

**EFFECT OF CORPORATE GOVERNANCE ON CREDIT RISK  
MANAGEMENT IN COMMERCIAL BANKS IN KENYA**

**D61/64705/2013: NDUMAI CORNELIUS NZIOKI**

**A RESEARCH PROJECT SUBMITTED IN PARTIAL  
FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF  
THE DEGREE OF MASTER OF BUSINESS ADMINISTRATION,  
SCHOOL OF BUSINESS, UNIVERSITY OF NAIROBI**

**2016**

## DECLARATION

This research project is my original work and has not been submitted for examination in any other University.

**Signed:** .....

**Date:** .....

**Cornelius Ndumai**

**D61/64705/2013**

### Supervisors

This research project has been submitted for examination with our approval as the University Supervisors.

**Signed:** .....

**Date:** .....

**Dr. Mirie Mwangi**

**Signed:** .....

**Date:** .....

**Mr. Dan Chirchir**

## **ACKNOWLEDGEMENT**

First I would like to offer my gratitude to my distinguished Supervisors Dr. Mirie Mwangi and Mr. Dan Chirchir for their guidance in the course of doing this Thesis. I wish you the best of luck in your endeavors. Next it is impossible not to mention all the people and institutions that assisted me while I was undertaking the research that led to this work. I would like to let all those whom I do not mention here know of my deep sense of appreciation. I would also like to thank also my colleagues at work place for their generosity and support when I needed help. At the end, I would like to thank my family for their love and support.

## **DEDICATION**

I dedicate this research project to my family members. To my parents your teachings and ceaseless support is always cherished. To my wife and children you are the pillar that I will always lean on, this project would not have been successfully completed without your enormous support, love and patience.

## TABLE OF CONTENTS

<b>DECLARATION</b> .....	<b>ii</b>
<b>ACKNOWLEDGEMENT</b> .....	<b>iii</b>
<b>DEDICATION</b> .....	<b>iv</b>
<b>LIST OF TABLES</b> .....	<b>viii</b>
<b>ABBREVIATIONS</b> .....	<b>ix</b>
<b>ABSTRACT</b> .....	<b>x</b>
<b>CHAPTER ONE</b> .....	<b>1</b>
<b>INTRODUCTION</b> .....	<b>1</b>
1.1 Background to the Study.....	1
1.1.1 Corporate Governance .....	2
1.1.2 Credit Risk Management .....	3
1.1.3 Relationship Between Corporate Governance and Credit Risk Management ...	4
1.1.4 Commercial Banks in Kenya .....	6
1.2 Research Problem .....	7
1.3 Research Objectives.....	10
1.4 Value of the Study .....	10
<b>CHAPTER TWO</b> .....	<b>12</b>
<b>LITERATURE REVIEW</b> .....	<b>12</b>
2.1 Introduction.....	12
2.2 Theoretical Framework.....	12
2.2.1 Three Lines of Defense Theory .....	12
2.2.2 Credit Risk Theory.....	13
2.2.3 Portfolio Theory.....	14
2.3 Credit Risk Management Practices.....	14

2.4 Empirical Evidence.....	15
2.5 Conceptual Framework.....	20
2.6 Summary of Literature Review.....	20
<b>CHAPTER THREE .....</b>	<b>22</b>
<b>RESEARCH METHODOLOGY .....</b>	<b>22</b>
3.1 Introduction.....	22
3.2 Research Design.....	22
3.3 Population and Sample .....	22
3.4 Data Collection .....	23
3.5 Data Analysis .....	23
3.5.1 Conceptual Model.....	24
3.5.2 Empirical Model .....	24
3.5.3 Test of Significance .....	26
<b>CHAPTER FOUR.....</b>	<b>27</b>
<b>DATA ANALYSIS AND PRESENTATION.....</b>	<b>27</b>
4.1 Introduction.....	27
4.2 Descriptive Statistics.....	27
4.3 Pearson’s Correlation Coefficient Analysis.....	28
4.4 Regression Analysis.....	30
<b>CHAPTER FIVE .....</b>	<b>34</b>
<b>SUMMARY AND DISCUSSION OF OF FINDINGS, CONCLUSION AND</b>	
<b>RECOMMENDATIONS.....</b>	<b>34</b>
5.1 Introduction.....	34
5.2 Summary of Findings.....	34
5.3 Conclusion .....	35

5.4 Recommendations.....	36
5.5 Limitation of the Study.....	37
5.6 Suggestions for Future Research .....	37
<b>REFERENCES.....</b>	<b>39</b>
<b>APPENDICES.....</b>	<b>47</b>

## LIST OF TABLES

Table 4.1: Descriptive Statistics .....	28
Table 4.2: Correlations.....	29
Table 4.3: Model Summary .....	30
Table 4.4: ANOVA <sup>a</sup> Without Control Variables .....	31
Table 4.5: ANOVA <sup>a</sup> With Control Variables .....	32
Table 4.6: Coefficients.....	32



## **ABBREVIATIONS**

- ANOVA** - Analysis of Variance
- CBK** - Central Bank of Kenya
- CEO** - Chief Executive Officer
- NPA** - Non Performing Accounts
- NSE** - Nairobi Securities Exchange
- Std** - Standard
- UoN** - University of Nairobi
- UK** - United Kingdom.
- USA** - United States of America

## ABSTRACT

The central aim of the management of a bank is to ensure that there is a maximization of shareholders wealth in the long run. The interpretation is that bank management aims at capitalizing on the company's ordinary share market value. Corporate governance and risk management in any firm are closely related to each other. The firm's performance sustainability is, moreover greatly dependent on the conclusive role played by both concepts. The present study's drive was to examine how credit risk management in commercial banks in Kenya is impacted by corporate governance. This study made use of cross sectional survey design as it takes place at one point in time. The study relied on a census survey by looking at the entire 42 commercial banks in Kenya. The study obtained secondary data through abstraction from financial statements as well as corporate governance related statements for the commercial banks covered as they had been published in their annual reports. Descriptive analyses were used (means scores and percentages) to analyze the extent of corporate governance practices. Both multiple regression and correlation analyses were utilized to assess the association between discretionary Non Performing Loans / Total Loans as a credit risk management apparatus and corporate governance variables deemed significant for commercial banks. The significance was measured by the t-value, which denoted the number of standard error means diverged by the sample from the value tested. The inferential findings reveal further that the extent and direction of a company's credit risk management is subject to the predictors in question. Findings indicate that large corporate practices, policies and rights of shareholders enhance credit risk management and such factors, when exploited, firm value is enhanced. Study findings may be regarded as an indicator that an appropriate structure of governance is significant among financial institutions as the same affects the management of credit risk by the institution. The study findings are not only geared towards fine-tuning Commercial banks' governance with respect to policy direction, but also to ensure Commercial bank collapse related to governance is anticipated with a view not to damage the critical risk management process. The results furnish shareholders with pertinent knowledge that they have a crucial role to push banks' management to enforcing and implementing good corporate governance. So as to control implementation of good corporate governance by the management, particular control mechanisms ought to be established.

# **CHAPTER ONE**

## **INTRODUCTION**

### **1.1 Background to the Study**

The study of corporate governance focuses on the way organizations are managed and controlled. This will include the best practices established and followed by a company in to ensure its operations are overboard. Basically, corporate governance are the processes that ensure how a firm is directed, controlled and held accountable. This will involve interaction among stakeholders, dealing with the organization directly or indirectly who are key to its operations including employees, shareholders, creditors, subcontractors and long- term suppliers (Brownbridge, 2007).

Corporate governance espouses the association a firm and its social, political and economic environment where it operates. The management and administration of many businesses are enhanced if combined efforts to stop corruption and other types of irregularities are to achieve desired results. Companies are required to set right legal framework by defining the roles of the board of directors, and chief executives and the related structure of authorities and responsibilities of each level of corporate governance. Good governance will impact on the general performance of the organization. The key stakeholders are the board of directors, management and other shareholders. Other players include employees, suppliers, customers, bankers, regulators, and the locals (Knell, 2006).

Best corporate governance ensure a firm is shielded from financial distress exposure in future (Bhagat & Jefferis, 2002). This normally has an effect on ensuring stable financial

performance hence more investments being available to the organization. Management and board of directors and how these are structured will have a bearing on the direction the firm takes and its ability to survive in the industry (Donaldson, 2003). Firms which have put in place strong governance practices will do better compared to the rest in the industry. When a company embraces good governance and legal framework in its management and operations will have an effect on its financial profitability hence will attract more capital hence beneficial to all its stakeholders.

Bad governance framework leads to weak financial results and risky financing patterns, hence prone to macroeconomic crises. A vast number of studies confirm that appropriate corporate governance is essential for the achievement of both market liquidity and investor confidence (Donaldson, 2003).

### **1.1.1 Corporate Governance**

According to the National Association of Corporate Directors (2006), corporate governance denotes how an establishment or organization is governed. Systems of good governance may, therefore, be considered as apparatuses for instituting the foundation of control and ownership of institutions within the economy. Company law and other forms of regulations enforce adherence to the existing systems of corporate governance.

A good legal framework and regulations play a substantial role in this regard. For instance, board of directors legally has the power to oversee the business management as well as an organization's affairs. While discharging their duties, directors and senior managers are obligated by law to deal in good faith and honestly and in the company's best interests; and practice care, skill and diligence.

Whereas these functions are in their scope widespread, what has transpired over the past number of years is that specific responsibilities and tasks have been expected of or assigned by regulations, the directors and shareholders in wide span of areas including board composition and structure, compensation, risk and financial oversight as well as director qualifications with a view to ascertain that boards of directors oversee adequately the organizational management and deal in the company's best interests for its shareholders. The role of regulations on corporate governance are felt by the way in which firms are controlled and owned and the ownership and monitoring change process (Jenkinson & Mayer, 2002). Ownership is well defined in the company law, by elaborating both income streams and property rights of all stakeholders (Deakin & Slinger, 2007).

### **1.1.2 Credit Risk Management**

Credit risk management (CRM) can be deemed as a structured method to uncertainty management through the identification of risk, its assessment, and mitigation and risk monitoring by use of managerial resources. Among strategies used include party shifting, risk avoidance, minimization of deleterious risk effects and adopting some or all particular risk ramifications (Santomero, 2007).

Management of financial risk on the other hand, is concerned with manageable risks through transacted financial tools. The sole risk management objective is to find out and alleviate various risk forms related to an area of concern to acceptable levels (Christen & Pearce, 2005). Credit Enhancement, which entails regular communication of risk position to senior management and departmental heads is one of the credit risk management

practice used by commercial banks. The risk management strategy is taken as part of the general plan. The strategy employed has to provide an environment favourable for lenders and buyers of credit. Identification of risk comprises ranking of risk constituents normally on the basis of severity, impact or dollar effects. Risk identification and assessment involves the assessment and examination by reference to risk mitigation and measurement. Virtually, it is imperative to categorize various risks with respect to the extent of exposure they subject an organization to (Fuser, Gleiner & Meier, 1999).

The classification enables separation of risks that are threatening the existence of the group from those which cause minimal damages. Monitoring of risk involves reporting and evaluation of systems with an aim of identifying and assessing the risks and ensuring existence of effective controls. Control of risk can serve as a sure way that risk management practices are in place and can also assist banks management to identify and mitigate risks in advance (Al-Tamimi & Al- Mazrooei, 2007).

### **1.1.3 Relationship Between Corporate Governance and Credit Risk Management**

The association that exists between CRM and corporate governance can be said to be complementary as it is through exercising good governance practices where credit risk can be eliminated in commercial banks. Proponents of stakeholder theory opine that the only way to achieve sustainability is by addressing the common interest of all stakeholders, which include stockholders, customers, employees and the society.

On the other hand, the stakeholder theory opponents postulate that it is not conceivable to group together various party interests. Whereas this tactic is nearer to normative theoretical tenet, actual findings in finance reveal the primary corporate governance goal

as maximization of shareholder's wealth. That is to say that, business community to a larger extent concurs that the primary purpose of a corporation is the shareholders (Asquith & Wizman, 2010).

Alternatively, high corporate governance focused on shareholder profit maximization will result in a good performance by management, adequate allocation of resources, informed investment strategy, and reliability in reporting. This will exhibit a positive impact on the firm's financial standing, ensure appropriate availability of information between the industry and the firm, benefit debt holders and reduce default risk in the long run (Warga & Welsh, 2003).

Consequently, weak governance, such as an inactive management control or board of directors will lead to default on firm's debt commitments or even destroy shareholder value. Holders of debt may be knowledgeable of corporate ownership changes and even any looming form of bankruptcy. Shareholders' rights and the ability to interfere with management are limited by antitakeover provisions. This has an effect on both debt and equity holders left at the executive speculation risk. Nevertheless, solid shareholder rights, whereas a disciplining device, a robust management, are not in all cases profitable to the creditors. Kirkpatrick (2009) conducted a commissioned World Bank survey for and found that the international financial crises that happened recently could to a larger extent, be as a result of the weak governance structures. He further noted weak corporate governance practices which were inadequate for safeguarding extreme taking of risk which resulted in vast sums of non-performing loans.

#### **1.1.4 Commercial Banks in Kenya**

As at the end of December 2014, the commercial banking sector comprised of the regulator, CBK and a total of 42 banking institutions (1 mortgage finance company and 41 commercial banks). Of the 42 banks, 13 are foreign owned while 29 are locally owned. Of the domestically owned, three institutions are significantly owned by State Corporations and the Government in terms of shareholding. The rest are 27 commercial banks and 1 mortgage finance system. Three peer groups exist into which Commercial Banks are categorized employing a weighted combined index which entails comprises deposits, assets, capital size of loan and deposit accounts.

A commercial bank exploring a weighted compounded index of and above 5% is categorized as a big bank large bank; a weighted compound index and of between 1 % and 5 % comprises medium bank while smaller banks have weighted compound indicator of less than 1 percent. In view of the above, there were 6 large banks in the country as of the period ended 31st December 2014, which represented 53.7 percent of the market share, 15 were medium representing 36.8 percent market share and 22 small banks were small.

Therefore, the large commercial banks in Kenya in 2014 were Equity Bank Ltd, Kenya Commercial Bank Ltd, Cooperative Bank Ltd, Barclays Bank of Kenya Ltd, Standard Chartered Bank (K) Ltd and CFC Stanbic Bank Ltd (CBK, 2014). Commercial banks face among other risks, interest rates, credit, operational, market and liquidity. Techniques for mitigating the foregoing risks include use of guarantees, collateral, as well as use of deposits to net off of loans for the same counter-party. Deposits held offset against loan balances and the balance is paid hence credit risk is reduced. Other



commonly used techniques include: factoring, letters of credit, credit insurance, surety bonds and debt collection. While using these techniques transfer or abate credit risk, others may arise which include liquidity, legal, market risks and operational (Stutz, 1985).

With a view to provide guidance to all financial institutions in Kenya, CBK has published risk management procedures on the minimum risk management strategy and frame work requirements. OECD (2004) stresses on the existence of an effective Corporate Governance System in firms and the entire economy, hence offering a level of confidence requisite for the appropriate market economy functioning. Vital to market's effectual economic operation is the financial sector which is predominantly commercial banks across most parts of Africa. As such, this calls for efficient and effective corporate governance in commercial banks.

## **1.2 Research Problem**

The central aim of the management of a bank is to ensure that there is a maximization of shareholders wealth in the long run. The interpretation of the aim is that bank management aims at capitalize on the company's ordinary share market value. The maximization of wealth, in return, calls for the cash flows present value evaluation by managers under improbability with near-term, larger cash flows presented when evaluated on an adjusted risk basis (Maina, 2003). To gain higher return yields, a bank must either lower operating costs or take an increased risk. Hence, the management must assess and balance the adjustments between higher yield prospects, possibilities of the bank's failing and that of not realizing them (Koch & MacDonald, 2006).

Corporate governance and risk management in any firm are closely related to each other. The sustainability of firm performance is, moreover, greatly reliant on the conclusive role both concepts play. An essential role that corporate governance plays is the element of control, while a regulated environment is established as a result of the risk management process (Knight, 2006). In this regard, corporate governance was defined by Knight (2006) in relation to risk management as an intermediate for governing and controlling an organization with an aim of attaining set goals. The regulated environment results in an institution that is consistent in achieving the set goals inside a sensible range of risk. Management of risk is a technique used for the minimization of detrimental risk effects and combining risky situation benefits (Essinger & Rosen, 1991).

The current business environment is very competitive combined with unstable conditions of the economy, increasing rates of defaulting and commercial and consumer debt hence calls for an enhanced effort to manage and monitor credit risk effectively with a view to ensure success and survival of the organization (Altman, 2002). In the last decade, massive losses have been witnessed in the banking industry. Respectable companies that had been well performing were faced by credit exposures hence made losses due to interest rates set, or derived vulnerabilities that may have been expected to offset balance sheet risk (Santomero, 2007). This caused commercial banks to embark on upgrading their risk management and control systems. However, when established corporate governance systems are not properly functioning, problems may result. It is necessary then for banks to adopt good corporate governance practices to ensure enhanced credit risk management, given that this would have significant implications for financing opportunities for the sector.

Various studies have been undertaken in relation to corporate governance and risks. Chen, (2003) examined the association between risk-taking behavior and corporate governance in the Taiwanese Banking Industry. Hollis, Daniel and Ryan (2004) examined the Corporate Governance effects on Firms' Credit Ratings. Andrew (2012) did a study on the connection between insolvency risk and corporate governance among Liberian commercial banks. Truong, Trinh<sup>1</sup>, Duyen and Nguyen (2015) examined Corporate Governance impact on Financial Risk among Commercial Banks in Vietnam. Seyram, Yakubu and Bawuah (2014) examined the risk management and corporate governance in the Ghanaian banking sector.

In Kenya, Jebet (2001) explored corporate management with reference to quoted firms in Kenya while Muriithi (2005) studied the association between firm performance of NSE quoted firms and corporate governance mechanisms. Manyuru (2005) assessed organizational performance and corporate governance with reference to companies listed at the NSE while Matengo (2008) examined the association between organizational performance and corporate governance with reference to the banking industry in Kenya. Kavulya (2011) explored the association between corporate governance and deposit taking Savings and Credit Cooperatives' financial performance in Kenya. Nyakoe (2012) explored the linkage between risk management practices and corporate governance among commercial banks in Kenya. Wangui, (2014) on the other hand assessed the corporate governance effect on enterprise risk in Kenya among commercial banks.

A review of the studies revealed that no study has been undertaken in relation to the effect of corporate governance on credit risk management in Kenya among commercial banks. Banks are prerequisites for savings mobilization in the economy. They represent a

significant element of the financial system and provide services to a significant number of households in Kenya. Good corporate governance in these banks would, therefore, ensure better performance through credit risk management. The present study aimed to address this gap by investigating the effect of corporate governance on credit risk management among commercial banks in Kenya.

### **1.3 Research Objectives**

The aim of the study was to explore the corporate governance effect on credit risk management among commercial banks in Kenya. From this general goal, specific objectives were derived as follows:

#### **1.3.1 Specific Objectives**

- i. To establish the effect of board size on credit risk management among commercial banks in Kenya.
- ii. To determine the effect of board composition and control on credit risk management among commercial banks in Kenya.
- iii. To assess the effect of board meeting frequency on credit risk management among commercial banks in Kenya.
- iv. To determine the effect of executive compensation on credit risk management among commercial banks in Kenya.

### **1.4 Value of the Study**

The present study concerned with investigating the impact of corporate governance on credit risk management among commercial banks in Kenya. The study is contributory to the various stakeholders in the banking industry in Kenya and beyond. The management would identify how various aspects of corporate governance practices affect the credit risk management among commercial banks as well as determine the extent to which this and other factors affect credit risk management in other financial institutions in Kenya.

They would also identify the impediments that face banks in approaching various corporate governance practices that affect their credit risk management. The policy makers will obtain information of the dynamics of the Kenyan banking industry and they will, as a result, receive guidance from the study findings in designing suitable practices with a view to regulate the shareholders' participation in credit risk management among commercial banks.

The study may provide information to potential and current scholars with regard to the effect of corporate governance on credit risk management among commercial banks in Kenya. The study findings will further serve as a point of departure for further investigations in governance structures and systems for academics and researches in general. This study may be an eye opener in research in developing markets.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

In this chapter, the literature of relevance to the study was reviewed. The main areas of research were the theoretical framework, determinants of business risk management and the business risk management and competitive advantage.

#### **2.2 Theoretical Framework**

The study established on some theories which included the three lines of defense theory and the portfolio approach theory.

##### **2.2.1 Three Lines of Defense Theory**

The three lines of defense theory is a model that has gained a lot of attention globally. A company's top management has to set an effective system of internal controls to ensure accountability for risk assessment, which is seen as the first line of defense (Kersnar, 2009). Boards of directors and senior management are the main players served by the lines of defense and are well placed in ensuring that this model is reflected in the organization's risk management and control processes. It is mandatory for the three lines to exist in some form in all agencies, despite their size or complexity. Where the three separate lines exist and can be clearly identified in an organization then risk management is considered to be strong (Hakim & Neamie, 2011).

However, in some groups which are deemed to be small some of the lines may be combined together. According to Badara and Saidin, (2014) implementation of the three lines of defense has to be clearly communicated to senior management and governing

bodies and the prospect that information be shared and activities harmonized among the various teams responsible for dealing with the organization's risks and controls.

### **2.2.2 Credit Risk Theory**

Merton (1974) introduced the credit risk approach also referred to as the structural theory. The theory explained a default incident obtained from the evolution of a firm's asset demonstrated by a process of distribution with persistent parameters. Merton (1974) noted that the class of models is referred to as structural models courtesy of variables connected to a particular issuer. This type's evolution is typified by an asset of models where the conditional loss on defaulting is specific. In this case, the default can happen endlessly during a corporate bond lifetime not only upon maturity (Longstaff & Schwartz, 1995).

Although credit risk has been in existence from time immemorial, it is an area that has yet to be broadly explored until the recent years. Pre 1974 literature on credit predominantly utilizes customary credit risk actuarial techniques, the challenge being reliance on past data. Three quantitative credit risk analysis tactics exist to date (Crosbie et al., 2003): operational techniques, reduced appraisal form and incomplete information method. There is a risk of nonpayment when a bank grants credit to its customers. Therefore the systems, procedures, and controls established by a bank to ensure an efficient collection of loan repayments hence reducing the risk of non-payment are called credit risk management (Naceur & Goaid, 2003).

### **2.2.3 Portfolio Theory**

Portfolio theory of investment is aimed at maximizing the expected return from a mix of an investment portfolio with a set amount of portfolio risk or with an effect of reducing a given level of expected return risk by making a good choice of various asset proportions. The portfolio theory is widely used in the practice of finance with its authors having won a Nobel Prize. The theory, nevertheless, has been lately contested (Markowitz, 1952) particularly in the field of behavioral economics. The theory was developed between the 1950s and early 1970s, deemed as a crucial progress in the mathematical finance modeling. The theory has been challenged theoretically and practically. One of the bases of criticism is that neither a Gaussian distribution nor any symmetric distribution is followed by either financial returns or those associations among asset classes (Micheal, 2008).

Most commercial banks are involved in lending business with loan portfolio being the largest asset and a critical line of revenue. This, therefore, presents an important source of soundness and safety risk to a financial institution. Loan portfolio problems whether due to loose credit standards, weak portfolio risk management, or fault in the economy, have been the primary cause of losses and failures to financial institutions (Micheal, 2008). This, therefore, calls for an efficient loan portfolio and credit function management and to ensure bank's soundness and safety.

### **2.3 Credit Risk Management Practices**

Credit results from borrowing and investment and therefore, debt is created. Debt and credit represent both sides of a coin that is, debt being what is owed and credit being what is given (Finley, 2008). The Basel Committee on Banking Supervision (1999) defined



credit risk as the probability that a counterparty or borrower will fail to meet their commitments as per the agreement. Credit risk management aims at maximizing the risk-adjusted return rate by a bank through recalling exposure to credit risk within satisfactory limits. The credit risk is also a key capital fund performance index suggested across a number of regulatory regimes (Basel Committee on Banking Supervision, 1999). There is a need for banks to manage credit risk inherent in their combined portfolio and ensure full monitoring of risk in individual credit transactions. An efficient credit risk management is a vital element of a far-reaching risk management technique which is vital in the long-term financial institution success (Nijskens & Wagner, 2011).

Different models of internal credit are applied by different financial institutions with a view to accommodate the management of risk. Models of credit portfolio are employed in credit risk distinction with respect to such as parameters as geography, credit grade, and industry. An arithmetical replication is, consequently, executed to produce several scenarios, which mimic various economic states and the ensuing manner of each on the value of credit portfolio. The examination assists managers of portfolio in decision making with respect to the best composition of portfolio, based on their respective risk affinity and performance goals (Caouette, Altman & Narayanan, 2008).

#### **2.4 Empirical Evidence**

Chen (2003) investigated the relationship between corporate governance and risk-taking behavior in Taiwanese Banking Industry. He sampled 39 local banks, and got 24 completed responses representing 61.54%. Of the 24 survey responses, 13 (54.1%) of the credit unions report that more than 60% of their internal audit activities are risk oriented. It was found that 8 of 24 (33.3%) respondents indicated that they use a relatively high

level of risk based internal audit (RBIA), about 61%-80%, while 6 (25%) of the domestic banks reported that about 21%-40% of their internal audit work were risk-based.

In another study, Truong, Trinh, Duyen and Nguyen (2015) examined the Impact of Corporate Governance on Financial Risk in Vietnamese Commercial Banks. They approached the corporate governance mechanism with an aim of studying the impact of corporate governance dynamics on capital risk, credit risk, as well as liquidity risk in Vietnamese commercial banks. The approach divides corporate governance separately into the internal mechanism and external mechanism. The empirical study investigated 26 joint-stock commercial banks in the 2009-2013 period. The empirical study indicated that board strengths, information disclosure, foreign capital, and stakeholder roles have a significant impact on financial risk management in the banking systems.

Hollis, Daniel and Ryan (2004) investigated the effects of Corporate Governance on Firms' Credit Ratings. This study adopted a framework for evaluating corporate governance, recently developed by Standard and Poors. The study established that firm credit rating are: (1) negatively associated with the number of block holders that own no less than 5% ownership in the company; (2) positively related to accrual quality and earnings timeliness; (3) positively related to weaker shareholder rights in terms of takeover defenses; and (4) positively related to board stock ownership, board expertise, and the general board independence, and negatively related to CEO authority on the board. The study also proved that CEOs of firms that have speculative grade credit ratings are overcompensated with higher marks than those in firms with investment grade ratings. Beside that, this overcompensation exceeds the CEO's share of additional debt costs related to lower credit scores.

Seyram, Yakubu and Bawuah (2014) examined the corporate governance and risk management in the banking sector of Ghana. Using a modified questionnaire, divided into two parts, the data collection was administered by selected banks' board of directors, senior risk management officers as well as selected staff. The first section of the questionnaire highlighted five major aspects: understanding risk and its management, the identification of risk, its assessment and analysis, how it can get monitored, and the practices put in place regarding corporate governance and risk management. The aforementioned part also included 32 closed-ended questions grounded on an interval scale. The final section contained two closed-ended questions constructed on an ordinal scale and covering two topics, namely, risks facing the sampled banks and methods of risk identification. The outcomes of the study indicated that board of directors, senior staff are actively involved in risk management. However, it was slo noted that not all employees are angaged in risk management. The most important types of risk facing the sampled banks were operating risk, interest rate risk, credit risk, solvency risk, and liquidity risk. Thorough the study, it was also found out that the tested banks were more or less efficient in managing risk.

Nyakoe (2012), investigated the relationship between corporate governance and risk management practices among commercial banks in Kenya. The study utilized a cross-sectional survey design. The population of the study involved 42 commercial banks, which had been operating in Kenya for at least five years. Data was obtained from both primary and secondary sources. Data on risk management was collected through a questionnaire designed for the risk managers in each of the banks. Corporate governance data was gathered from the annual statements. The data sought was on board dimensions

such as size (BOARD\_SIZE), CEO duality (CEO\_DUAL) and diversity (BOARD \_ DIV). Data was analyzed using regression analysis. The study found that the level of corporate governance was moderate as shown by the mean score of 3.048. The study found that the most managed risk in the banking sector was foreign currency risk (4.22). This is followed by interest rate risk (4.11) and equity price risk (3.44). The least managed risk was commodity price risk (1.78). The study also noted a high significant positive correlation between risk management and corporate governance ( $R = 0.754$ ,  $p < 0.05$ ). The study also concludes that there is a significant influence of corporate governance on risk management practices of commercial banks in Kenya.

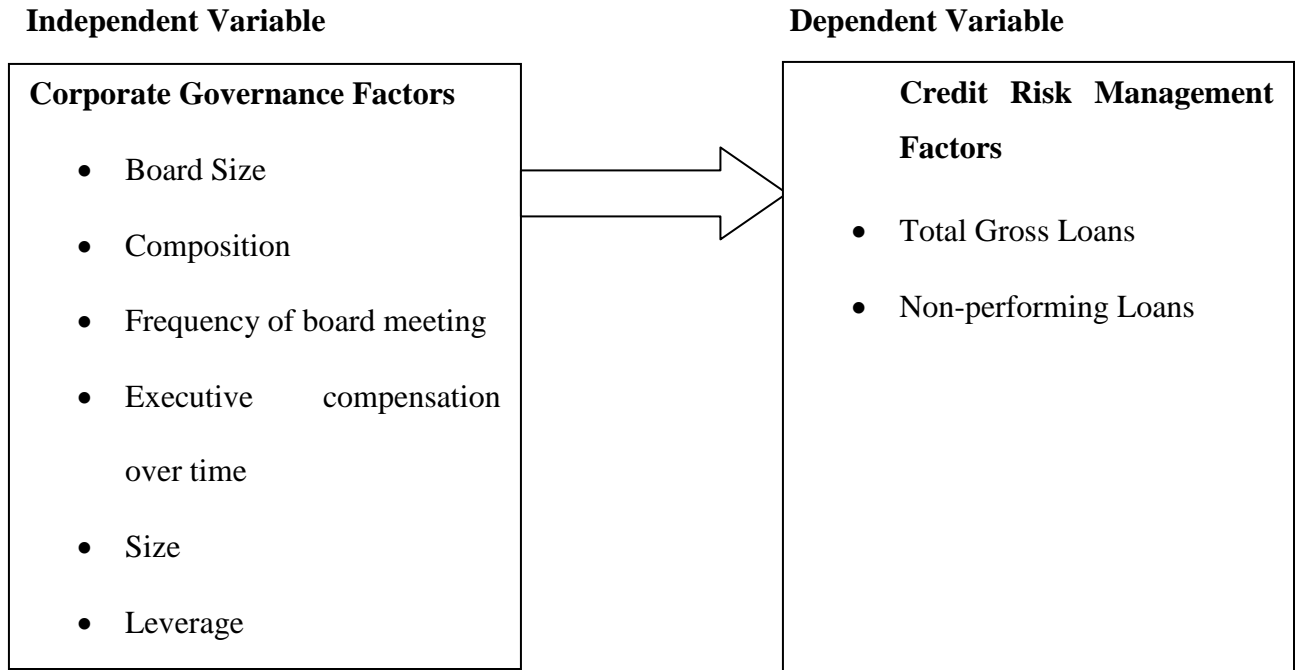
Andrew (2012), did a study on; the linkage existing between corporate governance and insolvency risk within commercial banks in Liberia. The study employed a cross-sectional survey design. The population of the survey was composed of 8 commercial banks, which had been operating during the period from 2006 to 2010. Data was fetched from the banks' annual statements and then sorted on board dimensions like duality, size, and cognitive diversity, under the focus of corporate governance. The data was, subsequently, analyzed using regression and correlation analysis. The outcome of the study showed that there were small insolvency risks in the banking industry in Liberia. This was because the highest insolvency risk stood at 0.411307 and the lowest at 2.5575. Consequently, the bankruptcy risk recorded was -0.1929. The study also found that corporate governance within the study scope was negatively correlated with bankruptcy risk (Pearson Correlation Coefficient,  $R = 0.572$  with an adjusted  $R^2 = -0.570$ ). In conclusion, it was ascertained that larger boards do not automatically lead to an eventual increase in insolvency risk and lack of coordination like prior studies have often

proposed. The highlights of the survey were that of a result that is opposed to the various results of some studies that treat the problems of “corporate governance” of the banking sector in such a way that the authors often suppose that the manager is averse to risk. The study, conclusively, recommended the need to question the wisdom that larger boards are detrimental to corporate governance.

Wangui (2014), did a study on the effect of corporate governance on enterprise risk in commercial banks in Kenya. The study employed a cross-sectional study to fill the research gap. The primary data was then collected using questionnaire method. Individual questionnaires were designed and sent to internal audit managers for their response in to answer the research question. The findings proved that the board size, CRO presence in executive council, as well as board independence, affected the CAMEL rating in an active modus, while board diversity itself had an adverse effect on the same score. The study had few limitations with one of the most discernible being a low response rate from the banks, although it turned out to be sufficient for the study. the study countered this limitation by providing questions that would accurately provide results and persuade banks to cooperate in providing the information. The dynamics of the study recommended the banks’ CAMEL rating to get centralized by the Central Bank of Kenya fro an easier and straightforward analysis and also to enable other analytical techniques to get employed in the analysis. There was also a recommendation in increasing independent directors and expanding the board size since these facets of corporate governance were believed to improve the banks’ enterprise risk management.

## 2.5 Conceptual Framework

**Figure 2.1: Conceptual framework**



According to Smyth (2004), a conceptual context is a research tool aimed at helping the researchers in creating awareness and understanding of the topic of study as well as articulating it. The conceptual framework of this research piece shows the effect of corporate governance on credit risk management in commercial banks in Kenya. The study conceptualizes that corporate governance influence the credit risk management of commercial banks if other factors remain constant.

## 2.6 Summary of Literature Review

To the best of the researchers' knowledge, none of the known local and international studies have, in the past, looked into the association between credit risk management and corporate governance within the banking sector in Kenya as such. The literature in our

study confirmed that there exists a gap in the practice of corporate governance and its effects on credit risk management among commercial banks in Kenya since much emphasis has been put on other areas of risk management. Hence the rising reported cases of commercial banks being placed under CBK receivership. This study, thus sought to address this research gap by exploring the linkage that exists between corporate governance in commercial banks in Kenya, and credit risk management.

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

This chapter sets out to study design that was utilized in the study as well as the data collection and analysis methods. It further provides the steps which were taken to select the study population and sample, the outcome realized, data types and data collection instruments used in the exercise.

#### **3.2 Research Design**

This study adopted across sectional survey design. A survey was the most appropriate design to undertake this investigation as it takes place at one point in time. The banking industry has 42 banks which can better be studied through a survey design. Nachmias and Nachmias (1996) applaud the use of survey design when considering a number of participants in a given industry such as banking industry simply because it makes generalization easy. Other studies of a similar kind have been carried out using this design study method and gave adequate results that are Cheptumo (2010), Wanemba (2010) and Mutie (2013).

#### **3.3 Population and Sample**

The study relied on a census survey by looking at the entire 42 commercial banks in Kenya. Mugenda and Mugenda (2003) opine that a study population refers to a discrete set of services, people, events, elements and a group of households or things being examined. The present study sought to perform the study on the entire population (42 banks). A complete listing of all banks was availed in appendix 1.



### **3.4 Data Collection**

The study obtained secondary data by abstracting from financial and corporate governance statements for the commercial banks covered as they had been published in their annual reports. The study, in addition, made use of secondary data from industry players such as Kenya Bankers Association (KBA), Financial Sector Deepening (FSD), the regulator CBK among others. The data to be collected included major shareholders' composition, the total number of directors, non-executive and executive director composition, financial data and CEO duality status including debt amounts, current assets and current liabilities, depreciation and cash equivalents. The data collected from the published results covered the results of the last five years (2010-2014)

### **3.5 Data Analysis**

The research used such tools as Microsoft Excel and Statistical Package for Social Studies (SPSS) to analyze the data. Both inferential statistical and descriptive techniques were used to analyse the data. According to Healey (2011), descriptive statistics enables the researcher to condense large quantities of data using methods that are understandable to the observer. Descriptive analyses were used (mean scores and percentages) to analyze the extent of corporate governance practices. Both linear regression and correlation analyses were utilized to assess the hypothesized relationships between the independent and dependent variables. R- squared, adjusted R-squared, F statistic the Analysis of Variance (ANOVA), and beta coefficients and their p-values were used to interpret the inferential results.

### 3.5.1 Conceptual Model

The relationship between the variables was estimated using a function:

$$\text{CRM} = f(\text{CG}) \dots\dots\dots (1)$$

CRM = Credit Risk Management

CG = Corporate Governance Practices (structures)

CRM The measure for Credit Risk Management was Loan Loss Reserves Ratio

(LLRR) obtained as Loan Loss Reserves/Gross Loans or Non- Performing Loans Ratio

(NPLR) computed as Non-performing Loans/Total Gross Loans.

### 3.5.2 Empirical Model

The study employed the regression model presented below:

$$\text{CRM} = \beta_0 + \beta_1 (X_1) + \beta_2 (X_2) + \beta_3 (X_3) + \beta_4 (X_4) + \beta_5 (X_5) + \beta_6 (X_6) + \varepsilon$$

Where;

CRM= Non Performing Loans / Total Loans

X<sub>1</sub> = Size of the board, provided by the natural log (Ln) of total number of directors.

X<sub>2</sub> = Composition of the board, indicated by the Non-executive/ Total Directors proportion.

X<sub>3</sub>= Board meeting frequency is measured by natural log (Ln) of number of board meetings held during the year.

X<sub>4</sub> = Executive compensation measured by year on year growth over time (t in years) to be determined from the financial statements of the banks

$\beta_0$   $\beta_1$   $\beta_2$   $\beta_3$  and  $\beta_4$  are the beta equation coefficients.

$\varepsilon$  : Standard Error term.

$X_5$  and  $X_6$  = Control variables i.e. leverage (L) and (S) size

$X_5$  = total debt to total assets ratio

$X_6$  = Size board defined as the natural log (Ln) of Total assets

**Summary Table**

<b>Variable</b>	<b>Measure</b>
Board Size	Natural log (Ln) of total number of directors in the board
Composition	Proportion of Non-executive directors / Total directors
Frequency of board meeting	Natural log (Ln) of number of board meetings held in the year
Executive compensation over time	Year on year growth over time (t in years)
Leverage	Ratio of Total debt to Total assets
Size	Natural log (Ln) of Total assets
Credit Risk Management	Non-performing Loans/Total Gross Loans

The Statistical Package for Social Sciences (SPSS) 21 version aided in the analysis.

### **3.5.3 Test of Significance**

Findings are deemed statistically significant at a P value of 0.05, implying that the value of significance must be less than 0.05. The t- value determined the significance, which was an indicator of the number of standard error means that the sample diverged from the tested value.

## **CHAPTER FOUR**

### **DATA ANALYSIS AND PRESENTATION**

#### **4.1 Introduction**

This chapter presents the analysis and the results of the study. The overall aim of this study was to investigate the corporate governance effect on credit risk management among Kenyan commercial banks. Corporate governance factors (which form independent variables) consisted of; Board Composition, Size, frequency of meetings as well as executive compensation. Commercial banks' credit risk management was the dependent variable. The investigation was founded on the obtained data from use of governance and financial report reviews.

#### **4.2 Descriptive Statistics**

Table 4.1 below presents the descriptive statistics for the study variables. The non-executive directors / total directors, total number of directors, executive compensation and the number of board meetings, total debt to total assets ratio and size in the five year period was a gradual increase.

**Table 4.1: Descriptive Statistics**

	N	Minimum	Maximum	Mean	Std. Deviation
Total number of directors in the board	42	6.00	13.80	8.87	1.43
Non executive directors / total directors	42	1.15	4.60	2.93	.76
Number of board meetings	42	2.60	10.40	5.97	1.53
Executive compensation	42	.01	.94	.25	.223
Ratio of total debt to total assets	42	.45	.80	.64	.07
Size	42	11.00	11.80	11.36	.18
Credit Risk Management	42	6.00	13.80	8.87	1.43

The mean for the total number of directors in the board was found to be 8.87 for the five year period with a SD of 1.43. Secondly, the mean for non executive directors / total directors was 2.93 with a SD of 0.76 for the five year period. The mean for number of board meetings was 5.97 with a SD of 1.53 for the five year period. Executive compensation had a mean of 0.25 and an SD of 0.223 for the five year period. Ratio of total debt to total assets had a mean of 0.64 and an SD of 0.07 for the five year period. Size had a mean of 11.36 and an SD of 0.18 for the five year period. Credit Risk Management had a mean of 8.87 and an SD of 1.43 for the five year period.

#### **4.3 Pearson's Correlation Coefficient Analysis**

The study assessed the magnitude of linkage among corporate governance and credit risk management variables that is., if the governance proxies will increase credit risk management. As earlier on stated, a positive relationship was anticipated between the corporate governance measures and credit risk management variable (Non-Performing Loans / Total Loans). Table 4.2 presents the correlation coefficients for all the variables considered in this study.

**Table 4.2: Correlations**

		<b>Total number of directors in the board</b>	<b>Non executive directors / total directors</b>	<b>Number of board meetings</b>	<b>Executive compensation</b>	<b>Credit risk management</b>	<b>Size</b>	<b>Leverage</b>
<b>Total number of directors in the board</b>	Pearson Correlation Sig. (2-tailed) N	1 42						
<b>Non executive directors / total directors</b>	Pearson Correlation Sig. (2-tailed) N	.225** .008 42	1 .000 42					
<b>Number of board meetings</b>	Pearson Correlation Sig. (2-tailed) N	-.963** .000 42	-.682* .014 42	1 .000 42				
<b>Executive compensation</b>	Pearson Correlation Sig. (2-tailed) N	-.297 .349 42	-.310 .326 42	.392 .208 42	1 .000 42			
<b>Credit risk management</b>	Pearson Correlation Sig. (2-tailed) N	.741 .001 42	.667 .035 42	.737 .001 42	.549 .018 42	1 .000 42		
<b>Size</b>	Pearson Correlation Sig. (2-tailed) N	.044 .001 42	.176 .008 42	.198 .006 42	.279 .016 42	.519 .007 42	1 .000 42	
<b>Leverage</b>	Pearson Correlation Sig. (2-tailed) N	-.558 .019 42	.263 .001 42	.335 .012 42	.399 .007 42	.602 .018 42		1 .000 42

Results presented by the correlation matrix indicate that there is significant correlation between the dependent and all the independent variables. Total number of directors in the

board, non-executive directors / total directors, number of board meetings, executive compensation showed a strong and significant relationship with credit risk management, (Pearson's  $r = 0.741, 0.667, 0.737, 0.549$ , Sig. = 0.001, 0.035, 0.001, 0.018) respectively and leverage, size with credit risk management (Pearson's  $r = 0.519, 0.602$  Sig. = 0.007, 0.018) respectively. It can be deduced from the matrix of correlation that a weak but significant correlation between the independent variables exists.

#### 4.4 Regression Analysis

A multiple regression analysis was performed to test the association among predictor variables. Regression Analysis on corporate governance on credit risk management without control variable

**Table 4.3: Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1 Without control variables	.969 <sup>a</sup>	.939	.921	.01575
2 With control variables	.793 <sup>a</sup>	.629	.608	.06695

Adjusted R squared can be attributed to independent variable changes which caused the variance in the dependent variable. From the table above, the adjusted R squared value was 0.921, which implied 92.1% variation on credit risk management among commercial banks due to changes in board composition, size, executive compensation and frequency



of meetings at 95% confidence interval. This indicates that 92.1% of credit risk management changes among commercial banks can be attributed to the foregoing variables. The study findings show a strong positive association among the study variables at an R value of 0.969. The findings also show that the 0.608 adjusted R squared value indicates a 60.8% variation on commercial banks' credit risk management owing to changes in Board Composition, Size, meeting frequency, executive compensation, size and leverage at 95% confidence interval.

**Table 4.4: ANOVA<sup>a</sup> Without Control Variables**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	36.325	8	9.081	2.808	0.015
	Residual	47.237	34	3.234		
Total		83.562	42			

a. Predictors: Board size, Board Composition, Board meeting frequency and executive compensation

b. Dependent Variable: credit risk management

The ANOVA statistics in the table above show a significance level of 0.015 which indicates that the model and the data thereof can be relied upon to make conclusive inferences. The critical value (2.262 < 3.869) was less than the F calculated which is an indication that the foregoing independent variables were significantly CRM among commercial banks in Kenya.

**Table 4.5: ANOVA<sup>a</sup> With Control Variables**

	Sum of Squares	df	Mean Square	F	Sig.
Regression	30.338	8	8.893	4.49823	0.039
Residual	41.226	34	1.977		
Total	71.564	42			

a. Predictors: Board size, Board Composition, Board meeting frequency and executive compensation, size, leverage

b. Dependent Variable: credit risk management

From table 4.4 and 4.5, the mean square which is the sum of squares divided by the degrees of freedom was 9.081 without control variables and 8.893 with control variables. The F static which is regression mean square divided by the residual mean was 2.808 without control variables and 4.498 with control variables. Degree of freedom df, was 8.00 with and without control variables. Statistically, the overall relationship was very significant with significant value, P value = 0.015 without control variables and 0.039 with control variables ( $P < 0.05$ ) as shown below.

**Table 4.6: Coefficients**

	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
(Constant)	1.936	0.451		4.292	0.000
Total number of directors in the board	0.741	0.213	0.146	3.478	0.001
Non executive directors / total directors	0.667	0.179	0.126	3.726	0.001
Number of board meetings	0.737	0.28	0.045	2.632	0.012
Executive compensation	0.549	0.222	0.142	2.472	0.018
Size	0.519	0.214	0.132	2.425	0.020
Leverage	0.602	0.206	0.047	2.922	0.006

The overall regression model for this model was:  $Y = -1.936 + .741X_1 + .667X_2 + .737X_3 + .549X_4 + .519X_5 + .602X_6$  Based on the statistical test of the

beta coefficient ( $t = 4.292$ ,  $p.000$ ), Total number of directors in the board ( $\beta=3.478$ ,  $P<.001$ ), Non executive directors / total directors ( $\beta=3.726$ ,  $P=.0001$ ), Number of board meetings ( $\beta=2.632$ ,  $P=.012$ ), Executive compensation ( $\beta=2.472$ ,  $P=.018$ ), Size ( $\beta=-2.425$ ,  $P=.020$ ), Leverage ( $\beta=2.922$ ,  $P=.006$ ). The findings imply that bigger Board size, Board Composition, Board meeting frequency and executive compensation, size, leverage is associated with higher credit risk management. The hypothesis that high Board size, Board Composition, Board meeting frequency and executive compensation, size, leverage are associated with high credit risk management in terms of Non Performing Loans / Total Loans was supported.

## **CHAPTER FIVE**

### **SUMMARY AND DISCUSSION OF OF FINDINGS, CONCLUSION AND RECOMMENDATIONS**

#### **5.1 Introduction**

In the present chapter, the summary of key findings, conclusions as informed by the findings, recommendations thereof and suggestions for future studies are provided.

#### **5.2 Summary of Findings**

The aim of this study was to establish the corporate governance effect on credit risk management among Kenyan commercial banks. In this study, the researcher adopted a across sectional survey design which assisted to investigate the relationship between corporate governance and the credit risk management. The researcher used a census of the population. The population of the study was 42 commercial banks in Kenya. The data was gathered exclusively by analyzing the annual reports of commercial banks from 2010 to 2014 and the data was analyzed using SPSS 21.

The findings of the study indicate that generally, corporate governance contributes to the credit risk management Kenyan commercial banks. A combination of the corporate governance structures, pillars and principles lead to a positive and statistically significant relationship between corporate governance and credit risk management of Kenyan commercial banks.

In summary, this study found that implementation of proper corporate governance is an important element in the credit risk management from the regression equation it was revealed that total number of directors in the board, non executive directors / total

directors, number of board meetings, executive compensation, size and leverage to a constant zero, credit risk management of companies would stand at 1.936.

The composition of the board may be used to ameliorate the principal-agent problem. The participation of outside directors is designed to enhance the ability of the firm to protect itself against threats from the environment and align the firm's resources for greater advantage. However, research on the impact of outside directors has grown significantly but with mixed results.

### **5.3 Conclusion**

The concept of corporate governance is of utmost significance as it constitutes a firm's internal activities' institutional climate. The concept provides new viewpoint and augments an organization's corporate competitiveness. From the foregoing findings, the study arrives at the conclusion that corporate governance has a critical role to play in the prosperity and success of commercial banks in Kenya. Findings further reveal that the extent and direction of an organization's CRM is reliant on the forecasters in question. Findings indicate that large corporate practices, policies and rights of shareholders enhance credit risk management and firm value is enhanced at the capitalization of such factors. Findings may be regarded as a sign that good corporate governance structure is significant among financial institutions since it affects institutions' CRM. The study observations are not only geared at fine-tuning corporate governance among commercial banks with respect to policy direction, but also at ensuring commercial banks do not collapse as a result of poor corporate governance.

#### **5.4 Recommendations**

For banks to have sustainable credit risk management they should embrace best practices of corporate governance which will ensure that shareholders wealth is looked after in the best way possible, that adequate risk management measures are put in place and that standards are not only in writing but that they are practiced on a day to day basis. The study results offer shareholders with empirical information to the effect that they play an important role in ensuring commercial banks' management do enforce and implement appropriate corporate governance. The study informs government that it has to be concerned with good corporate governance practices in banks since they are unique from other sector. CBK ought to encourage commercial banks to observe best corporate governance practices by enactment of regulations and rules. This will go a long way in ensuring that commercial banks uphold manageable risk levels and provide a sufficiently safe level of investments and savings to depositors. This study recommends that banks formally embrace Corporate Governance as espoused by the OECD Principles within their procedures, policies and their annual reports.

Commercial banks ought to develop policies of corporate governance with regard to the selection of board members that are independent, and forge and maintain better associations with their stakeholders, as well as institute the unitary board system model in line with the prevailing legislative provisions. Commercial banks ought to advance training programmes targeting their key managerial personnel and board members, with a view to enhance their corporate governance practices as informed by the OECD principles. The Institute of Certified Public Secretaries of Kenya should come up with

awards for banks that practice best practices of good corporate governance to encourage banks enhance their corporate governance.

### **5.5 Limitation of the Study**

The following limitations were faced in the course of the study. Although this research was well prepared, the study is aware of its limitations and shortcomings. The first limitation was that the study population only consisted of all banks drawn from the entire population, and might not represent the majority of the financial institutions. Also, as the evaluation of the pre and posttest was performed by the author, it was inevitable that in this study, certain levels of subjectivity could be found. As a matter of fact, objectivity would have been observed had it been decided by at least two examiners.

Lastly, results obtained from the study are not final in themselves as the study centred on four elements of corporate governance. In addition, data availability envisages the study elements and not any probabilistic or statistical standard. For that reason, care ought to be applied in generalizing the outcomes of the research.

### **5.6 Suggestions for Future Research**

The debate on corporate governance continues both in academic circles and popular press, and both in Kenya and international levels shows that this field is very important and needs urgent attention. The current literature addresses a range of issues relating to corporate governance practices and credit risk management, whereas the study significantly contributes to the literature body in various proportions, findings are not conclusive.

A study period of five years may not be reflective of the long term state of affairs and the findings may not be applicable to other developing countries. The study sample was

settled on the basis of data availability and the choice of methods of statistical analysis were established by the banks and period covered. It would thus be appropriate to outspread the same through accompanying it with other empirical studies employing different methods as well as encompassing comparative data. The insertion of other variables of corporate governance and performance such social performance indicators as would also merit further considerations. Also the results must also be carefully handled since many specific factors can impact banks working process. More research on practices of board is needed to assess the effects on banks performance in Africa and beyond.



## REFERENCES

- Al-Tamimi, H. & Al-Mazrooei, M. (2007). Banks' Risk Management: A Comparison Study of UAE National and Foreign Banks, *Chazen Web Journal of International Business*, 8(4), 394-409.
- Altman, E.I. (2002). Managing credit risk: A challenge for the new millennium. *Economic Notes*, 31, 201-214 & *Finance* 29, 1813-1834.
- Andrew, J. (2012). The relationship between corporate governance and insolvency risk among commercial banks in Liberia. Wiley, Chichester. *Journal of Governance*, 83(5), 1258-1264.
- Asquith, P. & Wizman, T. (1990). Event Risk, Covenants, and Bondholder Returns in Leveraged Buyouts, *Journal of Financial Economics*, 27, 195 – 213.
- Badara, M.A.S. & Saidin, S.Z. (2014). Empirical evidence of antecedents of internal audit effectiveness from Nigerian perspective. *Middle-East Journal of Scientific Research*, 19(4), 460-469.
- Basel Committee (1999). Principles for the Management of Credit Risks, *Consultative paper issued by the Basel Committee on Banking Supervision*. Basel, Switzerland.
- Berndt, A., Jarrow, R.A. & Kang, C.O. (2007). Restructuring risk in credit default swaps: an empirical analysis, *Stochastic Processes and Their Applications*, (117)11, 1724-1749.
- Bessis, J. (2003). Risk management in banking. Wiley, Chichester. *American Journal of Economics*, 83(5), 1258-1264.

- Bhagat, S. & Jefferis, E. (2002). *The Econometrics of Corporate Governance Studies*, MIT Press, Cambridge.
- Bhojraj, S. & Sengupta, P. (2003). Effect of Corporate Governance on Bond Ratings and Yields: The Role of Institutional Investors and the Outside Directors. *The Journal of Business*, 76, 455 – 475.
- Billett, M., King, T. & Mauer, D. (2004). Bondholder Wealth Effects in Mergers and Acquisitions: New Evidence from the 1980's and 1990's, *The Journal of Finance*, 59: 107 – 135.
- Brownbridge, D.L. (2007). Corporate governance and firm performance, *working paper*, Georgia State University. Atlanta, GA.
- Caouette, J.B., Altman, E.I. & Narayanan, P. (2008). *Managing Credit Risk: The Next Great Financial Challenge*, New York: John Wiley & Sons.
- Carey, M. (2001). The consistency of internal versus external credit ratings and insurance and bank regulatory capital requirements, *Working Paper, US Federal Reserve Board*.
- Central Bank of Kenya (2011). Agency banking: Guidelines on Agent Banking CBK/PG/2015 <http://www.centralbank.go.ke/index.php/regulations> and guidelines.
- Central Bank of Kenya (2012). Bank supervision Annual Report 2012 <http://www.centralbank.go.ke/index.php/bank-supervision-reports>
- Central Bank of Kenya (2014). Bank supervision Annual Report 2014 <http://www.centralbank.go.ke/index.php/bank-supervision-reports>.

- Chen, H.J. (2003). The Relationship between Corporate Governance and Risk-Taking. *The Review of Financial Studies*, Vol.7 No:1, 1994, pp. 125-148.
- Cheptumo, A.K. (2010). Response Strategies to Fraud-Related Challenges by Barclays Bank of Kenya. *Unpublished MBA Project*, University of Nairobi.
- Christen R. and D. Pearce. (2005). Managing Risks and Designing Products for Agricultural Microfinance: Features of an Emerging Model. *Occasional Paper No. 11. Consultative Group to Assist the Poor*. Washington, D.C. Available
- Crosbie, et al. (2003). Quantitative credit risk analysis, *Journal of Banking and Finance*, 47(8), 371-413.
- Deakin, S. & Slinger, G. (2007). Hostile takeovers, corporate law and the theory of the firm, *Journal of Law and Society*, 24(1), 124-51.
- Donaldson, L. (2003). Boards and Company Performance: Research Challenges the Conventional Wisdom', Corporate Governance, *An International Review*, 2(3), 51-60.
- Essinger, J. & Rosen, J. (1991). Using technology for risk management in Jafari, M., Chadegani, A., A. & Biglari, V. (2011). Effective risk management and company's performance: Investment in innovations and intellectual capital using behavioural and practical approach, *Journal of Economics and International Finance*, 3(15), 780-786.
- Finley, S. (2008). *The Management of Consumer Credit*, Palgrave Macmillan.
- Fuser, K., Gleiner, W. & Meier, G. (1999), "Risk Management (KonTraG) - Practical Experience, *The Company*, 52(15), 753-758.

- Hakim, S & Neamie, S. (2011). Performance and Credit Risk in Banking: A Comparative Study of Egypt and Lebanon, *ERF Working Paper Series*, Working Paper 0137.
- Healey, M. (2011). Testing the Relationship between Corporate Governance and Bank Performance: *An Empirical Study on Vietnamese Banks. Asian Social Science*, 10(9), 213-226.
- Hollis, A.S., Daniel W. C., & Ryan L., (2004). Effects of Corporate Governance on Firms' Credit Ratings. *International Journal of Economics and Finance*, 3(2), 176-185.
- Jebet, K. (2001). Corporate governances the case of quoted companies in Kenya. *Unpublished MBA Project*, University of Nairobi.
- Jenkinson, T. & Mayer, C. (2002). The assessment: corporate governance and corporate control', *Oxford Review of Economic Policy*, 8(3). 1-10.
- Kavulya, P.W. (2011). Explored the relationship between corporate governance and the financial performance of the deposit taking Savings and Credit Cooperatives in Kenya. *Unpublished MBA project*, KCA University.
- Kersnar, J. (2009). Warning signs: why risk management is letting down companies and what to do about it, *CFO Europe Magazine*, 2, 25-30.
- Kirkpatrick, G. (2009). The Corporate Governance Lessons from the Financial Crises, OECD 2009/1.
- Knell, K. (2006). Corporate governance and board effectiveness, *Journal of Banking and Finance*, 22(4), 371-403.

- Knight, K.W. (2006). Risk management a journey, not a destination. Paper presented at the Executive Meeting 2006. Hotel Do Frade & Golf Resort, Angra Dos Reis, Brazil. 20th May 2006.
- Koch, T., & MacDonald, S. S. (2003). *Bank management* (5th ed.). South Western: Thomson.
- Longstaff, P. & Schwartz, E. (1995). A simple approach to valuing risky fixed and floating rate debt. *Journal of Finance*, 5, 789-819.
- Maina, T. (2003). Risk based capital standards and the riskiness of bank portfolios in Kenya: An empirical investigation. *Unpublished MBA Project*, University of Nairobi.
- Manyuru, A. (2005). Corporate governance and organizational performance the case of companies quoted at the NSE. *Unpublished MBA Project*, University of Nairobi.
- Markowitz, H.M. (1952). Portfolio Selection. *Journal of Finance*, 7(1).
- Matengo, B. (2008). The relationship between corporate governance practices and performance: the case of banking industries in Kenya. *Unpublished MBA Project*, University of Nairobi.
- Merton, R. C. (1974). On the pricing of corporate debt: the risk structure of interest rates. *Journal of Finance* 29:449–470.
- Michael, S. (2008). The Quantity Theory Versus the Real Bills Doctrine in Colonial America. *In Economics Working Papers*, 28:12-17.
- Mugenda, O. (2003). An approach to qualitative and quantitative data management. *Journal of statistics*, 30:48-56.

- Muriithi, L. (2005). The relationship between corporate governance mechanisms and performance of firms quoted on the NSE. *Unpublished MBA Project*, University of Nairobi.
- Mutie, P.M. (2013). Diversification strategy used by Commercial Banks in Kenya as a means of gaining sustainable competitive advantage. *Unpublished MBA Project*, University of Nairobi.
- Naceur, S.B. & Goaid M. (2003). The Determinants of the Tunisian Deposit Banks' Performance, *Applied Financial Economics*, 11 (7), 142-157.
- Nachmias, C. F. & Nachmias, D. (1996). Research Methods in the Social Sciences. *St. Martins Press* (5<sup>th</sup> ed.). New York.
- National Association of Corporate Directors (2006). National Association of Corporate Directors: corporate governance resources, education, and information, available at [www.nacdonline.org/](http://www.nacdonline.org/).
- Nijskens, R. & Wagner, W. (2011). Credit risk transfer activities and systemic risk: how banks became less risky individually but posed greater risks to the financial system at the same time, *Journal of Banking & Finance*, 35(6), 1391-1398.
- Njanike, K. (2009). The impact of effective credit risk management on bank survival, *Annals of the University of Petrosani, Economics*, 9(2), 173-184.
- Nyakoe, J. K. (2012). The relationship between corporate governance and risk management practices among commercial banks in Kenya. *Unpublished MBA Project*, University of Nairobi.

- OECD (Organization for Economic Co-operation and Development), 2004. Principles of Corporate Governance. Available at <http://www.oecd.org/dataoecd/32/18/31557724.pdf>
- Richardson, D.C. (2002). PEARLS Monitoring system World Council information center.Maddison, WI, WOCCU Toolkit series (4).
- Santomero, A.M. (2007). Commercial bank risk management: An analysis of the process. *Center for Financial Institutions Working Papers 95-11*, Wharton School Center for Financial Institutions, University of Pennsylvania.
- Sengupta, P. (2008). Corporate disclosure quality and the cost of debt. *The Accounting Review*, 73, 459 – 474.
- Seyram P.K., Yakubu A.S. & Bawuah B. (2014). Corporate governance and risk management in the banking sector of Ghana. *International Journal of Information Management*, 22, 405-419.
- Smyth, R. (2004). Exploring the usefulness of a conceptual framework as a research tool: *A researcher's reflections. Issues in Educational Research*, 14(2), pp.167-180
- Truong, H., Trinh, T., Duyen, T. & Nguyen, T.T. (2015). Impact of Corporate Governance on Financial Risk in Vietnamese Commercial Banks. *Journal of Financial Regulation and Compliance*, December, 15(2): 205-224.
- Venkat, S. (1999). Implementing a firm-wide risk management framework. In *The practitioner's handbook of financial risk management* (581-612). Global Association of Risk Professionals.
- Wanemba, M.A. (2010). Strategies Applied By Commercial Banks in Kenya to Combat Fraud. *Unpublished MBA Project*, University of Nairobi.

Wangui, G. K. (2014). Effect of corporate governance on enterprise risk in commercial banks in Kenya. *Unpublished MBA Project*, University of Nairobi.

Warga, A. & Welch, I. (1993). Bondholder Losses in Leveraged Buyouts, *Review of Financial Studies*, 6, 959 – 982.



## APPENDICES

	Total number of directors in the board	Non Executive Directors / Total Directors	Number of Board Meetings	Executive compensation		Size	Credit Risk Management
<b>African Banking Corporation Ltd</b>							
2010	5	4	9	0.35	0.48	9.62	5.17
2011	8	4	9	0.39	0.53	10.58	4.56
2012	8	1	7	0.41	0.56	11.15	156
2013	7	2	5	0.42	0.58	11.54	3.4
2014	13	5	2	0.46	0.62	12.02	1.26
<b>Bank of Africa (K) Ltd</b>							
2010	9	4	4	0.4	0.55	9.50	6.54
2011	10	3	6	0.44	0.61	10.45	6.55
2012	9	3	4	0.46	0.64	11.02	6.55
2013	10	3	4	0.48	0.66	11.40	6.6
2014	11	4	8	0.52	0.72	11.87	6.55
<b>Bank of Baroda (K) Ltd</b>							
2010	8	3	6	0.6	0.59	9.54	6.15

2011	16	5	4	0.66	0.65	10.49	6.14
2012	12	2	4	0.7	0.68	11.06	6.14
2013	14	5	5	0.72	0.71	11.44	6.1
2014	19	7	6	0.78	0.77	11.92	6.15
<b>Bank of India</b>							
2010	6	2	4	0.1	0.43	9.61	3
2011	11	4	5	0.11	0.47	10.57	3.37
2012	13	5	6	0.12	0.50	11.15	3.64
2013	8	2	5	0.12	0.52	11.53	3.9
2014	13	3	4	0.13	0.56	12.01	3.67
<b>Barclays Bank of Kenya</b>							
2010	11	4	6	0.3	0.48	9.64	24
2011	12	4	3	0.33	0.53	10.60	16.8
2012	10	4	4	0.35	0.56	11.18	13.5
2013	7	1	7	0.36	0.58	11.57	17
2014	8	3	4	0.39	0.62	12.05	14.2
<b>CFC Stanbic Bank Ltd</b>							
2010	7	1	4	0.02	0.50	9.66	2.85
2011	4	4	4	0.02	0.55	10.62	2.91
2012	9	3	7	0.02	0.58	11.20	3.15
2013	9	4	4	0.02	0.60	11.59	2.6
2014	11	2	4	0.03	0.65	12.07	6.05

Charterhouse Bank Ltd							
2010	7	2	7	0.09	0.52	9.70	0.69
2011	11	3	7	0.1	0.57	10.67	0.75
2012	11	1	4	0.1	0.60	11.25	0.67
2013	11	6	4	0.11	0.62	11.64	0.6
2014	7	3	5	0.12	0.68	12.12	3.75
Chase Bank (K) Ltd							
2010	5	1	4	0.07	0.56	9.72	0
2011	10	1	6	0.08	0.62	10.69	0
2012	7	2	9	0.08	0.65	11.28	0
2013	7	3	8	0.08	0.67	11.66	0
2014	7	2	4	0.09	0.73	12.15	0
Citibank N.A. Kenya							
2010	7	1	10	0.01	0.59	9.78	43.4
2011	10	4	4	0.01	0.65	10.75	36
2012	9	3	4	0.01	0.68	11.34	34.9
2013	8	3	4	0.01	0.71	11.73	22
2014	5	2	7	0.01	0.77	12.22	5.72
Commercial Bank of Africa Ltd							
2010	5	1	4	0.1	0.61	9.86	36
2011	7	2	8	0.11	0.67	10.85	35.8
2012	11	1	3	0.12	0.71	11.44	43.9

2013	9	4	7	0.12	0.73	11.84	76
2014	7	3	4	0.13	0.79	12.33	3.59
Consolidated Bank of Kenya Ltd							
2010	13	5	5	0.3	0.55	9.92	23.5
2011	7	1	4	0.33	0.61	10.91	28.1
2012	7	1	4	0.35	0.64	11.51	6.37
2013	9	2	4	0.36	0.66	11.90	16
2014	5	1	10	0.39	0.72	12.40	4.07
Co-operative Bank of Kenya Ltd							
2010	8	3	4	0.02	0.54	10.00	66.7
2011	8	5	4	0.02	0.59	11.00	58
2012	8	4	4	0.02	0.63	11.60	14
2013	11	6	4	0.02	0.65	12.00	32
2014	13	4	12	0.03	0.70	12.50	26.1
Credit Bank Ltd							
2010	11	3	7	0.09	0.56	9.67	3.62
2011	6	3	9	0.1	0.62	10.64	4.72
2012	9	4	5	0.1	0.65	11.22	16
2013	7	3	5	0.11	0.67	11.61	6.5
2014	8	1	1	0.12	0.73	12.09	4.4
Development Bank of Kenya Ltd							
2010	7	5	8	0.07	0.62	9.55	13

2011	4	2	11	0.08	0.68	10.51	10.2
2012	9	3	13	0.08	0.72	11.08	28.3
2013	9	3	3	0.08	0.74	11.46	13
2014	7	1	5	0.09	0.81	11.94	9.95
Diamond Trust Bank (K) Ltd							
2010	7	4	9	0.01	0.60	9.58	22.7
2011	11	5	7	0.01	0.66	10.53	17.6
2012	11	1	8	0.01	0.70	11.11	53.4
2013	11	4	3	0.01	0.72	11.49	17
2014	5	1	3	0.01	0.78	11.97	5
Eco Bank (K) Ltd							
2010	7	4	11	0.39	0.51	9.64	44.6
2011	6	3	11	0.43	0.56	10.60	47.5
2012	9	3	5	0.45	0.59	11.18	2.26
2013	8	4	4	0.47	0.61	11.57	52
2014	9	3	5	0.51	0.66	12.05	55
Spire Commercial Bank Ltd							
2010	5	3	8	0.41	0.50	9.70	12
2011	4	1	7	0.45	0.55	10.67	7.59
2012	9	5	13	0.48	0.58	11.25	1.47
2013	9	3	4	0.49	0.60	11.64	6.1
2014	12	5	4	0.53	0.65	12.12	7.64

Equity Bank Ltd							
2010	13	1	9	0.44	0.55	9.58	15.5
2011	11	2	8	0.48	0.61	10.54	15.9
2012	11	2	9	0.51	0.64	11.12	6.02
2013	9	2	4	0.53	0.66	11.50	19
2014	13	4	3	0.57	0.72	11.98	26.2
Family Bank Ltd							
2010	8	4	9	0.39	0.58	9.80	31.4
2011	10	3	9	0.43	0.64	10.78	29.8
2012	7	1	12	0.45	0.67	11.37	45
2013	11	4	3	0.47	0.70	11.76	11
2014	10	4	1	0.51	0.75	12.25	3.87
Fidelity Commercial Bank Ltd							
2010	7	2	10	0.07	0.61	9.86	57.7
2011	10	1	4	0.08	0.67	10.85	47.3
2012	9	4	4	0.08	0.71	11.44	1.74
2013	8	1	4	0.08	0.73	11.84	23
2014	9	4	7	0.09	0.79	12.33	7.17
GT Bank Ltd							
2010	5	1	4	0.079	0.55	9.94	55.9
2011	7	1	8	0.09	0.61	10.94	37.5
2012	11	6	3	0.09	0.64	11.54	43.9

2013	9	2	7	0.09	0.66	11.93	70
2014	8	3	4	0.1	0.72	12.43	7.75
First Community Bank Ltd							
2010	13	5	5	0.82	0.54	9.34	1.76
2011	6	4	4	0.9	0.59	10.27	1.76
2012	4	3	4	0.95	0.63	10.83	1.56
2013	9	1	4	0.98	0.65	11.20	1.7
2014	6	1	10	1.07	0.70	11.67	15.2
Giro Commercial Bank Ltd							
2010	9	4	4	0.071	0.58	9.50	1.79
2011	10	3	4	0.08	0.64	10.45	1.88
2012	11	3	4	0.08	0.67	11.02	2.26
2013	11	1	4	0.09	0.70	11.40	65
2014	11	4	12	0.09	0.75	11.87	3.21
Guardian Bank Ltd							
2010	12	2	7	0.065	0.68	9.52	1.65
2011	14	1	9	0.07	0.75	10.47	1.46
2012	10	4	5	0.08	0.79	11.04	1.47
2013	7	1	5	0.08	0.82	11.42	2.4
2014	10	2	1	0.08	0.88	11.90	3.67
Gulf African Bank Ltd							
2010	13	1	8	0.068	0.59	9.56	4.12

2011	8	1	11	0.07	0.65	10.52	5.03
2012	10	2	13	0.08	0.68	11.09	6.02
2013	9	5	3	0.08	0.71	11.47	1.1
2014	10	1	5	0.09	0.77	11.95	7.64
Habib Bank A.G. Zurich							
2010	10	5	8	0.091	0.66	9.58	70
2011	7	4	1	0.1	0.73	10.54	41.2
2012	7	6	2	0.11	0.77	11.12	45
2013	11	3	1	0.11	0.79	11.50	6.1
2014	10	5	1	0.12	0.86	11.98	7.34
Habib Bank Ltd							
2010	10	3	6	0.099	0.49	9.63	1.52
2011	9	3	4	0.11	0.54	10.60	1.81
2012	7	4	6	0.11	0.57	11.17	1.74
2013	7	4	4	0.12	0.59	11.56	20
2014	9	3	4	0.13	0.64	12.04	2.44
Imperial Bank Ltd							
2010	7	2	11	0.089	0.39	9.42	22.8
2011	11	5	3	0.1	0.43	10.36	34.2
2012	9	7	3	0.1	0.45	10.92	43.9
2013	10	7	3	0.11	0.47	11.30	10
2014	11	1	1	0.12	0.51	11.77	7.27



I & M Bank Ltd							
2010	7	5	10	0.071	0.44	9.46	7.14
2011	7	2	1	0.08	0.48	10.41	10.1
2012	12	3	5	0.08	0.51	10.98	13.1
2013	14	3	1	0.09	0.53	11.36	1.5
2014	19	1	4	0.09	0.57	11.83	9
Jamii Bora Bank Ltd							
2010	8	4	10	0.078	0.56	9.52	6.71
2011	8	1	2	0.09	0.62	10.47	6.48
2012	13	3	2	0.09	0.65	11.04	5.26
2013	8	3	1	0.09	0.67	11.42	48
2014	10	3	6	0.1	0.73	11.90	2.1
Kenya Commercial Bank Ltd							
2010	6	3	7	0.088	0.54	9.55	10.6
2011	9	4	11	0.1	0.59	10.51	12.5
2012	10	2	10	0.1	0.63	11.08	12.2
2013	7	2	5	0.11	0.65	11.46	4.4
2014	10	5	4	0.11	0.70	11.94	6.35
K-Rep Bank Ltd							
2010	4	1	7	0.083	0.55	9.58	12.6
2011	9	6	7	0.09	0.61	10.53	9.87
2012	10	3	9	0.1	0.64	11.11	11

2013	9	3	3	0.1	0.66	11.49	10
2014	10	2	3	0.11	0.72	11.97	9.31
Middle East Bank (K) Ltd							
2010	11	2	9	0.08	0.57	9.62	12.2
2011	11	3	10	0.09	0.63	10.58	11.7
2012	7	2	11	0.09	0.66	11.15	11.7
2013	11	2	2	0.1	0.68	11.54	9.8
2014	10	1	5	0.1	0.74	12.02	6.92
National Bank of Kenya Ltd							
2010	10	3	12	0.078	0.56	9.64	7.46
2011	7	3	14	0.09	0.62	10.60	9.77
2012	7	2	19	0.09	0.65	11.18	8.41
2013	7	2	5	0.09	0.67	11.57	15
2014	9	4	2	0.1	0.73	12.05	5.19
NIC Bank Ltd							
2010	10	1	13	0.069	0.62	9.70	17.6
2011	9	4	8	0.08	0.68	10.67	18.5
2012	8	3	10	0.08	0.72	11.25	17.1
2013	8	3	4	0.08	0.74	11.64	6.9
2014	9	6	1	0.09	0.81	12.12	30
Oriental Commercial Bank Ltd							
2010	7	1	7	0.4	0.69	9.78	3.46

2011	11	2	8	0.44	0.76	10.75	2.94
2012	6	1	3	0.46	0.80	11.34	3.04
2013	9	1	3	0.48	0.83	11.73	20
2014	8	3	4	0.52	0.90	12.22	10.6
Paramount Universal Bank Ltd							
2010	7	4	9	0.3	0.55	9.84	10.3
2011	7	6	7	0.33	0.61	10.82	11.2
2012	4	4	5	0.35	0.64	11.41	10.7
2013	9	4	2	0.36	0.66	11.81	19
2014	6	3	3	0.39	0.72	12.30	6.09
Prime bank Ltd							
2010	8	3	11	0.5	0.58	9.92	9.74
2011	8	3	5	0.55	0.64	10.91	29.1
2012	11	3	4	0.58	0.67	11.51	19.5
2013	11	1	5	0.6	0.70	11.90	8.6
2014	11	4	1	0.65	0.75	12.40	10.9
Standard Chartered Bank Ltd							
2010	6	1	7	0.48	0.57	9.55	61
2011	9	5	13	0.53	0.63	10.51	43.3
2012	10	1	4	0.56	0.66	11.08	67.5
2013	7	4	4	0.58	0.68	11.46	19
2014	10	2	1	0.62	0.74	11.94	19.7

Trans-National Bank Ltd							
2010	4	2	8	0.39	0.61	9.58	4.43
2011	9	2	9	0.43	0.67	10.53	3.18
2012	10	1	4	0.45	0.71	11.11	1.95
2013	9	6	3	0.47	0.73	11.49	70
2014	10	6	3	0.51	0.79	11.97	1.03
UBA Kenya Bank Ltd							
2010	5	1	8	0.41	0.49	9.62	10
2011	6	1.1	9	0.45	0.54	10.58	8.19
2012	6	1.16	9	0.48	0.57	11.15	8.57
2013	6	1.2	10	0.49	0.59	11.54	1.9
2014	7	1.3	10	0.53	0.64	12.02	8.35
Victoria Commercial Bank Ltd							
2010	7	3	9	0.39	0.47	9.64	44.8
2011	8	3	10	0.43	0.52	10.60	37.5
2012	8	3	10	0.45	0.55	11.18	34.4
2013	8	4	11	0.47	0.56	11.57	8.7
2014	9	4	12	0.51	0.61	12.05	8