THE EFFECT OF CENTRAL BANK OF KENYA PRUDENTIAL GUIDELINES AND REGULATIONS ON THE FINANCIAL PERFORMANCE OF COMMERCIAL BANKS IN KENYA

BY

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OCTOBER 2014
DECLARATION

This Research and Analysis project is my ORIGINAL work and has not been presented for a degree in any other university.

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This Research and Analysis project has been submitted for examination with my approval as the Supervisor.

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ABSTRACT

The study sought to evaluate the effect of CBK prudential guidelines and regulations on the financial performance of commercial banks in Kenya. After secondary data gathered from Bank supervision reports of CBK and published financial statements of commercial banks. The collected data was edited and cleaned for completeness in preparation for coding. Once coded, the data was entered into the Statistical Package for Social Sciences (SPSS) version 17 for analysis. Descriptive statistics such as mean and standard deviation were used to analyse the data. Regression analysis was used to test the relationship between the variables under study in relation to the objectives of the study. The study recommended that there is a strong and positive relationship (r=0.628) between financial performance of banks and the CBK prudential guidelines and regulations. CBK prudential guidelines accounts for 29.9% of the financial performance of commercial banks in Kenya. The study also concludes that growth in Gross Domestic Product of the country, high levels of Capital Adequacy, high Management Oversight Efficiency level and high Liquidity levels of the bank as well as low inflation rates found have a positive effect on the banks financial performance. The study also concludes that the Kenyan commercial banks have a very low asset quality which makes it to have a negative effect on the financial performance of the banks. The study further concluded that this study supports existing literature. The study also found out that the management efficiency levels of the commercial banks are below average. This study recommended that the management of banks should start deploying their resources more efficiently, start maximizing their income more and also reduce further their operating costs so as to raise their management efficiency levels. Management efficiency determines the level of operating expenses and in turn affects profitability of the bank.
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<tr>
<td>BSD</td>
<td>Bank Supervision Department</td>
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<tr>
<td>CBK</td>
<td>Central Bank of Kenya</td>
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<tr>
<td>ICT</td>
<td>Information and Communication Technology</td>
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<td>KSMS</td>
<td>Kenya School of Monetary Studies</td>
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<td>Management Information Systems</td>
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CHAPTER ONE: INTRODUCTION

1.1 Background Study

Regulation refers to the set of laws and rules applicable to banking, whereas supervision is defined as the monitoring by authorities of banks’ activities and the enforcement of banking regulations (Barth et al., 2003). Regulations and Guidelines issued by the Central Bank of Kenya subject banks to certain requirements, restrictions and guidelines. This regulatory structure creates transparency between institutions in the banking sector as well as the individuals and corporations with whom they conduct business with.

Interesting to note is that despite the fact that regulations for banks are being rewritten in response to the global financial crisis, their implementation requires complex steps depending on each country’s policies and procedures they could have very different effects on bank performance depending on institutional environment where banks operate.

1.1.1 Central Bank of Kenya Prudential Guidelines and Regulations

The current and past regulations and guidelines issued by the Central Bank of Kenya are: Guideline on Non-Operating Holding Companies; Guideline on Incidental Business Activities, 2013; Risk Management Guidelines, 2013; Prudential Guidelines, 2013.

According to CBK (2013d), the guideline on Non-Operating Holding Companies enables non-operating holding companies to obtain control of an institution as part of an initiative to strengthen capital requirements at the consolidated level, reduce complexity of structures to enable efficient resolution of financial institutions and to contain risks within the groups.
The Risk Management guideline has identified the following categories of risks as critical risks in financial institutions: Strategic Risk, Credit Risk, Liquidity Risk, Market Risk, Operational Risk, Information and Communication Technology Risk, Reputational Risk, Compliance Risk, Country and Transfer Risk. CBK (2013f) identified the following elements as critical for a sound risk management system. They include: Active Board and Senior Management Oversight, Adequate policies Procedures and Limits, Adequate Risk Monitoring and Management Information Systems and Adequate Internal Controls.

The purpose of Incidental Business Activities guideline is to prescribe the business activities a Bank may undertake in addition to its core banking and financial business. Formulation of this guideline was informed by the desire to expand financial access by allowing the sharing of infrastructure by financial sector players to offer a variety of financial services and products (CBK, 2013c).

Prudential guidelines are issued by CBK to reduce the level of risk to which bank creditors are exposed whereas Bank supervision entails not only enforcement of rule and regulation, but also judgment concerning the soundness of bank asset, its capital adequacy and management. It’s therefore imperative that an effective supervision is expected to lead to a healthy banking industry that possesses the power to propel the economic growth (Soludo, 2007). The reform programme is also expected to engender a diversified, strong and reliable banking sector in the country. Studies have shown that the objectives of financial sector reforms are broadly the same in most countries of Sub-Saharan Africa (Balogun, 2007).
1.1.2 Financial Performance of Commercial Banks in Kenya

A more organized study of bank performance started in the late 1980’s (Olweny and Shihpo, 2011) with the application of Market Power and Efficiency Structure theories (Athanasoglou et al., 2005.) The Market Power theory states that increased external market forces would result in profit. On the other hand, the Efficiency Structure theory suggests that enhanced managerial and scale efficiency leads to higher concentration and then to higher profitability.

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

ROA represents the bank’s ability to make profits from its assets. ROE represents the return to shareholders on their investment capital equity. ROE is also a measure of financial leverage. It is computed by getting the ROA which is in turn multiplied by the ratio of total asset to equity. Net interest income is the differential of interest earnings from assets and deposits. High net interest income is an indication of existing structural rigidities.
The overall financial performance of banks in Kenya in the last two decade has been improving. However, this doesn't imply that all banks are profitable, there are banks declaring losses (Oloo, 2010). On average the performance of commercial banks in the country has been increasing. Compared to the financial performances of banks in developing countries, the overall financial performance of commercial banks in the country is good (Flamini et al., 2009.) This shows that investments in commercial banking in Kenya are profitable and it is an avenue to attract foreign direct investment (FDI) in the sector.

1.1.3 Central Bank of Kenya Prudential Guidelines and Regulations and Financial Performance of Commercial Banks

It's actually true that the Banking sector is so sensitive and sacrosanct to the economy in term of stability and growth that must not be let loose by the Government. Regulations and supervisions have therefore become imperative not only in the enforcement of rule and regulation, but also judgment concerning the soundness of bank asset, its capital adequacy and management. This regulatory structure creates transparency between banking institutions and the individuals and corporations with whom they conduct business with.

The goal of regulatory reforms and guidelines is to help banks and other financial institutions become stronger players and in a manner that will ensure longevity and hence higher returns to the shareholders over time as well as greater impacts on the Kenyan economy as observed by Ndungu (2010). Many literatures indicates that banking sector reforms are propelled by the need to deepen the financial sector and
reposition for growth to become integrated into the global financial architecture; and involve a banking sector that is consulting with regional integration requirements and international best practices (Gale, 2010).

The globalization of trade and services has increased banks’ efforts to service customers internationally. This has resulted in a greater number of international banks, which in many cases conduct more business abroad than in their home country. The rapid development of new technology that facilitates the more cost effective ability to collect and process vast amounts of information, and to a greater extent communicate anywhere at any time, has also contributed to the changing role of banks with respect to managing their own risks to distributing their products and services and at the same time helping customers manage both their wealth and various types of risk.

As part of the Central Bank of Kenya’s consolidated supervision drive, CBK developed a framework for supervisory colleges in 2012. Supervisory colleges refer to multilateral working groups of supervisors that are formed for the collective purpose of enhancing effective consolidated supervision of banking groups on an ongoing basis through continuous collaboration and information sharing. CBK formed the initial supervisory college for Kenya Commercial Bank (KCB) Group in 2012 as pioneer supervisory colleges in the region and subsequently formed two additional supervisory colleges for Equity Bank and Diamond Trust Bank in 2013 (CBK, 2013b).

The three supervisory colleges that have already been set up have proved useful to the regional banking sector regulators. The colleges have served as avenues to share supervisory experiences among the regulators. The colleges have also served as an
avenue for the regulators to harmonise their supervisory practices by embracing global best practices promulgated by international standard setting bodies such as the Basel Committee for Banking Supervision and the Financial Stability Board. The regulators have also strengthened their resolve to continuously share information on the cross-border operations of banking groups as an avenue towards a stable and efficient regional banking sector (CBK, 2013b).

The emerging consensus in the academic literature is that financial development is possible as long as certain conditions are present to ensure that financial intermediaries serve the financial needs of the citizens and the private sector. These conditions include an adequate and operational regulatory structure, a well-defined supervisory authority, legal systems that reinforce property and creditor rights, restrained control of government over the financial system and macroeconomic stability.

1.1.4 Commercial Banks in Kenya

The banking sector in any economy serves as a catalyst for growth and development. Banks are able to perform this role through their crucial functions of financial intermediation, provision of an efficient payments system and at the same time facilitating the implementation of monetary policies. It is not surprising therefore, that governments the world over attempt to evolve an efficient banking system, not only for the promotion of efficient intermediation, but also for the protection of depositors, encouragement of efficient competition, maintenance of public confidence in the system, stability of the system and protection against systemic risk and collapse as put by Iyade (2006).
The banking industry in Kenya has been earmarked as a key pillar to the achievement of vision 2030 (a long-term strategy to achieve sustainable growth by year 2030) through increased savings, encouragement of Foreign Direct Investment (FDI), safeguarding the economy from external shocks as well as propelling Kenya to become a leading financial centre in Eastern and Southern Africa. Within the Medium Term Plan (2008-2012) under vision 2030, some of the target areas included development of a safe and reliable payments system that will ensure smooth transfer and settlement of funds between customers and banks as well as between banks. Towards this end, the use of mobile phone networks, internet, payment cards, operational resilience and security was pursued in order to increase trust, integrity and confidence in the ICT based payment systems (Government of Kenya, 2008).

In comparison with other East African economies, Kenya's banking sector has for many years been credited for its size and diversification. Private credit to GDP, a standard indicator of financial development, was 23.7% in 2008, compared to a median of 12.3% for Sub-Saharan Africa. Based on the same indicator, Kenya is ahead of Tanzania which has 12.3% and Uganda with 7.2% (Beck, Demirguc-Kunt and Levine, 2009).

1.2 The Research Problem

Regulation no doubt is needed to bring sanity into the banking sectors as well as putting it in an internationally competitive status. Studies have shown that Regulatory authorities in Kenya especially the Central Bank of Kenya possess the agenda for macroeconomic coordination, vigorous pursuit of the developmental roles, improvement of the payments system, financial sector diversification and regulatory
reforms. However, some scholars like Coen & Heritier, (2005) and Thatcher, (2005) argued that the regulatory complexities with the business environmental regulations appear to create difficulties for potential entrants.

The CBK has earned a good reputation for banking supervision and regulation. In particular, its risk-based approach to mobile banking has become a model, since the CBK did not rush to regulate telecom providers developing banking services before the model had been tested (Alliance for Financial Inclusion 2010). The Kenyan case more generally suggests that there are huge benefits to be gained by economies whose central banks strike a balance between safeguarding financial stability and actively promoting the development of a financial system that serves the real economy.

The existing empirical evidence is inconclusive about the impact of regulatory and supervisory policies on bank performance. Demirguc-Kunt and Detragiache, 2002; Beck et al., 2006; Chortareas et al., 2012, found that banking supervisory reforms were positively associated to the performance and the stability of banks. Alternatively, powerful supervisors may exert a negative influence on bank performance. Powerful supervisors may use their powers to benefit favoured constituents, attract campaign donations, and extract bribes (Levine, 2011). However, according to Barth et al. (2001), there is mixed evidence regarding the impact of regulatory restrictions on bank performance.
Barth et al. (1999) questioned whether countries with more restrictive regulatory systems have a lower probability of suffering a banking crisis. They Barth et al (1999) found that restricting bank activities tends to increase the likelihood of suffering a major crisis. Particularly, in countries in which securities activities are restricted, the likelihood of a banking crisis is greater. This finding is quite opposite to those, which claim that stricter restrictions on the allowable activities of banks constraints excessive risk taking behaviour.

Kamau and Were (2013) sought to understand what drives bank performance in Kenya by analyzing the structural performance relationship existing in the banking sector using SCP literature. The results of the regressions analysis had provided statistically significant evidence that the main source of superior performance in the Kenyan banking sector is as a result of structure/collusive power and not efficiency. However in their conclusion, they called for further study to be carried with regard to inclusion of impact of regulatory measures such competitive laws or anticompetitive laws into their equations to check how it influence profitability in the banking sector in Kenya.

Aduda et al., (2013) studied the Relationship between Agency Banking and Financial Performance of Commercial Banks in Kenya. This study did not touch on the role of the government or regulatory framework in supporting the adoption of agency banking and the impact of agency banking to the financial sector deepening or financial inclusion. This study did not answer the question whether CBK regulation will stifle agency banking or otherwise.
Studies have shown that bank specific and macroeconomic factors affect the performance of commercial banks (Flamini et al. 2009). Study by Olweny and Shipho (2011) in Kenya focused on sector-specific factors that affect the performance of commercial banks. Yet, the effect of macroeconomic variables was not included. Moreover, there is need to carry out research on the effect of CBK prudential guidelines and regulations on the financial performance of commercial banks in Kenya. Thus, this study was conducted with the intention of filling these gaps.

CBK regulations and guidelines mitigate the effects of economic crises on the stability of the banking system and subsequent accompanying macroeconomic results. On the other hand, excessive regulations may increase the cost of intermediation and reduce the profitability of the banking industry. Simultaneously, as banks become more constrained, their ability to expand credit and contribute to economic growth would be hampered during normal times. While most analysts would argue for the need to enforce regulations, the question remains: What is the right benchmark to enforce regulations without really jeopardizing the ability of banks to service the economy. To properly address this question, and also looking at the conflicting findings, it has become necessary to thoroughly analyze the effect of CBK prudential guidelines and regulations on the financial performance of commercial banks thus the need to carry out the research to critically evaluate the effect of CBK prudential guidelines and regulations on the financial performance of commercial banks in Kenya. It’s in this respect that this study was carried out.
This study will also attempt to answer the research question: How have CBK regulations and prudential guidelines affected the pricing of banks products and services offered to their customers and what is the right benchmark to enforce these regulations and guidelines?

1.3 Objectives of the study

1.3.1 The main objective of this study was to evaluate the effect of CBK prudential guidelines and regulations on the financial performance of commercial banks in Kenya.

1.3.2 The specific objectives of the study was to:

1.3.2.1 Test the effectiveness of CBK regulation and prudential guidelines on the pricing of banks products and services offered to their customers.

1.3.2.2 Establish the right benchmark to enforce these regulations and guidelines.

1.4 Value of the Study

This research study would especially be of great importance to Central Bank of Kenya as it will provides a platform for CBK to appreciate the impact of their activities on the banking industry, and underscores areas for improvement. It is also imperative to state that a study of this nature provides an independent platform via which CBK can appraise fundamental tools of supervision in a bid to make reasonable adjustments where necessary.

This research is also of great significant to the Bank’s Chief Executives, Bank Managers and Risk managers. They would use the information gathered through this research to be able to know how these regulations and guidelines have influenced their operations and
even look at areas which require remedial actions to be taken and there by eventually improve on their financial performance.

Central Banks in Africa will learn from this Kenyan study and thus evaluate these regulations and guidelines that they can replicate in their country in order to improve on their performance. The study findings will inform them on which regulations and guidelines have better link to financial performance and hence save on the costs of conducting cost benefit research in their institutions.

The findings of this study was of immense benefit not only to the Kenyan banking industry and its related institutions, but also to those interested in understanding the inter-relationship between the actions of the CBK on one hand and the banking institutions on the other as well as providing a platform for promoting an efficient and effective banking practice.

Finally the study was of academic interest and it would also definitely help researchers and academicians who may have an interest in this area to conduct further studies.
CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

It has become evident that one of the very completing requirements for the success of any business in any economy is the existence of favourable regulatory environment. For the industry to be efficient, it must be regulated and supervised in view of the failure of the market system to recognize social rationality and the tendency for market participants to take undue risks which could impair the stability and solvency of their institutions (Alao, 2010). The recent development in the Kenyan financial institutions has become subject of concern for Accountants and other practitioners as far as performance measurement and predictions for investment decisions are concerned.

2.2 Theoretical Literature Review

A theory is a reasoned statement or group of statements, which are supported by evidence meant to explain some phenomena. According to Trochim (2006), a theoretical framework guides research, determining what variables to measure, and what statistical relationships to look for in the context of the problems under study. Thus, the theoretical literature helps the researcher see clearly the variables of the study, provides a general framework for data analysis and helps in the selection of applicable research design.
It has been said that there is no theoretically optimal system or standard blueprint of what constitutes the best structure of banking system regulation and supervision (Bank for International Settlement, 2000). Factors like differences in political structures, general complexity and state of development of the financial systems; the nature and extent of public disclosure of banks’ financial positions; level of market discipline; the availability and robustness of information technology; and the capacities of the regulator dictates regulatory and supervisory approaches world-wide.

Theories of regulation try to explain why regulation is adopted. In legal and economic literature, there is no fixed definition of the term ‘regulation’. Some researchers consider and evaluate various definitions and attempt through systematization to make the term amenable to further analysis (Baldwin and Cave, 1999).

One of the most fruitful definitions of regulation was phrased by Barry Mitnick: ‘Regulation is the public administrative policing of a private activity with respect to a rule prescribed in the public interest (Mitnick, 1980).

2.2.1 Public Interest Theories of Regulation

This theory proposes that regulation should be introduced to protect the public. This theory assumes that the regulatory body is a neutral arbiter of the ‘public interest’ and in most cases does not let its own self-interest impact on its rule-making processes. This public interest can further be described as the best possible allocation of scarce resources for individual and collective goods.
In theory, it can even be demonstrated that, under certain circumstances, the allocation of resources by means of the market mechanism is optimal (Arrow, 1985). Because these conditions are frequently not adhered to in practice, the allocation of resources is not optimal and a demand for methods for improving the allocation arises (Bator, 1958). According to public interest theory, government regulation is the instrument for overcoming the disadvantages of imperfect competition, unbalanced market operation, missing markets and undesirable market results. This theory is presumed to serve the interests of the public by correcting the inefficiencies of market failures. The normative public interest theory of regulation justifies state intervention as a means to protect the public interest against the undesirable consequences of markets operating unimpeded.

The public interest view of regulation is clearly predominant among economists. It’s always connected to the welfare economics (Hantke-Domas, 2003) and it holds that regulations provide corrective measures against various market failures, including natural monopolies and increasing returns of scale, under-provision of collective goods, and externalities. Governmental regulations are expected to increase social welfare in that perspective. Regulatory authorities are assumed to promote public interest efficiently and to maximize social welfare. They are concerned with efficiency only whereas redistributive issues are left outside the scope of regulation, as an exclusive matter for regulators. It’s also assumed that regulators are perfectly informed and rational and their decisions are affected neither by informational or computational limitations.
Challenging the public interest theory of regulation in the banking industry partakes of a larger movement that helps deregulation to become a respectable idea (Joskow and Noll, 1981; Hagg, 1997). Several factors can be identified.

On the one hand, the critique of governmental regulation takes place within a larger controversy over the role of the state in the economy, as a response to the peculiar political and macroeconomic conditions of the late 1960s and 1970s (Backhouse, 2005). The promotion of new ideas and intellectual values favourable to free markets and the changes of the attitude of scholars toward governmental intervention in university economic departments, law schools, and think tanks frame an intellectual environment encouraging a critical approach to regulation. Thus, the Chicago school of economics strongly contributes to establishing a persuasive intellectual foundation for deregulation, including the works of Coase (1960) and Demsetz (1973). Accordingly, a growing number of economists start to devote attention to the issue (Joskow & Rose, 1989), as the importance of regulation in most sectors of the US economy made it “impossible to study any important industrial market in the U.S. economy without taking account of the effects of the many restrictions on the behaviour of economic agents that have been established and are administered by one or more regulatory agencies” (Joskow and Noll, 1981).

2.2.2 Capture Theory of Regulation

Capture theory rests on the claim that particularistic interests see governmental regulation as a protective shield and that on the whole, the state meets their demands. However, it does not stop here; it has also developed a set of propositions that questions the neutrality
of regulatory administration. Capture theory regulatory administration operates as the willing extension for rent-seeking business. Central here is that, self-interested bureaucrats have strong rewards in view not only by giving into pressure groups, but also by expanding regulation.

A corollary is the rejection of any idea of regulation in the service of the public interest. Even regulation devised to correct negative externalities like environmental protection, drug and food safety regulation and consumer protection in this view is easily thwarted to serve particularistic interests (Stigler 1971; Posner 1974; Peltzman 1976). Any idea of ‘good regulation’ is futile, or to quote William Niskanen: ‘Good regulation is no regulation.’ So, if regulators are not held up by private interests, self-serving bureaucrats are captured by them.

Firms capture the regulatory process because each firm has a lot at stake. While the public as a whole has a lot at stake, any one person has only a very small stake and so has little incentive to invest resources in affecting the regulatory process. There are few firms relative to the overall public decreasing costs of organizing. Firms have the incentive and the opportunity to successfully invest resources in lobbying for favourable regulation.

Evidence supporting the capture theory of regulation: revolving door deals - high-level regulators and other officials leave government and find high-level jobs in the same industry that they had been responsible for regulating.

The capture theory is unsatisfactory in a number of respects (Posner, 1974). Firstly, there is insufficient distinction from the public interest theory, because the capture theory also assumes that the public interest underlies the start of regulation. Secondly, it is not clear
why an industry succeeds in subjecting an agency to its interests but cannot prevent its coming into existence. Thirdly, regulation often appears to serve the interests of groups of consumers rather than the interests of the industry.

2.2.3 Public Choice Theory

Public choice theory basic assumption is that representatives of institutions aimed at collective choice, rather than pursuing the public interest thus act to pursue their own private concerns. The interests of those regulated are promoted by interventionist measures and by an inflated public sector, while bureaucrats at the same time generate pressure for systems through which they can maximise their bureaucratic power and prestige. As a result, they are likely to deliver a larger amount of regulation than is justified on public interest grounds. (Ogus, 1994: 58-73)

Public choice theory reconciles political and economic questions. It relies on the neo-classical economic assumption of rational choice (self interest) to predict the behaviour of the regulators. Regulators only enact those policies that ensure their re-election which will direct them to those with the resources to further this aim. Public choice models start from the premise that regulators have an incentive to be re-elected and maintain power and control. Decisions made by a regulator can be evaluated in terms of the objective of attracting the necessary support for successful re-election.

Public choice theorists who argue that individuals are essentially self-interested in or out of the public arena and are thus therefore necessary to analyse the regulatory process as the product of relationships between different groups (Buchanan, 1972).
2.3 Determinants of Financial Performance of Commercial Banks

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

There are several indicators or performance ratios that can be used to indicate the status of a banking sector at a glance. The ratios include capital adequacy measured by the minimum core capital required, bank earnings measured by return on assets, return on equity or net interest income, asset quality measured by net non-performing loans/gross loans, liquidity measured by net liquid assets/net deposit liabilities. In this study, the bank performance is proxied by the profitability measures, which include returns on assets or return on equity or the net interest margins. The level of a bank’s profitability may be as a result of operational efficiency or advantages of large scale production (size) or already existing market structure.

Capital is one of the bank specific factors that influence the level of bank profitability. Capital is the amount of own fund available to support the bank’s business and act as a buffer in case of adverse situation (Athanasoglou et al. 2005). Banks capital creates liquidity for the bank due to the fact that deposits are most fragile and prone to bank runs. Greater bank capital reduces the chance of distress (Diamond, 2000). According to Dang (2011), the adequacy of capital is judged on the basis of capital adequacy
ratio (CAR). Capital adequacy ratio shows the internal strength of the bank to withstand losses during crisis. Capital adequacy ratio is directly proportional to the resilience of the bank to crisis situations. It has also a direct effect on the profitability of banks by determining its expansion to risky but profitable ventures or areas (Sangmi and Nazir, 2010).

The bank's asset is another bank specific variable that affects the profitability of a bank. The bank asset includes among others current asset, credit portfolio, fixed asset, and other investments. In most cases, a growing asset (size) is related to the age of the bank (Athanasoglou et al., 2005). More often than not the loan of a bank is the major asset that generates the major share of the banks income. The quality of loan portfolio determines the profitability of banks. The loan portfolio quality has a direct bearing on bank profitability. The highest risk facing a bank is the losses derived from delinquent loans (Dang, 2011). Therefore, nonperforming loan ratios are the best proxies for asset quality. It is the major concern of all commercial banks to keep the amount of nonperforming loans to low level. This is so because high nonperforming loan affects the profitability of the bank. The lower the ratio the better the bank performing (Sangmi and Nazir, 2010).

Management Efficiency is also one of the key internal factors that determine the bank profitability. It is represented by different financial ratios like total asset growth, loan growth rate and earnings growth rate. Management quality in this regard, determines the level of operating expenses and in turn affects profitability (Athanasoglou et al. 2005). The capability of the management is to deploy its resources efficiently, income maximization and also reducing operating costs. One of the ratios used to measure
management quality is operating profit to income ratio (Rahman et al. in Ilhomovich, 2009; Sangmi and Nazir, 2010).

Liquidity is also another factor that determines the level of bank performance. Liquidity refers to the ability of the bank to fulfil its obligations, mainly of depositors. According to Dang (2011), adequate level of liquidity is positively related with bank profitability. The most common financial ratios that reflect the liquidity position of a bank according to the above author are customer deposit to total asset and total loan to customer deposits. Other scholars use different financial ratio to measure liquidity. Ilhomovich (2009) used cash to deposit ratio to measure the liquidity level of banks in Malaysia. However, the study conducted in China and Malaysia found that liquidity level of banks has no relationship with the performances of banks (Said and Tumin, 2011).

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

Thatcher (2002) submitted that regulations can either promote or stifle business performance. Empirical evidence from Coen and Thatcher (2005) also suggests that environmental regulations deter entry into industries where the requirements for regulatory compliance activities are high.

Oluyemi (2006) studied the effect of banking sector reforms on corporate governance and concluded that to check abuses in the emerging consolidated banking system, Institutionalization of good corporate governance practice is both necessary and desirable. Akintoye and Somoye (2008) argued in favour of few banks with adequate capital suggesting further soiling up of banks capital base.

Pasiouras et al. (2009) assessed the impact of regulatory conditions on profit and cost efficiency of banks using similar data. The authors found that regulations that improve supervisory power and market discipline tend to have positive impact on both of the measures. In turn, capital requirements tend to improve only cost efficiency while reducing profit efficiency. In addition, the results show that restricting banks’ activities may improve their profit efficiencies and worsen their cost efficiencies.

Fernández, Jorge and Saurina, (2000) in their study stated that the growth of banks credit and its prudential implications is an ever-present item on the agenda of banking supervisors, since most banking crises have had as a direct cause on the inadequate management of credit risk by institutions. They further assert that even though bank supervisors are well aware of this problem, it is however very difficult to persuade bank managers to follow more prudent credit policies during an economic upturn,
especially in a highly competitive environment. They claim that even conservative managers might find market pressure for higher profits very difficult to overcome.

The study on the relationship between ownership and performance is one of the key issues in corporate governance which has been the subject of ongoing debate in the corporate finance literature. Ongore (2011) argues that the risk-taking behaviour and investment orientation of shareholders have great influence on the decisions of managers in the day-to-day affairs of firms. There are however scholars who claimed that foreign firms perform better with high profit margins and low costs compared to domestic owned banks (Farazi et al., 2011). They claim that this is so because foreign owned firms are believed to have tested management expertise in other countries over years and that’s why foreign banks often customize and apply their operation systems found effective at their home countries (Ongore, 2011). It is also assumed that banks crossing boundaries are often those big and successful ones. However, there are scholars who argue that domestic banks perform better than foreign banks. Cadet (2008) stated that ”... foreign banks are not always more efficient than domestic banks in developing countries, and even in a country with low income level.

According to Tushman and Nadler (2006), strategic management in the banking sector demand that the institutions should have effective systems in place to offset unpredictable events that can maintain their operations and reduce the risks implicated through innovations. According to Davila, Epstein and Shelton (2006) innovation is a necessary ingredient for sustained success and is an integral part of the banking business.
In general, it can be concluded from this empirical study that bank specific factors (factors under the control of managers) are the most significant determinants of the financial performance of commercial banks in Kenya. This evidence supports and is in line with the efficiency structure theory which states that enhanced managerial efficiency leads to higher performance (Okoth, 2013).

2.5 Summary of Literature Review

Evidences from the literature reveal that the banking business is highly regulated all over the world. This according to Iyade (2006) is because of the pivotal position the financial industry occupies in most economies. An efficient banking system is a sine qua non for efficient functioning of a nation’s economy. Thus, for the industry to be efficient, it must be regulated and supervised in view of the failure of the market system to recognize social rationality and the tendency for market participants to take undue risks which could impair the stability and solvency of their institutions (Alao, 2010).

It is obvious that a sound and profitable banking sector is able to withstand negative shocks and contribute to the stability of the financial system (Athanasoglou et al., 2005.) Moreover, commercial banks play a significant role in the economic growth of countries. Through their intermediation function, banks play a vital role in the efficient allocation of resources of countries by mobilizing resources for productive activities. They transfer funds from those who don't have productive use of it to those with productive venture. In addition to resource allocation, good bank performance rewards the shareholders with sufficient return for their investment.
CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

The research methodology to be used enabled the achievement of the purpose and objectives of the study. The methodology offered the researcher a profile and described the relevant aspects of the phenomena of interest from an individual, organizational, industry oriented or other perspective.

3.2 The Research Design

The study concentrated on the effect of CBK regulations following the CBK continued effort to strengthen its supervisory framework within the banking sector. Correlation research study was employed. This kind of design permits a researcher to analyze inter-relationship among a large number of variables in a single study and also allows a researcher to analyze how several variables either in isolation or in combination might affect a particular phenomenon being studied.

3.3 Population

As at the end of 31st December 2013, the banking sector comprised of 44 banking institutions, 43 of which are commercial banks and 1 mortgage finance companies. Out of the 44 banking institutions, 30 are locally owned and 14 are foreign owned. The locally owned financial institutions comprise 3 banks with significant government shareholding, 26 privately owned commercial banks and 1 mortgage finance companies (MFCs). The foreign owned financial institutions comprise 8 locally incorporated foreign banks and 6 branches of foreign incorporated banks (CBK, 2013f).
3.4 Sample

The sampling approach is a process of selecting a portion of the population to represent the entire population. The entire population of Commercial banks in Kenya was considered under the study, the unit of analysis was the licensed domestic and foreign commercial banks operating in Kenya. Due to the few number of commercial bank in Kenya, all the 43 commercial banks was the subject of study.

3.5 Data Collection

The study used secondary data gathered through Bank supervision reports, Published financial statements of commercial banks collected from the sample of commercial banks operating in Kenya in year 2009 to 2013. The study used panel data due to the advantage that it helps to study the behaviours of each bank over time and across space. To validate certain queries, interview to some of the Bank supervision department staff of Central Bank of Kenya was conducted.

3.6 Data Analysis

The data was analysed using Microsoft Excel and econometric view software. A multiple linear regression model and t-statistic was used to determine the relative importance (sensitivity) of each explanatory variable in affecting the performance of banks.

The major dependent performance indicator to be used was ROE. The major independent variables were Capital adequacy, Liquidity status, Management oversight, and Asset quality which were proxied by selected ratios. The CAMEL ratios are the popular bank specific factors often used in representing bank specific factors in relation to
performance. The CBK also uses CAMEL ratios to evaluate the performances of commercial banks (Olweny and Shipho, 2011). The macroeconomic variable to be used as independent variables was GDP growth rate and average annual Inflation Rate. The significance of each independent variable was tested. Fischer distribution test called F-test was used to test the significance of the overall model at a 95% confidence level.

In this study the following baseline model was used:

\[ P = \beta + \beta_1 CA_{it} + \beta_2 LS_{it} + \beta_3 MO_{it} + \beta_4 AQ_{it} + \beta_5 GDP_{it} + \beta_6 INF_{it} + \varepsilon_{it} \quad \cdots (1) \]

Where

\( P \) = Performance of a Bank \( i \) at time \( t \) as expressed by ROA.

\( \beta \) = Intercept

\( CA \) = Capital Adequacy of bank \( i \) at time \( t \)

\( LS \) = Liquidity Ratio of bank \( i \) at time \( t \)

\( MO \) = Management Oversight Efficiency of Bank \( i \) at time \( t \)

\( AQ \) = Asset Quality employed by Bank \( i \) at time \( t \)

\( GDP \) = Gross Domestic Product at time \( t \)

\( INF \) = Average Annual Inflation rate at time \( t \)

\( \varepsilon \) = Error term where \( i \) is cross sectional and \( t \) is time identifier

The above variables were measured as shown in the table below:-
Table 3.6.1: Measurement of Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROA</td>
<td>Total Income to its Total Asset</td>
</tr>
<tr>
<td>Capital Adequacy</td>
<td>Total Capital to Total Asset</td>
</tr>
<tr>
<td>Liquidity</td>
<td>Total Loans to Total Customer Deposit</td>
</tr>
<tr>
<td>Management Oversight Efficiency</td>
<td>Total Profit to Total Operating Revenue</td>
</tr>
<tr>
<td>Asset Quality</td>
<td>Non-performing Loans to Total Loans</td>
</tr>
<tr>
<td>GDP</td>
<td>Yearly Gross Domestic Product</td>
</tr>
<tr>
<td>Inflation</td>
<td>Yearly Average Inflation</td>
</tr>
</tbody>
</table>

3.7 Data Validity and Reliability

According to Mugenda and Mugenda (2003), reliability refers to the degree to which measurements are free from error and, therefore, yield consistent results or data after repeated trials. In a research study, the reliability coefficient can be computed to indicate how reliable data are. A coefficient of 0.80 or more implies that there is a high degree of data reliability.

Confirmatory factor analysis was used to test the reliability of the items. Simple regression was also used to test the relationship between dependent variables and the independent variables. To check for normality, descriptive statistic was used. To avoid the problem of heteroscedasticity of disturbance terms, weighted Generalized Least Square (GLS) was employed in establishing the relationship.

The validity refers to the extent to which an instrument measures what it purports to measure (Mugenda and Mugenda 2003). It is the degree to which results obtained from the analysis of the data actually represent the phenomenon under study. Piloting was carried out to establish the validity of the research instrument.
CHAPTER FOUR: DATA ANALYSIS AND PRESENTATION OF FINDINGS

4.1 Introduction

This chapter presents the analysis of data collected. The study used secondary data covering the period from 2009 to 2013 for analysis. The data was sourced from Central Bank of Kenya and was used to answer the researchers’ queries. The study sought to evaluate the effect of CBK prudential guidelines and regulations on the financial performance of commercial banks in Kenya. Reliability of the data was assured since was gathered from Bank supervision reports of CBK and published financial statements of commercial banks. The study used panel data due to the advantage that it helps to study the behaviours of each bank over time and across space. The secondary data for regression analysis was gathered from forty three banks.

The collected data was edited and cleaned for completeness in preparation for coding. Once coded, the data was entered into the Statistical Package for Social Sciences (SPSS) version 17 for analysis. Descriptive statistics such as mean and standard deviation were used to analyze the data. Regression analysis was used to test the relationship between the variables under study in relation to the objectives of the study. Anova analysis was used to confirm the findings of regression. The findings were presented in tables and figures for easy understanding.
4.2 Data Presentation

4.2.1 Bank Financial Performance

The study sought to evaluate the effect of CBK prudential guidelines and regulations on the financial performance of commercial banks in Kenya. The performance of bank was measured using Return on Equity. The study established that the average performance of the commercial banks over the five year period was 28.64%. However, the performance over the five years had been fluctuating as evidenced by the standard deviation of 2.28%. For instance, the year 2011 registered the highest financial performance at 30.89% while the year 2009 registered the lowest return on equity at 24.97%. The study findings are as shown in Table and Figure 4.2.1;

**Table 4.2.1: Return on Equity**

<table>
<thead>
<tr>
<th></th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>Avg.</th>
<th>Stdev</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROE</td>
<td>24.97%</td>
<td>28.19%</td>
<td>30.89%</td>
<td>29.97%</td>
<td>29.20%</td>
<td>28.64%</td>
<td>2.28%</td>
</tr>
</tbody>
</table>

*Source: Research Data (2014).*

**Figure 4.2.1: Return on Equity**

![Return On Equity](source)

*Source: Research Data (2014).*
4.2.2 Capital Adequacy

The study sought to establish the effect of capital adequacy on the financial performance of commercial banks in Kenya. The study found out that the average capital adequacy of the banks for the five year period was 15.2%. The level of capital adequacy fluctuations over the duration of study was computed to be 0.89% indication a significant deviation. The year 2009 recorded the lowest capital adequacy of 14.10%. There was a steady increase in capital adequacy from the year 2011 to the year 2013 during which the highest capital adequacy of 16.05% was recorded. The results of the study are as shown in Table and Figure 4.2.2;

Table 4.2.2: Capital Adequacy

<table>
<thead>
<tr>
<th>Year</th>
<th>Capital Adequacy</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>14.10%</td>
</tr>
<tr>
<td>2010</td>
<td>15.86%</td>
</tr>
<tr>
<td>2011</td>
<td>14.40%</td>
</tr>
<tr>
<td>2012</td>
<td>15.59%</td>
</tr>
<tr>
<td>2013</td>
<td>16.05%</td>
</tr>
<tr>
<td>Avg.</td>
<td>15.20%</td>
</tr>
<tr>
<td>Stdev</td>
<td>0.89%</td>
</tr>
</tbody>
</table>

Source: Research Data (2014).

Figure 4.2.2: Capital Adequacy

Source: Research Data (2014).
4.2.3: Liquidity Ratio

The study further sought and obtained details about the liquidity of commercial banks in Kenya between 2009 and 2013. Over the five year period, banks registered very high levels of liquidity with an overall liquidity of 74.11%. A steady growth in liquidity was witnessed from the year 2009 which had the lowest liquidity of 70.09% to the year 2011 which registered a liquidity of 76.68%. The highest level of liquidity of 78.42% was recorded in the year 2013. The variations in the levels of liquidity are evidenced by a very significant standard deviation of 3.80%. The results of the study are as shown in Table and Figure 4.2.3;

Table 4.2.3: Liquidity Ratio

<table>
<thead>
<tr>
<th>Year</th>
<th>Liquidity Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>70.09%</td>
</tr>
<tr>
<td>2010</td>
<td>70.20%</td>
</tr>
<tr>
<td>2011</td>
<td>76.68%</td>
</tr>
<tr>
<td>2012</td>
<td>75.15%</td>
</tr>
<tr>
<td>2013</td>
<td>78.42%</td>
</tr>
<tr>
<td>Avg</td>
<td>74.11%</td>
</tr>
<tr>
<td>Stdev</td>
<td>3.80%</td>
</tr>
</tbody>
</table>

Source: Research Data (2014).

Figure 4.2.3: Liquidity Ratio

Source: Research Data (2014).
4.2.4 Management Oversight Efficiency

The study further sought to establish the management oversight efficiency level of the banks between the years 2009 and 2013. Over the study period, the banks registered a below average management oversight efficiency of 41.89%. The years 2009 recorded the lowest level of management oversight efficiency of 35.35%. However, a steady increase in the management oversight efficiency was observed from the year 2009 to the year 2013 where the highest level of management was registered. Variations in the level of management oversight efficiency were computed to be at 3.86% as evidenced by the standard deviation. The study findings are as shown in Table and Figure 4.2.4;

Table 4.2.4: Management Oversight Efficiency

<table>
<thead>
<tr>
<th></th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>Avg.</th>
<th>Stdev</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management</td>
<td>35.35%</td>
<td>41.80%</td>
<td>43.08%</td>
<td>44.00%</td>
<td>45.20%</td>
<td>41.89%</td>
<td>3.86%</td>
</tr>
<tr>
<td>Oversight</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Research Data (2014).

Figure 4.2.4: Management Oversight Efficiency

Source: Research Data (2014).
4.2.4 Asset Quality

In this section, the study sought to establish the asset quality levels of the commercial banks in Kenya between the year 2009 and 2013. The average asset quality level for the period was found to be 4.84%. The highest level of asset quality of 6.96% was recorded in the year 2009 while the lowest level of 3.69% was recorded in the year 2011. The fluctuations in asset quality are as indicated by the standard deviation of 1.37%. The findings of the study are as shown in Table and Figure 4.2.4;

Table 4.2.4: Asset Quality

<table>
<thead>
<tr>
<th>Year</th>
<th>Asset Quality</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>6.96%</td>
</tr>
<tr>
<td>2010</td>
<td>5.43%</td>
</tr>
<tr>
<td>2011</td>
<td>3.69%</td>
</tr>
<tr>
<td>2012</td>
<td>3.79%</td>
</tr>
<tr>
<td>2013</td>
<td>4.32%</td>
</tr>
<tr>
<td>Avg.</td>
<td>4.84%</td>
</tr>
<tr>
<td>Stdev</td>
<td>1.37%</td>
</tr>
</tbody>
</table>

Source: Research Data (2014).

Figure 4.2.4: Asset Quality

Source: Research Data (2014).
4.2.5 Gross Domestic Product

The research sought to evaluate the impact of Gross Domestic Product growth on the financial performance of commercial banks between the 2009 and 2013. The average growth rate of Gross Domestic Product during the study period was recorded to be 4.44%. The highest growth rate of 5.80% was registered in the year 2010 while the lowest growth rate of 2.70% was recorded in the year 2009. Steady growth in Gross Domestic Product was recorded between the year 2011 and the year 2013. The results of the study are as shown in Table and Figure 4.2.5;

Table 4.2.5: Gross Domestic Product

<table>
<thead>
<tr>
<th></th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>Avg.</th>
<th>Stdev</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDP</td>
<td>2.70%</td>
<td>5.80%</td>
<td>4.40%</td>
<td>4.60%</td>
<td>4.70%</td>
<td>4.44%</td>
<td>1.11%</td>
</tr>
</tbody>
</table>

Source: Research Data (2014).

Figure 4.2.5: Gross Domestic Product

Source: Research Data (2014).
4.2.6 Inflation Rate

The study lastly sought to establish the impact of inflation rate on the financial performance of commercial banks between the 2009 and 2013. The average inflation rate for the five years was calculated to be 8.74% while the fluctuations in the rate were computed to be 3.94%. The year 2009 registered the highest average annual inflation rate of 10.50% while the year 2010 recorded the lowest rate of 4.10%. The study findings are as shown in Table and Figure 4.2.6;

Table 4.2.6: Inflation Rate

<table>
<thead>
<tr>
<th></th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>Avg.</th>
<th>Stdev</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inflation Rate</td>
<td>10.50%</td>
<td>4.10%</td>
<td>14.00%</td>
<td>9.40%</td>
<td>5.70%</td>
<td>8.74%</td>
<td>3.94%</td>
</tr>
</tbody>
</table>

Source: Research Data (2014).

Figure 4.2.6: Inflation Rate

Source: Research Data (2014).
4.2.7 Multiple Regression Analysis

The study sought to evaluate the effect of CBK prudential guidelines and regulations on the financial performance of commercial banks in Kenya. Financial performance was measured using ROE while the determinants of the performance were proxied by Average Annual Inflation rate, Gross Domestic Product, Asset Quality employed, Management Oversight Efficiency, Liquidity Ratio, and Capital Adequacy. To establish the relationship, ROE was regressed against the proxies of CBK prudential guidelines.

4.2.7.1 Model Summary

The research findings indicated that there was an overall strong and positive relationship between the variables. The findings are as shown in the tables 4.2.7.1;

Table 4.2.7.1: Model Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.628a</td>
<td>0.474</td>
<td>0.299</td>
<td>0.017619</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Average Annual Inflation rate, Gross Domestic Product, Asset Quality employed, Management Oversight Efficiency, Liquidity Ratio, and Capital Adequacy.

Source: SPSS Output (2014).

In a model summary, the “R” value is used to indicate the strength and direction of the relationship between the variables. The closer the value gets to 1 or -1, the stronger the relationship. A positive or negative sign indicates the direction of the relationship. In this case the R= 0.628. This means there was an overall strong positive relationship between the financial performance of banks and the CBK prudential guidelines. The adjusted R-Square in the study was found to be 0.299. This value indicates that the independent variables can explain 29.9% of the variance in banks’ financial performance. It is clear...
that they contribute to a fairly significant level of performance that is achieved in the financial performance of banks. It therefore suffices to conclude that CBK prudential guidelines are fairly essential in enhancing banks’ financial performance given that there is an unexplained variance of 70.1%.

4.2.7.2 Coefficients of Determination

Un-standardized Coefficients of determination under the B column were used to substitute the unknown beta values. The beta values indicate the direction of the relationship. A positive sign indicates a positive relationship while a negative sign indicates a negative relationship. The significant values (p-value) under sig. column indicate the statistical significance of the relationship. A p-value of less than 0.05 is recommended as it signifies a high degree of confidence. A value above 0.05 indicates that the relationship maybe as a result of coincidence.

Table 4.2.7.2: Co-efficients of Determination

<table>
<thead>
<tr>
<th>Model</th>
<th>Un-standardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>.173</td>
<td>0.0878</td>
<td></td>
<td>8.937</td>
</tr>
<tr>
<td>Average Annual Inflation rate</td>
<td>.107</td>
<td>0.329</td>
<td>.185</td>
<td>.326</td>
</tr>
<tr>
<td>Gross Domestic Product</td>
<td>1.215</td>
<td>0.951</td>
<td>0.594</td>
<td>1.278</td>
</tr>
<tr>
<td>Asset Quality</td>
<td>-1.638</td>
<td>0.173</td>
<td>-0.984</td>
<td>-9.479</td>
</tr>
<tr>
<td>Management Oversight Efficiency</td>
<td>.526</td>
<td>0.155</td>
<td>0.891</td>
<td>3.398</td>
</tr>
<tr>
<td>Liquidity Ratio</td>
<td>.452</td>
<td>0.228</td>
<td>0.753</td>
<td>1.984</td>
</tr>
<tr>
<td>Capital Adequacy</td>
<td>.929</td>
<td>1.382</td>
<td>0.362</td>
<td>.672</td>
</tr>
</tbody>
</table>


Source: Research Data (2014).
In this case, four variables (Asset Quality, Management Oversight Efficiency, Liquidity Ratio and Capital Adequacy) were found to be statistically significant as their the p-values were less than above 0.05. Growth in GDP was found to have the greatest positive impact on the financial of commercial banks indicated by the beta value of 1.215 though the study found out that the impact was not statistically significant. This was followed by Capital Adequacy (0.929), Management Oversight Efficiency (0.526) and then Liquidity Ratio (0.452) where their impact was established to be statistically significant. Asset quality was found to have the greatest negative impact as indicated by the beta value of -1.638.

The equation for the baseline model was expressed as:

\[ P = \beta_0 + \beta_1 CA_{it} + \beta_2 LS_{it} + \beta_3 MO_{it} + \beta_4 AQ_{it} + \beta_5 GDP_{it} + \beta_6 INF_{it} + \epsilon_{it} \]

\[ P = 0.173 + 0.929CA_{it} + 0.452LS_{it} + 0.526MO_{it} - 1.638AQ_{it} + 1.215GDP_{it} + 0.107INF_{it} \]

Where

\( P \) = Performance of a Bank i at time t as expressed by ROE.

\( \beta_0 \) = Constant of the model

\( CA \) = Capital Adequacy of bank i at time t

\( LS \) = Liquidity Ratio of bank i at time t

\( MO \) = Management Oversight Efficiency of Bank i at time t

\( AQ \) = Asset Quality employed by Bank i at time t

\( GDP \) = Gross Domestic Product at time t

\( INF \) = Average Annual Inflation rate at time t

\( \epsilon \) = Stochastic error term where i is cross sectional and t is time identifier
The results of the regression equation show that if all the independent variables were rated zero, Banks’ financial performance as proxied by ROE is predicted to be 17.3%.

### 4.2.7.3 Analysis of Variance (ANOVA)

Analysis of variance was also done to establish the significance of the regression model.

#### Table 4.5.3 Analysis of Variance

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
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<td>.002</td>
<td>89.850</td>
<td>.00249a</td>
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<tr>
<td>Residual</td>
<td>.000</td>
<td>3</td>
<td>.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>.002</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Average Annual Inflation rate, Gross Domestic Product, Asset Quality employed, Management Oversight Efficiency, Liquidity Ratio, and Capital Adequacy.

b. Dependent Variable: Performance of Bank (ROE).

**Source: Research Data (2014).**

At 95% confidence level, a significant value (p-value) of 0.00249 was registered. This shows that the regression model has a probability of less than 0.00249 of giving wrong prediction. Hence, the regression model used above is a suitable prediction model for explaining how CBK prudential guidelines influence financial performance of commercial banks in Kenya.
4.6 Summary and Interpretation of the Findings

This section will summarize the major findings of this study and compare them with the findings of previous studies. The study used secondary data for analysis. Reliability of the data was assured since was gathered from Bank supervision reports of CBK and published financial statements of commercial banks. The study sought to evaluate the effect of CBK prudential guidelines and regulations on the financial performance of commercial banks in Kenya.

The financial performance of banks was measured using return on equity (ROE). ROE is an important indicator of bank performance in terms of profitability because it indicates how well it is utilizing the shareholders contribution. The study established that the average performance of the commercial banks over the five year period was 28.64%. It indicated that the shareholders were earning profit from their investment at a good rate.

Capital adequacy ratio shows the internal strength of the bank to withstand losses during crisis. Capital adequacy ratio is directly proportional to the resilience of the bank during crisis situations. It has also a direct effect on the profitability of banks by determining its expansion to risky but profitable ventures or areas. The study found out that the average capital adequacy of the banks for the five year period (2009-2013) was 15.2%. This indicates that Kenyan commercial banks have a fairly adequate internal strength to withstand losses during financial crisis.

The highest risk facing a bank is the loss derived from delinquent loans and that’s why non-performing loan ratios are the best proxies for asset quality. It is the major concern of all commercial banks to keep the amount of nonperforming loans to low level.
because high nonperforming loan affects the profitability of the bank. The lower the ratio, the better the bank performing. The study found out that the average asset quality level for the period was found to be 4.84%. However, since the variable was found to have a negative effect on the financial performance of banks between 2009 and 2013 which thus indicates that the nonperforming loans of the banks need to be lowered more.

Management Efficiency determines the level of operating expenses and in turn affects profitability of the bank. Over the study period, the banks registered a management oversight efficiency of 41.89%. This indicate that the management of banks to deploying their resources efficiently, maximizing their income and also reducing their operating costs to a fairly good level though a lot needs to be done.

Liquidity indicates the ability of the bank to fulfil its obligations, mainly of depositors. Adequate level of liquidity is positively related with bank profitability. Over the five year study period, banks registered very high levels of liquidity with an overall liquidity of 74.11% indicating that the Kenya banks are a position to position to meet their short term obligations without straining the banks financially.

The trend of GDP affects the demand for banks asset. During the declining GDP growth, the demand for credit fall which in turn negatively affects the profitability of banks. The average growth rate of Gross Domestic Product during the study period was recorded to be 4.44%. Since the variable had a positive effect on the financial performance of the banks, then it implies the growth rate is fairly good to enable the banks to make profits. However, the Central Bank of Kenya needs to initiate fiscal policies aimed at accelerating the growth of GDP at least to a double digit.
High Inflation rates forces banks to increase their interest rates as a way of cushioning themselves from inflationary pressures. This in turn leads to decreases in the demand of the credits from the banks. The average inflation rate for the study period was calculated to be 8.74%. The fact that the impact on financial performance was found to be very minimal means that steps should be taken to keep the rates low as a way of increasing the demand for the banks products.

Multiple regression analysis study findings revealed that there was a strong positive relationship ($r=0.628$) between financial performance of banks and the CBK prudential guidelines. CBK prudential guidelines accounted for 29.9% of the financial performance of banks. This means that there are other factors that greatly affect the financial performance of banks apart from CBK prudential guidelines. Growth in GDP, Capital Adequacy, Management Oversight Efficiency and then Liquidity Ratio were found to have a positive effect on the banks financial performance while asset quality was found to have a negative effect.

Pasiouras et al. (2009) assessed the impact of regulatory conditions on profit and cost efficiency of banks using similar data. The authors found that regulations that improve supervisory power and market discipline tend to have positive impact on both of the measures. In turn, capital requirements tend to improve only cost efficiency while reducing profit efficiency. In addition, the results showed that restricting banks’ activities improves their profit efficiencies. This study supports existing literature since it found out those prudential guidelines and relations have a positive effect on banks financial performance.
CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Summary
The goal of regulatory reforms and guidelines is to help banks and other financial institutions become stronger players and in a manner that will ensure longevity and hence higher returns to the shareholders over time. The study sought to evaluate the effect of CBK prudential guidelines and regulations on the financial performance of commercial banks in Kenya.

The study used secondary data gathered from Bank supervision reports of CBK and published financial statements of commercial banks for analysis. The collected data was edited and cleaned for completeness in preparation for coding. Once the data was coded, it was entered into the Statistical Package for Social Sciences (SPSS) version 17 for analysis. Descriptive statistics such as mean and standard deviation were used to analyze the data. Regression analysis was used to test the relationship between the variables under study.

Multiple regression analysis study findings revealed that there was a strong positive relationship (r=0.628) between financial performance of banks and the CBK prudential guidelines. CBK prudential guidelines accounted for 29.9% of the financial performance of banks. This means that there are other factors that greatly affect the financial performance of banks apart from CBK prudential guidelines. Growth in GDP, Capital Adequacy, Management Oversight Efficiency and then Liquidity Ratio were found to have a positive effect on the banks financial performance while asset quality was found to have a negative effect.
5.2 Conclusions

The study sought to evaluate the effect of CBK prudential guidelines and regulations on the financial performance of commercial banks in Kenya. After secondary data gathered from Bank supervision reports of CBK and published financial statements of commercial banks was analysed, the study made the following conclusions:

There was a strong and positive relationship (r=0.628) between financial performance of banks and the CBK prudential guidelines. CBK prudential guidelines accounts for 29.9% of the financial performance of commercial banks in Kenya. This means that there are other factors that greatly affect the financial performance of banks apart from CBK prudential guidelines.

The study also concludes that growth in Gross Domestic Product of the country, high levels of Capital Adequacy, high Management Oversight Efficiency level and high Liquidity levels of the bank as well as low inflation rates found have a positive effect on the banks financial performance. The study also concludes that the Kenyan commercial banks have a very low asset quality which makes it to have a negative effect on the financial performance of the banks.

The study also concludes that this study supports existing literature. This is in relation to Pasiouras et al. (2009) who assessed the impact of regulatory conditions on profit and cost efficiency of banks using similar data and found out that regulations that improve supervisory power and market discipline tend to have positive impact on bank profit and that restricting banks’ activities improves their profit efficiencies.
5.3 Recommendations for Policy & Procedure

Having duly conducted the study, the researchers wish to make the following recommendations in line with the study findings. The highest risk facing a bank is the loss derived from delinquent loans. That’s why non-performing loan ratios are the best indicators for asset quality. The study found out that asset quality had a negative effect on the financial performance of banks between 2009 and 2013. This indicated that the non-performing loans of the banks were high. This study therefore recommends that the managements of commercial banks in Kenya should work on reducing their bank’s nonperforming loans.

The study also found out that the management efficiency levels of the commercial banks are below average. Management efficiency determines the level of operating expenses and in turn affects profitability of the bank. This study therefore recommends that the management of banks should start deploying their resources more efficiently, start maximizing their income more and also reduce further their operating costs so as to raise their efficiency levels as a way of improving their performance.

The study also established that growth in GDP leads to improved performance of commercial banks. This is because, during declining GDP growth, the demand for credit fall which in turn negatively affects the profitability of banks. This study therefore recommends that the Central Bank of Kenya should to initiate fiscal policies aimed at accelerating the sustained growth of GDP.
5.4 Limitations of the Study

The study mainly depended on financial data provided by the Central Bank of Kenya. This means that the accuracy of the data provided depended on the information provided. This is however a general problem when dealing with secondary data. The researcher countered the problem by crosschecking data from Kenya National Bureau of Statistics.

The contact person at the Central Bank of Kenya had busy working schedules and this delayed the completion of the data collection process. The researcher exercised utmost patience and makes extra effort in reminding the contact person and making constant follow-ups so as to acquire sufficient data.

The researcher faced the challenge of inadequate time and resources as the study was being undertaken within a limited period of time and the researcher was engaged at the place of work. The researcher handled the problem by taking academic leaves as a way of facilitating the completion of the research project.
5.5 Suggestions for Future Studies

Arising from this study, the following directions for future research should be explored. The study was concerned with evaluating the effect of CBK prudential guidelines and regulations on the financial performance of commercial banks in Kenya. CBK prudential guidelines could explain 29.9% of the financial performance of commercial banks. The remaining 70.1% can only be explained by other factors not considered in this study. Therefore, there is need to establish the other factors. This will help to better explain the relationship between CBK prudential guidelines and financial performance of commercial banks in Kenya.

Further, this study only considered a five year period. This study therefore recommends that a future study should consider a longer period of time preferably 10 years as this might yield different results and help the researcher in drawing more adequate conclusions.
REFERENCES


APPENDIX 1: LIST OF COMMERCIAL BANKS IN KENYA

1. African Banking Corporation Limited
   Date Licensed: 08-12-1994

2. Bank of Africa Kenya Limited
   Date Licenced: July 2004

3. Bank of Baroda (K) Limited
   Date Licenced: 01-07-1953

4. Bank of India
   Date Licenced: 05-06-1953

5. Barclays Bank of Kenya Limited
   Date Licenced: 1916

6. CFC Stanbic Bank Limited
   Date Licensed: 01-06-2008

7. Charterhouse Bank Limited
   UNDER - STATUTORY MANAGEMENT
   Date Licensed: 01-08-1998

8. Chase Bank (K) Limited
   Date Licenced: 01-04-1991

9. Citibank N.A Kenya
   Date Licenced: 01-07-1974

10. Commercial Bank of Africa Limited
    Date Licensed: 01-01-1967

11. Consolidated Bank of Kenya Limited
    Date Licenced: 18-12-1989

    Date Licenced: 01-07-1968

13. Credit Bank Limited
Date Licenced: 20-09-1996

15. Diamond Trust Bank Kenya Limited  
Date Licenced: 15-11-1994

16. Dubai Bank Kenya Limited  
Date Licenced: April 2000

17. Ecobank Kenya Limited  
Date Licenced: 16-06-2008

18. Equatorial Commercial Bank Limited  
Date Licenced: 23-06-1995

19. Equity Bank Limited  
Date Licenced: 28-12-2004

20. Family Bank Limited  
Date Licenced: 01-05-2007

21. Fidelity Commercial Bank Limited  
Date Licenced: 07-03-1996

22. Guaranty Trust Bank (K) Limited (Formerly-Fina Bank Limited)  
Date Licenced: 13-01-1995

23. First Community Bank Limited  
Date Licenced: 29-04-2008

24. Giro Commercial Bank Limited  
Date Licenced: 17-12-1992

25. Guardian Bank Limited  
Date Licenced: 20-12-1995

Date Licenced: 01-11-2007

27. Habib Bank A.G Zurich
Physical Address: Habib House, Koinange Street.
Date Licenced: 01-07-1978

28. Habib Bank Limited
Date Licenced: 02-03-1956

29. Imperial Bank Limited
Date Licenced: 08-12-1994

30. I & M Bank Limited
Date Licenced: 27-03-1996

31. Jamii Bora Bank Limited
Date Licenced: 02-03-2010

32. Kenya Commercial Bank Limited
Date Licenced: 01-01-1896

33. K-Rep Bank Limited
Date Licenced: 23-03-1999

34. Middle East Bank (K) Limited
Date Licenced: 15-12-1980

35. National Bank of Kenya Limited
Date Licenced: 01-01-1968

36. NIC Bank Limited
Date Licenced: 28-09-1995

37. Oriental Commercial Bank Limited
Date Licenced: 8/2/1991

38. Paramount Universal Bank Limited
Date Licenced: 05-07-1995

39. Prime Bank Limited
Date Licenced: 03-09-1992

40. **Standard Chartered Bank Kenya Limited**
Date Licenced: 10-01-1910

41. **Trans-National Bank Limited**
Date Licenced: 08-01-1985

42. **UBA Kenya Bank Limited**
Date Licenced: 25-09-2009

43. **Victoria Commercial Bank Limited**
Date Licenced: 11-01-1996