EFFECTS OF BASEL III FRAMEWORK ON CAPITAL ADEQUACY OF COMMERCIAL BANKS IN KENYA

BY

KEVIN N. KOMBO

UNITED STATES INTERNATIONAL UNIVERSITY

FALL 2014
EFFECTS OF BASEL III FRAMEWORK ON CAPITAL ADEQUACY OF COMMERCIAL BANKS IN KENYA

BY

KEVIN N. KOMBO

638498

A Research Project Submitted to the Chandaria School of Business in Partial Fulfilment of the Requirement for the Degree of Masters in Business Administration

UNITED STATES INTERNATIONAL UNIVERSITY

FALL 2014
STUDY DECLARATION

I, the undersigned, declare that this is my original work and has not been submitted to any other college, institution or university other than the United States International University in Nairobi for academic credit.

Signed: ___________________________ Date: __________________

Kevin Kombo(ID: 638498)

This research project has been presented for examination with my approval as the appointed supervisor.

Signed: ___________________________ Date: __________________

Dr. Amos Njuguna

Signed: ___________________________ Date: __________________

Dean, Chandaria School of Business
ABSTRACT

The purpose of the study was to assess the effects of Basel III framework on capital adequacy requirement in commercial banks in Kenya. The study sought to address the following research questions: why are capital adequacy regulations important in commercial banks in Kenya? What challenges are commercial banks facing in the implementation of capital adequacy requirement? What measures have commercial banks taken to ensure compliance with the capital adequacy requirement?

A descriptive survey design was applied to a population of 43 commercial banks operating in Kenya. The target population composed of the 159 management staff currently employed at the head offices of the various commercial banks in Kenya. The population was composed of Senior, Middle and Junior or Entry level Management staff. A sample of 30% was selected from within each group. Primary data was gathered using questionnaires which were dropped off at the bank’s head offices and picked up later when the respondents had filled the questionnaires. Descriptive analysis was used to analyze quantitative data while content analysis was used to analyse qualitative data.

The findings show that capital adequacy requirement is important in commercial banks because it leads financial stability in the Kenyan economy, improves credit risk management techniques as poor credit risk management requires more capital and leads to reduced vulnerability to liquidity shocks due to the sound capitalisation policies being implemented under the Basel III framework.

Findings also revealed that capital adequacy affected the balance sheet structure of the commercial banks in Kenya. Smaller banks without the minimum capital requirements in their balance sheet would be required to merge with other smaller banks or seek additional capital injection from investors. Middle tier banks have gone to the stock markets to seek additional capital through rights and bond issue. Large multinational banks have sought capital injections from their parent company. Hence capital adequacy have has significantly changed the balance sheet structure of commercial banks in Kenya.

The commercial banks in Kenya have deployed various strategies to comply with the looming capital adequacy requirements. These strategies include cutting back on lending, withholding dividend payments, aggressively increasing their interest income and other revenues through various promotions, offers and products in the lending market. This has
been combined with cost cutting measures so as to increase net profits hence improving the capital base through retained earnings. Some commercial banks listed in the Nairobi Securities Exchange have issued additional shares through rights issues in order to ensure compliance with the capital adequacy requirement.

The study recommends that banks should continue the pursuit of various strategies to ensure that they are in compliance with Basel III requirements and the Central Bank of Kenya’s Prudential Guidelines. This will be achieved through the expertise and involvement of the Asset and Liability Management Committee. The staff of this committee should be drawn from mainly the finance, legal, compliance and treasury departments. Compliance with the capital requirements will lead to a safety net for all commercial banks as the additional capital will act as a cushion that absorbs losses in case of distress in the commercial banking sector.
COPYRIGHT

All rights reserved. No part of this report may be photocopied, recorded or otherwise reproduced, stored in a retrieval system or transmitted in any form by electronic or mechanical means without prior permission of copyright.

©Copyright Kevin Kombo, 2014
ACKNOWLEDGEMENT

First and foremost, I thank the Almighty God for granting me peace, knowledge and sanity of mind that has enabled me to complete this research work. It is through His abundance grace that has brought my research work this far.

I am greatly indebted to my supervisor, Dr. Amos Njuguna, for his patience, support and professional guidance, encouragement and availability. My sincere gratitude also goes to the staff of United States International University, for their support and assistance.

Finally, I appreciate the most important people who have provided spiritual and emotional support that has been the ultimate inspiration for my academic pursuits. They include my family and friends who relentlessly stood by me even when I barely had time for them while pursuing this course. Their understanding and moral support went a long way in making this a success.
DEDICATION

I dedicate this research work to my family who are my pillars and sources of great inspiration and strength. My parents for their unceasing prayers for God’s blessings upon me to be the best I can. May the Almighty God bless you all.
# TABLE OF CONTENTS

STUDY DECLARATION ........................................................................................................... ii
ABSTRACT ............................................................................................................................ iii
COPYRIGHT ........................................................................................................................... v
ACKNOWLEDGEMENT ........................................................................................................ vi
DEDICATION ........................................................................................................................ vii
LIST OF TABLES .................................................................................................................. x
LIST OF FIGURES ................................................................................................................ xi
LIST OF ACRONYMS AND ABBREVIATIONS ................................................................... xii

CHAPTER 1 ............................................................................................................................ 1

1.0 INTRODUCTION ............................................................................................................. 1
  1.1 Background of the Study ............................................................................................... 1
  1.2 Statement of the Problem .......................................................................................... 4
  1.3 Purpose of the Study ................................................................................................. 5
  1.4 Research Questions .................................................................................................. 6
  1.5 Significance of the Study ......................................................................................... 6
  1.6 Scope of the Study .................................................................................................... 7
  1.7 Definition of Terms .................................................................................................. 7
  1.8 Chapter Summary ..................................................................................................... 8

CHAPTER 2 ............................................................................................................................ 10

2.0 LITERATURE REVIEW ................................................................................................ 10
  2.1 Introduction ................................................................................................................ 10
  2.2 Importance of Capital Adequacy Requirements ....................................................... 10
  2.3 Challenges Faced in the implementation of Capital Adequacy Requirement .......... 16
  2.4 Measures taken to Ensure Compliance with the Capital Adequacy Requirement ...... 23
  2.5 Chapter Summary .................................................................................................... 28

CHAPTER 3 ............................................................................................................................ 30

3.0 RESEARCH METHODOLOGY ..................................................................................... 30
  3.1 Introduction ................................................................................................................ 30
  3.2 Research Design ....................................................................................................... 30
  3.3 Population and Sampling Design .............................................................................. 31
  3.4 Data Collection Methods ......................................................................................... 34
  3.5 Research Procedures ............................................................................................... 35
LIST OF TABLES

Table 3.1: Target Population........................................................................................................................................32
Table 3.2: Sample of the Study......................................................................................................................................34
Table 4.1: Gender of the Respondents..........................................................................................................................38
Table 4.2: Respondents’ Departments ...........................................................................................................................38
Table 4.3: Respondents Designations ............................................................................................................................40
Table 4.4: Respondents’ Duration of Work in the Commercial Banks in Kenya.........................................................41
Table 4.5: Level of Education...........................................................................................................................................42
Table 4.6: Extent to which Capital Adequacy Requirement is Important to Banks .................................................42
Table 4.7: Extent to which Basel III Regulations affect Banks’ Capital Requirement ..............................................43
Table 4.8: Challenges Faced in the Implementation of Capital Adequacy Requirement ......................................44
Table 4.9: Measures taken for Compliance with Capital Requirement .......................................................................45
Table 4.10: Measures to Ensure Compliance with the Capital Adequacy Requirement ..............................................46
LIST OF FIGURES

Figure 4.1: Respondents’ Departments...............................................................39
Figure 4.2: Working Experience in the Banking Industry........................................41
Figure 4.3: Measures are taken for Compliance with Capital Requirement...............46
<table>
<thead>
<tr>
<th>Acronym</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACB</td>
<td>Asian Commercial Bank</td>
</tr>
<tr>
<td>BCBS</td>
<td>Basel Committee on Banking Supervision</td>
</tr>
<tr>
<td>CAR</td>
<td>Capital Adequacy Ratio</td>
</tr>
<tr>
<td>CBK</td>
<td>Central Bank of Kenya</td>
</tr>
<tr>
<td>CEO</td>
<td>Chief Executive Officer</td>
</tr>
<tr>
<td>CMA</td>
<td>Capital Markets Authority</td>
</tr>
<tr>
<td>DEA</td>
<td>Data Envelopment Analysis</td>
</tr>
<tr>
<td>DIV</td>
<td>Deposit Insurance of Vietnam</td>
</tr>
<tr>
<td>DPFB</td>
<td>Deposit Protection Fund Board</td>
</tr>
<tr>
<td>GDP</td>
<td>Gross Domestic Product</td>
</tr>
<tr>
<td>IAS</td>
<td>International Accounting Standards</td>
</tr>
<tr>
<td>ICPAK</td>
<td>Institute of Certified Public Accountants of Kenya</td>
</tr>
<tr>
<td>IFRS</td>
<td>International Financial Reporting Standards</td>
</tr>
<tr>
<td>LCR</td>
<td>Liquidity Coverage Ratio</td>
</tr>
<tr>
<td>MFIs</td>
<td>Micro Finance Institutions</td>
</tr>
<tr>
<td>NBFIs</td>
<td>Non-Bank Financial Institutions</td>
</tr>
<tr>
<td>NPL</td>
<td>Non-Performing Loans</td>
</tr>
<tr>
<td>NSE</td>
<td>Nairobi Securities Exchange</td>
</tr>
<tr>
<td>NSFR</td>
<td>Net Stable Funding Ratio</td>
</tr>
<tr>
<td>OBS</td>
<td>Off-balance Sheet</td>
</tr>
<tr>
<td>OECD</td>
<td>Organization for Economic Cooperation and Development</td>
</tr>
<tr>
<td>ROA</td>
<td>Return on Asset</td>
</tr>
<tr>
<td>ROE</td>
<td>Return on Equity</td>
</tr>
<tr>
<td>RWA</td>
<td>Risk Weighted Assets</td>
</tr>
<tr>
<td>SACCOs</td>
<td>Savings and Credit Co-operative</td>
</tr>
<tr>
<td>SSA</td>
<td>Sub-Saharan Africa</td>
</tr>
<tr>
<td>Abbreviation</td>
<td>Description</td>
</tr>
<tr>
<td>--------------</td>
<td>---------------------------</td>
</tr>
<tr>
<td>USA</td>
<td>United States of America</td>
</tr>
<tr>
<td>USD</td>
<td>United States Dollar</td>
</tr>
</tbody>
</table>
CHAPTER 1

1.0 INTRODUCTION

1.1 Background of the Study

The global financial crisis of 2009-2010 spurred the need to review the regulatory framework of banks across the globe. As a result, reforms were necessary to rectify flaws in the regulatory framework. The Basel Committee on Banking Supervision (BCBS) is leading efforts to reform the global banking regulatory framework (BCBS, 2010a). In December 2010, BCBS announced Basel III proposals which national regulators and regional supervisory organisations are reviewing to evaluate its suitability to conditions in their own financial systems. According to Bean (2009), the banks were undercapitalised which is one of the reasons behind the 2007-2010 financial crises. The financial crisis 2007-2009 still has effects on international financial markets and the real economy.

Key lessons from the global financial crisis revolve around leverage, capital and liquidity. According to BCBS (2010b) the existence of the credit bubble, alongside with the constant innovation in financial products and techniques and fair value accounting have to be cited in this context as additional causes of the crisis. In addition, inadequate bank regulation is viewed as one of the main causes of the financial crisis (BCBS, 2010a; Calice, 2010).

According to Financial Stability Board (2011) global crises had a huge impact on banks across the world. The crisis resulted from too much leverage, little capital and inadequate liquidity by many banks. They were thus unable to absorb their large trading and credit losses that had occurred since 2007 and many banks failed (International Monetary Fund, 2010). The weaknesses in the banking sector were rapidly transmitted to the rest of the financial system and the economy resulting in a massive contraction of liquidity and credit availability (Moreno, 2011).

Basel III is the third instalment of the Basel accords and is a global regulatory standard set by the BCBS on capital adequacy (including a new leverage ratio and capital buffers), market liquidity risk (with new short-term and long-term liquidity ratios) and stress testing focusing on stability. The Basel III reforms to global regulatory standards were agreed by the G-20 in November 2010 and were then issued by the Basel Committee on
Banking Supervision in December 2010 (BCBS, 2010a). The key aim of these reforms is to strengthen the capital adequacy requirements with regard to quality and quantity of capital which banks must hold in order to absorb losses.

The Basel III framework, whose main thrust has been enhancing the banking sector’s safety and stability, emphasises the need to improve the quality and quantity of capital components, leverage ratio, liquidity standards, and enhanced disclosures. Basel III is therefore an effort to control the causes of the most recent crisis. Regulation of this sort has been effective in the past (BCBS, 2010b).

Basel III introduces new and enhanced rules, these includes the introduction of a new and stricter definition of capital – designed to increase consistency, transparency and quality of the capital base – and the introduction of a global liquidity standard (BCBS, 2010a,b). The two new liquidity ratios – the longer-term Net Stable Funding Ratio (NSFR) and the short-term Liquidity Coverage Ratio (LCR)–call on banks to raise high-quality liquid assets and acquire more stable sources of funding, ensuring that they are in agreement with the principles of liquidity risk management. In addition, Basel III introduces a new leverage ratio, a substitute to the risk-based Basel II framework. By setting 3 percent as the ratio of Tier 1 Capital to total exposure, the new leverage ratio may limit banks’ scope of action (BCBS, 2010c).

Moreover, Basel III increases capital requirements for securities financing activities, repurchase agreements and counterparty credit risk arising from derivatives. Additionally, the new framework has formulated ways of reducing systemic risk and the cyclical effects of Basel II. For instance, it introduces a countercyclical capital buffer and capital conservation, and discusses “through the- cycle” provisioning. The bursting of the credit bubble led to a rapid decline in asset prices, combined with a reduction in what Wilmot, Sweeney, Klein & Lantz (2009) dubbed, the stock of shadow money, liquid assets which take up the role of money to finance the expansion during an economic boom.

Basel III is poised to have a significant impact on the world’s financial systems and economies. The implications for the banking industry from Basel III could be profound. According to BCBS (2010b) new minimum capital standards changes combined with the higher capital charges for trading books make some business models less profitable or
even unprofitable going forward and banks will need to rethink their strategy and business portfolio in the light of the changes.

As the ailing global economy blew cavernous holes in national budgets, mounting censure was directed to financial regulators in OECD nations. Their counterparts in emerging economies have not escaped fierce condemnation for blatantly (Ashcraft and Schuermann, 2008). While credit rating firms failed to properly measure the inherent dual risks arising from sub-prime loans and the new financial architecture, policymakers resorted to easy money and low interest rates to further boost house purchases and consumption (Mishkin, 2008). All the more, the openness of international financial markets tempted western governments to expand their expenditure by taking up huge foreign debt at cheap interest rates especially since they were weary of rebounding into a post-2001 recession.

The issuance of government bonds tamed emerging economies’ hunger for holding solid sovereign securities (Balin, 2010). Consequently, western fiscal agents accumulated national debt that approached the perilous threshold of 90 percent debt-to-GDP ratio boding an economic predicament (Reinhart and Rogoff, 2010). Despite the fact that Macroprudential regulation is necessary for Africa, the proposals in Basel III are still inadequate in reducing systemic risks on the continent. This is because they do not deal with systemic threats resulting from cross border capital flows arbitrated through the banking system.

Lukonga and Kay (2010) argue that the regulatory shortcomings facing Africa need a larger collection of instruments than those offered in Basel III. These instruments can include limitation to foreign exchange exposure and regulations to limit amassing of large loan. This calls for a more aggressive regulatory regime to warrant a more healthy and flexible financial system in Africa. Most African countries inflict restrictions on business activities, banks’ large loan concentrations and foreign exchange exposures which are not within the traditional commercial banking.

Lukonga and Kay (2010) further argued that African bank regulation are more forceful compared to the advanced economies which basically rely on just one regulatory instrument, the capital adequacy requirement, which exposed the advanced economies to “gaming” by banks to reduce the amount of capital they had to hold. The potential impact
of Basel III on the banking system is significant. Banks will experience increased pressure on their Return on Equity (RoE) due to increased liquidity and capital costs. In particular, Basel III creates incentives for banks to improve their operating processes – not only to meet requirements but also to increase efficiency and lower costs (BCBS, 2010a).

Kenyan banks are forced to improve their capital buffers through increased capital adequacy requirements, as well as the introduction of liquidity requirements and countercyclical macro prudential measures (BCBS, 2010). The banks are also required to maintain a total capital to risk-weighted assets ratio - a gauge of a bank’s financial strength based on total capital including items such as goodwill and revaluation of 14.50 per cent, up from the current 12 per cent (CBK, 2013). Banks are building their buffer capital in line with the CBK’s prudential requirements and CBK is undertaking stress-testing to ensure that this progresses well within the 18-month build up window.

Currently, the minimum capital requirements for Kenyan banks are already above the proposed minimums as the tier 1 capital to Total Risk Weighted Assets stands at 8 per cent and total capital to total risk weighted assets at 12 per cent. An analysis of the two ratios for banks shows that the top six and other tier two banks such as Diamond Trust and NIC Bank are already in compliance with the new requirements. Equity, Barclays and Co-operative Banks adjusted their ratios in advance, their adoption of new accounting methods resulting in a drop in both ratios as at June 2013 when compared with December 2012 (CBK, 2013).

Further, the progressive increase of the minimum core capital of banks and mortgage finance companies to Ksh1 billion ($12.5 million) by 2012 will position the Kenyan banks to exploit new market niches and absorb any emerging shocks. As at December 2013, the Kenyan Banking system comprised of 43 commercial banks, 2 NBFIs, 4 building societies and 48 foreign exchange bureaus Central Bank of Kenya, (2013). This study aimed at carrying out a study on the effects of Basel III framework on capital adequacy of commercial banks in Kenya.

1.2 Statement of the Problem

The aggregate effects of the requirements vary from one bank to another. Among large banks almost all of them have had to deal with its far reaching implications. Several
studies have been carried out with regard to such bank regulations across the globe. In Egypt for the period 1989-2004, using a bank scope data base for 28 banks Naceur and Kandil, (2009) analysed the effects of capital regulations on the stability and performance of banks. The study analysed two measures of performance: cost of intermediation and banks’ profitability- measured by return on assets. Result revealed that banks raise the cost of intermediation as the capital adequacy ratio internalizes the risk for shareholders. This results to higher return on assets and equity revealing the need for capital regulation to the performance of banks and financial stability in Egypt. Their study suggested that the use of structural reforms aiming at establishing more competition in the banking industry can help ensure that performance indicators are corresponding with the best practices of the intermediation function that assures financial stability over time.

According to the quantitative impact study conducted by the Basel Committee (2010c), on average the newly defined capital ratio (Common Equity Tier I ratio) of large banks decreases from 11.1 percent to 5.7 percent, due to the change of definition of capital and the changes in risk-weighted assets. Furthermore, Basel III increased the required minimum capital level percent to more than 7 percent. Kamau et.al (2004) used the simultaneous equations approach to model the regulatory effect of minimum capital requirements on bank risk behaviour and capital levels in Kenya for the period 2000-2002. This study established that the Kenya’s banking sector has an oligopolistic market structure.

To the best of the researcher’s knowledge, no study had ever concentrated on assessing the effects of Basel III framework on capital adequacy of commercial banking industry in Kenya hence the research gap that the current study sought to fill. This study was built on the premise that the passage of time and the very numerous and significant changes in the commercial banks operating environment have led to totally different operating environment after the Basel III framework requirements.

1.3 Purpose of the Study

The purpose of this study was to assess the effects of Basel III framework on capital adequacy requirement in commercial banks in Kenya.
1.4 Research Questions

1.4.1 Why are capital adequacy requirements in Basel III framework important for commercial banks in Kenya?

1.4.2 What challenges are commercial banks facing in the implementation of capital adequacy requirement in Basel III framework?

1.4.3 What measures have commercial banks taken to ensure compliance with the capital adequacy requirement in Basel III framework?

1.5 Significance of the Study

1.5.1 Commercial Banks

Through this research, commercial banks in Kenya as well as the various firms in the financial sector would benefit immensely from the findings. The study would increase managers’ of commercial banks in Kenya understanding and appreciation of the approaches that relate to competitive nature, generic strategies and competitive advantage in the industry. The top management would be informed on how to articulate, envision and maintain flexibility and to empower others to create formidable systems that would withstand dynamic competitive environments, which would help its long-term survival.

1.5.2 Regulators and Policy Makers

The study would provide insights on the possible approaches that can enhance the sector’s growth, performance and monitoring, and hence guide in regulation and policy formulation. This would therefore help policy makers of the Banking sector such as Central Bank and ministry of Finance and Planning among others with the development and review of existing policies to achieve synergy with the existing circumstance.

1.5.3 Academics and Researchers

The study would highlight other important relationships that require further research; this would be in the areas of Basel III implementation in the commercial banking industry to affect on their performance. The researchers, students and academicians would use this study as a basis for discussions on implementation of such regulations in the commercial...
banking industry and performance. The study would be a source of reference material for future researchers on other related topics.

1.6 Scope of the Study
The scope of this study is on the effects of Basel III framework on capital adequacy requirement in the banking industry. The specific context of interest was the effects of Basel III framework on capital adequacy requirement in the banking industry in Kenya with reference to commercial banks in Kenya. This study was limited to commercial banks in Kenya where special focus was on the head offices in Nairobi. This study was carried out in a period of three months starting March 2014 to May 2014.

1.7 Definition of Terms
1.7.1 Capital adequacy
This is the statutory minimum reserves of capital which a bank or other financial institution must have available. It shows the percentage ratio of a financial institution's primary capital to its assets (loans and investments), used as a measure of its financial strength and stability. As per the Basel III regulation, banks must have a primary capital base equal at least to eight percent of their assets (Agenor & Pereira, 2010).

1.7.2 Competition
Competition refers to the rivalry in which every bank tries to get what other financial institutions are seeking at the same time in order to achieve such goals as increasing profits, market share, and sales volume by varying the elements of the marketing mix such as price, product, distribution, and promotion (Naceur and Kandil, 2009).

1.7.3 Financial stability
This is a condition in which the financial system, comprising of financial intermediaries, markets and market infrastructures, is capable of withstanding shocks, thereby reducing the likelihood of disruptions in the financial intermediation process which are severe enough to significantly impair the allocation of savings to profitable investment opportunities. Under such conditions, the key financial markets and the financial institutional system is resistant to economic shocks and is fit to smoothly fulfil its basic
functions: the intermediation of financial funds, management of risks and the arrangement of payments (Lukonga & Kay, 2010).

1.7.4 Leverage

This is a general term for the technique of multiplying the gains and losses that exists when an institution achieves the right to a return on a capital base that exceeds the investment which the institution has contributed to the entity or instrument achieving a return. Accordingly, leverage ratio is a measure of how a company is prone to making gains or losses and debt load (Mishkin, 2008).

1.7.5 Liquidity

Liquidity is a measure of the extent to which an organization has cash to meet immediate and short-term obligations, or assets that can be quickly converted to do this. It reflects the amount of capital that is available for investment and spending including cash, credit and equity (Brunnermeier, 2009).

1.7.6 Risk management

This is the continuing process of identification, analysis evaluate, and treat loss exposures and monitor risk control and financial resources to mitigate the adverse effects of loss or uncertainty in investment decision-making (Majnoni & Powell, 2011).

1.7.7 Capital adequacy ratios

These are the measures of the amount of capital that a bank must hold articulated as a proportion of the bank’s total risk-weighted assets.

1.7.8 Credit risk

This refers to the risk that the borrower will default on any type of debt by failing to make required payments.

1.8 Chapter Summary

In this chapter we got a general overview of this study. The introduction provided the background of the study as regards to the effects of Basel III framework on capital adequacy requirement in commercial banks in Kenya. The chapter took an overview of
the effects of Basel III framework on capital adequacy requirement in commercial banks in Kenya with a clear interpretation of the consequential impact of its implementation. The chapter presents the statement of the problem and the purpose of the study. The research questions of the study are also clearly outlined as well as the significance of the study, scope of the study, and the definition of significant terms as used in the study.

The second chapter contains the literature review which is touching on the key variables as well as previous studies and their outcomes. The literature was reviewed according to the independent variables identified in the research questions. The review was important so as to be able to find out how other scholars have dealt with problems. The literature review in the study was divided into the various sub-headings as relates to the research objectives. Chapter three contains the methodology that was used in this study encompassing the research design, population, sample, data collection methods, research procedures and data analysis methods. Chapter four shows the analysis and findings of the study as outlined in the research methodology. Chapter five discusses the summary of the findings, giving the discussions and conclusions as well as making recommendations of the study with regard to the objectives of the study.
CHAPTER 2

2.0 LITERATURE REVIEW

2.1 Introduction

The purpose of literature review is to outline what has been done previously as far as the research problem being studied is concerned. The literature reviewed in this study was explored under three dominant themes that were studied under the following subheadings: importance of capital adequacy requirement, challenges faced by commercial banks in implementing capital adequacy requirement and the measures taken by commercial banks to ensure compliance with the capital adequacy requirement for commercial banks in Kenya. This research has drawn materials from several sources which are closely related to the theme and the objectives of this specific study. The chapter finally presents the chapter summary.

2.2 Importance of Capital Adequacy Requirements

2.2.1 Credit Risk Management

Mutesi (2011) sought to investigate the relationship between risk management, information and financial performance of commercial banks. The research objectives that guided the study were, to examine the relationship between information sharing and risk management, to examine the relationship between information sharing and financial performance, to investigate the relationship between information sharing, risk management and financial performance. A sample of 104 commercial banks branches were selected from a total of all the branches of commercial banks in Kampala. The respondents were purposively selected from each branch. Across-sectional research design was used in this study. Questionnaires were used collect primary data. SPSS package was used to analyze data. Descriptive regression and correlation analysis were carried out.

The findings revealed that there was a significant positive relationship between all the study variables information sharing, risk management, and financial performance. The study recommended that banks should put up strong information sharing premises like credit bureaus, enrich their risk management committee, credit committee and audit function so as to minimize risks. The study also recommended that banks should recruit
qualified staff and embrace training as a common practice in the banking industry in order to improve risk management policies and hence improved financial performance.

Abiola and Olaisi (2014) sought to investigate the impact of credit risk management on the performance of commercial banks in Nigeria. Secondary data was obtained from financial reports of seven commercial banking firms. The study used a time series methodology whereby data was obtained for seven years (2005–2011). The panel regression model was employed for the estimation of the model. In the model, Return on Equity (ROE) and Return on Asset (ROA) were used as the performance indicators while Non-Performing Loans (NPL) and Capital Adequacy Ratio (CAR) as credit risk management indicators. The findings revealed that credit risk management has a significant impact on the profitability of commercial banks in Nigeria.

Hosna, Manzura and Juanjuan (2009) sought to find out how credit risk management affects the profitability of banks in Sweden. The study used the quantitative approach and concentrated on the description of the outputs from SPSS. Regression model was used to do the empirical analysis. In the model ROE was defined as profitability indicator while NPLR and CAR as credit risk management indicators. The data was collected from the sample banks annual reports (2000-2008) and capital adequacy and risk management reports (2007-2008). The findings and analysis showed that credit risk management has effect on profitability in all 4 banks. Among the two credit risk management indicators, NPLR had a more significant effect on profitability (ROE) than CAR.

Mwangi (2012) examined the effect of credit risk management on the financial performance of commercial banks. The study used a descriptive research design. The study used secondary data which was obtained from the commercial banks’ annual reports (2007-2011). Of the 43 commercial banks in Kenya, complete data was obtained from only 26 banks and thus the study concentrated on the 26 banks. The data obtained from the annual reports of the banks was analyzed using multiple regression analysis. Statistical Package for Social Sciences (SPSS version 18) was used to obtain the regression output. In the model return on equity (ROE) was used as the profitability indicator while non-performing loans ratio (NPLR) and capital adequacy ratio (CAR) as credit risk management indicators. Results revealed that there is a significant relationship between financial performance (in terms of profitability) and credit risk management (in terms of loan performance and capital adequacy). The results of the analysis revealed that
both non-performing loans ratio (NPLR) and capital adequacy ratio (CAR) have negative and relatively significant effect on return on equity (ROE), with NPLR having higher significant effect on ROE in comparison to CAR. The study recommended that all banks should take on a credit risk grading system. The system should define the risk profile of borrower’s to ensure that account management, structure and pricing are proportionate with the risk involved. Risk grading is a key measurement of a Bank’s asset quality, and as such, it is essential that grading is a robust process. All facilities should be assigned a risk grade. Where deterioration in risk is noted, the risk grade assigned to a borrower and its facilities should be immediately changed. Borrower Risk Grades should be clearly stated on Credit Applications.

2.2.2 Balance Sheet Structure

A bank’s balance sheet structure is the only true measure of analysing a bank’s financial performance and wellbeing as capital requirements do not take into account either the competence, depth and integrity of management (Commission of the European Communities, 2004). Capital requirements have become the only true internationally accepted standards of bank soundness (Mishkin, 2008). Due to the scrutiny of the banks’ balance sheet structure from regulators and other stakeholders capital adequacy has emerged as major strategic theme for bank managers, one to which they devote an increasing amount of time and effort: capital provides a fund against which to charge unexpected or temporary losses, thus acting as a safety cushion for equity holders and debt holders, capital is considered by competitors, customers and rating agencies as a proxy for soundness (BCBS, 2010b; Taylor, 2011).

Kapan and Minoiu (2013) examined the role of bank balance sheet strength in the transmission of financial sector shocks to the real economy. The study used data from the syndicated loan market, they took advantage of variation in banks’ dependency on wholesale funding and their structural liquidity positions, in 2007 quarter two, to approximate the effect of exposure to market freezes during 2007–08 on the supply of bank credit. Results revealed that banks with strong balance sheets were better in maintaining lending during the crisis. Particularly, banks that were ex-ante more dependent on market funding and had lower structural liquidity reduced the supply of credit more than other banks. However, higher and better-quality capital minimized this effect. Hence, it can be concluded that strong bank balance sheets are key for the recovery
of credit following crises, and provide support for regulatory proposals under the Basel III framework.

Some proof points to the pro-cyclicality of leverage among financial institutions leading to aggregate volatility. This pro-cyclicality arises when financial institutions finance their assets with non-equity funding (i.e., debt financed asset expansions). Wholesale funding is a key source of market-based funding that enables institutions to adjust their leverage quickly. As such, financial institutions that are dependent on wholesale funding are likely to have higher degrees of leverage pro-cyclicality. Using high frequency balance sheet data for the world of banks, Damar, Meh and Terajima (2010) sought to identify whether there exists a positive relationship between the assets and leverage in Canada, the role played by wholesale funding for this relationship and market and macroeconomic factors associated with this relationship. The findings of the empirical analysis revealed that a strong positive relationship exists between asset growth and leverage growth, and the use to wholesale funding is a key determinant of this relationship. Furthermore, liquidity of several short-term funding markets matters for pro-cyclicality of leverage.

Using the non-parametric Malmquist methodology Casu and Girardone (2010) analyzed the importance of the inclusion of off-balance sheet (OBS) business in the definition of banks output when estimating total factor productivity change indexes. The analysis encompassed the total factor productivity change into technical efficiency and technological change. The results were in line with the common view in the recent literature, indicating that the exclusion of non-traditional activities leads to a misspecification of banks output. In particular, the inclusion of OBS items raised the estimated productivity levels for all countries under study. However, the impact was bigger on technological change rather than efficiency change. Overall, results suggest that despite the uneven distribution of OBS between countries and among different institutions in the same country, these non-traditional activities are very important and failure to account for them would lead to biased conclusions.

2.2.3 Deposit Insurance

The Deposit Protection Fund Board (DPFB) Kenya was established in 1985, under Section 36 of the Banking Act. This followed a number of bank failures in Kenya. Its mission is to build confidence in the banking sector through the provision of an effective
deposit insurance scheme. Currently DPFB operates administratively as a department of Central Bank of Kenya. A new Kenya Deposit Insurance Act has established Kenya Deposit Insurance Corporation which will be independent and autonomous (Kimani, 2013).

Minh (2014) sought to study Deposit Insurance of Vietnam (DIV). The first objective of the study was to determine the benefits of DIV to the national banking system, and to the bank depositors. The second objective of the study was to analyse the knowledge of DIV among the bank employees of the Asian Commercial Bank (ACB), Vietnam. The study used a qualitative research method as a single case study for the case bank ACB in Vietnam. The study used primary data which was collected through interviews with the manager, and three employees of the case bank. Results revealed that the basic information of DIV is well-perceived by three of the four bank employees interviewed. Depending upon the duties of bank employees interviewed in the case bank, their knowledge of DIV’s key elements, benefits, and limitations can be improved. The study recommended that banks should increase employees’ knowledge of DIV for both the bank and insurer organisation. In terms of the case bank, it is recommended that some training methods should be implemented, for example professional training and consulting in forms of lectures, workshops, and seminars. With regard to the insurer organisation, it is recommended that different communication tools should be used to publicize DIV effectively.

Hamada (2011) investigated market discipline by depositors in the Indonesian banking sector. The study sought to give answers to the following questions; Does depositor discipline fulfill its role in Indonesia? Does deposit insurance affect depositor behavior thereby imposing discipline on banks? These questions are empirically examined using panel data on Indonesian commercial banks from 1998 to 2009. In Indonesia deposit insurance was introduced in 2005. Depositor discipline was examined by two measures: change in the interest rate and amount of deposits. Results revealed that depositors are keen to bank soundness and riskiness and select banks based on the bank’s condition paying attention to equity ratio. It is found that depositors impose discipline on banks, but it varies according to regulatory and economic circumstances.
2.2.4 Financial Stability

Financial stability is one of the most widely discussed issues in today’s economic literature. The relevance of analyses on financial stability was first recognised during the international financial crises at the end of the 1990s, also strengthened by the financial and economic crisis emerging in 2007. These developments prompted the need for continuously providing the professional public opinion with an up-to-date and reliable picture of the condition of a given country’s financial sector. Owing to the mutual relations of dependence – affording interpretation on both a vertical and horizontal level – the analyses need to cover the whole financial intermediary system (Reinhart and Rogoff, 2010).

Budding confirm that regulatory policy that restrict entry and banks’ activities are negatively linked with bank industry stability. Banking systems having more limitations on banks’ activities and hindrances to bank entry face systemic banking distress. On the other hand, capital regulations has no influence on banks financial stability (Barth, Caprio and Levine 2004; Beck et al. 2006). Nevertheless, in highly concentrated markets, financial institutions may judge that they are “too-big-to-fail” resulting to even riskier investments (Berger et al., 2008).

Results of a study conducted by Boyd et al. (2006) and De Nicolo and Loukoianova (2006) revealed that there exists an inverse relationship between higher market concentration and financial stability which is an implication that the risk of failures of a bank is higher in more concentrated markets. When analysing the stability of an institutional system, one examines the degree in which the whole of the system is capable of resisting external and internal shocks. Shocks do not always result in crises, but an unstable financial environment can in itself impede the healthy development of the economy. In global bank regulatory standards Basel III was the first framework to launch a specific macro-prudential measure seeking to deal with challenges to systemic stability; the countercyclical capital shield for the first time. The main aim of this was to control the levels of the credit cycle and chiefly to shun sharp declines of credit during cyclical recession which can have adverse effects on the real economy.
2.2.5 Reduced Vulnerability to Liquidity Shocks

Vodová (2013) sought to find out determinants which affect liquid asset ratio of Czech and Slovak commercial banks. The data covers the period from 2001 to 2010. The study examined four bank specific factors and nine macroeconomic factors. Results of panel data regression analysis showed that although Czech Republic and Slovak Republic have a lot in common, different factors determined banks’ liquid assets in individual countries. The liquid asset ratio of Czech banks increased with increase in capital adequacy, with depreciation of Czech koruna and with worsening quality of credit portfolio. Liquidity of Slovak banks decreased with size of the bank, with higher capital adequacy, higher bank liquidity and during periods of financial crisis. Liquidity of Slovak banks was also positively related to economic cycle.

Raddatz (2010) provided a systematic evidence of the role of banks’ reliance on wholesale funding in the international transmission of the ongoing financial crisis. The researcher carried out an event study to estimate the impact of the liquidity crunch of September 15, 2008, on the stock price returns of 662 individual banks across 44 countries, and tested whether differences in the abnormal returns observed around those events related to these banks’ ex-ante dependence on wholesale funding. Globally and within countries, banks that were highly dependent on non-deposit sources of funds had a larger decline in stock returns even after controlling for other mechanisms implying that liquidity played an important role in the transmission of the crisis.

Botoe (2012) analysed the impact of liquid asset holdings on Commercial Banks in Liberia profitability. The study used regression analysis to analyze the profitability of commercial banks using balanced data over the period of 2006-2011. The study used the liquidity asset to estimate the relationship between liquid asset and profitability. Results revealed that the business cycle of a commercial bank, deposit ratio and asset ratio influenced banks profitability.

2.3 Challenges Faced in the implementation of Capital Adequacy Requirement

2.3.1 Regulatory Constraints

Recent economic crises have revealed the importance of bank regulations to reduce the high risk attributed to imbalances in banks’ balance sheets. The key regulatory role of
banking regulation is regulation on capital. Nonetheless, excessive regulations may have adverse effects. Safety of depositors’ fund remains the major concern of bank regulators. It is in this respect the capital adequacy becomes relevant and important. Sentero (2013) sought to find out the effect of capital adequacy requirements on the efficiency of commercial banks in Kenya. This study used a descriptive research design. The population of interest in the study consisted of all 43 commercial banks operating in Kenya and had been in existence in the last five years, licensed and registered under the Banking Act Cap.488. To measure economic efficiency the study adopted the Data Envelopment Analysis (DEA) techniques. The value of the F statistic indicated that the overall regression model was significant implying that there is a significant relationship between the predictor variables of capital adequacy ratio and the efficiency of commercial banks in Kenya.

The study recommends that central bank should be keen on commercial banks capital adequacy ratio by laying down financial regulations on liquidity since the goal of financial regulation is to enable banks to improve liquidity and solvency. Stricter regulation may be good for bank stability, but not for bank efficiency, restricting banks may not only lower bank efficiency but also increase the probability of a banking crisis.

Gudmundsson, Ngoka-Kisinguh and Odongo (2013) sought to find out the role of capital requirements on bank competition and stability in Kenya for the period 2000-2011. The study adopted the Lerner index and the Panzar and Rosse H-statistic to measure competition in Kenya’s banking industry. Approximations of both the Lerner index and the H statistic showed that competition in the Kenyan banking sector had reduced over the study period. The study approximated the fixed effects of capital requirements on bank competition and stability for the 36 commercial banks using a panel regression model. The panel estimates indicated that there was a significant non-linear effect of core capital on competition. The log of core capital was positive and significant while squared log of core capital was negative and significant which is an implication that an increase in core capital reduces competition up to a point and then increases competition. Therefore, the advantages of raising capital requirements on competitiveness are achieved after consolidation in the banking sector. Return on equity was used to capture bank performance and stability which showed a positive relationship in support of the evidence that capital regulation improves the performance of banks and financial stability.
Cheserek (2010) examined the determinants of bank failure in Kenya over a period of five years between 2004 and 2009 using capital adequacy. Asset quality and earnings after tax were cited as major predictors of bank failure. The study addressed the determinants of commercial bank failures in the banking industry. Data from 21 commercial banks was obtained and analyzed using SPSS package. Results revealed that Kenya’s banking industry looked shaky but are stabilizing. Key ratios like capital adequacy, asset quality and return on assets didn’t have a consistent trend and this was worrying. Results also revealed that banks’ management did not have clear policies on how to maintain and grow these key ratios. Further, results revealed that bank failure had no significant relationship with earnings after tax, total loans, total equity and return on assets. However, bank failure had a significant relationship with capital adequacy, asset quality and total assets. This explained the reason as to why over the last decade, national and international regulatory bodies, in an attempt to reduce the chance of a bank failure have imposed stricter requirements on capital adequacy and asset quality.

2.3.2 Additional Capital

Odinga (2010) carried out a study seeking to find out the relationship between capital adequacy and stability of Commercial Banks of Kenya. All Commercial Banks in Kenya were analysed. Secondary data was used and this was collected from the financial statements for the year ended 31 December 2009. On the face value Kenyan banks are on average well capitalized implying that they have met all the requirements (statutory) as set by the Central Bank of Kenya. However, on closer inspection, tier I commercial banks have a much stronger capital position than tier II and III commercial banks. Not all commercial banks had achieved the minimum core capital of Kshs. 1 billion. With respect to supplementary capital, majority of Banks were found to have supplementary capital reserves. However, very few were found to have no supplementary capital.

Waithaka (2013) sought to investigate the effect of Basel II requirement on Kenyan commercial banks' lending. A descriptive research design was adopted for this study. The populations for this research are the 43 listed Commercial Banks in Kenya analyzed for a period from 2009-2012. The study findings revealed that commercial banks risk weighted asset had increased by 79% over the years indicating a similar growth in bank's assets. To meet the asset growth, core capital had also increased by 88% with bank's undertaking rights issue between 2011 and 2012 in order to meet the new capital requirements with
Basel II. Total loans and advances with a risk weight of 100% also increased by 77% from the year 2009 to 2012. The CAMEL rating also showed continuous growth in all the main ratios over the years under review. The study concluded that Basel II requirement has an impact on banks' capital requirement and asset growth with growth in core capital and risk weighted assets clearly seen over the years. The study also concluded that Basel II requirement has an impact on banks' lending. None of the commercial banks so far was in breach of the minimum capital requirements of 8% as additional capital has being raised through rights issues.

Wachiuri (2012) sought to establish the effect of capital adequacy requirements on credit creation by commercial banks in Kenya. Data for a period of 11 years from 2001 to 2011 was studied where an econometric model was used. For this purpose, data from 43 commercial banks in Kenya was extracted from CBK annual bank supervision reports. The study revealed that capital adequacy requirements introduced by Basel 1 had a negative impact on credit creation by banks in Kenya. This was evident especially in 2000 when the requirements were introduced in Kenya and in 2009 when further development of minimum statutory capital requirements from Kshs. 250 million to 350 million (all the way to 1 billion by December 2012) was introduced. The trend in credit created had been changing direction every four years a fact that can be accredited to shocks originating from the continuous development of capital adequacy requirements by the Central Bank of Kenya. Results showed that the volume of existing bank capital may act as binding constraint on liquidity and credit creation. However, there could have been other factors accounting for variations in credit created trends other than the capital adequacy requirements as experienced in 2005, a fact that could be accredited to other factors such as high interest rate and reduced demand for credit. The study recommended that policy makers should a certain that commercial banks have adequate capital to strengthen confidence of depositors, but capital adequacy requirements should not be very retaliatory as to restrain bank activities and the performance of the overall economy.

### 2.3.3 Compliance, Risk and Finance Management Culture

Bett (2012) examined the extent to which current developments in accounting regulations have been embraced by non-listed firms in the Kenya financial sector and their impacts in finding solutions to major problems of corporate financing among small and medium enterprises. The study used a descriptive research which involved acquisition of
information about the level of compliance with mandatory and voluntary aspects of accounting regulations from a sample of 93 non-listed firms in different subsectors; Banking, Insurances, SACCOs and Stock brokerage firms among others. Majority of the firms were more compliant with mandatory aspects of accounting regulations like accounting disclosure requirements of the respective Government Regulatory Agencies, Companies Act and IAS1. However, the level of compliance with voluntary accounting regulations tested like IAS 39 on valuation and disclosures of financial assets and liabilities and IFRS 7 on disclosures requirements for firms’ exposure to risk was generally very low. This can be explained by the fact that firms not listed in NSE are generally not motivated to achieve high levels of compliance with accounting pronouncements of IFRSs and IASs mainly because they see these regulations as a requirement for the big public firms.

The study recommended that ICPAK should take the challenge of acquainting Small and Medium sized Entities with information on the strategic benefits on achieving high levels of compliances to entire accounting regulatory framework irrespective of the firm size. This would help mitigate on the risk suffered from the perceptions of information asymmetry and other unfavourable consequences associated with low quality accounting information such as limited access to external finance.

Kinuthia (2013) conducted a study seeking to establish the relationship between financial risk management systems and financial performance of micro finance institutions in Kenya. The research adopted a survey research method as well as causal research design to show the relationship between financial performance and financial risk management systems. The study targeted 47 registered MFIs. Both primary and secondary data sources were used in this study. A likert scale questionnaire was used to collect primary data. Statistical Package for Social Sciences (SPSS version 17.0) was used to aid in the entry, coding and analysis of the data obtained through the questionnaires. A regression analysis was used to determine the relationship between dependent and independent variables. From the findings of the study Mil's-should institutionalize a risk management process. Management of micro finance institutions has in many instances treated internal control and internal audits as marginal to operations, prioritizing only on their ability to uncover past mistakes and wrongdoing. The risk management approach thus suggests a more integrated approach to internal control, placing a greater emphasis on its ability to
proactively prevent loss and encourage efficiency. For assured efficiency, MFIs must incorporate the concepts of risk management into their organizational culture and environment. In addition, the board and management should play an active role in a bid to rise above negative perceptions of internal control and internal audit. This can be done by putting emphasis to the employees about the positive results that can be achieved from their effective application. Similarly, the management can create a positive control environment in which all employees have a role in improving the internal control system.

Kasiva (2012) conducted a study seeking to establish the impact of risk-based audit on financial performance in commercial banks in Kenya. This study adopted Correlation research design since it describes the specific phenomenon in its current trends, current events and linkages between different factors at the current time. The target population for the study comprised of 44 respondents who were finance officers, internal auditors, the credit officers, relationship officers/managers and accountants at commercial banks in Kenya. Primary data collected using questionnaires was used in this study. Data analysis was done using descriptive statistics such as mean, standard deviation and frequency distribution. Data presentation was done by the use of pie charts and tables for ease of understanding and interpretation. From the findings, the study concluded that risk based auditing through risk assessment, risk management, annual risk based planning, internal auditing standards and internal auditing staffing should be improved. This would make it easy for the firm to detect risks on time and focusing on high risk areas leading to increased transparency and accountability. Proper planning enhances accuracy, timeliness, efficiency, completeness, convenience and clarity. Credible audit reports, auditor independence to identify and rectify audit errors, effective implementation of audit recommendations, financial management and compliance with accepted audit standards, effective internal audit staff and independent audit committee influence financial performance in commercial banks. From the findings, the study recommended that management in commercial banks in Kenya should adopt effective risk based audit practices such as risk assessment, risk management, annual risk based planning, internal auditing standards and internal auditing staffing to enhance effective and efficient financial performance.
2.3.4 Growth Barrier

Muriithi (2013) carried out a study to determine the causes of Non-Performing loans in Commercial Banks, in Kenya. The study adopted the descriptive design and applied both multiple regression models on secondary data to determine the relationship between causes of Non-Performing Loans in Commercial Banks in Kenya. The study used secondary data for the period 2008-2012. Inflation, interest rates and growth in loans were used as independent variables while non-performing loan was used as the dependent variable. The population of this study comprised of 43 commercial banks in Kenya and data was analysed using SPSS. Findings revealed that inflation rate, real interest rate and growth rate in loans were the causes of non-performing loans in Kenya.

The study recommends that in order for the profitability of commercial banks in Kenya to improve, the Government should adopt measures that will control the real interest rate in Kenya. Lower interest rates would be more appropriate in order to reduce the level of non-performing loans in Kenya since they are negatively correlated with ratio of non-performing loans. The study also recommends that there is also need for the Government to control the inflation rate in Kenya as there is some evidence to suggest that low inflation rate will lead to better performance of loans in Kenya. The study further recommends that there is need for the commercial banks to adopt policies that will control the amount of loans they have.

Wanjiku (2010) sought to find out how Suntra Investment Bank (SIB) had managed growth. SIB endured a very tumultuous time in the capital markets during which several stock brokerage firms collapsed, were put under receivership or were acquired by other companies. The study sought to address two main objectives which were to determine the approaches adopted by SIB to manage growth and to determine how SIB has managed the organisation culture through its growth. Both primary data and secondary data were used in this study. Primary data was collected through personal interviews while secondary data was collected from journals, websites and in-house publications. A content analysis was then done on the data obtained and the findings were presented as brief discussions on the growth of the company, the approaches adopted to manage both growth and the organisation culture and on what informed those approaches.
Results revealed that SIB had gone through a full organisation life cycle marked by a period of slow growth which lasted about 12 years between 1990 and 2002, rapid growth was experienced between 2003 and 2006 when the company reached maturity and there was a decline in growth in period between 2007 and 2008. Results also revealed that growth for the company was highly dependent on the performance of the economy and the change in government at the end of 2002 was of great benefit to the company due to increased investor confidence which saw to an increase in investors in the capital market and there by positive returns in the company too. Further, results revealed that SIB had adopted various approaches to manage growth more so during the rapid growth phase and the decline stage. These approaches were applied to different extents with the key ones being strategic planning, financial control, human resource management, enhancements of the management information systems and management of the organisation culture. On the other hand, standardization marketing and lobbying the government were used to a lower extent. The study also established that SIB had experienced a big challenge in overcoming the organizational culture barrier. The company overcame this challenge by having culture change as an objective in the strategic plan and other strategies such as succession planning and induction of all new employees on the mission vision and core values of the company. Finally, the study concluded that it is very important that companies adopt various approaches to manage growth and to keep evaluating the approaches in light of the changes in the business environment.

2.4 Measures taken to Ensure Compliance with the Capital Adequacy Requirement

2.4.1 Cutting back on Lending

Owino (2013) investigated lending policies and their impact on the levels of non-performing loans among commercial banks in Kenya. A descriptive survey was employed in this study with the population of interest of being the forty three (43) commercial banks in Kenya. The study used primary data which was collected using questionnaires. Self-administration of the questionnaires was done through drop-and-pick later method. Descriptive statistics was used to summarize the data and findings presented using tables and other graphical presentations as appropriate for ease of understanding and analysis. The study found that there is a relationship between lending policies and non-performing loans, leading the banks to lend prudently. This lowers the risk level to the banks.
Lang’at (2013) sought to find out the determinants of lending to farmers by commercial banks in Kenya. The study was conducted through a survey research design. Self-administered structured questionnaires were used to collect primary data. The respondents were given an assessment of their lending policy to farmers vis-a-vis their policies on Credit Standards with Regard to Farmers; their Assessment of Return on Credit to Farmers; and their assessment of Risk on Credit to Farmers. Results indicated that banks give out loans to finance farming activities and that farmers have reliable sources of income that enable them to pay back their loans in time. Results also revealed that credit standards with regard to farmers negatively affected lending to farmers. This is an implication that credit standards with regard to Farmers; Return on Credit to Farmers; and Risk on Credit to Farmers reduces the amounts provided to the farmers in Kenya. The study recommended that policies should be scripted to ensure that the income from farmers in Kenya is stabilized to mitigate risk and improve their creditworthiness, to ensure that farmers have skills to manage their finances properly to maintain excellent financial records with banks and to help banks unwind their credit qualification for farmers so as to stimulate the demand and supply of credit.

Mwirotsi (2012) sought to investigate the effects of the lending rate policy on the loan portfolio of commercial banks in Kenya. The lending rate policy was measured by the average annual lending rate of the selected commercial banks. Loan portfolio comprised of the annual average of total loans and advances, loan accounts and nonperforming loans. The study employed a quantitative survey design. Secondary data was collected from the audited financial reports of sampled commercial banks for the period between 2002 and 2011. SPSS was used to analyse the data. The findings were presented in bar charts and tables. Descriptive statistics, correlation analysis, regression analysis and test of auto correlation were the techniques used to analyze the data. Results revealed that the lending rates had a positive correlation with total loans and advances, total loan accounts and total nonperforming loans. However, only the nonperforming loans had a significant relationship with the lending rates. The study concluded that the high nonperforming loans portfolio in the Kenyan commercial banks has been as a result of high lending rates caused by the increases in the CBR and the high exchange rates. The study recommended that commercial banks should adopt policies and models that would enable them to reflect
the changes in CBR, foreign exchange rates and any other inherent risks in the lending business.

Therefore commercial banks will resort to cutting back on lending in order to shore up then capital adequacy ratios.

2.4.2 Market Rights Issue/Bonds

According to Financial Stability Board (2011), lack of regulation makes transactional and compliance costs very low. However, the volume that is available domestically is limited so long as it is possible to access cheaper funding from outside and then convert it into local currency. Fixed interest end investors (and their advisers) are blocked by the fear of inflation, the lack of liquidity and an inflexible system of equity-biased taxation. The cash for bond investment is increasing the amount of funds available. However, it needs to be in the best interests of the members for the funds to switch from equities to bonds. A liquid domestic bond market would benefit the financial system but to bring it about it will need a more radical stimulus than the requirements of Basel III.

Koka (2012) explored the relationship between issuance of Treasury/ Government bonds and economic growth in Kenya. A case survey research design was used in this study. The study used secondary data that span from the year 2003 to the year 2011. The time series data was on gross domestic product, market capitalization of bonds, value of bonds traded and total new issues of bonds. Regression analysis was used to analyse the data used in this study. The results revealed that the issuance of Government bonds has a positive effect on the level of economic growth in Kenya. This implied that Kenya could enhance its economic growth by effectively and strategically strengthening the Bonds market and the uptake of Government Bonds. The study concluded that the supply-leading hypothesis of economic growth prevailed in Kenya during the period under study from 2003 to 2011. This was an implication that economic growth was finance-led through funds mobilization. The study recommended that the regulatory authority should adopt policies that would support more companies to access the market and also be more proactive in their inspection role in order to check sharp practices which hinder market integrity and wear away investors’ confidence.

The banks are also planning to raise capital in a timely manner and at a proper price. Unfavourable markets may mean issuing shares at a higher discount to market price and
issuing more equity shares, thereby causing dilution of shareholding and reducing earnings per share (Moreno, 2011). Banks may be impacted by higher costs of capital and lower returns making it difficult to attract and retain investors. Again, as the cost of capital becomes higher, banks may be unable to provide lending to SME clients/unrated clients. If banks are not able to turn over their assets due to capital constraints, it will impact the GDP and economic growth as well.

2.4.3 Increasing Revenue Growth/Cutting Costs

In a bid to increase revenue, banks have adopted strategic responses which are dynamic mechanisms to balance sheet management, including rationalisation of branch structures, product rationalisation or implementation of a shared services model, undertaking strategic cost reductions. Banks will have to look at the kind of equity they can raise, the contingent capital and the amount of earnings they have to retain to reduce the need for raising further capital (Caggiano and Calice. 2011). At the same time this will affect the investor community because the investors look at dividends and expect some returns from the banks every year. So it's like a trade-off between retaining capital, retaining earnings and distributing dividends. Banks also have to look at their lines of businesses and make some hard decisions on exiting risky businesses, and businesses that are more capital demanding and also outsourcing or off-shoring non-core functions.

Kimani (2013) considered revenue, cost and profit effectiveness for Kenyan banks between 1998 and 2006. Besides, the study sought to find out the relationship between changes in cost and profit efficiency to stock returns using classical regression models. The study used a DEA methodology. Results revealed that banks had declining cost efficiency over the sample period while the revenue efficiency was linearly increasing. Malmquist total factor productivity index measures revealed that technical efficiency and technological efficiency were the main drivers of profit efficiency in the banking industry. Results also revealed that there exists a significant relationship between stock returns and changes in both cost and profit efficiency for the listed commercial banks. Cost efficiency influenced stock returns of banks as poor cost management lowers banks’ profits. Poor profits led to low future dividends to investors. Subsequently, the share price was bid down at the stock market. Hence, a bank which is capable of mobilizing its deposits, other funds and staff earns high profits, resulting to high dividends to investors and the share will be highly priced which implies high stock returns.
Mwange (2013) conducted a study seeking to establish the impact of mobile banking on the Financial Performance of Commercial Banks in Kenya during a period of five years. A causal research design was used in this study. The study used secondary data obtained from the Central Bank of Kenya reports and published financial reports of the 43 Commercial Banks in Kenya for a period of five years between 2008 through 2012. Results revealed that Mobile Banking has a restrained influence on profitability of commercial banks in Kenya. Thus, there exists positive relationship between mobile banking and bank performance. The study concluded that mobile banking enables banks to increase revenues in various ways such as increasing the return on asset (ROA). The study recommended that commercial banks should adopt new technologies which will improve their profit margins. Government policy makers should also revise policies related to promotion of innovation and transfer of technology that will improve profitability of organizations as it will translate to better tax revenues for the government.

2.4.4 Withholding Dividend Payment

The goal of corporate entities is to maximize the value of shareholders’ investment in the firm. Managers pursue this goal through their investment and financing decisions. Investment decisions involve the selection of positive net present value projects while financing decisions involve selection of a capital structure that would minimize the cost of capital of firm. Apart from the investment and financing decisions, managers need to decide on regular basis whether to payout the earning to shareholders, reducing the agency problem. As Richard and Stewart (2003) posit the objective of the corporation is to maximize the total discounted dividends paid out to shareholders and companies that pay dividends are historically stable.

Ada (2013) carried out a study seeking to establish the relationship between corporate governance practices on the dividend payout of commercial banks in Kenya. The study used a functional form relationship between corporate governance practices and dividend payout using a regression model that showed the relationship between board size, insider holding, board composition, CEO duality, leverage as well as ownership and control to dividend payout. A total of 17 commercial banks in Kenya that paid dividends in the year 2008 - 2012 were used to determine the relationship. Results revealed that 72.7% of dividend payout in Kenyan commercial banks could be explained by corporate governance practices. The study recommended that the government should ensure that the
corporate governance practices as outlined by the CMA are followed by companies which in turn will certify that the dividend payout to investors is most favourable.

Kimathi (2010) sought to establish the forms of dividend payout of firms listed at the Nairobi Stock Exchange by industry and to find out their influence of industry on dividend pay-out policies of firms. This study was a relational survey. The population of interest in this study consisted of all the firms quoted at the Nairobi Stock Exchange. Lack of readily available data from private companies limited this study to listed companies. Results showed that cash was the only form of dividend which was paid out by these firms. Hence, in terms of industry, it is not possible to conclude that a particular form of dividend payout is preferred over the other since all the firms paid their dividends in the form of cash. Results also revealed that industry factors had a strong positive effect on dividend payout ratios in three industries namely agriculture, finance and investment, and industrial and allied. In addition, industry factors had a weak positive influence on dividend payout ratios in the commercial and services industry. The study recommended that the management of various companies listed on the NSE should take into account the findings of this study in a bid to understand how industry factors influence the dividend payout ratios of their firms.

2.5 Chapter Summary

Since there are arguments that capital buffers cannot be used as real buffers in times of distress because they must be used to satisfy the requirements, there is a demand to implement these buffers in pillar II. The new conservation buffer, however, counters this problem since it can be cut back in times of distress, while this implies restriction in distribution of earnings. It provides banks with flexibility and simultaneously incentives to strengthen the capital base to avoid restrictions for their capital distribution. Therefore, this is a major advantage of the new Basel III framework.

On the one hand, current regulation is implemented as a fixed rule since the countercyclical buffer is 0-2.5 percent of common equity but it is also in a discretionary manner since the exact configuration is based on national judgment. The foregoing chapter covered in detail the effects of Basel III framework on capital adequacy requirement in commercial banks in Kenya. The literature review concentrated on the importance of capital adequacy requirement, challenges hindering the implementation of
capital adequacy requirement and measures taken to ensure compliance with capital adequacy requirement. These key variables were discussed in detail in an effort to familiarize completely with these concepts. The subsequent chapter outlined the methodology that was used in this study.
CHAPTER 3

3.0 RESEARCH METHODOLOGY

3.1 Introduction

Research methodology discusses the procedures and methods of the research period. This section is an overall scheme, plan or structure designed to assist the researcher in answering the raised research question. It is a programme to guide the researcher in collecting, analyzing and interpreting observed facts. This chapter gives explanation on the methodology that was used in achieving the objectives of the study. It consists of a plan for the collection, measurement and analysis of data. In this stage, most decisions about how research was executed and how respondents were approached, as well as when, where and how the research was completed. The chapter outlines the stages and phases that were followed in completing the study.

3.2 Research Design

A research design is the chronological order of things that result to answering research questions. This study used a descriptive research design. According to Cooper and Schindler (2006), a descriptive study is aims at finding out the what, where and how of a phenomenon. This study therefore was able to generalize the findings to all the banks. The main focus of this study was quantitative. Additionally, the study also used a qualitative approach in a bid to acquire a better understanding and hence lead to a better and more insightful interpretation of the results from the quantitative study. This method concerns the intense investigation of problem solving situations in which problems are relevant to the research problem. This strategy involves selecting of several targeted cases on which an intensive analysis is conducted. This aids in recognizing other possible ways for solving the research questions based on the present solution applied in the selected case study. The study brings out a subject, often by formulating a profile of group of problems (Cooper and Schindler, 2006).

Descriptive survey design is flexible enough to provide opportunity for considering different aspects of a problem under study (Kothari, 2004). This design was further appropriate for this study as descriptive survey research is intended to produce statistical
information about the aspects of the research issue that may interest policy makers and other stakeholders within the banking sector.

Apart from measuring and describing characteristics of the variables of interest, the method also allows for the researcher to carry out analysis, interpret and report findings as they exist without any manipulation. The study adopted a descriptive survey design to assess the state of the distributions and the interrelations of variables (Basel III implementation) that affect the commercial banking industry in Kenya. The study helped gather data with a great intention to describe the nature of existing conditions against which conditions can be compared for increased performance. It also helped in determining the relationship that exists between specific events.

3.3 Population and Sampling Design

3.3.1 Population

A population is the total collection of elements about which we wish to conduct a study, while a population element is the subject on which the measurement is being taken (Mugenda and Mugenda, 2003). Target population is the specific population from which information is required. Target population refers to an entire group of individuals who have common observable characteristics (Mugenda and Mugenda, 2003). The more specifically a population of interest is defined, the better the ability to describe and explain the behaviour intended to be studied. Thus the population should fit a certain specification, which the researcher is studying and the population should be homogenous.

The population of this study comprised of the commercial banks operating in Kenya. According to CBK (2013), the total number of commercial banks operating in Kenya by year 2013 was forty three. For the purpose of this study, 43 commercial banks were selected to investigate the effects of Basel III framework on capital adequacy requirement in commercial banks in Kenya. The target population composed of the management 159 management staffs currently employed at the head offices of the commercial banks in Kenya.

To be specific, the study sought the opinions of the management staffs of the banks. The organization in the commercial banks has organized staff in three categories; top management level consisting of the executives (head of departments and the deputy heads
of departments); middle management constituting of functional heads (tactical level of management and comprised all the senior and middle level officers in all departments of the company whose responsibility was to implement policies made) while low level management is comprised of accounting and customer attendant officers whose responsibility was to perform daily tasks which are routine and repetitive in the banks.

The target respondents included the 159 departmental heads, assistant departmental heads and lower cadre staffs like the supervisors, accounts and finance officers from the selected commercial banks’ offices in Nairobi. The study used stratified sampling. Sampling was through top level, middle level and low level management. Mugenda & Mugenda (2003) elucidate that the target population should have some evident characteristics, to which the study proposes to generalize the results of the study. This description depicts that the population is not homogeneous.

**Table 3.1: Target Population**

<table>
<thead>
<tr>
<th>Sections</th>
<th>Population (Frequency)</th>
<th>Percentage %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Top management</td>
<td>16</td>
<td>10</td>
</tr>
<tr>
<td>Middle level management</td>
<td>23</td>
<td>14</td>
</tr>
<tr>
<td>Low level management</td>
<td>120</td>
<td>75</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>159</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

**3.3.2 Sampling design**

**3.3.2.1 Sampling Frame**

The ability to generalize from a sample to the population depends critically on the representativeness of the sample. A representative sample is one that shares a wide range of attributes found among the wider population and a careful selection of a research sample allows a researcher to generalize findings from the sample to the population (Shaughnessy, 2006). According to Shaughnessy (2006), contacting everyone in a large population is often practically impossible and researchers usually select a subset of the population to represent the population. The sampling plan describes how the sampling
unit, sampling frame, sampling procedures and the sample size for the study. The sampling frame gives details about the list of all population units from which the sample will be selected (Cooper and Schindler, 2006).

Sample of responding staff was drawn from 159 top and middle level managers from the staff working in the banks’ head offices in Nairobi. Kotler (2001) depicts that if well selected, samples of about 10% of a population can yield good reliability. Other literatures have shown that sample size selection to a great extent is judgmentally decided.

### 3.3.2.2 Sampling Technique

A sampling technique is the part of the research plan that explains how cases are to be selected for observation. The study used stratified random sampling. The population was divided into three interrelated groups referred to as strata. The next step was drawing random samples from each stratum and then combining to form a complete stratified sample. Stratified random sampling method was used to sample respondent managers from the head offices in Nairobi. According to Kerry & Bland (1998) the technique aids in obtaining approximations of overall population characteristics with greater accuracy and ensures that a more representative sample is obtained from a relatively homogeneous population. According to Mugenda & Mugenda (2003) stratified random sampling is unbiased sampling method of grouping heterogeneous population into homogenous subsets then making a selection within the individual subset to ensure representativeness.

### 3.3.2.3 Sample Size

The study used a sample of 30% of the entire population which was selected from within each group in proportions that each group contributes to the study population. This sample was suitable for this study since the population was not homogeneous and the units were not uniformly distributed. This was because simple random sampling gives every subject of the population an equal chance of being picked. This generated a sample of 48 respondents which the study sought information from. The selection was as follows.
Table 3.2: Sample of the Study

<table>
<thead>
<tr>
<th>Management levels</th>
<th>Frequency</th>
<th>Sample Proportion (30%)</th>
<th>Sample size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Top management</td>
<td>16</td>
<td>0.3</td>
<td>5</td>
</tr>
<tr>
<td>Middle level management</td>
<td>23</td>
<td>0.3</td>
<td>7</td>
</tr>
<tr>
<td>Low level management</td>
<td>120</td>
<td>0.3</td>
<td>36</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>159</strong></td>
<td><strong>0.3</strong></td>
<td><strong>48</strong></td>
</tr>
</tbody>
</table>

3.4 Data Collection Methods

According to Ngechu (2004) there exist many methods of data collection. The choice of a particular tool or instrument is dependent on various the attributes of the subjects, research topic, problem question, objectives, design, expected data and results. The reason for this is because each tool and instrument collects specific data. There are various research instruments such as interview guides and questionnaires. The interview guides are research instruments with only unstructured (open ended) questions mostly administered on a face to face basis. They offer the advantages in that they are used with respondents who do not provide information in another format – bedridden, illiterate, etc; researcher can elicit more in-depth response or fill in information if participant doesn’t understand the question and certainty about who answered the questions and respondent gave an insight to his feelings, background, hidden motivation, interests and decisions and gave as much information as possible without holding back. However, they have disadvantages of being intrusive and reactive; being time and money consuming and it is difficult to locate respondents for call-backs.

On the other hand, questionnaires have both structured (closed ended) and unstructured (open ended) questions that are self-administered. They have the advantages in that everybody get the same questions, researcher asks more complex questions; no response effect (willing to divulge more info face-to-face contact; less likely to try to impress
interviewer; is computer-based; minimal amount of staff is required; allows respondents to respond in their time frame; reduces the number of related responses in order to obtain more varied responses; saves on time and money and enables easy analysis as they are in immediate usable form. Nevertheless, they have the disadvantages in that one has no control over participant interpretation, low response rates and uncertainty about who actually filled out the questionnaire.

Data can either be primary or secondary. Primary data is information gathered directly from respondents. Similarly, secondary data involves the collection and analysis of published material and information from other sources such as text books, online journals, previous researches, and the internet annual reports. Cooper and Schindler (2006) further explained that secondary data is a useful qualitative technique for evaluating historical or contemporary confidential or public records, reports, government documents and opinions. This study used primary data collected using questionnaires.

3.5 Research Procedures

This study commenced once the researcher obtained a letter of introduction from the University. Before the actual field data collection, a pilot test was conducted on the questionnaire. According to Macky & Gass (2009) the point of carrying out a pilot study is to test-often to revise and finalize the materials and the methods. The study carried out a pilot study to pre-test and validate the data collection instrument. This was in line with a qualitative research design methodology employed in this research project. To establish the validity of the research instrument the researcher sought opinions of experts in the field of study especially the researcher’s supervisor and lecturers in the department of business management. This facilitated the necessary revision and modification of the research instrument thereby enhancing validity. The researcher selected a pilot group of 10 individuals from the target population to test the reliability of the research instrument.

This was achieved by first stratifying the individuals according to level of management, level of education, number of years worked. The study also put in consideration gender equity and departmental distribution of individuals. The pilot data was not incorporated in the actual study. The pilot study allows for pre-testing of the research instrument. The clarity of the instrument items to the respondents was established so as to enhance the instrument’s validity and reliability. The pilot study enabled the study to be familiar with
research and its administration procedure as well as identifying items that required modification. The result aided in correcting inconsistencies arising from the instruments, which will ensure that they measure what is intended.

3.6 Data Analysis methods

Data analysis is the process of bringing order, structure and meaning to the mass of information collected. The goal of data analysis is to produce findings that relate to the problem motivating the research and to provide insights that contribute to decision-making process. The data collected from the field was assessed and comparison made so as to select the most accurate and quality information from the feedback given by various respondents, it involved assessing and evaluating the questionnaires and other sources. This included analysis of data to summarize the essential features and relationships of data in order to generalize from the analysis to determine patterns of behaviour and particular outcomes. Quantitative data was measured using descriptive statistics which was analyzed using the SPSS (Version 21). The researcher used the data with an aim of presenting the research findings in respect to the extent to which the banks' performance is affected by Basel III implementation. Data was analysed using SPSS and Microsoft excel. SPSS was used to produce descriptive statistics such as means, standard deviation, percentages and frequencies. Results were presented in form of tables, pie charts and graphs. The qualitative data was analyzed using content analysis and presented in prose form. Both quantitative and qualitative data was compiled to generate the final project report.

3.7 Chapter Summary

This chapter discussed the methodology for the study, stated the research design, and method. In addition, this chapter elaborated on the population, sampling technique, tools for data collection and data analysis. This chapter is a requirement to chapter four (presentation of results) as it gives the research framework and offer results creditworthiness. The next chapter presents analysis and findings of the study as set out in the research methodology. The study findings are presented on effects of Basel III framework on capital adequacy of commercial banks in Kenya.
CHAPTER 4

4.0 RESULTS AND FINDINGS

4.1 Introduction

The purpose of this research was to assess the effects of Basel III framework on capital adequacy requirement in commercial banks in Kenya. This chapter centres on data analysis, interpretation and presentation. Having identified the problem of study in chapter one, reviewed existing literature and shown gaps of knowledge in chapter two, explained the methods that the study used to collect data in chapter three. The study sought to answer the following research questions: Why are capital adequacy regulations important in commercial banks in Kenya? What challenges are commercial banks facing in the implementation of capital adequacy requirement? And what measures have commercial banks taken to ensure compliance with the capital adequacy requirement?

4.1.1 Response Rate

Response rate involves the computation of the response rate from the questionnaire returned from the respondents. The study sampled 48 respondents from the target population to collect data with regard to the effects of Basel III framework on capital adequacy requirement in commercial banks in Kenya. Out of 48 questionnaires distributed 37 respondents completely filled in and returned the questionnaires which accounted for 77.1% response rate. The good response rate was reached due to the adoption of the data collection method of constant follow up with the respondents by the researcher. The response rate demonstrates a willingness of the respondents to participate in the study on the effects of Basel III framework on capital adequacy requirement in commercial banks in Kenya.

4.1.2 Distribution of the Respondents by Gender

The respondents sampled comprised male and female staff of the commercial banks in Kenya. They were to indicate their gender by ticking on the spaces provided in the questionnaire. Table 4.1 shows the distribution of the respondents by gender.
Accordingly, 62\% of the respondents were males while 38\% of them were females. The findings show that the institution studied has both male and female members; however the majority of them are males. The findings imply that the views expressed in this findings are gender sensitive and can be taken as representative of the opinions of both genders as regards to the effects of Basel III framework on capital adequacy requirement in commercial banks in Kenya.

4.1.3 Response Rate Based on the Respondents’ Departments
Capital requirements and implementation of Basel III decisions affect the various aspects of performance of the organizations across various departments. It was therefore important to ensure that questionnaires were distributed and returned from various departments within the selected commercial banks. This was to ensure that the all areas influenced by Basel III are captured in the study. The results are as shown in table 4.2.

Table 4.1: Gender of the Respondents

<table>
<thead>
<tr>
<th>Gender</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>23</td>
<td>62</td>
</tr>
<tr>
<td>Female</td>
<td>14</td>
<td>38</td>
</tr>
<tr>
<td>Total</td>
<td>37</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 4.2: Respondents’ Departments

<table>
<thead>
<tr>
<th>Department</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Human resource</td>
<td>7</td>
<td>19.0</td>
</tr>
<tr>
<td>Finance</td>
<td>16</td>
<td>42.9</td>
</tr>
<tr>
<td>Procurement</td>
<td>7</td>
<td>19.0</td>
</tr>
<tr>
<td>Operations</td>
<td>5</td>
<td>14.3</td>
</tr>
<tr>
<td>Marketing</td>
<td>2</td>
<td>4.8</td>
</tr>
<tr>
<td>Total</td>
<td>37</td>
<td>100.0</td>
</tr>
</tbody>
</table>
From the results shown in table 4.2 and figure 4.1, 42.9% of the respondents were working in the finance departments, 19.0% of them were working in the human resource departments, 19.0% worked in procurement department, and 14.3% worked in the operations department, while 4.8% worked in marketing departments. This implies that all departments that were targeted by the study were involved and that the findings are not biased hence representative of the various departments’ views on effects of Basel III framework on capital adequacy requirement in commercial banks in Kenya.

![Respondents' Departments](image)

**Figure 4.1: Respondents’ Departments**

**4.1.4 Respondents Managerial Positions**

The study targeted to collect data from the management staffs. As such the respondents were likely to include managers, assistant managers, supervisors and general staffs. This was relevant to assess the distribution of the respondents across the management levels since they are part and parcel in the process of determining the effects of Basel III framework on capital adequacy requirement in commercial banks in Kenya.
Table 4.3: Respondents Designations

<table>
<thead>
<tr>
<th>Designations</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heads of department</td>
<td>4</td>
<td>10.3</td>
</tr>
<tr>
<td>Assistant heads of department</td>
<td>13</td>
<td>34.5</td>
</tr>
<tr>
<td>Supervisors</td>
<td>13</td>
<td>34.5</td>
</tr>
<tr>
<td>General staffs</td>
<td>8</td>
<td>20.7</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>37</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

The study findings in table 4.3 show that all the respondents occupy positions concerned with implementation of decisions like Basel III therefore they are aware of the effects of Basel III framework on capital adequacy requirement in commercial banks in Kenya. As such, 34.5% of the respondents indicated that they were assistant heads of department (assistant managers), another 34.5% of them were supervisors, 20.7% of them indicated that they were general staffs, while 10.3% of the respondents comprised of heads of departments (managers). These findings show that the respondents that participated in the study were mainly those involved in the implementation of Basel III requirements that affect the capital adequacy requirement in commercial banks in Kenya.

4.1.5 Distribution of Respondents by Working Experience in the Banking Industry

The respondents were required to indicate the length of time they had worked in commercial banks in Kenya. The length of service/working in an organization determines the extent to which one is aware of the issues sought by the study. The results are as depicted in Table 4.4.
Table 4.4: Respondents’ Duration of Work in the Commercial Banks in Kenya

<table>
<thead>
<tr>
<th>Duration</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-5 yrs</td>
<td>7</td>
<td>19.0</td>
</tr>
<tr>
<td>5-10 yrs</td>
<td>11</td>
<td>31.0</td>
</tr>
<tr>
<td>10-15</td>
<td>19</td>
<td>50.0</td>
</tr>
<tr>
<td>Over 15 yrs</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>37</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

From the respondents’ duration of work in the commercial banks demonstrated in Table 4.4, 50.0% of them indicated that they had worked in the commercial banks for 10 to 15 years, 31.0% of them had been working in the commercial banks for 5 to 10 years, while 19.0% had worked in the commercial banks for 0 to 5 years. For that reason, majority of the respondents had enough experience on the effects of Basel III framework on capital adequacy requirement in commercial banks in Kenya.

![Figure 4.2: Working Experience in the Banking Industry](image)

4.1.6 Highest Formal Qualification

The respondents were asked to indicate their level of education. The target population comprised of people in different responsibilities and qualification requirements hence different academic qualifications. This difference might contribute to differences in the
responses given by the respondents. The study therefore sought to investigate the education level achieved by the respondents.

Table 4.5: Level of Education

<table>
<thead>
<tr>
<th>Level of Education</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Undergraduate</td>
<td>15</td>
<td>40.5</td>
</tr>
<tr>
<td>Post graduate level</td>
<td>19</td>
<td>50.0</td>
</tr>
<tr>
<td>Certificate/Diploma</td>
<td>4</td>
<td>9.5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>37</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

The outcome depicted in table 4.5 show that majority of the respondents had at least an undergraduate degree and hence understood the information sought by this study, that is, 40.5% of the respondents had acquired a undergraduate degrees level of education, 50.0% of the respondents indicated that they had acquired a post graduate level of education, while 9.5% of the respondents indicated that they had acquired other levels of education such as ICPAK and Higher Diplomas. These outcomes mean that majority of the respondents had at least an undergraduate degree and hence understood the information sought by this study.

4.2 Importance of Capital Adequacy Requirement

The first objective the study was to establish the importance of capital adequacy requirement. In this regard the respondents were required to indicate the extent to which capital adequacy requirement is perceived to be important in commercial banks in Kenya.

Table 4.6: Extent to which Capital Adequacy Requirement is Important to Banks

<table>
<thead>
<tr>
<th>Extent</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>To a very great extent</td>
<td>11</td>
<td>30.1</td>
</tr>
<tr>
<td>To a great extent</td>
<td>20</td>
<td>53.2</td>
</tr>
<tr>
<td>To a moderate extent</td>
<td>5</td>
<td>13</td>
</tr>
<tr>
<td>To a little extent</td>
<td>1</td>
<td>3.7</td>
</tr>
</tbody>
</table>
From table 4.6, 53.2% of the respondents indicated that capital adequacy requirement is perceived to be important in commercial banks to a great extent, 30.1% of them indicated that capital adequacy requirement is perceived to be important in commercial banks to a very great extent, 13.0% of the respondents indicated to a moderate extent, while 3.7% of the respondents indicated that capital adequacy requirement is perceived to be important in commercial banks to a little extent.

In addition the respondents were required to indicate the extent to which various aspects of Basel III regulations affect the capital requirement of the commercial banks in Kenya. The results are as depicted in Table 4.7.

**Table 4.7:Extent to which Basel III Regulations affect Banks’ Capital Requirement**

<table>
<thead>
<tr>
<th>Aspects of Basel III regulations</th>
<th>No extent</th>
<th>Little extent</th>
<th>Moderate Extent</th>
<th>Great extent</th>
<th>Very great extent</th>
<th>Mean</th>
<th>Std. Dev.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Credit Risk Management</td>
<td>2.1</td>
<td>16.7</td>
<td>10.4</td>
<td>60.4</td>
<td>8.3</td>
<td>3.6250</td>
<td>1.0022</td>
</tr>
<tr>
<td>Balance Sheet Structure</td>
<td>4.1</td>
<td>26.3</td>
<td>18.1</td>
<td>19.2</td>
<td>32.3</td>
<td>3.4612</td>
<td>1.2633</td>
</tr>
<tr>
<td>Deposit Insurance</td>
<td>27.1</td>
<td>37.5</td>
<td>6.3</td>
<td>14.6</td>
<td>14.6</td>
<td>3.2083</td>
<td>1.1842</td>
</tr>
<tr>
<td>Financial Stability</td>
<td>2.1</td>
<td>27.1</td>
<td>16.7</td>
<td>10.4</td>
<td>43.8</td>
<td>3.6667</td>
<td>1.3421</td>
</tr>
<tr>
<td>Reduced Vulnerability to Liquidity Shocks</td>
<td>29.2</td>
<td>43.8</td>
<td>8.3</td>
<td>10.4</td>
<td>8.3</td>
<td>3.5428</td>
<td>1.5152</td>
</tr>
</tbody>
</table>

From the study majority of the respondents indicated that financial stability affects the capital requirement of the commercial banks in Kenya to a great extent as shown by a mean score of 3.6667, credit risk management affects the capital requirement of the commercial banks in Kenya to a great extent as shown by a mean score of 3.6250 and reduced vulnerability to liquidity shock affects the capital requirement of the commercial banks in Kenya to a great extent as shown by a mean score of 3.5428 while balance sheet
structure and deposit insurance affect the capital requirement of the commercial banks in Kenya to moderate extents as shown by mean scores of 3.4612 and 3.2083 respectively.

4.3 Challenges Faced in Implementation of Capital Adequacy Requirement

The second objective of the study was to seek to investigate the challenges commercial banks are facing in the implementation of capital adequacy requirement. Accordingly, the respondents were required to indicate the extent their banks experience various challenges in the implementation of capital adequacy requirement.

Table 4.8: Challenges Faced in the Implementation of Capital Adequacy Requirement

<table>
<thead>
<tr>
<th>Challenges</th>
<th>No extent</th>
<th>Little extent</th>
<th>Moderate extent</th>
<th>Large extent</th>
<th>Very large extent</th>
<th>Mean</th>
<th>Stddev</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regulatory constraints</td>
<td>29.2</td>
<td>43.8</td>
<td>8.3</td>
<td>8.3</td>
<td>10.4</td>
<td>3.542</td>
<td>1.5152</td>
</tr>
<tr>
<td>Additional capital</td>
<td>18.8</td>
<td>10.4</td>
<td>35.4</td>
<td>35.4</td>
<td>33.3</td>
<td>3.297</td>
<td>1.6102</td>
</tr>
<tr>
<td>Risk and finance management culture</td>
<td>0</td>
<td>12.5</td>
<td>14.6</td>
<td>25</td>
<td>29.2</td>
<td>3.332</td>
<td>1.4923</td>
</tr>
<tr>
<td>Growth barrier</td>
<td>0</td>
<td>4.2</td>
<td>45.8</td>
<td>37.5</td>
<td>12.5</td>
<td>3.584</td>
<td>0.7725</td>
</tr>
</tbody>
</table>

Results in table 4.8 reveal that majority of the respondents reiterated that their banks experienced growth barrier and regulatory constraints to great extents as shown by mean scores of 3.5845 and 3.5428 respectively, while they indicated that, in the implementation of capital adequacy requirement, commercial banks experienced risk and finance management culture and additional capital challenges to moderate extents as shown by mean scores of 3.3322 and 3.2972 respectively.
4.4 Measures taken to Ensure Compliance with Capital Adequacy Requirement

The third objective of the study was to establish the measures that commercial banks have taken to ensure compliance with the capital adequacy requirement. As such the study sought to ascertain the extent to which commercial banks have taken some measures to ensure compliance with the capital adequacy requirement.

Table 4.9: Measures taken for Compliance with Capital Requirement

<table>
<thead>
<tr>
<th>Extent</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very great extent</td>
<td>12</td>
<td>33</td>
</tr>
<tr>
<td>Great extent</td>
<td>14</td>
<td>39</td>
</tr>
<tr>
<td>Moderate extent</td>
<td>9</td>
<td>23</td>
</tr>
<tr>
<td>Little extent</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>37</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

Results in Table 4.9 reveal that a majority (39%) of the respondents stated that commercial banks have taken measures to ensure compliance with the capital adequacy requirement to a great extent and 33% to a very great extent while 23% said commercial banks have taken some measures to ensure compliance with the capital adequacy requirement to a moderate extent. According to 4.5% of the respondents, commercial banks have taken some measures to ensure compliance with the capital adequacy requirement to a little extent. These results indicate that commercial banks have taken some measures to ensure compliance with the capital adequacy requirement to a great extent as shown by majority of the respondents, 72%.
The study further required the respondents to rate the extent to which the banks have taken various measures to ensure compliance with the capital adequacy requirement. A scale of 1 to 5 where 1 = no extent, 2 = little extent, 3 = moderate extent, 4 = large extent and 5 is to a very large extent was provided.

Table 4.10: Measures to Ensure Compliance with the Capital Adequacy Requirement

<table>
<thead>
<tr>
<th>Measures to ensure compliance</th>
<th>No Extent</th>
<th>Little Extent</th>
<th>Moderate Extent</th>
<th>Great Extent</th>
<th>Very Great Extent</th>
<th>Mean</th>
<th>Std. Dev</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cutting back on lending</td>
<td>2.1</td>
<td>27.1</td>
<td>16.7</td>
<td>10.4</td>
<td>43.8</td>
<td>3.6667</td>
<td>1.342</td>
</tr>
<tr>
<td>Market rights issue/bonds</td>
<td>11.9</td>
<td>7.4</td>
<td>22.6</td>
<td>21.2</td>
<td>24.3</td>
<td>3.0071</td>
<td>1.695</td>
</tr>
<tr>
<td>Increasing revenue growth/cutting costs</td>
<td>16.2</td>
<td>7.1</td>
<td>21.7</td>
<td>21.2</td>
<td>26.0</td>
<td>3.1000</td>
<td>1.634</td>
</tr>
<tr>
<td>Withholding dividend payment</td>
<td>0</td>
<td>27</td>
<td>7</td>
<td>41</td>
<td>23</td>
<td>3.5528</td>
<td>1.1843</td>
</tr>
</tbody>
</table>
Majority of the respondents recapped that their banks have practiced cutting back on lending and withholding dividend payment to great extents as shown by mean scores of 3.6667 and 3.5528 to ensure compliance with the capital adequacy requirement while their banks have been increasing revenue growth/cutting costs as well as market rights issue/bonds to a moderate extents shown by mean scores of 3.1000 and 3.0071 respectively.

4.6 Content Analysis

With regard to the open ended questions, the residents felt that Basel III raises the capital requirements for counterparty credit risk arising from repurchase agreements, derivatives and securities financing activities. As such, the capital conversion buffer enables banks to take up losses without negating the minimum capital requirement, and is able to continue in business even in a downturn without deleveraging.

Similarly, the respondents said that other challenges faced by commercial banks and financial institutions is deciding how best to implement a solution that will allow them to comply with Basel III included; how to operate the systems and processes for improved operational effectiveness and how to understand and ultimately reduce their capital requirements. The weaknesses in applying consistent, robust risk asset definitions globally have led to distortions of true capital adequacy positions. Further, the respondents felt that commercial banks should adopt policies that reduce the capital adequacy gap with a steadfast secured liquidity facility after it has done what it can to reduce its liquid asset requirement by other means.

4.7 Chapter Summary

This chapter has presented the results and findings from the study. The results have been presented in tables and figures. Descriptive analysis was used to generate frequencies and percentages as well as means and standard deviations. The chapter is composed of four sections, that is, importance of capital adequacy requirement, challenges faced in the implementation of capital adequacy requirement and measures taken to ensure compliance with the capital adequacy requirement and capital adequacy requirement and performance of commercial banks. The next chapter provides the summary of the findings, giving the discussions and conclusions as well as making credible recommendations of the study based on the objectives of the study.
CHAPTER 5

5.0 DISCUSSION, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This is the last chapter in this study which gives the summary of the findings, the discussion, conclusions, recommendations of the study with regard to the objective of the study and suggestions for further findings. It comes after identifying the background, problem at hand and the objectives in chapter one, literature review was done in chapter two, chapter three set out the methodology that the study used to collect data and chapter four analyzed the data obtained from the study. The chapter finally presents the suggestions for further studies. The study sought to establish the importance of capital adequacy requirement, to investigate the challenges commercial banks are facing in the implementation of capital adequacy requirement and to assess the measures that commercial banks have taken to ensure compliance with the capital adequacy requirement.

5.2 Summary

The first objective of the study was to assess the importance of capital adequacy regulations in commercial banks in Kenya. Capital is often considered as a cushion that helps banks absorb their losses and thus avoid failure in the long run. The study found that capital adequacy requirement is perceived to be important in commercial banks to a great extent, where financial stability, credit risk management and reduced vulnerability to liquidity shocks were found to affect the capital requirement of the commercial banks in Kenya to great extents while balance sheet structure and deposit insurance affect the capital requirement of the commercial banks in Kenya to moderate extents. Additionally, the respondents added that Basel III increases capital requirements for counterparty credit risk arising from derivatives, repurchase agreements and securities financing activities. As such, the capital conversion buffer ensures that banks absorb losses without breaching the minimum capital requirement, and are able to carry on business even in a downturn without deleveraging.

The second objective of the study was to determine the challenges faced by commercial banks facing in the implementation of capital adequacy requirement. Results revealed that
commercial banks experienced growth barrier and regulatory constraints to great extents, while in the implementation of capital adequacy requirement, commercial banks experienced risk and finance management culture and additional capital challenges to moderate extents. Further, the respondents said that other challenges for commercial banks and financial institutions is deciding how best to implement a solution that will allow them to comply with Basel III include; how to operate the systems and processes for improved operational effectiveness, and how to understand and ultimately reduce their capital requirements. The weaknesses in applying consistent, robust risk asset definitions globally have lead to distortions of true capital adequacy positions.

The third objective of the study was to establish the measures that commercial banks have taken to ensure compliance with the capital adequacy requirement. Results revealed that the banks have practiced cutting back on lending and withholding dividend payment to great extents, while the banks have been increasing revenue growth/cutting costs as well as market rights issue/bonds to a moderate extents to ensure compliance with the capital adequacy requirement. Additionally, the respondents added that commercial banks can plug the capital adequacy gap with a committed secured liquidity facility after it has done what it can to reduce its liquid asset requirement by other means, market rights issue for banks listed at the NSE, bonds issues for listed and non-listed firms, advertising, reducing interest rates on loans and mortgages, increasing interest rates on fixed deposits and introducing new products into the market, cutting costs through staff retirement packages, reduction of travelling costs and in-house training and development for staff.

These findings agree with those of BCBS (2010) a group that argued that banks may be impacted by higher costs of capital and lower returns making it difficult to attract and retain investors. As such, increasing efficiency, strategic cost reduction, and reassessing risky processes so that operating costs will be reduced and productivity will simultaneously increase. They also added that banks may consider changing group structure by buying minority and banks can mitigate the impact through cost-reduction programmes, changing internal change, adopting capital efficiency measures, de-risking and price adjustments. As a result of the foregoing measures, the average there has been a strong financial status of overall industry performance.
5.3 Discussion

5.3.1 Importance of Capital Adequacy Requirement

The study found out that capital adequacy requirement is perceived by management staff of various commercial banks in Kenya as a key component in enhancing financial stability. With regard to the extent of effect, improved credit risk management and reduced vulnerability to liquidity shocks affected the capital adequacy requirement of the commercial banks in Kenya to great extents. These findings agree with those of Mutesi (2011) who sought to investigate the relationship between risk management, information and financial performance of commercial banks. His findings revealed that there was a significant positive relationship between all the study variables information sharing, risk management, and financial performance.

Balance sheet structure and deposit insurance affect the capital requirement of the commercial banks in Kenya to moderate extents. Hence, we can come to the notable discussion point of capital adequacy being a key component in the banking industry. A sound capital structure as indicated by a bank’s balance sheet will lead to a safety net in times of financial distress in the banking and financial services industry. The capital will also create a cushion to absorb losses during systematic economic downturns due to political or natural causes. These findings agree with those of Kapan and Minoiu (2013) who examined the role of bank balance sheet strength in the transmission of financial sector shocks to the real economy. His results revealed that banks with strong balance sheets were better in maintaining lending during the crisis. Particularly, banks that were ex-ante more dependent on market funding and had lower structural liquidity reduced the supply of credit more than other banks. The findings also agree with those of Minh (2014) who sought to study Deposit Insurance of Vietnam (DIV). His results revealed that the basic information of DIV is well-perceived by three of the four bank employees interviewed.

In addition, results revealed that Basel III raises the capital requirements for counterparty credit risk accruing from securities financing activities, derivatives and repurchase agreements. As such, the capital conversion buffer ensures that banks absorb losses without breaching the minimum capital requirement, and are able to carry on business even in a downturn without deleveraging. These findings agree with those of Boyd et al. (2006) and De Nicolo and Loukoianova (2006) who found out that an inverse relationship
exists between higher market concentration and financial stability which is an implication that the risk of failures of a bank is higher in more concentrated markets. These findings also agree with those of Botoe (2012) who analysed the impact of liquid asset holdings on Commercial Banks in Liberia profitability. His results revealed that the business cycle of a commercial bank, deposit ratio and asset ratio influenced banks profitability.

5.3.2 Challenges Faced in the Implementation of Capital Adequacy Requirement

The study found out that commercial banks experienced growth barrier and regulatory constraints to great extents, while in the implementation of capital adequacy requirement, commercial banks experienced risk and finance management culture and additional capital challenges to moderate extents. Further, the respondents said that other challenges for commercial banks and financial institutions is deciding how best to implement a solution that will allow them to comply with Basel III include; how to operate the systems and processes for improved operational effectiveness, and how to understand and ultimately reduce their capital requirements. The weaknesses in applying consistent, robust risk asset definitions globally have lead to distortions of true capital adequacy positions.

These findings agree with those of (Agoraki et al, 2011) who argued that commercial banks are faced by several challenges in the implementation of capital adequacy requirement. The key challenge for Kenyan banks and financial institutions are regulatory constraints and limitations as CBK does not have enough staff and systems to adequately supervise the implementation of the new regulations.

5.3.3 Measures taken to Ensure Compliance with Capital Adequacy Requirement

The study found out that the banks have adopted various measures in a bid to comply with capital adequacy requirement. This include; cutting back on lending and withholding dividend payment to great extents, increasing revenue growth/cutting costs as well as market rights issue/bonds to a moderate extents. Additionally, the commercial banks can minimize the capital adequacy gap with a steadfast secured liquidity facility after reducing its liquid asset requirement by other means, market rights issue for banks listed at the NSE, bonds issues for listed and non-listed firms, advertising, reducing interest rates on loans and mortgages, increasing interest rates on fixed deposits and introducing new products into the market, cutting costs through staff retirement packages, reduction of travelling costs and in-house training and development for staff.
These findings agree with those of BCBS (2010) a group that argued that banks may be impacted by higher costs of capital and lower returns making it difficult to attract and retain investors. As such, increasing efficiency, strategic cost reduction, and reassessing risky processes so that operating costs will be reduced and productivity will simultaneously increase. They also added that banks may consider changing group structure by buying minority and banks can mitigate the impact through cost-reduction programmes, changing internal change, adopting capital efficiency measures, de-risking and price adjustments. As a result of the foregoing measures, the average there has been a strong financial status of overall industry performance.

5.4 Conclusions

5.4.1 Importance of Capital Adequacy Requirement

The study concludes that capital adequacy requirement is perceived to be important in commercial banks. In this regard, capital adequacy requirement is perceived to be important in commercial banks. The study thus deduces that financial stability, credit risk management, reduced vulnerability to liquidity shocks balance sheet structure and deposit insurance affect the capital requirement of the commercial banks in Kenya. In addition, the study concluded that Basel III increases capital requirements for counterparty credit risk arising from derivatives, repurchase agreements and securities financing activities. As such, the capital conversion buffer ensures that banks absorb losses without breaching the minimum capital requirement, and are able to carry on business even in a downturn without deleveraging.

5.4.2 Challenges Faced in the implementation of Capital Adequacy Requirement

The study concludes that the implementation of Basel III requirement has been faced by various challenges like growth barrier, regulatory constraints, risk and finance management culture and additional capital challenges. In addition, the study concluded that commercial banks face challenges in deciding how best to implement a solution that will allow them to comply with Basel III, how to operate the systems and processes for improved operational effectiveness, and how to understand and ultimately reduce their capital requirements.
5.4.3 Measures taken to Ensure Compliance with Capital Adequacy Requirement

The study thus concluded that the commercial banks in Kenya have taken various measures to ensure compliance with capital adequacy requirement such as cutting back on lending, market rights issue/bonds, increasing revenue growth/cutting costs and withholding dividend payment. In addition, the study also concluded that commercial banks, in a bid to reduce the challenges experienced in the implementation of capital adequacy requirement, they opt to purchase high quality liquid assets, increasing their maturity profile and increasing retail deposits.

5.5 Recommendations

5.5.1 Recommendations for Improvement

5.5.1.1 Importance of Capital Adequacy Requirement

Among the benefits of Basel II implementation, the allocation of bank capital is better matched to specific bank risks, resulting in more efficient pricing and allocation of funds. The goals of Basel III are strengthening capital regulations with the goal of promoting a more resilient banking sector; and improving the banking sector’s ability to take up shocks resulting from financial and economic stress. Accordingly, the study recommends that banks should ensure a flexible Basel III management expertise that delivers speed, accuracy, and performance to deliver competitive advantage. And those banks that implement the optimal solution will not only have an ideal platform for delivering Basel III, they will also have a solid platform for their future commercial development. A key success factor in implementing Basel II and furthering risk management was gaining buy-in and support at the highest levels of banking organizations, including not only various levels of management, but the board as well. Such an integrated program will coordinate all Basel III initiatives enterprise-wide in the banks and help ensure that major work streams in risk management solution sets and projects fully address Basel III implementation requirements.

5.5.1.2 Challenges Faced in the implementation of Capital Adequacy Requirement

The implementation of Basel II has been a key driver for the refinement and maturation of risk management frameworks in financial institutions worldwide. However, the arrival of Basel III signals an unprecedented rising of the bar for risk management practices to
support the comprehensive nature of the new requirements. The critical risk management challenges posed by the need to implement Basel III require the support and engagement of multiple competencies across the organization to address impacts on people, process and technology. The study therefore recommends that Banks should manage their risks more closely and avoid a build-up of unintended risk, reducing the opportunities for regulatory capital arbitrage. This would go a long way in eliminating growth barriers, regulatory constraints, capital adequacy requirement, risk and finance management culture and additional capital challenges.

5.5.1.3 Measures taken to Ensure Compliance with the Capital Adequacy Requirement

The study further recommends that it is vital to understand the forces behind the increasing sophistication and efficiency of risk management systems, before adopting them more widely for regulatory purposes. Accordingly, ensuring that the Basel III regulations function effectively will require substantial investment in the human capital of supervisors in the Country as well as in other developing countries. Further the commercial banks should ensure that they are well versed with the measures that include risk-management incentives, including incentives to move over-the-counter derivative contracts to central counterparties, to reduce systemic risk across the financial system from counterparty exposures. This would ensure that the commercial banks take the appropriate measures for ensuring compliance with the capital adequacy regulations through cutting back on lending, market rights issue/bonds, increasing revenue growth/cutting costs and withholding dividend payment.

5.5.2 Suggestions for Further Research

Basel III framework is founded on strengthening the banking industry through the three key principles of capital adequacy, leverage ratio and liquidity requirements. This study has only analysed the impact of capital adequacy. Therefore, further research could be done on the Impact of leverage ratios in the commercial banking industry in Kenya as Basel III requires banks to maintain a leverage ratio in excess of 3%.

Further research can also be done on the impact of liquidity requirements on the performance of commercial banks in Kenya since Basel III also introduced two essential liquidity ratios. The liquidity Coverage Ratio is guarantee that a bank holds sufficient
high-quality liquid assets to cover up for total net cash outflows for over 30 days. Similarly, the Net Stable Funding Ratio necessitate that the available amount of stable funding should be more than the requisite amount of stable funding for more than one-year of pro-longed stress.
REFERENCES


Bean, C. (2009).*The great moderation, the great panic and the great contraction*, Transcript of the Schumpeter Lecture at the Annual Congress of the European Economic Association, Barcelona, 25 August.


APPENDICES

Appendix I: Research Questionnaire

This research is in partial fulfilment of requirements for a degree in Masters of Business Administration from USIU Nairobi and I will be most grateful if you could kindly complete this questionnaire. This questionnaire consists of three parts; kindly answer all the questions by ticking in the appropriate box or filling in the spaces provided. Kindly answer the following questions by ticking in the appropriate box or filling the spaces provided. The information given here will only be used for purposes of this study and will be treated with utmost confidentiality. Your cooperation will be highly appreciated.

PART A: INSTITUTION DETAILS AND BIO DATA

1. Please indicate your gender

   Male [ ] Female [ ]

2. Department:

   Human resource [ ] Finance [ ]
   Procurement [ ] Operations [ ]
   Marketing [ ] Other (Specify.................)

3. Designation.

   Heads of department (managers) [ ] Assistant manager [ ]
   Supervisor [ ] General staff [ ]
4. Total work experience (in years) in the banking industry.

<table>
<thead>
<tr>
<th></th>
<th>0-5 yrs</th>
<th>[ ]</th>
<th>5-10 yrs</th>
<th>[ ]</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>10-15</td>
<td>[ ]</td>
<td>Over 15 yrs</td>
<td>[ ]</td>
</tr>
</tbody>
</table>

5. Highest formal qualification.

<table>
<thead>
<tr>
<th>Qualification</th>
<th>[ ]</th>
<th>Undergraduate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Certificate/ Diploma</td>
<td>[ ]</td>
<td></td>
</tr>
<tr>
<td>Post graduate level</td>
<td>[ ]</td>
<td></td>
</tr>
</tbody>
</table>

**PART B: IMPORTANCE OF CAPITAL ADEQUACY REQUIREMENT**

6. To what extent do you think capital adequacy requirement is importance in commercial banks in Kenya?

<table>
<thead>
<tr>
<th>To a very great extent</th>
<th>To a great extent</th>
<th>To a moderate extent</th>
<th>To a little extent</th>
<th>To no extent</th>
</tr>
</thead>
</table>

7. To what extent do the following aspects of Basel III regulations affect the capital requirement of the commercial banks in Kenya? Rate on a scale of 1 to 5 where 1= no extent, 2= little extent, 3= moderate extent, 4= large extent and 5 is to a very large extent.

<table>
<thead>
<tr>
<th>Aspects of Basel III regulations</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Credit Risk Management</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Balance Sheet Structure</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Deposit Insurance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financial Stability</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reduced Vulnerability to Liquidity Shocks</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
PART C: CHALLENGES FACED IN CAPITAL ADEQUACY REQUIREMENT

8. To what extent do you experience the following challenges in the implementation of capital adequacy requirement? Use a scale of 1 to 5 where 1= no extent, 2= little extent, 3= moderate extent, 4= large extent and 5 is to a very large extent.

<table>
<thead>
<tr>
<th>Challenges</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regulatory Constraints</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Additional Capital</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Risk and Finance Management Culture</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Growth Barrier</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Others</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(specify.....................................)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

PART D: MEASURES FOR COMPLIANCE WITH CAPITAL ADEQUACY REQUIREMENT

9. To what extent has this bank taken some measures to ensure compliance with the capital adequacy requirement?
10. Rate the extent to which this bank has taken the following measures to ensure compliance with the capital adequacy requirement? Use a scale of 1 to 5 where 1 = no extent, 2 = little extent, 3 = moderate extent, 4 = large extent and 5 is to a very large extent.

<table>
<thead>
<tr>
<th>Measures to ensure compliance</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cutting back on Lending</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Market Rights Issue/Bonds</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Increasing Revenue Growth/Cutting</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Costs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Withholding Dividend Payment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Others specify……………………….</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

11. In general what other information would you like to share about effects of Basel III framework on capital adequacy requirement in commercial banks in Kenya?


12. What do you think should be done to enhance Basel III implementation for enhancing capital adequacy requirement in commercial banks in Kenya?


THANK YOU!!!
Appendix II: List of Commercial Banks

1. African Banking Corporation Ltd
2. Bank of Africa (K) Ltd
3. Bank of Baroda (K) Ltd
4. Bank of India
5. Barclays Bank of Kenya Ltd
6. CFC Stanbic Bank (K) Ltd
7. Chartered House Bank Ltd
8. Chase Bank Ltd
9. Citibank N.A Kenya
10. Commercial Bank of Africa Ltd
11. Consolidated Bank of Kenya Ltd
12. Co-operative Bank of Kenya Ltd
13. Credit Bank Ltd
15. Diamond Trust Bank (K) Ltd
16. Dubai Bank Ltd
17. Ecobank Kenya Ltd
18. Equatorial Commercial Bank Ltd
19. Equity Bank Ltd
20. Family Bank Ltd
21. Fidelity Commercial Bank Ltd
22. First Community Bank Ltd
23. Giro Commercial Bank Ltd
24. Guaranty Trust Bank Ltd
25. Guardian Bank Ltd
26. Gulf African Bank Ltd
27. Habib Bank A.G. Zurich
28. Habib Bank Ltd
29. I&M Bank Ltd
30. Imperial Bank Ltd
31. Jamii Bora Bank Ltd
32. K - Rep Bank Ltd
33. Kenya Commercial Bank Ltd
34. Middle East Bank (K) Ltd
35. National Bank of Kenya Ltd
36. NIC Bank Ltd
37. Oriental Commercial Bank Ltd
38. Paramount Universal Bank Ltd
39. Prime Bank Ltd
40. Standard Chartered Bank (K) Ltd
41. Trans - National Bank Ltd
42. UBA Kenya Ltd
43. Victoria Commercial Bank Ltd