THE EFFECT OF BANKING REGULATIONS ON FINANCIAL PERFORMANCE OF COMMERCIAL BANKS IN KENYA

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DECLARATION

This research project proposal is my original work and to the best of my knowledge has not been submitted for the award of a degree in any other university.

Signature: ………………………………. Date: ………………………

VIOLET KHAYONGO

This research project proposal has been presented for the award of degree of master of business administration with my approval as the University Supervisor.

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DEDICATION

This study is dedicated to my family for their love, support,encouragement and prayer which saw me through the entire course.

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ABBREVIATIONS AND ACRONYMS

CAMEL	Capital adequacy, Asset quality, Management efficiency, Earnings performance and Liquidity.
CBK	Central Bank of Kenya
KBA	Kenya Bankers Association
MPT	Modern Portfolio Theory
MM	Modigliani and Miller
ROA	Return on Assets
ROE	Return on Equity
ROI	Return on Equity
SPSS	Statistical Package for Social Science

ABSTRACT

The objective of the study was to establish the effect of banking regulations on financial performance of commercial banks in Kenya. This study was anchored on three theories namely; Modern Portfolio Theory, Modigliani and Miller Theory and Liquidity Preference Theory. A cross-sectional correlation research design was used for this study to enable the researcher to observe two or more variables at the point in time and is useful for describing a relationship between two or more variables. The populations for this research included listed Commercial Banks in Kenya**.** The study used secondary data for the purpose of analyzing the relationship between bank regulation and financial performance for commercial banks in Kenya. The secondary data was collected from the financial statements of the banks. The data collected was cleaned, validated, and edited for accuracy, uniformity, consistency and completeness. The study then used Statistical Package for Social Science (SPSS) to analyze the quantitative data. A linear regression model of financial performance versus regulations was then applied to examine the effect of banking regulations on financial performance of commercial banks in Kenya. The study concluded that capital regulation requirement, liquidity requirement and risk management have a positive effect on return on assets. The study further established that mean capital requirement and mean liquidity requirement have a significant effect on return on assets. The mean risk management however does not have a significant effect on return on assets. Overall, the study established that the model is not significant in explaining performance of the Commercial banks. This means that there are other determinants of return on assets of commercial banks in Kenya. The study recommends that the commercial banks should not be extremely restricted because this can create information asymmetry and consequently lead to the poor performance of the bank. However, adequate regulations should be put in place to bring sanity to the sector.

CHAPTER ONE: INTRODUCTION

1.1Background of the Study

Stability of the banking industry as well its competitiveness is a necessity, especially after experiencing the financial crisis of the 2007-2009. This can be achieved through ensuring strictness in the implementation of control measures (Financial Service Authority, 2009). The need for stability is because the banking sector is relied upon in ensuring that the savings of the society are allocated in the most productive investments. The banking sector also ensures that there is adequate mechanisms for managing risks that accompanies the said investments (Kenya Bankers Association, 2012). The occurrence of the financial crisis was a clear indication that without a stable banking sector, the global economy would. This calls for adequate reforms across the globe regarding the performance of the banking sector. The essence is to achieve a strong global capital and liquidity proceduresto ensure a strong banking sector with relevant global financial stability (Naceur&Kandil, 2009).According to Schiuma (2003) regulation of the banking sector and performance is assessed using return profitability ratios.

There are various theories that are important for the current studies. Modern Portfolio Theory helps commercial banks in diversifying their portfolio by selection of combination of risk weighted assets thus affecting a class of risks including credit, market and operational risk mix (Smith, 2013). Rochet (1992) found that the effectiveness of capital regulations depends on the extent to which the banks are maximizing value and utility. Cline (2015)also found out that when the capital requirements are high, the Modigliani-Miller theorem is invoked. Lastly, the liquidity preference theory is of the view that the liquidity level of a bank depend on its level of deposits on demand and how they perceive the future economic performance.

Banking in Kenya can be traced way back in 1896. The first bank was the branch of National Bank of India. The regulation of the commercial banks and other financial institutions in Kenya is done by Central Bank of Kenya (CBK). The sector equally operates under the regulations issued by the Banking Act, Cap 488. In Kenya, commercial banks operate with a view to earn a profit on the services rendered to the customers, and for the recipient to better her economic life in terms of breaking the poverty cycle. However, for this to be achieved the operational costby either side has got to be translated, analyzed and measured. In Kenya, commercial banks have achieved massive increase in asset base, improved deposits, high profits and variety of products offered over the last decade. This growth is due increased customer loyalty. The major challenge is that a lot of effort has not been directed towards attracting and retaining customers (Ernst & Young, 2010). Decade

1.1.1 Measures of Banking Regulations

When the banking systems are functioning effectively, there is realization of economic growth and development (Levine, 2005). This realization has however not been achieved and this creates the need for regulation. The idea is that the banking systems have not been functioning effectively. The proof is the recent financial crisis that affected the entire globe.In the regulation of banks, the commercial banks are subjected to specific requirements, restrictions and guidelines to facilitate transparency in the market between banking institutions and their clients (Banking Act, 2015). It’s about the rules that the commercial banks have to follow to govern their behavior. The aim of the regulations is to facilitate the reduction inrisks facing commercial banks; reduction in the chances of making huge; reduction inillegal practices including legalizing the proceeds of crime and direction of credit facilities to customer value added services and investments.

A significant milestone in regulation of commercial banks was the adoption of the Basel III whose development was meant to facilitate the supervision of commercial (Basel, 2004). The committee came up with strategies complementing the implementation of the Basel II and Basel I provisions. Basel III emphasizes on the need to improve commercial banks solvency levels that could only be achieved through the regulations of capital levels of the commercial banks. Based on the Basel III resolutions, commercial banks in Kenya are required to increase their capital ratio to help strengthenthe financial institutions structures and improveflexibilityof the operations of the commercial banks. In this respect, the Finance Act (2008)requires that all the commercial banks to ensure compliance regarding thecapital ratio provision. The argument is that with strong capital foundation, commercial banks have the ability to survive any kind of financial crisis. This facilitates the stability of the banking sector.

1.1.2 Financial Performance

Financial performance means benchmarking the extent of achievement of the company's objectives, policies and operational guidelines using financial indicators. According to Muga (2012) financial performance is measured on the extent of profitability of the commercial bank. Profitability in this case can be measured by focusing on the micro and macro levels of the economy. According to the micro level, profitability is a way of achieving and sustaining competitive advantage. The argument is that when commercial banks maximize their profits, they are able to be successful in the financial market. The macro level on the other hand focuses on the need for a commercial bank to survive the negative effects of financial crisis and enhance achievement of a stable banking sector through high profitability.

Schiuma (2003) on the other hand is of the view that financial performance can be measured using return on assets (ROA) and other profitability ratios involving equity and Return on Investment (ROI).These ratios have been used widely as measures of financial performance have been widely used in bank regulations as the best assessment of banking industry performance and to facilitate forecasting of future performance.

1.1.3 Commercial Banks in Kenya

In Kenya, the Banking activities can be traced way back in 1896. The first bank was the branch of National Bank of India. The central bank in Kenya is in charge of regulation of the commercial banks. The financial sector operates under the regulations issued by the Banking Act, Cap 488. In 1992, there were 15 CBs operating in Kenya. This number increased to 43 by 2006, the last year the study covered. However, only five banks were controlling 57.11 percent of the loans market, leaving 38 CB to control the rest by 2006 (See appendix IV). Earlier in 1998, there was collapse of several commercial banks namely Trust Bank, Reliance Bank, Prudential Bank, Bullion Bank while the National Bank of Kenya nearlyclosed down since banking industry was facing fragility, poor management and worsening economic conditions (Wagacha 2001). The Kenyan commercial banking sector was also composed of, five banks registered abroad, eight foreign owned but locally incorporated banks, seven CBs with Government participation and thirty six banks locally owned by the end of 2001 (CBK, 2016).

The banking industry is among the most important sectors of any economy because it acts as a driving force for economic activities and therefore the banking sector is significant in the process of building the economy (Soyibo&Adekaye, 1991). The key roles of commercial banks include mobilization of deposits from the members of the public to enhance investment activities. This process involves connecting the saving members of the public with those who need cash to do investments activities. Increased focus on the roles of the commercial banks and the need for regulation is therefore based on the stability and effectiveness of these core functions.

1.2 Research Problem

According to Caprio and Levine (2006) the banking industry experiences high regulation globally. This is justified because of the need to enhance the security by ensuring that the financial institutions and the sector at large is stable (Biggar&Heimler, 2005). It can however be noted that regulation comes at a very high labour cost to the commercial banks (Elliehausen, 1998). The implication is that smaller commercial banks are disadvantaged in terms of cost. This may further discourage new entrants into the banking industry leading reduced growth of the sector. There has been increased need to improve the extent to which the commercial banks perform in Kenya. This led to investment in structural and policy changes as well as increased move towards adequate regulation and supervision of the commercial banks.According to the Kenya Bankers Association (2015) the guidelines are meant to facilitate effective governance and financial reporting, reduced risks, improved performance and survival of their businesses as well as general growth in the banking sector.

A number of studies exist in banking regulation and financial performance of commercial banks.Agoraki, Delis &Pasiouras (2011) found out that capital requirements leads to reduced credit risk especially for commercial banks with a larger market share. Ekong&Udonwa (2015) pointed out a number of possible policy menu capable of bringing about a sustained commercial banks performance in Nigeria including banking regulations. The study however emphasized on the general for sustainability without specific emphasis of financial performance. The context of the study is equally different. On the other hand, Naceur&Kandil (2009) found out that when banks do not have sufficient capital, it increases their intermediation cost. This emphasizes the need to regulate capital.

In Kenya, Tsuma&Gichinga (2016) found out that Change in capital requirement affects financial performance of commercial banks because fund that were to be lend out to earn interest income are put up as capital thus denying commercial banks revenue. The study did not however address the specific aspects of financial performance variables affected. Kirimi (2015) on the other hand found out that lending rates positively influence financial performance of financial institution because it is the main determinant of interest income. This study however focused on only lending interest rates as the aspect of regulation. From the above-mentioned studies, it is clear that banking regulations is a significant issue. However, very few studies address the issue of financial performance which is key in the assessment of bank performance. This study therefore sought to answer the question: What is the effect of banking regulations on financial performance of commercial banks in Kenya?

1.3 Research Objective

To establish the effect of banking regulations on financial performance of commercial banks in Kenya.

1.4 Value of the Study

The study offers valuable contribution theoretically, in practice and in policy development. On theory, the outcome of this study shall add valuable knowledge to the body of finance. A basis of further research shall also emerge from knowledge gaps that shall arise from the study. This study shall also offer scholars insights into the extent of application of the theories in understanding behaviours of banks. Banking sector regulation is important as it contributes immensely to the economy. This Study will also benefit the field of finance through the provision of knowledge in the area of regulation in intermediation activities of commercial banks. This will facilitate more studies regarding the effect of regulations on borrowers as well as savers and the attitude to banks

Regarding contribution to policy, the study emphasizes the need regulations and the need to reduce barriers to contestable markets. In this regard, there should be adequate reforms in the financial sector to enhance competition in the banking sector. The study findings will therefore provide guidance to those involved in policy making to help them upgrade quality and enhance the competitiveness of the banking industry. The studywill equally enhanceadministration ofregulations to stimulate growth and profitability.

In practice, the study findings will be beneficial to the managers and staff of different financial institutions especially the commercial banks. It will help such people to understand the significance of regulations. The study shall also offer understanding of the importance of regulation in enhancing stability of the banking sector. Both the theoretical and empirical findings shall be of great import to academicians and professionals working in the banking industry. This study will also be important by enabling commercial banks to understand the banking patterns and regulations from a professional perspective.The Government will also find the findings practical in analyzing the problems concerning commercial banks behaviour thus inventing policies that augment the ventures in the countrythus spurring economic growth and stability. The conclusion of the study will also be of assistance to members of the public based on accurate decision making during the investment decisions especially the consideration to invest in the banking industry.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This chapter outlines the theoretical review of the study and opinions advanced by various authors, writers, and scholars on the concept of banking regulation and financial performance. It also outlines the various studies done by different scholars in the same knowledge area.

2.2 Theoretical Review

This study was based on three theories namely; Modern Portfolio Theory, Modigliani and Miller Theory and Liquidity Preference Theory.

2.2.1 Modern Portfolio Theory (MPT)

This theory was developed by Markowitz (1952). According to the theory, companies needs to take advantage of the expected return on portfolio for a given amount of portfolio risk. This is achieved byproper choice of a good mix of the various assets. A critical emphasis of the theory is that each asset for investment should be selected based on its advantages individually and how this translate to the advantages on the entire investment of the company (Omisore, Yusuf & Christopher, 2012). The motivation of choosing a good portfolio is to achieve maximization of expected gains.

The ability of commercial banks to take risks depends on extent of regulations of capital requirements to improve the solvency of commercial banks. Portfolio models is a basis of analyzingwhether regulations is a necessity or not. Kim &Santomero (1988) uses the concept of portfolio analysis to show the significance of capital requirements regulations. The argument is that a high capital requirements gives the commercial bank ability to achieve increased portfolio risk. In a mean-variance analysis, Koehn &Santomero (1980) posit that high leverage ratios leads banks to shift their portfolio to riskier assets. Amidst the challenges of regulations, the modern portfolio theory assists commercial banks in diversifying their portfolio by selection of combination of good assets thus affecting the credit, market and operational risk mix (Smith, 2013).

2.2.2Liquidity Preference Theory

According to Keynes (1942) people desire to hold liquid money to facilitate transaction, precautionary spending and to take advantage of investment opportunities in the financial market. They would rather hold liquid balances for precautionary purposes rather than putting it in investments. In contrast, they become interested on investment of the money to take advantage of increasing interest rates. According to the theory, when the interest rates increases, people will part with the liquid balances in their possession and exchange them for financial assets such as bonds. Commercial banks provide liquidity (Bryant, 1980). In this regard, commercial banks makes it possible for people to access liquid balances of cash for transaction, precaution and speculative purposes. The ability to create credit and expand liquidity improves the competitive position of the commercial banks.

In banking, liquidity creation is significant in dealing with financial difficulties (Acharya, Shin &Yorulmazer, 2009). Excess liquidity however makes commercial banks to be exposed to several risks such as liquidity risk. The commercial banks can however hold liquid assets like cash. Bouwman (2013) therefore posit that regulations should focus on regulation of liquidity requirements and capital requirements to help build enough liquidity.

2.2.3 Modigliani – Miller Theorem

Modigliani and Miller (1958) posit that averagely, the capital structure of a firm does not depend on their cost of capital. The argument is that the choice of the type of capital to employ does not depend on their cost but other factors. The use of low cost debt helps to offset the increase in the unit cost of higher-cost equity capital as a consequence of the associated rise in risk. According to the theory, companies do not have optimal equity - debt finance mix since it does not influence the choice of capital to use (Admati&Hellwig, 2013).

In the banking, the debt-equity mix would be different from other companies. Fama& French (1992) in their analysis did not include the financial based companies since they are highly leveraged. Mitchell Berlin (2011) posit that the practice of financial intermediation is inherently levered. He stated that banks use liquid liabilities leading to high leverage.

2.3 Determinants of Financial Performance of Commercial Banks

The financial performance of commercial banks is an important subject given the significant role the banks play in the economy. With the number of banks increasing over the years and competition for customers increase, an analysis of what factors influence banks' financial performance is important to the banks as this can aid them in ascertaining the determinants of performance and by extension know the areas to improve in order to perform better (Nyanga, 2009). The factors that determine the financial performance of commercial banks deals with internal and external (Al-Tamimi, 2010).

The commercial banks in Kenya have achieved improved performance. Some commercial banks have however realized losses (Oloo, 2010). The performance of commercial banks have also been specifically affected by both micro and macro-economic factors (Flamini et al. 2009). The study by Olweny&Shipho (2011) posit that there are several factors that affect performance of commercial banks in Kenya. Uzhegova (2010) used CAMEL to study the extent to which commercial banks' profitability can be examined. This measure of performance centers on the need for adequate capital, good quality of assets, efficient management, and improved performance of earnings and Liquidity of the commercial banks.

2.4 Empirical Review

A number of local and international studies have been conducted in bank regulations..Agoraki, Delis &Pasiouras (2011) found out that commercial banks having lower market power usually have a low credit risk and equally lowchances of default. The findings also revealed that meeting the capital requirements leads to reduced credit risk. Barth, Naceur&Kandil(2009) used bank scope data base for 28 banks for the period 1989-2004 to analyze how regulation of capital requirements affect the performance and stability of banks in Egypt. The study analyzed cost involved in intermediation and profit levels of commercial banks as measures of performance. The study found out that when the bank has adequate capital levels, there is reduced risks to shareholders leading to increase in the cost of intermediation. This further leads to high return on assets and equity.

Vianney (2011)also conducted a survey on the relationship between regulation and financial performance of commercial banks in Rwanda.The objective was to establish how capital requirement ratio, liquidity ratio and management efficiency ratioinfluence the financial performance of commercial banks in Rwanda. The researchused adescriptive research design. The study used a population of ten commercial banks. Data collection was done using a data collection schedule and was analyzedusing SPSS 17. The study concluded that capital requirement ratio, liquidity ratio and management efficiency ratio are not significant in affecting financial performance of commercial banks in Rwanda. The study was of the view that there could be other factors apart from capital requirement regulations, liquidity requirement and extent of management efficiency that affects the performance of commercial banks in Rwanda.

A study by Njeri (2013) sought to determine the effect of Basel II requirement on the lending capability of Kenyan commercial banks. The study adopted descriptive study design. The populations for this research are the 43 listed Commercial Banks in Kenya analyzed for a period from 2009-2012. The study found that commercial banks risk weighted assed had increased by 79% over the years indicating a similar growth in bank's assets. To meet the asset growth, core capital 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 key 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 a clear impact on banks' lending.

Kirimi (2015) studied the effect of lending interest rates on financial performance of Commercial Banks in Kenya. This study utilized descriptive approach. The study used census where the entire population of 43 Commercial Banks operating in Kenya and registered by Central Bank of Kenya were selected. The study entailed the use of secondary data. Multiple regression models was used for analysis of the collected data. The study established that lending rates has a positive influence on the financial performance of financial institution because it is the main determinant of interest income. The study further concluded that an efficient management will ensure that the operating expenses of the Bank are kept at their optimal minimum hence promote the financial performance recorded. The study recommends that commercial banks evaluate their lending rates properly to ensure that they have adequate loan disbursement but also high returns that would improve the financial performance.

Lastly, the study by Tsuma&Gichinga (2016) was meant to identify, analyze and understand the key issues that affect the extent to which commercial banks in Kenya perform financially. It also aims at revealing the indicators of financialperformance, reasons, criteria and systems of determining the extent of performance. According to the study, key factors that affect financial performance of commercial banks include capital adequacy and liquidity, credit risk, interest rate and inflation rates. A descriptive research design was used. A population of 1,700 staff of National Bank of Kenya in Coast region were considered for the study. The sample size was 51. Market power theory, efficiencystructure theory and portfolio theory were used to explain the theoretical framework. The study found out that change in capital requirement affects financial performance of commercial banks because fundthat were to be lend out to earn interest income are put up as capital thus denying commercial banks revenue. Bad economictimes affect how customers repay their credit facilities thus causing loan defaulter. When inflation is rising, consumerpurchasing power is greatly reduced because many people are not able to borrow and invest and eventually repay loans.

2.5 Summary of Literature Review

A general conclusion drawn from the survey of the body of literature above is that banking regulation has some effect on the performance of the banking sector. It can also be concluded from the empirical evidence that previous studies did notaddress the aspect of financial performance as a result of regulations of commercial banks in Kenya. Most of the studies carried out focused ondifferent aspects and countries which are more developed compared to Kenyawhich is a developing country. It is evident that Bank asset, loan performance,bank liquidity, operating costs, and return on investment influence lendinginterest rates of commercial banks and consequently the financial performance.

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

This chapter discusses the research design, the population, the type of data needed and the source of the data. It also explains how the data will be analysed.

3.2 Research Design

A cross-sectional correlation research design was used for this study. In this design, the researcher observesmore than one variable at a point in time so that how they relate can be easily analyzed. In a correlation study, more than quantitative variables from the same group of subjects are analyzed (Waters, 2011).The aim of correlational studies is the examination of variables in their natural environments without direct involvement of the researcher.

The essence of a correlational research design is to determine whether the variables under study are related to each other and whether there is any relationship between the variables (Creswell, 2008). This makes the design suitable for this study (Leedy&Ormrod 2010).

3.3 Target Population

The populations for this research included listed Commercial Banks in Kenya**.** As at 31st December 2012, the banking sector consisted of the Central Bank of Kenya, as the regulatory authority, 44 banking institutions, (43 commercial banks and 1 mortgage finance company). Out of the 44 banking institutions, 31 locally owned banks comprise 3 with public shareholding and 28 privately owned while 13 are foreign owned. The foreign owned financial institutions comprise of 9 locally incorporated foreign banks and 4 branches of foreign incorporated banks (Bank

Supervision Report, 2012). This study used census method where the entire population of the 43 registered commercial banks (see appendix 2) will be analyzed for a period from 2009-2012.

3.4 Data Collection

Secondary data was used in this study. This data was collected from the financial statements published by the banks as well as books to collect information on annual earnings of the banks, profits and loss accounts and balance sheets of commercial banks registered under Kenya Bankers Association (Appendix II). Secondary data was adequate since financial performance is based on reported financial activities. The data was collected for five years between the years 2011 – 2015.

3.5 Data Analysis

Once the secondary data is collected, there was the cleaning, validation, and editing to ensure that the data is accurate, uniform, consistent and complete.The study then used Statistical Package for Social Science (SPSS) to analyze the quantitative data. A linear regression model of financial performance versus regulations was then be applied to examine the effect of banking regulations on financial performance of commercial banks in Kenya. The model treats financial performance of commercial banks as dependent variable while independent variables are bank regulations. Financial performance of commercial banks was measured using return on assets. The significance of each independent variable was then tested. Fischer distribution test called F- test was used to test the significance of the overall model at a 95% confidence level.

To find out the effect of banking regulations on financial performance of commercial banks in Kenya, the following regression model was used:

$\mathbf{Y = a + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3} + \varepsilon$

Where:

Y = Return on Assets (Dependent variable).

a = Constant

β_1 = Coefficient of capital regulation requirement

β_2 = Coefficient of liquidity requirement ratio

β_3 = Coefficient of risk management

X_1= Capital requirement

X_2 = Risk management

ε = Error term.

CHAPTER FOUR: DATA ANALYSIS, RESULTS AND DISCUSSION

4.1 Introduction

This chapter presents research results, study findings and then concludes by presenting detailed analysis and discussion of the research objectives. Descriptive statistics was used.

4.2 Response Rate

The targeted number of respondents was the 43 commercial banks registered with the central bank of Kenya. The researcher managed to get data for forty (40) commercial banks which represent 93% of all the registered commercial banks shown in the table 4.1 below. Reliable data could be obtained for Chase bank, Charterhouse bank and Imperial bank. Corroborative data was gathered from the annual reports of the forty

Table 4.1 Response Rate

Commercial Banks	Frequency	Percent
Responded	40	93.02%
Did not respond	3	6.98%
Total	**43**	**100%**

4.4 Effect of Banking Regulations on Financial Performance

Banking regulations helps in avoiding economic failures arising from failed banking sector. Banking regulation is meant to ensure reduced failures in the banking system and to facilitate a stable system of payment. Effective regulation enables banks to exploit economies of scale and creates more diversified, hence more stable banks. To establish how banking regulations influence financial performance of commercial banks in Kenya, a linear regression model was applied. The result is as shown in the table 4.4 below:

Table 4.2: Effect of Banking Regulations on Financial Performance

		Return on assets	Mean capital requirement	Mean liquidity requirement	Mean risk management
Return on assets	Pearson Correlation	1	.561**	.595**	.253
	Sig. (2-tailed)		.000	.000	.115
	N	40	40	40	40
Mean capital requirement	Pearson Correlation	.561**	1	.859**	.304
	Sig. (2-tailed)	.000		.000	.057
	N	40	40	40	40
Mean liquidity requirement	Pearson Correlation	.595**	.859**	1	.271
	Sig. (2-tailed)	.000	.000		.091
	N	40	40	40	40
Mean risk management	Pearson Correlation	.253	.304	.271	1
	Sig. (2-tailed)	.115	.057	.091	
	N	40	40	40	40

**. Correlation is significant at the 0.05 level (2-tailed).

The table 4.2 above shows the correlation coefficients between return on assets and mean capital requirement, mean liquidity requirement and mean risk management. The correlation between return on assets and mean capital requirement is 0.561 with a p-value of 0.000. This indicate that return on assets and capital requirement have a positive relationship. The relationship is significant at 5% level of significance since p-value 0.000<0.05. It also shows that return on assets and mean liquidity requirement have a positive correlation 0.595 which is significant at 5% level of significance. Finally, return on assets and mean risk management have a positive correlation though not significant with p-value 0.115>0.05 at 5% level of significance.

4.4.1: Regression Co-efficient

To find out the effect of banking regulations on financial performance of commercial banks in Kenya, a regression model of the nature: $\mathbf{Y = a + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3} + \varepsilon$ was used. The regression coefficients are as given in the 4.5 below:

Table 4.3: Regression Co-efficient

	Unstandardized Coefficients		Standardized Coefficients		
Model	B	Std. Error	Beta	t	Sig.
(Constant)	.026	1.342		.020	.984
Mean capital requirement	.071	.110	.168	.644	.524
Mean liquidity requirement	.071	.043	.428	1.657	.106
Mean risk management	.025	.041	.086	.621	.539

Source: Research Data

From the table 4.6 the following regression equation was established

$Y= 0.026 + 0.071X_1 + 0.071X_2 + 0.025X_3$

The results indicate that a unit change in the capital requirement causes a decline of 7.1% change in the return on assets of the commercial banks. The p-value of 0.524>0.05 showing that mean capital requirement does not have a significant influence on return on assets. A unit change in mean liquidity requirement also leads to a rise in return of assets at with a rate of 7.1%. This however is not significant with the p-value of 0.106>0.05.Equally, a unit change in risk management leads to a positive change of 2.5% change in the return on assets of the commercial banks. The effect of mean risk management is however not significant with a p-value of 0.539>0.05. This means financial performance may be under influence of other factors other than capital requirement, liquidity and risk management used in the model. The findings therefore shows that mean capital requirement, mean liquidity requirement and mean risk management have positive influence on financial performance of commercial banks in Kenya but their influence is not significant based on the p-values that are greater than 0.05.

Table 4.4: Analysis of Variance – ANOVA

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	7.459	3	2.486	7.060	.001[a]
Residual	12.678	36	.352		
Total	**20.136**	**39**			

a. Predictors: (Constant), Mean risk management , Mean liquidity requirement , Mean capital requirement

b. Dependent Variable: Return on assets

Table 4.6 above shows that variations in the return on assets can be explained by the model to the extent of 7.459 out of 20.136 while other variables not captured by this model can explain of the 62.96% (12.678) out of 20.136) of the variations in return on assets. The F value of the model produces a p-value of 0.670 which is significantly different from zero. A p-value of 7.060 is greater than the set level of significance of 0.05 for a normally distributed data. This means that the model is not significant in explaining performance of the Commercial banks. This means that other studies can include other determinants of performance.

Table 4.5: Model Summary – Goodness of Fit

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.609[a]	.370	.318	.59343

a. Predictors: (Constant), Mean risk management , Mean liquidity requirement , Mean capital requirement

The Table 4.5 above shows adjusted R^2 is 0.318 which means that there was 31.8% positive variation in return on assets index due to changes inindependent variable and 68.2% is variation of the dependent variable due to other factors not in the model. The correlation coefficient tells us the strength of the relationship between the variables. The study found that the correlation coefficient was 0.609 thus there was a strong positive correlation between return on assets and mean capital requirement, mean liquidity requirement and mean risk management.

CHAPTER FIVE: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter summarizes the research findings and also presents conclusions and recommendations of the study. The conclusions are drawn from the findings of the study which sought to establish the effect of banking regulations on financial performance of commercial banks in Kenya.

5.2 Summary

The objective of this study was to establish the effect of banking regulations on financial performance of commercial banks in Kenya.The variables of regulation included capital regulation requirement, liquidity requirement ratio and risk management while performance of commercial banks was measured using return on assets.

Regarding the objective, the study found out that capital regulation requirement, liquidity requirement and risk management have a positive effect on return on assets. The study found out that the correlation between return on assets and mean capital requirement was 0.561 with a p-value of 0.000 indicating that return on assets and capital requirement have a positive relationship. The relationship was significant at 5% level of significance since p-value 0.000<0.05. The study also found that return on assets and mean liquidity requirement have a positive correlation 0.595 which is significant at 5% level of significance while return on assets and mean risk management have a positive correlation though not significant with p-value 0.115>0.05 at 5% level of significance.

The regression analysis also shows that capital requirement, liquidity ratio requirement and risk management do not have significant influence on return on assets. This means that return on assets of the commercial banks may be under influence of other factors other than capital requirement, liquidity and risk management used in the model.The F value of the model produces a p-value of 0.670 which is significantly different from zero. A p-value of 7.060 is greater than the set level of significance of 0.05 for a normally distributed data. This means that the model is not significant in explaining performance of the Commercial banks. This means that other studies can include other determinants of performance.

The study further established that the correlation coefficient was 0.609 thus there was a strong positive correlation between return on assets and mean capital requirement, mean liquidity requirement and mean risk management.

5.3 Conclusions

The study concluded that capital regulation requirement, liquidity requirement and risk management have a positive effect on return on assets. The study further established that mean capital requirement and mean liquidity requirement have a significant effect on return on assets. The mean risk management however does not have a significant effect on return on assets. Overall, the study established that the model is not significant in explaining performance of the Commercial banks. This means that there are other determinants of return on assets of commercial banks in Kenya.

5.4 Recommendations

Regulation of the commercial banks is key in Kenya especially with recent cases of collapse of commercial banks. It is a key issue in enhancing the success of the country through sustainable stable financial performance. The Government should therefore enable a good conducive regulatory environment. It is recommended that the commercial banks should not extremely restrict because this can create information asymmetry and consequently it leads to the poor performance of the bank. However, adequate regulations should be put in place to bring sanity to the sector.

5.5 Limitations of the Study

First, there was limited scope by the fact that it only covered commercial banks. The study would give a better picture for policy reasons if it reflected the other non-bank financial institutions. Obtaining of data from commercial banks was a great challenge and the management in some few commercial banks was not cooperative, the researcher managed to obtain the data for the commercial banks. The study was further constrained by limited financial and time resources. This was sorted through the development of time schedules that enabled the study to be completed using the budget drawn and within the required time of the study. In some financial institutions it was difficult to meet senior managers in order to allow us to get data from the finance department.

5.5 Suggestions for Further Studies

This study is not exhaustive in showing and explaining the determinants of regulation in commercial banks that can contribute to the financial performance. Further studies will therefore be of great use in explaining what really determines the financial performance of commercial banks. Other researchers who are really interested may do a research of regulation and its impact on financial performance with an aim of doing cross countries comparative study and met analytical evaluation. Another study can be conducted in Kenya but should expand the variables. Other variables that could be included are the market discipline, supervisory power, initial capital stringency competition from commercial banks. This kind of study will have an advantage of having many variables.

The study also recommends that a further study should be carried out to determine how capital requirements can increase financial stability in commercial banks in Rwanda. This will offer a broad analysis on impact of capital regulation on financial performance in Kenya.

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APPENDIX I: LIST OF COMMERCIAL BANKS IN KENYA

1. African Banking Corporation Ltd
2. Bank of Africa Kenya Ltd
3. Bank of Baroda (K) Ltd
4. Bank of India
5. Barclays Bank of Kenya Ltd
6. CFC-StanbicBank Ltd
7. Charterhouse Bank Ltd
8. Chase Bank (K) 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.
14. Development Bank of Kenya Ltd
15. Diamond TrustBankKenya Ltd
16. Dubai Bank Kenya Ltd
17. Ecobank Kenya Ltd
18. Equatorial Commercial Bank Ltd
19. Equity Bank Ltd
20. Family Bank Limited
21. Fidelity Commercial Bank Ltd
22. Fina Bank Ltd
23. First community Bank Limited
24. Giro Commercial Bank Ltd.
25. Guardian Bank Ltd
26. Gulf African Bank Limited
27. Habib Bank A.G Zurich
28. Habib Bank Ltd.
29. Imperial Bank Ltd
30. I &M Bank Ltd
31. Jamii Bora Bank Limited.
32. Kenya Commercial Bank Ltd
33. K-Rep 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 Kenya Ltd
41. Trans-National Bank Ltd
42. UBA Kenya Bank Limited
43. Victoria Commercial Bank Ltd

APPENDIX II: MEAN OF DEPENDENT AND INDEPENDENT VARIABLES

	Name of the Bank	Mean ROA (%)	Mean Capital Requirement (%)	Mean Liquidity Requirement	Mean Risk Management
1.	African Banking Corporation	4.23	11.49	44.40	25.52
2.	Bank of Africa Kenya	4.12	12.10	44.48	30.28
3.	Bank of Baroda Ltd	4.09	11.50	44.00	22.02
4.	Bank of India	4.02	10.40	40.00	24.44
5.	Barclays Bank of Kenya	5.12	16.96	56.24	26.65
6.	CFC – Stanbic Bank	5.01	14.88	50.24	25.56
7.	Citi Bank	4.98	10.48	42.24	22.44
8.	Commercial Bank of Africa	5.88	14.66	51.10	24.86
9.	Consolidated bank	6.01	15.98	54.24	22.14
10.	Co-operative Bank of Kenya	6.03	15.44	50.46	23.54
11.	Credit Bank Ltd	4.82	11.28	48.44	20.21
12.	Development Bank of Kenya	4.40	14.54	50.20	22.23
13.	Diamond Trust Bank	5.76	12.24	48.40	20.12
14.	Dubai Bank of Kenya	4.98	10.46	45.54	21.64
15.	Eco bank Kenya Ltd	5.12	14.44	54.00	25.43
16.	Equatorial Commercial Bank	6.03	14.88	52.00	25.00
17.	Equity Bank	6.11	16.02	56.20	26.76
18.	Family Bank	5.88	15.22	50.56	24.46
19.	Fidelity Commercial Bank	5.02	14.46	48.98	20.86
20.	Fina Bank	4.98	14.48	46.24	22.46
21.	First Community Bank	4.12	14.48	48.20	20.46
22.	Giro Commercial Bank	5.66	13.98	46.44	22.87
23.	Guardian Bank Ltd	4.89	12.64	45.45	24.56
24.	Gulf African Bank Ltd	4.96	13.46	48.00	26.00
25.	Habib Bank A.G Zurich	4.10	14.02	52.02	22.90
26.	Habib Bank Ltd	4.15	14.22	54.24	20.34
27.	I & M Bank Ltd	6.03	15.22	52.20	25.00
28.	Jamii Bora Bank	5.58	12.48	48.80	20.24
29.	Kenya Commercial Bank	6.40	16.44	58.20	26.88
30.	K-Rep Bank	6.00	14.48	50.20	25.68
31.	Middle East Bank (K) Ltd	5.04	13.46	47.88	22.14
32.	National Bank of Kenya	6.14	16.00	58.34	25.56
33.	NIC Bank Ltd	6.16	15.24	54.44	23.00
34.	Oriental Commercial Bank	4.58	14.24	49.78	22.01
35.	Paramount Universal Bank	4.40	14.00	48.00	20.10
36.	Prime Bank Ltd	4.80	13.28	46.78	20.12
37.	Standard Chartered Bank	5.40	15.86	54.48	25.64
38.	Trans National Bank	5.82	15.64	56.68	25.00
39.	UBA Kenya Bank Ltd	4.90	14.48	50.43	24.22
40.	Victoria Commercial Bank	4.98	13.88	48.44	20.14
	AVERAGE	**5.17**	**13.99**	**49.92**	**23.487**