame

According to Mugenda, (2008), sampling frame refers to the ultimate entities which may be people, households, organizations or other units of analysis. It is a physical representation of the target population and comprises all the units that are potential members of a sample (Kothari, 2008).

3.4 Sample and Sampling Size

Sampling is a procedure of selecting a part of the population on which research was to be conducted. The sample size of the study was calculated using the formula below as recommended by Mugenda & Mugenda (2003):

$$n = \frac{n}{1 + \frac{n}{N}}$$

Where; n = the desired sample size (when population is more less 10,000)

N = the estimate of the population size

$$n = \frac{Z^2 pq}{d^2}$$

Where: n is the desired sample size when the target population is less the 10,000

Z is the confidence level (95%); that is, Z=1.96

P - The proportion in the target population estimates to have characteristics being measured.

Proportion to total population

d - The level of statistical significance set. (0.05 level).

A proportion of 50% is assumed hence;

$$384 = \frac{1.96^2(0.5)(0.5)}{0.05^2}$$

The desired sample size (n) is thus 384

Since n = 384

Substituting with the target population will give;

$$670 \times 384 = 244.1$$

$$670 + 384$$

The desired sample size thus was comprised of 244 respondents.

The study used stratified sampling technique to select the employees where a respondent was picked from. Therefore, employees would be stratified into three strata's where the sample size was distributed according to Neyman allocation formula (1934). The purpose of the method was to maximize survey precision, given a fixed sample size. With Neyman allocation, the best sample size for stratum h was:

$$n_h = \left(\frac{N_h}{N} \right) n$$

Where,

n_h - The sample size for stratum h,

n - Total sample size,

N_h - The population size for stratum h,

N - The total population

Hence, distribution will be as follows;

Respondents	Sample	Procedure	Sample
Top Management	67	$67/670 \times 244$	24
Middle Level	402	$402/670 \times 244$	147
Lower Cadre	201	$201/670 \times 244$	73
Total	670		244

Table 3. 2: Sample Size

Therefore, the study sampled employee through simple random sampling from the three levels of employees through stratified random sampling where. Using the same formula, the researcher arrived at a sample size of 244. The study therefore sampled a total of 244 respondents. q (1-p) -is the pro.

3.5 Research Instruments

The main instrument of data collection in the study was questionnaires which was issued to the respondents. The questionnaire would provide the researcher with the primary data that was required. Secondary data was also obtained in order to supplement the primary data. The questionnaire would contain closed ended questions and some would be in Likert scale format. A five point Likert-type scale ranging from 1(Strongly Agree) to 5(Strongly Disagree) was used for all the constructs with 5 being the highest to measure the respondents' attitude towards an issue(Kothari,2010).The Likert-scale would be used in the study to measure variables where the respondent was required to express opinion on the statements in terms of degrees. The results was presented in form of tables.

3.6 Data Collection Procedure

Primary data was collected through questionnaires. Primary data was important because, it provided direct data or first-hand evidence about an event,(Henige,1986) Secondary data that was collected from quarterly banking reports.Secondary data was important in the sense that it had a valuable role in the capacity building of the research skills as well as developing the researchers career and substantive interests, (Smith,2008) The researcher was personally collecting the questionnaires from the respondents' completion.

3.7 Pilot Study

A pilot study was conducted in Kenya Commercial Bank, Kakamega Branch before the final research to test Validity and reliability of the instruments that was used in the study. The objective of piloting was to detect any ambiguities in the questionnaire.

3.7.1 Validity of Instruments

Validity refers to the extent to which research results can be accurately interpreted and generalized to the other population. It's the extent to which research instruments measure what they intended to measure. Since the questionnaire has been used in other studies and contains items that test both the independent variable and dependent variable, it is considered as valid (Oso & Onen, 2008).

3.7.2 Reliability of Instruments

Reliability refers to the degree to which scores obtained with an instrument are consistent measures (Kothari, 2008). Mugenda and Mugenda (1999) defined reliability as a measure of the degree to which a research instrument yields consistent results or data after repeated trials. An instrument is reliable when it can measure a variable accurately and obtain the same results over a period of time. A correlation greater or equal to 0.7 is accepted (George & Malley, 2003). The responses from the respondents was subjected to Cronbach's Alpha of reliability using SPSS software and the obtained correlation was compared to the threshold of reliability of 0.7.

3.8. Data Processing and Analysis

The study used descriptive and inferential statistics in analyzing data. Descriptive statistics provide for meaningful distribution of scores using statistical measures of central tendencies, dispersion and distribution (Kothari, 2008). Data that was collected from respondents was coded appropriately and analyzed using the statistical package for social science (SPSS). The study also used regression analysis to determine the relationship between variables (independent and dependent variables). For example, illustrating multiple linear regression on model.

The multiple linear regression model;

$$Y = B_0 + B_1 X_1 + B_2 X_2 + B_3 X_3 + e$$

Where:-

X_1, X_2 and X_3 are independent variable (predictor variables)

X_1 is financial leverage

X_2 is diversification of products

X_3 is credit policy

e is the error term (random component) and source of randomness in Y .

B_0 is the intercept of the systematic component of the regression relationship.

B_1, B_2 & B_3 are the coefficients of the regression models

IV. DATA ANALYSIS AND PRESENTATION

4.1 Introduction

This study investigated if there exists a relationship between financial leverage and performance of commercial banks in Kenya and also to determine how product diversification affects performance of commercial banks and thirdly, how credit policies affects performance of Kenya commercial bank. It has been commonly believed that commercial banks make enormous profits from credit lending. This has not always been correctly correlated with how diversification of products can affect the overall profitability performance. The relationship between leverage and performance has remained as a dormant considerable yet it's a crucial area that requires sufficient study that can establish its effect on the banks profitability. The study adopted the use of primary data collected by use of questionnaires and also used secondary data sources that included journals, magazines and financial statements. Data presentation is organized based on the specific objectives of the study.

4.1.1 Kenya's Banking Sector Performance in 2014

The performance of commercial banks for the last 8 years in Kenya grew impressively between the years 2007 to 2014 where profit grew from Kshs 4.8 billion in 2007 to Kshs 84.5 billion in 2014. During the same period Credit to customers grew from Kshs 79 billion to Kshs 210 billion while total Assets grew from 545 billion to 1.95 Trillion (CBK, 2015). According to Central Bank Supervision report (2015), the banking sector recorded a solid performance in 2014. This performance can partly be attributed to improvement in the GDP growth which grew from 4.62% in 2013 to 5.24% in 2014. The re-basing of the Kenyan economy is was a clear indicator that bank credit had played a major part in the growth of the GDP over that period. Total customer deposit base increased from Kshs 1.788 Trillion in 2013 to 2.12 Trillion in 2014 an increase of 18.56%. Net advances to customers increased from 1.324 trillion to 1.425 trillion an increase of 7.63% while profit before tax increased from Kshs 112.9 in 2013 to Kshs 118.2 trillion in 2014 an increase of 4.69% (CBK 2014)

4.2 Study Preliminaries

This section presents the basic characteristics of the sample of the study.

4.2.1 Response Rate

Primary data was collected between January and March 2015 using a questionnaire while secondary data was collected from past journals, magazines and financial reports of Kenya Commercial Bank. Two hundred and forty four (244) questionnaires were issued to randomly selected bank employees from in Kakamega, Vihiga, Bungoma, Busia, Kisumu, Siaya, Kisii, Nyamira and Homa bay counties with a total of 30 branches out of the 173 branches in Kenya (KCB credit rating report, 2015) as at March 2015. A population size of 670 staff work within this counties for Kenya Commercial bank. A sample size of 244 was used in the research study representing 36.4% of the population size.

4.2.2 Reliability test

Reliability Statistics		
	Cronbach's Alpha Based on	Standardized Items
Cronbach's Alpha	No of Items	
.749	.793	21

The reliability test run from the 21 questions in the likert scale indicate the Cronbach's alpha is 0.749. This shows a high level of internal consistency and reliability for our scale with this specific sample size.

4.3 Sample Demographics

This section outlines the characteristics of the respondents in terms of their Age, Gender, job experiences and educational levels. From table 4.3.1, there is almost equal gender representation in employment in KCB as 56.1% representing 137 of the respondents were male and a close 43.9% represented by 107 were female. In the case of age, 64.3% who were a representative of 157 of the workers in KCB belong to the age bracket of 18-30 years followed with 27.5% that were 67 of the respondents being from the age bracket of 41-50 and finally the minority 8.2% representing only 20 of the respondents being of the age bracket 31-40. In educational level of the staff who participated, 46.3% that represented 113 of the respondent workers in top management have achieved postgraduate level in terms of education with only 20.1% that represented 49 of the workers having a bachelor's level of education. Equally, 33.6% who were 82 of the respondents have attained diploma level of education.

Table 4.1 Demographic Information

		Frequency	Percent
Gender	Male	137	56.1
	Female	107	43.9
	Total	244	100.0
Age bracket	18-30	157	64.3
	31-40	20	8.2
	41-50	67	27.5
	Total	244	100.0
Job experience	2-10 years	103	42.2
	11-20 years	141	57.8
	Total	244	100.0
Education Level of Respondents	Diploma level	82	33.6
	Bachelor's level	49	20.1
	Postgraduate level	113	46.3
	Total	244	100.0

Finally there was a questionnaire on the job experience of the employees in KCB. The questionnaires revealed that 57.8% equivalent to 141 of the respondents had worked for between 11-20 years with the 42.2% that represented 103 employee respondents having had a work experience of between 2-10 years. This was a clear indication of the banks need to blend experienced staff with newly recruited ones for the purpose of service continuity

4.4 Financial leverage

Data in Table 4.2 shows the impact of financial leverage on performance of Kenya Commercial Bank. First, In terms of whether Debt/Equity is the most appropriate mode for measuring profitability of a firm specifically the Return on Equity (ROE), 24.2% of the respondents represented by 59 of the respondents strongly agreed that debt/equity is the most appropriate instrument for measuring profitability of a firm, 75.0% equivalent to 183 of the respondents agreed that debt/equity is the most appropriate instrument for measuring profitability of a firm while 0.8% equivalent to 2 respondents were neutral (the mean was 4.23, while the Standard deviation (SD) was 0.443).

Table 4.2 Financial leverage

		SA	A	N	D	SD	Mean	Std. Deviation
Debt/Equity most appropriate for measuring profitability of a firm (ROE)	Freq.	59	183	2	0	0	4.23	.443
	%	24.2	75.0	0.8	0.0	0.0		
Debt/Asset is the most appropriate way of measuring the size of firm (ROA)	Freq.	45	199	0	0	0	4.00	.000
	%	18.4	81.6	0.0	0.0	0.0		
Debt/Capital tier is the most appropriate way of measuring the value of the firm	Freq.	0	190	54	0	0	3.78	.416
	%	0.0	77.9	22.1	0.0	0.0		
When the firm uses only Debt to finance its capital structure, it becomes less leveraged	Freq.	0	195	9	40	0	3.64	.750
	%	0.0	79.9	3.7	16.4	0.0		
When the firm uses only Equity from shareholders to finance capital structure, it becomes highly leveraged	Freq.	179	18	7	40	0	4.38	1.132
	%	73.4	7.4	2.9	16.4	0.0		
Financial leverage							4.006	0.5482

Table 4.2 shows data on whether debt/asset is the most appropriate way of measuring the size of a firm. The responses to this questionnaire were that, 18.4% equivalent to 45 respondents strongly agreed that debt/asset is the most appropriate way of measuring the size of a firm while 81.6% of the respondents with a number of 199 agreed that debt/asset is the most appropriate way of measuring the size of a firm (the mean was 4.00, while the SD = 0.000). Furthermore, 77.9% or 190 in number of the respondents agreed that debt/capital tier, is the most appropriate measure of value of the firm while 22.1% equivalent to 54 respondents neither agreed nor disagreed that debt/capital tier is the most appropriate for measuring value of the firm. There was a mean of 3.78, while the Standard deviation (SD) was 0.416).

A 79.9% of the respondents, equivalent to 195 of the respondents agree that a firm becomes less leveraged when it uses only debt as capital to finance its capital structure. 3.7% or 9 respondents who were neutral. While 16.4% equivalent to 40 respondents disagreed that a firm become less leveraged when it uses only debt to finance its capital structure (the mean was = 3.64, while the SD = 0.750). Finally, 73.4% representing 179 of the respondents strongly agree that equity should be used to finance capital structure with a mere 16.4% that represented 40 respondents disagreeing. However, 2.9% equivalent to 7 of the respondents neither agree nor disagree to the same. 7.4% that were 18 of the respondents simply agree to this method of funding capital structure (mean = 4.38, SD = 1.132). The overall mean and standard deviation were 4.006 and 0.5482 respectively.

4.5 Diversification of products

This section in table 4.3 focuses on how diversification of products affects the performance of Kenya Commercial Bank. 77.9% equivalent to 190 of the respondents strongly agreed that performance in recent years is subject to new products in the market, 15.6% equaling 38 respondents agreed while 6.6% that were equivalent to 16 respondents were neutral that performance in recent years is subject to new products in the market. None of the respondents disagreed or strongly disagreed (the mean was 4.71, as the SD was 0.581). On whether overconcentration on income interest has cost problems of high charges; 24.2% (59) of the respondents strongly agreed that overconcentration on income interest has cost problems of high charges while 75.8% (185) agreed that overconcentration on income interest has cost problems of high charges (mean = 4.24, SD = 0.429).

Table 4.3 Diversification of products

		SA	A	N	D	SD	Mean	Std. Deviation
Profitability in recent years is subject to new products in the market	Freq.	190	38	16	0	0	4.71	0.581
	%	77.9	15.6	6.6	0.0	0.0		
Overconcentration on income interest has cost problems of high charges	Freq.	59	185	0	0	0	4.24	0.429
	%	24.2	75.8	0.0	0.0	0.0		
Move from traditional intermediation will boost bank performance	Freq.	59	185	0	0	0	4.24	0.429
	%	24.2	75.8	0.0	0.0	0.0		
Practicing both income rates & other products avoids volatility	Freq.	141	47	54	2	0	4.34	0.848
	%	57.8	19.3	22.1	0.8	0.0		
Low lending rates increase profitability	Freq.	97	11	0	136	0	3.28	1.456
	%	39.8	4.5	0.0	55.7	0.0		
Default risk can be reduced by other products	Freq.	99	143	2	0	0	4.40	0.507
	%	40.6	58.6	0.8	0.0	0.0		
Diversification of Products (Average)							4.2012	0.7083

Furthermore, 24.2% equivalent to 59 of the respondents had to strongly agree that a move from traditional intermediation will boost bank performance. This was a much enthusiastic section, while 75.8% with a majority of the respondents to the level of 185 agreed that a Move from traditional intermediation will boost bank performance (mean = 4.24, SD = 0.429). In terms of whether practicing both income rates and other products avoids volatility, 57.8% equivalent to 141 of the respondents strongly agreed that using and practicing both income rates and other products avoids volatility, 19.3%, 47 respondents agreed while 22.1% equivalent to 54 respondents were neutral on the same. Only 0.8% or just 2 respondents disagreed that practicing both income rates and other products avoids volatility (mean = 4.34, SD = 0.848). Moreover, 39.8%, or 97 respondents strongly agreed that low lending rates increase profitability while 4.5% or 11 of the respondents agreed Low lending rates increase profitability. However, 55.7% that is equivalent to 136 respondents disagree that low lending rates increase profitability. A mean of 3.28 and a SD of 1.456 was achieved). Finally, 40.6% that represents 99 respondents strongly agree that default risk can be reduced by other products, while 58.6% equivalent to 143 of the respondents agreed to the same and a mere 0.8% or 2 respondents remaining neutral on whether default risk can be reduced by other products (mean = 4.40, SD = 0.507). The overall mean and standard deviation were 4.2012 and 0.7083 respectively.

4.6 Credit Policy

This section focuses on the how credit policy affects the performance of Kenya Commercial Bank. The results are presented in table 4.

Table 4.4 Credit Policy

		SA	A	N	D	SD	Mean	Std. Deviation
Controlling credit limit curbs against credit default	Freq.	63	45	16	120	0	3.21	1.293
	%	25.8	18.4	6.6	49.2	0.0		
Credit risk is caused by limited institutions etc.	Freq.	59	58	38	89	0	3.36	1.204
	%	24.2	23.8	15.6	36.5	0.0		
Credit risk management strategies can minimize adverse effects	Freq.	75	169	0	0	0	4.31	0.462
	%	30.7	69.3	0.0	0.0	0.0		
Credit reduces the regulatory capital	Freq.	61	107	38	38	0	3.78	0.993
	%	25.0	43.9	15.6	15.6	0.0		
Lending policy guide the bank in disbursing loans to customers	Freq.	79	83	82	0	0	3.99	0.814
	%	32.4	34.0	33.6	0.0	0.0		
Credit policy (Average)							3.73	0.953

From the table, 25.8% equivalent to 63 of the respondents strongly agreed that controlling credit limit curbs against credit default, as 18.4% (45 respondents) agreed while 6.6% (16 respondents) were neutral that performance in recent years is subject to new products in the market. However, 49.2% (120 respondents) disagreed that controlling credit limit curbs against credit default while 0.0% (0) strongly agreed to the same (mean = 3.21, SD = 1.293). 24.2% equivalent to 59 of the respondents strongly agreed that credit risk is caused by limited institutions, 23.8% (58 respondents) agreed while 15.6% (38 respondents) were neutral that credit risk is caused by limited institutions. However, 36.5% equivalent to 89 of the respondents disagreed that credit risk is caused by limited institutions while 0.0% (0) strongly agreed to the same (mean = 3.36, SD = 1.204). In terms of whether credit risk management strategies can minimize adverse effects; 30.7% equivalent to 75 of the respondents strongly agreed that credit risk management strategies can minimize adverse effects, 69.3% (169 respondents) agreed to the same. However, none of the respondent had a neutral, disagree or strongly disagree response on whether credit risk management strategies can minimize adverse effects (mean = 4.31, SD = 0.462). In addition, 25.0% (61 respondents) strongly agreed that credit reduces the regulatory capital while 43.9% representing 107 of the respondents agreed that credit reduces the regulatory capital. A further 15.6% that represented 38 of the respondents were neutral while the same number 15.6% (38 respondents) disagreed that credit reduces the regulatory capital (mean = 3.78, SD = 0.993). Finally, 32.4% that was equivalent to 79 of the respondents strongly agree that lending policy guide the bank in disbursing loans to customers, 34.0% (83 respondents) agreed to the same and 33.6% (82 respondents) remaining neutral on whether lending policy guide the bank in disbursing loans to customers (mean = 3.99, SD = 0.814). The overall mean and standard deviation were 3.73 and 0.953 respectively.

4.7 EFRM

This section focuses on the how EFRM affects the performance of Kenya Commercial Bank. The results are presented in table 4.5

Table 4.5.EFRM on Performance

		SA	A	N	D	SD	Mean	Std. Deviation
Performance is determined by capital structure (Debt/Equity)	Freq.	77	127	38	2	0	4.14	0.697
	%	31.6	52.0	15.6	0.8	0.0		
Performance is determined by Internal capital (Equity)	Freq.	143	25	38	38	0	4.12	1.165
	%	58.6	10.2	15.6	15.6	0.0		
Overconcentration on one type reduces the performance	Freq.	97	147	0	0	0	4.40	0.490
	%	39.8	60.2	0.0	0.0	0.0		
Low lending rates improve the performance	Freq.	68	38	18	120	0	3.22	1.312
	%	27.9	15.6	7.4	49.2	0.0		
Good Credit facility improves on performance	Freq.	106	138	0	0	0	4.43	0.497
	%	43.4	56.6	0.0	0.0	0.0		
Performance can be affected by credit risk	Freq.	148	96	0	0	0	4.61	0.490
	%	60.7	39.3	0.0	0.0	0.0		
EFRM (Average)							4.1533	0.7752

The tables analysis ascertained that 31.6% representing 77 of the respondents strongly agreed that performance is determined by capital structure (Debt/Equity), 52.0% (127 respondents) agreed while 15.6% (38 respondents) were neutral that Performance is determined by capital structure (Debt/Equity). However, only 0.8% (2) of the respondents disagreed that Performance is determined by capital structure (Debt/Equity) while 0.0% (0) strongly agreed to the same (mean = 4.14, SD = 0.697)58.6% equivalent to 143 of the respondents strongly agreed that performance is determined by internal capital (Equity), 10.2% (25 respondents) agreed while 15.6% (38 respondents) were neutral that performance is determined by internal capital (Equity). However, 15.6% (38 respondents), disagreed that performance is determined by internal capital (Equity) while 0.0% (0 or no respondent) strongly agreed to the same (mean = 4.12, SD = 1.165).

In terms of whether overconcentration on one type of product reduces the performance; 39.8% (equivalent to 97 of the respondents strongly agreed that overconcentration on one type of product reduces the performance, 60.2% (147 respondents) agreed to the same. However, none of the respondent had a neutral, disagree or strongly disagree response on whether overconcentration on one type of product reduces the performance (mean = 4.40, SD = 0.490). In addition, 27.9% (68 respondents) strongly agreed that low lending rates improve the performance while 15.6% equivalent to 38 of the respondents agreed that low lending rates improve the performance. A further 7.4% representing 18 of the respondents were neutral while 49.2% (120) disagreed that low lending rates improve the performance (mean = 3.22, SD = 1.312).

On whether good credit facility improves on performance; 43.4% or 106 of the respondents strongly agreed that good credit facility improves on performance, 56.6% (138 respondents) agreed to the same. However, none of the respondent had a neutral, disagree or strongly disagree response on whether good credit facility improves on performance (mean = 4.43, SD = 0.497). Finally, on whether performance can be affected by credit risk; 60.7% or 148 of the respondents strongly agreed that performance can be affected by credit risk, 39.3% (96 respondents) agreed to the same. However, none of the respondent had a neutral, disagree or strongly disagree response on whether performance can be affected by credit risk (mean = 4.61, SD = 0.490). The overall mean and standard deviation were 4.1533 and 0.7752 respectively.

4.8 Correlation of diversification of products and performance

This section focuses on the correlation between diversification of products and performance of Kenya Commercial Bank. The results are presented in table 4.8.1.

Table 4.6 Correlation of diversification of products on performance of Kenya Commercial Bank

		Profitability subject to new products in the market	Overconcentration on one type reduces the performance
Profitability subject to new products in the market	Pearson Correlation	1	.402**
	Sig. (2-tailed)		.000
Overconcentration on one type reduces the performance	Pearson Correlation	.402**	1
	Sig. (2-tailed)	.000	
	N	244	244

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

In a correlation analysis to determine the correlation between diversification of products and performance; the sig value indicated that there is a significant relationship between diversification (avoiding overconcentration on one type of product) and performance (profitability). However, the Pearson correlation value indicated that the strength of the relationship is just moderate and not strong ($r = 0.402$, $p < 0.01$). Therefore, other factors come into play to affect the performance of Kenya Commercial Bank.

Table 4.7. Correlation of financial leverage on performance of Kenya Commercial Bank

		Performance of KCB bank	Financial leverage
Performance of KCB bank	Pearson Correlation	1	.731**
	Sig. (2-tailed)		.000
Financial leverage	Pearson Correlation	.731**	1
	Sig. (2-tailed)	.000	
	N	244	244

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

In the correlation analysis to determine the correlation between financial leverage and performance; the sig value indicated that there is a significant relationship between financial leverage and performance. Furthermore, the Pearson correlation value indicated that the strength of the relationship is a strong one ($r = 0.731$, $p < 0.05$).

4.10 Correlation of credit policy and performance in Kenya Commercial Bank

This section focuses on the correlation of credit policy and performance of Kenya Commercial Bank. The results are presented in table 4.10.1.

Table 4.8 Correlation of credit policy on performance of Kenya Commercial Bank

		Performance of KCB bank	Credit policy
Performance of KCB bank	Pearson Correlation	1	.688**
	Sig. (2-tailed)		.000
Credit policy	Pearson Correlation	.688**	1
	Sig. (2-tailed)	.000	
	N	244	244

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

The above correlation analysis was to determine the correlation between credit policy of KCB bank and its performance. From the results the sig value indicated that there is an actual significant relationship between credit policy and performance. Moreover, the Pearson correlation value indicated that the strength of the relationship is a strong one ($r = 0.688$, $p < 0.05$).

4.11 Crosstabulation and Chi square analysis on performance of KCB

4.11.1 Crosstab of EFRM *Financial Leverage

Financial Leverage	EFRM				Total
	D	NA/D	A	SA	
Neither agree nor disagree					
Count	2	0	0	0	2
Percentage	100.0%	0.0%	0.0%	0.0%	100.0%
Agree					
Count	0	38	127	18	183
Percentage	0.0%	20.8%	69.4%	9.8%	100.0%
Strongly agree					
Count	2	38	127	77	244
Percentage	0.8%	15.6%	52.0%	31.6%	100.0%

The cross tabulation between EFRM and Financial leverage indicates that all 100.0% (2) of those who neither agree nor disagree on financial leverage, they also disagree with the EFRM. 20.8% (38) of those who agree on the effect of financial leverage neither agree nor disagree with the EFRM while 69.4% (127) of them agree that it affects EFRM and finally 9.8% (18) strongly agree that financial leverage affects EFRM. On those who strongly agree on the effect of financial leverage; 0.8% (2) of those disagree that there is any effect on EFRM while 15.6% (38) of them neither agree nor disagree that it affects EFRM. 52.0% (127) agree while 31.6% (77) strongly agree that financial leverage affects EFRM

4.11.2 Chi-Square Test on EFRM *Financial Leverage

Chi-Square Tests

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	412.571 ^a	6	.000
Likelihood Ratio	208.281	6	.000
Linear-by-Linear Association	129.826	1	.000
N of Valid Cases	244		

a. 6 cells (50.0%) have expected count less than 5. The minimum expected count is .02.

From the chi square test, the Pearson sig. value is 0.000 indicating that there is a significant relationship between EFRM and Financial leverage. Consequently, this test shows there is a relationship between financial leverage and improved bank performance.

4.11.3 Crosstab of EFRM *Diversification of Products

Diversification of products	EFRM				Total
	D	NA/D	A	SA	
Neither agree nor disagree					
Count	0	0	0	16	16
Percentage	0.0%	0.0%	0.0%	100.0%	100.0%
Agree					
Count	0	0	38	0	38
Percentage	0.0%	0.0%	100.0%	0.0%	100.0%
Strongly agree					
Count	2	38	89	61	244
Percentage	1.1%	20.0%	46.8%	32.1%	100.0%

The cross tabulation from the table above illustrates the relationship between EFRM and diversification. Of those who neither agree nor disagree on diversification; 100.0% (16) strongly agree with the EFRM. Of those who agree on the effect of diversification of products; 100.0% (38) agree that it affects EFRM. On those who strongly agree on the effect of product diversification; 1.1% (2) disagree, 20.0% (38) neither agreed nor disagreed that there is any effect on EFRM. 46.8% (89) agreed that it affects EFRM while 32.1% (61) strongly agreed that diversification of products had an effect on EFRM.

4.11.4 Chi-Square Test on EFRM *Diversification of Products

Chi-Square Tests

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	73.233 ^a	6	.000
Likelihood Ratio	89.883	6	.000
Linear-by-Linear Association	12.124	1	.000
N of Valid Cases	244		

a. 4 cells (33.3%) have expected count less than 5. The minimum expected count is .13.

From the chi square test table 4.11.4 above, the Pearson sig. value is 0.000 indicating that there is a significant relationship between EFRM and diversification of products. Consequently, this test shows there is a relationship between the wide variety of products and improved bank performance.

4.11.5 Crosstabulation of EFRM *Credit policy

Credit policy	EFRM				Total
	D	NA/D	A	SA	
Neither agree nor disagree					
Count	0	0	0	16	16
Percentage	0.0%	0.0%	0.0%	100.0%	100.0%
Agree					
Count	0	0	38	0	38
Percentage	0.0%	0.0%	100.0%	0.0%	100.0%
Strongly agree					
Count	2	38	89	61	244
Percentage	1.1%	20.0%	46.8%	32.1%	100.0%

The table above demonstrates the relationship between EFRM and credit policy. Of those who neither agree nor disagree on the credit policy; 100.0% (16) strongly agree with the EFRM. Of those who agree on the effect of credit policy; 100.0% (38) agree that it affects EFRM. On those who strongly agree on the effect of sound credit policy; 1.1% (2) disagree, 20.0% (38) neither agreed nor disagreed that there is any effect on EFRM. 46.8% (89) agreed that it affects EFRM while 32.1% (61) strongly agreed that credit policy has an effect on EFRM.

Chi- Square Test on EFRM *Credit policy

From the chi square test below, the Pearson sig. value is 0.000 indicating that there is a significant relationship between EFRM and credit policy. Consequently, this test shows there is a relationship between the wide variety sound credit policy and improved bank performance.

4.11.6 Chi- Square Test on EFRM *Credit policy

Chi-Square Tests

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	272.988 ^a	9	.000
Likelihood Ratio	336.444	9	.000
Linear-by-Linear Association	106.109	1	.000
N of Valid Cases	244		

a. 5 cells (31.2%) have expected count less than 5. The minimum expected count is .13.

4.12 Regression Analysis

Table 4.9 Coefficient of Estimate

	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
(Constant)	3.096	0.389		-1.003	0.323
Financial leverage	.785	.090	1.812	8.702	.000
Diversification of products	.522	.017	.904	31.385	.000
Credit policy	.779	.032	1.294	24.008	.000

a Dependent Variable: Performance of Bank

Where X1, X2, X3 are independent variable (predictor variables)

X1 is financial leverage, X2 is diversification of products, and X3 is credit policy.

Y is the (dependent variable) Performance of Kenya Commercial Bank

B0 is the intercept of the systematic component of the regression relationship

B1, B2 and B3 are the coefficients of the regression model

From the above regression matrix, the following regression model can be used in making predictions of the performance of Kenya Commercial Bank.

$$Y = B_0 + B_1X_1 + B_2X_2 + B_3X_3 + e$$

$$Y = 3.096 + 0.785X_1 + 0.522X_2 + 0.779X_3$$

Finally from the significant values found in the regression; we can deduce that:

There is a significant relationship between financial leverage and performance of Kenya Commercial Bank. The p sig. value is 0.000. There is also a significant relationship between financial diversification of products and performance of Kenya Commercial Bank. The p sig. value is 0.000. There is a significant relationship between good credit policy and performance of Kenya Commercial Bank. The p sig. value is 0.000

4.11. Model summary

The results from table 4.11.1 shows that that (R square= 0.820) 82.0% of the performance of Kenya Commercial Bank is explained by the above regression model. This provides a very strong relationship between the independent variables and the dependent variable.

Table 4.10 Model Summary

R	R Square	Adjusted R Square	Std. Error of the Estimate
.906 ^a	.820	.818	.209

^a Predictors: (Constant), Financial Leverage, Diversification of products, Credit policy.

4.12 Discussion of the Findings

Financial leverage had significant effect on financial performance of Kenya Commercial Bank ($\beta_1 = 0.785$, $p < 0.05$). This is because leverage is a critical option for diversifying financing risk. Leverage has the probability of enhancing the performance of firms if well-structured and managed. An optimum leverage level must be determined and maintained by individual firms in order to ensure that financing risk is not increased beyond acceptable limit, which will lead to lower returns to shareholders (Ebiringa, 2012).

Further, study results revealed that diversification of products had significant and positive effect on financial performance of Kenya Commercial Bank ($\beta_2 = 0.522$, $p < 0.05$). The positive relationship can be accredited to the shift from focusing and in exchanging it with diversifying the various products offered by the bank. This result seems to be complemented by the findings of a study by Turkmen (2012) who argued that losses in one sector or location can be compensated from the gain obtained from other sector or location. On the other hand, if the diversification level increases, it leads to rising of costs that are undertaken and diversification may not be associated with higher returns in every circumstances. It is important to make strategic decisions for a bank, in cases of risk and return preferences (Turkmen, 2012).

Finally, the results of the study have revealed that credit policy have a positive and significant effect on financial performance ($\beta_3 = 0.684$, $p < 0.05$). This implies that the credit policy and regulatory mechanism employed by Kenya Commercial Bank has been efficient and effective. The aspect setting credit risk limit by assessing the customer's credit worthiness with the help of 5Cs namely: Character, Capacity, Capital, Collateral and Conditions have paid off. A study by Byusa (2013) agrees with this approach as each type of loan application must go through loan description process, preferred maturity period, indication on maximum allowable amount, and provide an insurance cover.

V. SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter gives a summary of findings outlined in chapter four (4), conclusions and recommendations of the study on the relationship between financial leverage and performance of commercial banks in Kenya; determination of how product diversification affects performance of commercial banks and how credit policies affects performance of Kenya commercial bank. This chapter is organized in three sections. The first section deals with the summary which includes discussions related to the research objectives. The second section focuses on conclusions which are derived from the summary while the third section presents on recommendations which are drawn from conclusions and finally areas for further study.

5.2 Summary of Findings

The study was intended to determine the relationship between financial leverage and performance of commercial banks in Kenya; determination of how product diversification affects performance of commercial banks and thirdly, how credit policies affects performance of Kenya commercial bank. The results of background information of respondents indicated that majority of the total respondents (56.1%) are male, (57.8%) have worked for 11-20 years and (64.3%) of the respondents are in the age bracket of 18-30 years. The results of the descriptive statistical analysis also indicated that majority of the respondents agree that financial leverage, diversification of products and credit policy affects the performance of Kenya Commercial Bank.

The correlation result shows that there is a positive and significant relationship between diversification of products and the financial performance. Furthermore, the multiple regression results showed that financial leverage, diversification of products and credit policy all have significant effect on financial performance. The R square value of 0.820, demonstrates that 82.0% of variation in financial performance can be accounted by the independent variables (financial leverage, diversification of products and credit policy). The findings of this study also indicated that financial leverage is the most important factor to have positive effect on financial performance, followed by credit policy and diversification of products.

5.3 Conclusion

The results have indicated that when the firm uses shareholders equity to finance the capital structure, then good financial performance is witnessed. There is also evidence from the study showing that diversification of products have led to improved financial performance of the banks. This points out to the fact that the bank is able to provide a wide range of services to their client base. This ultimately leads to customers spending more on using these different services, thus increasing the profit margin of the bank. Consequently the ripple effect is that there is improved performance of the bank courtesy of the diversification. Finally, credit policy and regulations were found to impact positively on financial performance of then commercial bank. Particularly, the regulations targeting credit risk and credit management that lay proper guidelines and preconditions for access and repayment of loans.

5.4 Recommendations

In light of the aforementioned findings, the following recommendations are made: The study has established that financial leverage has a positive and significant effect on financial performance. There is therefore need for banks to look into how they finance their capital structure so as to check the financial leverage of their firms. The findings of this research might enable Kenya commercial bank to reflect on its practices and further evaluate the possibility of more diversification of products and services offered through their marketing and banking operations. Particularly, the products should target to attract different types of people and sections of the community. Finally, there is need for the board and management to ensure that the credit policies and regulations are solemnly adhered to. The staff needs to be trained on credit management and lending limits of the bank. Further, the bank credit department should set up stringent measures to curb from bad debts and other unnecessary debts that the bank may incur.

5.5 Areas of Further Research

The sample was drawn from only Kenya Commercial Banks within Western region Kenya. Thus this study may be limited in its generalizability of the findings. So, future research should have to draw sample of respondents on more number of commercial banks in Kenya the for the sake of generalizing the results of the study and therefore, may consider more factors affecting the operations of commercial bank.

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