# THE EFFECT OF FINANCIAL REPRESSION ON THE FINANCIAL PERFORMANCEOF COMMERCIAL BANKS IN KENYA

BRIAN MWENDA MICHENI D61/34939/2019

# A RESEARCH PROJECT SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF DEGREE IN MASTER OF BUSINESS ADMINISTRATION, FACULTY OF BUSINESS AND MANAGEMENT SCIENCES UNIVERSITY OF NAIROBI.

**APRIL 2022** 

### DECLARATION

I declare that this proposal is my original work which has not been submitted to any other University for award of any degree

Signature...

Date.....18/11/2022.....

## Brian Mwenda Micheni

## D61/34939/2019

This research project has been submitted for examination with my authority and approval as university supervisor.

18/11/2022 .....Date..... Signature.... .....

DR. ANGELA KITHINJI, SENIOR LECTURER, DEPARTMENT OF FINANCE AND ACCOUNTING, UNIVERSITY OF NAIROBI

#### ACKNOWLEDGEMENT

I am grateful to God for the good health which enabled me to complete this research project in time. I wish to sincerely thank my supervisor, Dr Angela Kithinji for her professional guidance and support she accorded me throughout the research process. I would also like to extend my gratitude to the staff and fellow students at the University of Nairobi who sacrificed their time to assist me from time to time.

## **DEDICATION**

This research project is dedicated to my family, supervisor, lecturers and friends for their endless support, love and encouragement during the study. May God Bless you all.

## LIST OF FIGURES

Figure 2.1: Conceptual Model (Source:	Author 2022)	14
---------------------------------------	--------------	----

## LIST OF TABLES

Table 3.1: Operationalization of Study Variables	
Table 4.2: Descriptive Statistics	21
Table 4.3: Normality Test	23
Table 4.4: Regression Model Summary	
Table 4.5: Analysis of Variance (ANOVA)	
Table 4.6: Coefficients of the Regression Model	

## TABLE OF CONTENTS

DECLARATION	ii
ACKNOWLEDGEMENT	iii
DEDICATION	iv
LIST OF FIGURES	v
LIST OF TABLES	vi
ABBREVIATIONS	X
ABSTRACT	xi
CHAPTER ONE: INTRODUCTION	1
1.1 Background of the Study	1
1.1.1 Financial Repression	1
1.1.2 Financial Performance	3
1.1.3 Financial repression and Financial Performance	3
1.1.4 Commercial Banks in Kenya	4
1.2 Research Problem	5
1.3 General Objective	6
1.4 Value of Study	6
CHAPTER TWO: LITERATURE REVIEW	7
2.1 Introduction	7
2.2 Theoretical Framework	7
2.2.1 Free Market Theory	7
2.2.2 Public Policy Theory	7
2.2.3 Public Finance Theory	8
2.3 Review of Empirical Evidence	9
2.4 Determinants of Financial Performance	12
2.4.1 Company Size	12
2.4.2 Liquidity	13
2.4.3 Leverage	13
2.4.4 Profitability	13
2.5 Conceptual Framework	13
2.6 Summary of Literature Review	14
CHAPTER THREE: RESEARCH METHODOLOGY	16
3.1 Introduction	16
3.2 Research Design	16
3.3 Target Population	16

3.4 Data Collection	16
3.5 Diagnostic Test	17
3.5.2 Linearity Test	17
3.5.3 Normality Test	17
3.5.4 Heteroscedasticity Test	17
3.5.5 Multicollinearity Test	17
3.5.6 Autocorrelation Test	18
3.5.7 Homoscedasticity Test	18
3.6 Data Analysis	18
3.6.1 Analytical Model	18
3.6.2 Operationalization of Study Variables	19
3.6.3 Tests of Significance	19
CHAPTER 4: DATA ANALYSIS, FINDINGS AND DISCUSSION	21
4.1 Introduction	21
4.2 Descriptive Statistics	21
4.2.1 Return on Assets	22
4.2.2 Interest Rate Cap	22
4.2.3 Cash Reserve Requirement	22
4.2.4 Government Debt	22
4.3 Skewness and Kurtosis of the Variables	23
4.4 Normality Test	23
4.5 Linear Regression	24
4.5.1 Summary of the Model	24
4.5.2 Analysis of Variance	25
4.5.3 Coefficients of the Regression Model	25
4.6 Discussion of Findings	27
CHAPTER 5: SUMMARY, RECOMMENDATIONS AND CONCLUSIONS	
5.1 Introduction	
5.2 Summary of the Research Findings	
5.2.1 Effects of Interest Rate Caps on Financial Performance	
5.2.2 Effects of Cash Reserve Requirements on Financial Performance	
5.2.3 Effects of Government Debt on Financial Performance	29
5.2.4 The Effects of Financial Repression on Financial Performance	29
5.3 Conclusions of the Study	
5.4 Study Recommendations	29
5.4 Study Limitation	30
5.5 Suggestions for Further Researcher	30

REFERENCES	
Appendix 1: List of Commercial banks in Kenya	
Appendix 2: Data Collection Schedule	

## ABBREVIATIONS

СВК	The Central Bank of Kenya.
CRR	The Cash Reserve Ratio.
NSE	The Nairobi Securities Exchange.
ROA	The Return on Assets.
ROE	The Return on Equity.
ROI	The Return on Investments.
SPSS	The Statistical Package for the social Sciences.

#### ABSTRACT

The study focused on evaluation of the influence of financial repression on financial performance of Kenyan commercial banks. The study used interest rate cap, government debt and cash reserve requirements as the independent variables. Return on assets was used as the depended variable in the current study. The research was guided by the free market theory, public policy theory and public finance theory. The research utilized a descriptive research design and it considered data from 2001 to 2021 for the all the commercial banks in Kenya. The research was a census study because it involved all the commercial banks operating in Kenya. The data utilized in the research was collected from the CBK's annual survey report, bank annual reports of financial statements, and Kenyan bank websites. A linear regression analysis model was employed to evaluate the data. According to the study's findings, there is a weak but significant relationship between financial repression and financial performance. The results also showed that government debt has a positive impact on Kenyan commercial banks' financial performance. Moreover, the study's findings indicate a negative relationship between cash reserve requirements, interest rate caps, and the financial performance of commercial banks. The study recommends that the government and policy makers should not focus on interest rate cap and government debt to improve the financial performance of the commercial banks in Kenya because the variables have a weak relationship. The research also recommended policymakers and government to lower the cash reserve requirements to improve the financial performance of banks because it had a significant impact.

#### **CHAPTER ONE: INTRODUCTION**

#### 1.1 Background of the Study

The government's activities are likely to have an impact on commercial banks' operations, such as interest rates, cash reserves, and the decision made by industries to finance their activities with credit (Kosimbei & Gitau, 2015). Furthermore, when government restricts market entry, it alters the banking sector's environmental competition. All of these variables hint to a connection between financial repression and commercial bank operations, highlighting the need of assessing the influence of financial repression on financial companies in Kenya operate.

Financial repression is defined as a set of government-imposed legal limitations, laws, distortions, regulations, qualitative, taxes, quantitative restraints, controls and quantitative restraints that prevent financial intermediaries from operating at full capacity (Xun, 2013). As a result, financial repression is defined as government-imposed restrictions that prevent financial intermediaries from operating at full capacity.

The rules of supply and demand, according to free market ideas, work to make sure the market regulates itself. Financial repression, on the other hand, impedes the free flow of capital, which is contrary to the economy's free market idea (Canova, 1994). In fractional reserve banking theory, banks are not needed to keep all the amount at consideration. This theory is supported by the assumption that commercial banks are required to ensure the Economy works. The free market power theory says that the market structure always influence the performance of a firm.

The Kenyan government has implemented a number of steps in the last few years that can be classified as financial repression. For example, in September 2016, the Kenyan government established interest rate caps on bank credits at roughly 4%, which was the same as the central bank base rate in Kenya. The Reserve Ratio Requirements for Commercial Banks in Kenya have also been changed by the Kenyan government. The Central Bank of Kenya, for example, decreased the cash reserve ratio requirements from 5.25 percent to 4.25 percent in the aftermath of the Covid-19.

#### **1.1.1 Financial Repression**

Financial repression, according to McKinnon & Shaw (1973), is a system of regulations, other

non-market constraints and laws imposed by the government to prevent financial firms from operating as they should. The tactics employed to minimize the government's debt-to-GDP ratio are referred to as financial repression (Reinhart & Sbrancia, 2011). As a result, financial repression is primarily connected with interest rate limits and ceilings, government control of banks and local financial institutions, and the creation of a held internal market for government debt. Also, financial repression deals with the entry restrictions into the banking sector, as well as direct financing to specific industries. Authorities in the private sector use the funds as a form of debt payback (Hileman, 2017).

Financial rules, according to Agborndakaw (2010), are used to create order in the markets, offer licenses to financial service providers, law and order enforcement, punishment of wrongdoing, consumer and investor protection, and the promotion of a stable financial scheme. These regulations are created by regulations introduced by the government and other international agencies such as the Basel Committee and the International Monetary Funds (IMF). The Kenyan Central Bank is responsible for bank regulation (CBK). During the 1970s and 1980s, most developing countries' economies were characterized by financial repression.

The amount charged by the lender to the borrower for the use of an asset is referred to as the interest rate. It's calculated as a percentage of the principal of the loan. Interest rate caps are restrictions placed on financial organizations by the government, particularly commercial banks, on the lowest or highest interest rates charged (Fabozzi & Frank, 2000). Reserve ratio requirements are the central bank's regulations governing the minimum reserve that commercial banks must hold.

Commercial bank reserves are composed of a fraction of deposit obligations owing by commercial bank clients (Kavwele et al., 2018). The major approach utilized by the government to increase the money supply is to reduce the reserve ratio. When the government wants to reduce the money supply, the reserve ratio is raised, lowering commercial banks' lending capacity. The government debt owed to domestic lenders is referred to as domestic credit by the government. It is collected through domestic commercial banks and other financial entities. The creation of a benchmark yield curve for private lending is aided by securitized domestic debt (Christensen & Abbas 2010). Kenya's internal debt was \$3.08 billion in the 2018/2019 budget year, accounting for 66 percent of the country's total debt (The Africa report, 2020). Financial repression in the current study was measured using cap on interest rate, cash reserve requirementand government debt. Specifically, the interest rate ceiling or the credit supply are used to find the cap on interest rates. The central bank

rate is used as the base rate in measuring the interest ratecap. Checking deposits and the reserve requirements were used to measure the cash reserve requirements. Lastly, debt to GDP ratio was used to measure the government debt.

#### **1.1.2 Financial Performance**

Financial performance, according to McMullen (1986), is the evaluation of a company's financial and profitability soundness. It shows how perfectly a company uses the assets to generate revenue and enhance its performance financially. The purpose of reviewing the financial performance of a firm is to assess its financial health. One of the primary objectives for the existence of organizations is to generate more value for the owners. Poor financial health, on the other hand, shows that the company is not creating the desired value for its shareholders (Uotila, Maula, Keil, & Zahra, 2009).

The owners can determine whether they are getting value for their money by evaluating a company's financial performance. Return on investments (ROI), return on assets (ROA) and return on equity (ROE) are the three metrics that are most frequently used to evaluate a company's financial performance (Uotila, Maula, Keil, & Zahra, 2009).

Return on Equity is used to find a company's capacity to generate income from its available capital. The formula for calculating return on equity, also known as RoE, is net income of a firm divided by equity held by the shareholders. On the other hand, return on assets is a metric that determines an organization's ability to create income from its available assets. Return on assets can be computed by considering the net income of a company then dividing it with the total assets that it possesses. Returns on investment (ROI) is a metric that is primarily used to assess a company's capacity to earn income from various assets. As a result, the net return divided by the investment cost is the formula for assessing an organization's return on investment. The net returns are computed by taking the minus of the original investment value from the final investment value. Return on assets was used to measure financial performance. Specifically, information on the net income from using the assets was used and the use of average total assets by the firms were considered in evaluating the financial performance.

#### **1.1.3 Financial repression and Financial Performance**

Financial repression is a collection of government-imposed qualitative or quantitative constraints and controls that prevent financial intermediaries from operating at their full technological capacity. The financial intermediary's operation capability is distorted, which affects the performance of the firm financially. Inability to fully utilize all business prospects in the environment results in lower earnings and, as a result, lower profitability and overall performance of the company (Uotila, Maula, Keil, & Zahra, 2009).

Mbugua (2020) was interested in finding out how the financial performance of Kenyan commercial banks was affected by repression of the financial system. It was demonstrated using a regression analysis that there is no significant connection between financial repression and the financial performance of the several Kenyan banks that were chosen for this study. According to the findings of the research, factors such as restrictions on interest rate, requirements for cash reserves, and domestic credit intake all had an effect on the Kenyan commercial banks' performance.

Ongonge & Eddie (2021) investigated the effect of financial repression had on the overall performance of a selection of commercial banking institutions. The goal of the study was to find the correlation between the performance of commercial banks and domestic government debt, limits on interest rates, reserve and liquidity ratios, and capital regulations. Thefindings showed that controlling the interest rate, capital controls and reserve ratios had apositively impact on performance while government debt had a negative impact on commercial banks performance.

#### 1.1.4 Commercial Banks in Kenya

Kenya's Banking Act establishes a number of rules for establishing, operating, as well as terminating a bank in Kenya. The Kenyan Central Bank (CBK) is in charge of enforcing the regulations, and regulating all commercial banks in Kenya. Banks and other financial institutions in the country provide services such as safe custody of clients' money, facilitating international trade, offering investment services to customers, lending funds to customers, transferring funds from one account to another in-house or otherwise, safe custody of valuable items, financial advice, providing foreign exchange services, and acting as trustees.

It is apparent that government financial repression has an impact on the functions of these financial institutions. Commercial banks' capacity to issue loans that earn interest income is hampered by interest rate limits. The increase in reserve ration requirements has an impact on bank liquidity since it reduces the amount of money available to pay off debts, lend to clients, and do other things in commercial banks. The government's use of domestic credit has an impact on banks' ability to offer money to non-government organizations, which creates additional revenue for the commercial bank through the government, affecting commercial bank performance (Kosimbei & Gitau, 2015).

#### **1.2 Research Problem**

Financial repression usually takes the shape of government policies that limit the financial sector's freedom. Financial repression has been utilized to aid countries' recovery from the global financial crisis in recent years. The Chinese government, for example, employed financial repression to prevent residents from withdrawing money from banks in order to fund its stimulus package. Commercial banks care about financial success which can be achieved through financial repression for a number of reasons. To begin with, banks are in the business of lending money, therefore they must be able to earn enough revenue to cover their operating expenses while still having money to lend. Second, because banks are regulated enterprises, they must maintain good financial ratios to be in compliance with the rules. Finally, because banks rely on consumer deposits to support their operations, they must earn sufficient revenue to pay their deposit expenses. In a nutshell, commercial banks care about their financial performance because it helps them to earn enough money to cover their costs, comply with regulations, and attract and retain clients.

Despite the fact that the main policies of financial repression in Kenya are implemented through commercial banks, such as interest rate caps, government credit uptake, policies to favor certain sectors when offering credit, and, reserve ratio requirements, the consequences of financial repression based on commercial bank performance have not been conclusively addressed in extant literal studies. According to Kosimbei & Gitau (2015), interest rate ceilings, government borrowing, and broad money are all linked to slowing economic growth. A high reserve requirement, on the other hand, is connected to a positive influence on economic growth, according to the study. According to Mutemi & Makori (2019), interest rate caps had a favorable effect on the performance of financial institutions and banks. Monetary and financial policies in some countries, such as India, have a negative impact on financial institutions and banks' performance (Punita & Somaiyi, 2006).

Mutemi & Makori (2019) found negative effects of financial repression on bank performance, economic growth and the profitability of financial institutions. Kavwele, Ariemba, & Evusa (2018), Mbua (2017), Oganda, Mogwabo & Otieno (2018), and Ng'ang'a (2017) results showed financial repression had a positive influence on profitability, bank performance and economic growth.Islam, Porporato & Waweru (2014), Abidi & Lodhi (2015), Mwakima (2017), and Oganda, Mogwabo & Otieno (2018) studied the effect of financial repression on the economy rather than the effect they have on financial institutions such as banks.

The studies looked at how several factors, such as interest rate ceilings, wide money, and government borrowing, influence economic growth. Nonetheless, the study did not look at the effects of the components on commercial bank performance. The studies were conducted to find the effect of capping interest rate on the performance of financial institution. However, no studies have been conducted in Kenya to assess the impact of financial repression on the financial performance of financial institutions and banks. As a result, the main objective of this research was to assess the effects of financial repression on the financial performance of Kenyan commercial banks.

#### **1.3 General Objective**

To determine the effect that financial repression has had on Kenyan commercial banks' financial performance.

#### 1.4 Value of Study

The information could be used by policymakers, particularly the National Treasury and the Central Bank of Kenya, to establish new financial repression/liberalization policies or reform existing ones. The research also helps the Kenyan government to provide goods and services that will benefit the community as a whole. The findings aid commercial banks in implementing fair and ethical business practices such as client protection, monetary policy monitoring, and banking operations regulation without unwarranted intervention. The research also assists commercial bank executives in making judgments and adopting strategies that assure profitable operations. Thisstudy contributes to existing information on the topic of financial repression since it investigates the effect that measures of financial regulation have on the performance of banks. Also, it serves as a foundation for future study and a source of information to be used by policymakers. This study contributes to the literature on financial repression concepts, particularly since it aims to illustrate a connection between profitability and financial repression, which creates interest to scholars and academics conducting research.

#### **CHAPTER TWO: LITERATURE REVIEW**

#### **2.1 Introduction**

The section focuses on the study's theoretical framework, followed by an assessment of prior research relevant to the contexts being investigated, identifying the study gap, and determining the conceptual framework, which was utilized as a guide to the study's approach.

#### **2.2 Theoretical Framework**

The current research narrows down on three major theories outlined below

#### 2.2.1 Free Market Theory

The free market theory was created by John Locke in the seventeenth century and it outlines an economic system with no or limited government interference in the demand and supply of goods and services. According to free market theory, supply and demand rules always strive for market self-regulation (Canova, 1994). Moreover, when it comes to the free market hypothesis, financial repression is thus considered as authority involvement that influences the rules of supply and demand.

Monetary repression entails activities such as regulating commercial bank interest rates, tightening regulations on local banks and financial establishments, and the development of a confined domestic market for sovereign debt. This includes limiting access to the financial sector as well as providing direct loans to specific industries. As a result, as Gelfond (2001) points out, monetary repression impacts the free movement of financial markets, which is contrary to the free market principle.

The free-market hypothesis influences three control variables in this study: interest rate capping, bank cash reserve ratio restrictions, and government internal credit acquisition. Government initiatives relating to financial repression policies contradict free market theory and have an impact on these variables.

#### 2.2.2 Public Policy Theory

This hypothesis was cultivated by Viana (1996). It asserts that imposing monetary constraints is beneficial, and that it is inspired by an inclination to disseminate credit to specific economic sectors. Government interventions in the financial system, according to the public policy view, address market failure in loan provision and improve household social well-being. Supporters say

that these are minimal monetary limitations because they are in place to boost growth, sustain financial solidity and economic growth, as well as to assist the needy. These government initiatives, according to Reinhart & Rogoff (2011), aid loan allotment and facilitation by central banks to meet public policy aims. Moreover, they claim that, in addition to providing the government with the means to smooth business operations and improve financial development in the right path, it also aids in addressing social justice apprehensions in society. (Prasad et al, 2003) discovered an ambiguous connection between monetary repression and economic growth in a data set of emerging economies, whereas Stiglitz (2000) imputes financial liberalization for increased financial dangers and weak economic growth in underdeveloped countries. Stiglitz (1994);Roubini & Sala-i-Martin (1995); and Johansson (2012) have all used the theory to evaluate oppressive regimes. A portion of existence is totally private, but it is expressed publicly through public policy. Public policy is of paramount importance in a nation where democracy reigns supreme. Public policy is viewed as a mechanism used to improve the economic-social system and a means of determining the future. It plays a significant role in aiding society to live a full life andensuring that products and services are provided on time.

#### **2.2.3 Public Finance Theory**

This notion was created by Musgrave in the year (1960). According to the public finance theory, financial repression has a negative influence on development and that economic liberalization, on the other hand, supports growth by facilitating financial development, enhancing capital allocation efficiency, and boosting private internal savings. In the two basic policies of financial repression, the government determines who lends credit, the people who receive the credit, pricing of credits, and conditions for addressing debt overhang that exist outside from the free flow of goods in the market economy. The government's desire to control the financial sector, according to Riet (2008), arises from its discretion to fund its budget at advantageous terms in order to help lower public debts. As a result, the government is seen as an entity who will unavoidably stifle the free functioning of markets, so contorting savings and investment incentives. Free interest rates were promoted by Mckinnon and Shaw in order to draw consumers' voluntary savings into the free and competitive banking system sector in order to stimulate economic growth. This theory was used by Johansson (2012) to evaluate the influence of repressive policies on economic growth. Stock markets that are well-developed assist businesses and people in better managing liquidity and output risks, resulting in improved financial performance. They argue that a depressed financial

market discourages risk-avoiding investors from participating in enterprises, resulting in inefficient resource allocation and slower growth. This theory can be used to explain how government debt and reserve requirements affect bank performance.

### 2.3 Review of Empirical Evidence

Several researches have been conducted to evaluate the influence that capping interest rates has on the overall financial success of commercial banks. Abidi & Lodhi (2015) investigated the effect that alterations to cash reserve requirements have on the performance of commercial banks operating within Pakistan's financial system. The aim of the study was to find whether or not there is a connection between bank profits and the levels of cash reserves that are determined by a nation's monetary and fiscal policy. Return on equity and return on assets were two of the variables used to determine a bank's profitability. The researchers gathered information from financial statements belonging to banks found in Pakistan's financial market for ten years, from 2005 to 2014. Correlational analysis and linear regression analysis were applied to examine the data. According to the study's findings, cash reserve ratio regulations have an adverse association with commercial banks' financial performance in Pakistan's financial sector.

Numerous research have been done to determine whether the cash reserve ratio influences the financial performance of the companies under examination. MacCarthy (2015) investigated the effect of the Cash Reserve Ratio on Ghanaian banks' financial performance. The findings show that although it is widely thought that the Cash Reserve Ratio has an effect on financial companies, it is unclear what that effect is. Some studies discovered a negative relationship between CRR and bank financial performance, others found a favorable impact of CRR on commercial bank financial performance, and still others found no link between CRR and commercial bank financial performance (MacCarthy, 2015). To resolve these anomalies, the researcher gathered data from 20 Ghanaian commercial banks' annual financial reports from 2013. The data was then analyzed using the LOS regression and Pearson's Product Moment Correlation by the researchers. The Return on Investments (ROI) was used to assess financial performance during the procedure. Conclusions of the research prove that the CRR has a positive effect on the financial success and performance of commercial banks, particularly in a countrylike Ghana.

Mbua (2017) conducted the study to evaluate the effect of the Central Bank of Kenya's interest rate cap on the financial performance of banks, particularly those listed on the Nairobi Stock Exchange. The main purpose for researching the influence of the Kenyan Central Bank capping interest rates on the financial performance of banks enumerated on the NSE was to see if interest rates are a significant aspect to think about when investing in a bank's stock. The researchteam used a checklist to collect data from 11 NSE-listed banks, and the study was conducted in the form of an observational survey. The researchers then used IBM SPSS 22.0 statistical softwareto do correlation analysis on the acquired data. The analysis indicated that imposing interest ceilings had a negative impact on bank lending rates. Furthermore, following the implementation interest rate caps, bank stock prices fell, implying that interest rates are an essential consideration when deciding whether or not to invest in a specific bank's shares. If a bank's stockprice falls and its lending rates fall, it can be assumed that interest ceiling has an adverse effect on the financial performance of Kenyan commercial banks.

According to another assessment on the banks' financial performance by Ng'ang'a (2017), the government instituted interest rate caps in December 2016 in an effort to reduce the excessive interest rates charged by commercial banks in Kenya during that period. The research used a descriptive research approach to find the influence of the government's interest rate cap on the financial performance of the country's monetary institutions. All 42 commercial banks operating in Kenya's economy were included in the sample, and the data acquired was secondary data from these banks' financial statements. The findings revealed caping annual interest rates had a negative influence on commercial bank financial performance, and that the government should reconsider its interest rate capping policy.

Oganda, Mogwabo, & Otieno (2018) also investigated the effect of cash reserves on financial institutions performance in the country. The researchers compared the National Bank of Kenya with Equity Bank Kenya Limited in their study. The data was collected from 2007 to 2016. The researchers conducted interviews with the commercial banks' Credit Directors, Operations Directors, Credit Directors, Chief Financial Officers, and Treasury Directors. The researchers evaluated the data using both descriptive and inferential statistics. The examination of the study's data was led by a correlation matrix. The financial performance measures were Net Income Margin, Returns on Equity, and Returns on Assets. The research concludes that cash reserves have a detrimental effect on the performance of banks. The greater the cash reserves of banks, the lower their financial performance. The report suggested that banks deploy their money rather than keeping it in cash reserves. Adding cash reserves to a portfolio can boost an investor's overall performance.

Kavwele, Ariemba, & Evusa (2018) did a research to examine the effect of interest rate capping on monetary institution performance. To calculate interest rate capping, the researchers used three variables: non-interest income, interest income and interest rate expense. Earnings before taxes, interest rates, and unusual items were the variables utilized to measure performance. The data was gathered from selected financial institution banks' financial statements four quarters before and four quarters after interest rate limiting. The goal of the research is to evaluate the effect that putting a ceiling on interest rates has on the overall performance of commercial and financial companies. The analysis used in the research was based on Multilinear regression paired with a sample T-test. Interest capping, according to the data, has a negative impact on bank performance. Profits went down because the drop in interest costs wasn't enough to make up for the loss of income from sources other than interest and interest on income.

Mutemi & Makori (2019) researched the influence of interest rate limitation on institutions' financial performance. The research shows that commercial banks in Kenya's economy make most of theirmoney from interest rates. A constraint on interest rates establishes a limit on the interest rate margins that may be generated by commercial banks. Putting a ceiling on interest rates will have no significant effect on the financial performance of banks. The researchers drew their secondarydata for the years 2013 to 2017 from the quarterly financial reports of the country's fortytwo commercial banks. Following that, the researchers utilized the Ordinary Least Square (OLS) regression method in conjunction with descriptive statistics to investigate the effect that interest rate caps had on the overall performance of Kenyan financial companies. The findings suggested that the government could perhaps maintain interest rate controls because they improve the performance of banks and other financial institutions. The research findings differ from those of Mbua (2017), Kavwele, Ariemba, & Evusa (2018) and Ng'ang'a (2017). Mwakima (2017) wanted to know how government debt affects private sector loans in Kenya. Central bank loans, Treasury bonds and Treasury bills all have an impact on private sector lending, according to the study. The study concentrated on the government's direct borrowing and national debt, which were calculated semi-annually in a time series analysis that spanned nine years from 2006 to 2016. The study utilized descriptive statistical analyses, such as trend analysis, percentage graphs, distribution tables, and spread graphs, in the processing and interpretation of the data that was gathered. The study found that internal government debt to fund capital projects has a long-term detrimental effect on private sector financing.

Mbugua (2020) investigated the impact of financial repression on the performance of Kenyan commercial banks. The independent variables in the study were domestic credit uptake, interest rate caps, and cash reserve requirements, while the dependent variable was return on assets. The research used a descriptive research design and secondary data was used to get the results. Moreover, regression analysis and ANOVA are used to analyze the data used in the study. The results of the study proved that domestic credit uptake, interest rate caps and cash reserve requirements had a negative effect on financial performance.

Ong'ong'e & Eddie (2021) studied the impact of financial repression policies on the financial performance of Kenyan commercial banks. The researchers wanted to ascertain whether domestic government debt, interest rate ceiling, reserve and liquidity ratio and capital controls had an impact on the performance of banks. The research used secondary data to collect data and a descriptive research design was used to examine the variables in the research. Descriptive statistics, regression analysis and Pearson correlation were used to analyze the data. The results confirm that interestrate controls, capital controls, and reserve ratios have a significant impact on the financial performance of commercial banks. However, government debt had an insignificant impact on the financial performance of Kenyan commercial banks.

#### **2.4 Determinants of Financial Performance**

The financial performance of any business entity is improved by using assets without limitations to generate more income. Measuring financial performance will involve assessing the financial strength and weakness of the company. In order to determine the financial performance of an entity, company size, leverage, liquidity, and profitability are put into consideration.

#### 2.4.1 Company Size

The capacity of the firm to offer goods and services can determine its financial performance. Large corporations enjoy economies of scale and they can easily diversify showing that they can reduce the risk of business operations (Matar & Eneizan, 2018). The large firms can also become fully established monopolies because they can reduce the prices or increase it to eliminate the competing firms in the market. The size of the company will also determine the type of resources it will use in the production process and the type of employees to utilize (Matar & Eneizan, 2018). Large companies will use more sophisticated resources in production activities and they get the most talented staff to handle the work leading to more profitability. Therefore, the size of the firm will determine how the firm will perform in the market.

#### 2.4.2 Liquidity

Liquidity is used to imply the ease to which a security or an asset can be changed to cash without affecting the prices in the market. The performance of any business depends on its liquidity because they need cash to handle the daily costs (Matar & Eneizan, 2018). The managers have to decide the amount of cash to be maintained to handle the day-to-day activities. Liquidity is measured using liquidity ratios which evaluates the capability of the firm to satisfy the debt needs in the short run period. The liquidity ratios are useful to measure the ability of the company to use its near cash to eliminate its current liabilities.

#### 2.4.3 Leverage

Leverage is the extent of debt financing by any business. A business with more debt financing is considered to have a high leverage while a business with few debts is considered to be less leveraged (Matar & Eneizan, 2018). High debt attracts more interest payments for the firm which affects the profitability of the business because more money is used to service the debt. Managers use the financial leverages to increase the earnings per share and the return on equity but there is a higher risk of being bankrupt and high cost of financial distress.

#### 2.4.4 Profitability

Profitability is a financial performance metric that represents the ratio of a company's profit to its revenue. A corporation must earn more revenue than it spends on expenses in order to be profitable. Subtracting a business's expenses from its revenue yields its profit (Matar & Eneizan, 2018). Profitability is essential since it indicates a company's ability to create revenue. A business that is not lucrative cannot survive over the long term. The most prevalent metric is profitability margin, which is calculated by dividing net income by revenue. Another profitability metric is return on assets (ROA). This metric quantifies the ratio of a company's profit to its assets. ROA is calculated by dividing the net income of a corporation by its total assets.

#### **2.5 Conceptual Framework**

Financial repression is the independent variable in this research, while commercial bank financial performance is the dependent variable. Government domestic credit intake, cash reserve ratio and Interest rate caps are all measures of the independent variable (financial repression). Capital structure, leverage, risk management, ownership structure, business size, firm characteristics and policies, economic conditions, and corporate governance are all factors that influence financial performance (Buckle & Adams, 2003). The return on assets is the dependent variable's metric

(ROA). Interest rate limits, increased bank reserve requirements, wide money, capital controls, restrictions on market entry in the financial sector, lending ceilings, and government dominance over banks are all symptoms of financial repression (Hiro, 2005). The most relevant metric of financial performance is ROA, which illustrates how well a company transforms its investments into income. The vast majority of commercial banks' assets, goods, and services are backed by cash, making them highly liquid firms. As a result, this statistic is pertinent to his research because the units that are the subject to investigation deal with cash equivalents that are invested to create funds for commercial banks. High return on assets are better for a company because it demonstrates that the company can generate a greater profit with a lower level of investment



Figure 2.1: Conceptual Model (Source: Author 2022).

## 2.6 Summary of Literature Review

Several studies, including Mwakima (2017), Abidi & Lodhi (2015), Oganda, Mogwabo, & Otieno

(2018), and Islam, Porporato, & Waweru (2014), looked into the effect that cash reserve ratio, interest rate floor, and cash reserve ratio have on the financial effectiveness of commercial banks. They haven't done any research into how different features of financial repression, such as interest rate ceilings, cash reserve ratios, and domestic credit intake, impact the financial performance of the commercial banks. An analysis of the impact of financial repression on the Kenyan economy was carried out by Kosimbei & Gitau (2015). In addition, there is a lack of evidence regarding the ways in which the interaction of these three factors considered in the currentresearch affects the overall profitability and effectiveness of commercial banks.

#### **CHAPTER THREE: RESEARCH METHODOLOGY**

#### **3.1 Introduction**

This chapter describes the methodology of the study, research design, demographic, sample, data collection procedures, and data analysis are all part of the strategy.

#### 3.2 Research Design

The research design for this research includes a plan for data collecting and analysis. It also discusses the manner in which research questions are addressed (Kumar, 2011). The type of data and the type of data analysis performed by the researcher determine the study strategy (Cooper & Schindler, 2013). As a result, the research used a descriptive research design, which aims to collect data and determine whether or not there is a relationship between the variables. The primary advantage of descriptive analysis is that it involves data collection without altering the data's natural disposition (Mugenda & Mugenda, 2003). The objective of descriptive research is to explain specific patterns by referencing past events and inferring what occurs in the future.

#### 3.3 Target Population

According to Kothari (2004) an entire collection of all entities that share similar traits and from which inferences can be drawn is referred to as a population. The population of the research includes the 42 registered commercial banks that were functioning as of December 31, 2021. As a result, the study conducts a census of Kenya's 42 recognized banks.

#### 3.4 Data Collection

Secondary data was obtained utilizing data collection sheets in order to create a panel of data for analysis in this project. Secondary data was gathered over the years 2001 to 2021. The timeperiod chosen is significant because it coincides with important changes in the Kenyan banking sector's adoption of financial technology innovation.

The information was gathered via the CBK's annual survey report, bank annual reports of financial statements, and Kenyan bank websites. Annual CBK supervisory reports were used todetermine the return on assets of each commercial bank. Government publications are also used to gather information on the government's financial repression measures, such as cash reserve ratio restrictions, interest rate ceilings and government credit uptake in the domestic market.

#### **3.5 Diagnostic Test**

#### 3.5.2 Linearity Test

The linearity test determines whether or not a set of data points is linearly connected. Calculating the correlation coefficient between the data points does this. In order to execute the test, a scatterplot of the data and a line that best describes the data are generated (Baltagi, Pirotte & Yang, 2021). The relationship is considered to be linear when the data is close to the line. The relationship is not linear if the data does not fall close to the line. If the correlation coefficient is close to 1, then the relationship between the data points is linear.

#### **3.5.3 Normality Test**

The Normality test determines whether or not a data collection is normally distributed. If a data set has a normal distribution, the mean, median, and mode are all identical. The chi-square testand Kolmogorov-Smirnov statistic are used to do a normality test (Pandey & Pandey, 2021). The chi-square test is based on the observation that the chi-square statistic was near to zero if a dataset is regularly distributed. If a data set is normally distributed, the Kolmogorov-Smirnov statistic is near to zero, according to another application of the Kolmogorov-Smirnov test.

#### **3.5.4 Heteroscedasticity Test**

The Heteroscedasticity test determines if the variance of a dependent variable is the same for all values of an independent variable. If the variances are not same, then the data are heteroscedastic (Baltagi, Pirotte & Yang, 2021). The researcher estimates the variance of the dependent variable for each value of the independent variable prior to conducting the test. Next, a regression is conducted using the independent variable as the predictor and the dependent variable's variance as the outcome (Pandey & Pandey, 2021). The data are heteroscedastic if the predictor is judged to be significant. If the predictor is not statistically significant, the data are not heteroscedastic.

#### **3.5.5 Multicollinearity Test**

Multicollinearity is a statistical technique needed to determine whether or not the independent variables in a regression model have strong correlations. It relies on the correlation matrix between the independent variables. According to Xie et al. (2022) Variance inflation factor (VIF) is computed for each independent variable. The VIF assesses the degree to which the addition of other factors in a model increases the variance of a variable. There is no correlation between the variable and the other variables in the model if the VIF equals 1. A VIF between 1 and 5 implies a moderately positive correlation between the variable and the other model variables (Pandey &

Pandey, 2021). A VIF greater than 5 implies a strong relationship between the variable and the other model variables.

#### 3.5.6 Autocorrelation Test

The autocorrelation test assesses the linear relationship between two variables. The test is based on correlation, which measures the linear connection existing between two variables. The purpose of the test is to evaluate whether the relationship between two variables is linear or nonlinear (Xie et al., 2022). The Durbin-Watson test is used to determine the presence of autocorrelation. The test statistic is computed by dividing the sum of the squared differences between consecutive values in the data set by the sum of the data set's squares. The test statistic is close to 0 if the data set is autocorrelated (Pandey & Pandey, 2021). According to the test, scores between 0 and 2 showa positive autocorrelation. Additionally, values between 2 and 4 indicate negative autocorrelation.

#### **3.5.7 Homoscedasticity Test**

The homoscedasticity test determines if the error term in a regression model is constant. The null hypothesis for the test is that the error term is constant, whereas the alternative hypothesis is that it is not constant. The Breusch–Pagan test can be utilized to determine if the variance of a dependent variable is consistent across varying values of an independent variable. The Breusch–Pagan test's null hypothesis is that the variance of the error term is uniform across all values of the independent variable (Pandey & Pandey, 2021). The alternative hypothesis is that variance is variable. Initially, the data are regressed using the above model. Following this, the residuals are regressed against the independent variable. The slope of this second regression should be close to zero if the null hypothesis is correct.

#### 3.6 Data Analysis

For data analysis, descriptive statistics such as median and mode were used. Multiple regression models was also used in the research to determine the connection between the explained and explanatory variables using inferential statistics.

#### **3.6.1 Analytical Model**

The analytical model to be used is shown below.

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon$$

Where,

 $X_1$  = interest rates cap

 $X_2$  = cash reserve ratio requirements

 $X_3$  = debt held by the government

 $\beta_1, \beta_2, \beta_3$  represents regression coefficient.

## **3.6.2 Operationalization of Study Variables**

Variables	Indicators to be used	Measurement of the
		variables
Financial performance	Return on assets	Net Income or the use
		of average total assets
Cap on interest rate	Interest rate ceiling or the interest rate	Interest rate ceiling set
	floor	by the commercial
		banks or credit supply
Cash Reserve	Cash Reserve ratio	Checking Deposits or
requirement		using the reserve
		requirement ratio
Government debt	Debt balance	Debt to GDP ratio.

Table 3.1: Operationalization of Study Variables

## **3.6.3 Tests of Significance**

To discover statistical importance, T- test and F-test were employed. The statistical significance of the regression equation was evaluated using the F-test and the analysis of variance. The T- test was used to figure out how important regression coefficients are from a statistical point of view. Both

the F and t-tests were conducted with a confidence level of 95%.

### **CHAPTER 4: DATA ANALYSIS, FINDINGS AND DISCUSSION**

#### **4.1 Introduction**

In this chapter, data on how financial repression affected Kenya's commercial banks' financial performance were analyzed. Tables with descriptive and inferential statistics are used to illustrate the interpretation of findings. The data in the section represents the returns on assets, interest rate caps, cash reserve requirement, and the domestic government debt uptake from the commercial banks from 2001 to 2021.

#### **4.2 Descriptive Statistics**

The section describes the mean and standard deviation of the return on assets, interest rate caps, cash reserve requirement ratio, and government debt, which were measured using the debt-to-GDP ratio.

#### **Table 4.2: Descriptive Statistics**

	Descriptive Statistics									
	Minimum	Maximum	Mean	an Std. Deviation Skewness Kur		osis				
						Std.				
					Stati	Erro	Statist	Std.		
	Statistic	Statistic	Statistic	Statistic	stic	r	ic	Error		
return on	.45	4.70	2.9110	1.01209	-	.501	.771	.972		
assets					.110					
interest	4.80	13.00	8.3619	2.43977	.410	.501	170	.972		
rate cap										
Governm	31.10	45.20	39.5733	3.98155	-	.501	178	.972		
ent debt					.693					
(Debt to										
GDP)										
Cash_res	23870900000	1804890000	9391395714	5621054571419	.212	.501	-1.678	.972		
erve_requ	00.00	0000.00	285.7150	.46900						
irements										

Valid N				
(listwise)				

#### 4.2.1 Return on Assets

According to Table 4.1, the mean value of return on assets for Kenya's commercial banks was 2.911, and the standard deviation is 1.01209. The value of the mean demonstrates that Kenya's commercial banks can make money from their investments. The low standard deviation indicates that the data on return on assets had no outliers and displays the accuracy of the statistic due to the low variability. The minimum value of the return on assets was 0.45 and the maximum value was 4.7 as shown by the table.

#### 4.2.2 Interest Rate Cap

According to Table 4.1, the standard deviation was 2.43977, and the mean value was 8.3619. The value of the mean indicates that the commercial banks in Kenya are involved in interest rate capping. The value also shows that financial institutions charged borrowers an average interest rate of 8.3619. The interest rate floor was 4.80 and the interest rate ceiling was 13.00 as shown by the minimum and maximum values from table 4.2. However, the standard deviation value is high, demonstrating a high variability in the interest rates Kenyan commercial banks charge.

#### 4.2.3 Cash Reserve Requirement

The mean value of the cash reserve requirement was 9391395714285.7150, while the standard deviation was 5621054571419.46900. The result indicates that the average amount of money that commercial banks must keep at the central bank is 9391395714285.7150. The minimum amount kept in the central bank was 2387090000000.00 as shown by table 4.2. The maximum value of the cash reserve requirement was 1804890000000.00. The high standard deviation value indicates a high variation in the cash reserve requirements set for the various commercial banks in Kenya.

#### **4.2.4 Government Debt**

The debt-to-GDP ratio had a mean value of 39.5733 and a standard deviation of 3.98155. The mean value was high, showing that the government is not producing enough to pay the domestic credit uptake from the commercial banks. The high standard deviation indicates a high variation in the amount the government directly borrows from commercial banks. Therefore, the money borrowed from commercial banks to finance the budgets and development purposes is higher than the capability of the government to pay up its debt. The minimum value of the debt to GDP ratio was 31.10 and the

maximum value was 45.20 as shown by table 4.2.

#### 4.3 Skewness and Kurtosis of the Variables

Skewness is used to measure the asymmetry of a distribution. From the table 4.2, return on assets and government debt had negative skewness as shown by -0.110 and -0.693 representing the two variables. As a result, the variables had a long left tail as shown by the negative skewness. Interest rate cap and cash reserve requirement have positive skewness. The statistic associated with interest rate cap was 0.410 and the other for cash reserve requirement was 0.212. Both show the data on the variables had a long right tail. The standard error of skewness is uniform for all the variables as depicted by the value of 0.501. The value is between the range 1.96 and -196 showing that we accept all the variables were normally distributed. On the other hand, kurtosis is a measure of the extend which data used in the study had outliers. Return on assets had positive kurtosis, which implies that the data had more outliers compared to a normal distribution as shown by the value of 0.771 from table 4.2. Interest rate cap, government debt and cash reserve requirements had negative kurtosis indicating that the data had less outliers than a normal distribution. Moreover, the standard error of kurtosis as uniform at 0.972 for all the variables showing that the data was normal because the value lies between 1.96 and -1.96.

#### 4.4 Normality Test

Tests of Normality									
	Kolmo	ogorov-Sm	irnov <sup>a</sup>	Shapiro-Wilk					
	Statistic	df	Sig.	Statistic	df	Sig.			
return on assets	.131	21	$.200^{*}$	.953	21	.389			
interest rate cap	.143	21	$.200^{*}$	.928	21	.124			
Government debt (Debt	.157	21	.191	.943	21	.244			
to GDP)									
Cash_reserve_requirem	.168	21	.125	.878	21	.014			
ents									
*. This is a lower bound of the true significance.									
a. Lilliefors Significance	Correction	1							

The results of the normality test used in the study are shown in Table 4.3. The sample size considered in the research was below 50, showing that it was appropriate to use the Shapiro-Wilk tests to determine if the data in the research variables was normally distributed. To demonstrate that the data is normally distributed, the p-values from the Kolmogorov-Smirnov and Shapiro-Wilk tests should be greater than 0.05. Therefore, the data on the interest rate caps, government debt, and return on assets is normally distributed. However, the cash reserve requirement is not normally distributed because it has a significance value lower than 0.05. The cash reserve requirement is not normally distributed because the data had many outliers due to the high variability of the reserve requirements in the collected data.

### 4.5 Linear Regression

Using linear regression analysis, it was possible to determine how financial repression affected Kenyan commercial banks' financial performance. The section describes the summary of the model, analysis of variance, and the regression coefficient table to explain the results of the study.

## 4.5.1 Summary of the Model

## **Table 4.4: Regression Model Summary**

	Model Summary <sup>b</sup>										
				Std.		Cha	inge Statis	stics			
				Error of	R						
Mod		R	Adjusted	the	Square	F			Sig. F	Durbin-	
el	R	Square	R Square	Estimate	Change	Change	df1	df2	Change	Watson	
1	.605 <sup>a</sup>	.366	.254	.87439	.366	3.265	3	17	.047	1.223	
a. Pre	a. Predictors: (Constant), Cash_reserve_requirements, Government debt (Debt to GDP), interest rate										
cap	cap										
b. De	pendent	Variable:	return on a	issets							

The value of R squared represents the percentage variation caused by the independent variables in the research. The value of R squared measures how well the model explains the variations on the dependent variable. The value of R squared in the data is 0.366, implying that 36.6% of the interest rate cap, cash reserve requirement, and government debt explain the changes in the return on assets. As a result, the model has a weaker fitness. The value of Durbin Watson statistic from table 4.4 is 1.223 showing existence of a positive autocorrelation.

## 4.5.2 Analysis of Variance

## Table 4.5: Analysis of Variance (ANOVA)

ANOVA <sup>a</sup>										
		Sum of								
Model		Squares	df	Mean Square	F	Sig.				
1	Regression	7.489	3	2.496	3.265	.047 <sup>b</sup>				
	Residual	12.997	17	.765						
	Total	20.487	20							
a. Dependent Variable: return on assets										
b. Predictors: (Constant), Cash_reserve_requirements, Government debt (Debt to										
GDP), interest rate cap										

The F-value in the research is 3.265. The p-value associated with the F value, as shown in table 4.4, is 0.047. The large F value means that the between group variation is more than the within group variation in the data. Therefore, interest rate caps, cash reserve requirements, and government debt reliably predict the financial performance. Therefore, there is a statistically significant difference in the group means showing that the null hypothesis of the study should be rejected.

## 4.5.3 Coefficients of the Regression Model

## Table 4.6: Coefficients of the Regression Model

Coefficients <sup>a</sup>											
				Standar							
				dized							
	Unstandardized		Coeffic						Collin	earity	
		Coefficients		ients			Correlations		Statistics		
			Std.				Zero-	Parti		Toleran	
Mode	l	В	Error	Beta	t	Sig.	order	al	Part	ce	VIF
1	(Constant)	675	2.32		290	.775					
			6								

	interest rate	392	.166	945	-	.031	245	496	455	.232	4.311
	cap				2.355						
	Government	.223	.078	.876	2.856	.011	.387	.569	.552	.397	2.519
	debt (Debt to										
	GDP)										
	Cash_reserve_r	-2.074E-	.000	-1.152	-	.036	.177	484	441	.146	6.830
	equirements	13			2.282						
a. Dependent Variable: return on assets											

The unstandardized coefficients show the direction of the relationship between interest rate cap, government debt, and cash reserve requirements with the return on assets. The regression model representing the variables is shown below:

Y= -0.675 - 0.392 Interest rate cap + 0.223 Government debt - 0.0000000000002074 Cash Reserve Requirement.

According to the regression equation, a unit increase in Kenya's interest rate cap results in a 0.392 decrease in return on assets. Additionally, the regression equation demonstrates that a unit increase in government debt the results in a 0.223 increase in return on assets. According to the study's findings, a unit increase in cash reserve requirements causes a decrease in return on assets by 0.00000000002074. The p-value associated with the independent variables indicates that all the variables were statistically significant. Interest rate cap, government debt and cash reserve requirement all had significance values of 0.031, 0.011 and 0.036 respectively. The T-test shows that the variables have p-values lower than 0.05 showing that they are statistically significant. Variable inflation factor (VIF) is used in measuring the multi-collinearity in a study. A VIF of 1 shows the variables used in the study are not correlated. A VIF between 1-5 implies moderate multi-collinearity between variables while a VIF of more than 5 indicates high multi-collinearity between variables. In the data, interest rate cap and government debt have VIF values of 4.311 and 2.519 respectively. Therefore, the variables have moderate multi-collinearity. Cash reserve requirement has a VIF of 6.830 showing that it had a high multi-collinearity. The study's findings demonstrate that cash reserve requirement and interest rate caps have a negative impact on the financial performance of commercial banks. Additionally, there is a positive correlation between Kenya's commercial banks' financial performance and the government debt.

#### **4.6 Discussion of Findings**

The findings show that the data used in the research was normally distributed as shown by the kurtosis and the skewness results. The cash reserve requirement had the highest mean and standard deviation because the central bank sets high cash reserve requirements for banks. The standard deviation was large because the amount also differs among the commercial banks in the country. The Shapiro-wilk statistic is relevant to the current study because the sample size involved was lower than 50. The statistic shows that the variables are normally distributed with an exception of the cash reserve requirements.

The study's findings demonstrate that cash reserve requirement and interest rate caps have a negative relationship on the financial performance. Additionally, there is a positive relationship between financial performance and the government debt. Moreover, the results show a weak and significant relationship between interest rate caps, government debt, cash reserve requirement, and the return on assets. The study's findings are also consistent with Abidi & Lodhi (2015), who found that cash reserve requirements have a negative relationship with the financial performance. Oganda, Mogwabo, & Otieno (2018) results are also consistent with the current study because they found that cash reserve requirements negatively affect banks' performance. The results of the research are also consistent with Mbua (2017), Ng'ang'a (2017), Kavwele, Ariemba, & Evusa (2018) and Mbugua (2020) study who found that interest rate capping had a negative influence on financial performance.

#### **CHAPTER 5: SUMMARY, RECOMMENDATIONS AND CONCLUSIONS**

### 5.1 Introduction

The chapter includes the study's conclusions, a summary of the results, and recommendations. The chapter also discusses future areas of investigation and the limitations of the research on the impact of financial repression on financial performance

## **5.2 Summary of the Research Findings**

The descriptive statistics show that the domestic credit uptake by the government was higher than their capability to pay, as demonstrated by the high Debt to GDP ratio of 39.5833. Moreover, the mean value of the cash reserve requirements was 9391395714285.7150, while the standard deviation was 5621054571419.46900. The results prove that the quantity of money the banks are expected to hold in the central bank varies much for all the banks. The results also confirm that the central bank has set an interest rate cap that is favorable for the banks in the country as shown the minimum and maximum values. The low values of standard deviation for all the independent and dependent variables except cash reserve requirements show that the data was accurate in establishing the effect of financial repression on financial performance because there were no outliers.

#### 5.2.1 Effects of Interest Rate Caps on Financial Performance

The results of the research demonstrate that interest rate caps had a negative financial performance on Kenyan commercial banks. According to the study's findings, each unit increase in interest rate caps causes a -0.392 decrease in the commercial banks' financial performance. The t-test results for the variable show a statistically significant relationship between the interest rate cap and financial performance, with a significance value of 0.031. Therefore, the government should continue avoid using interest rate capping as a driver for financial performance for the banks because they influence the financial performance of the banks negatively. The findings show that while the interest rate caps may negatively impact financial performance, the effect is also considered statistically significant.

#### 5.2.2 Effects of Cash Reserve Requirements on Financial Performance

The findings of the research demonstrate a negative relationship between cash reserve requirements and financial performance. The findings of the research indicate that Kenyan commercial banks' financial performance declines by 0.000000000002074 when their cash reserve requirements are raised by one unit. The p-value in the t-test being less than 0.05 demonstrates that there is statistically significant relationship between the variables. The results show that if commercial banks were required to hold most of their cash in reserve, their financial performance would suffer. As a result, it would

lead to higher lending rates and reduced lending activities, which would affect the financial performance of the banks negatively.

#### 5.2.3 Effects of Government Debt on Financial Performance

The findings indicate a significant but positive correlation between government debt and Kenyan commercial banks' financial performance. Financial performance would rise by 0.223 for every unit increase in government debt. The p-value associated with the variable is less than 0.05 showing that government debt has a significant relationship with the financial performance of banks. Therefore, an increase in government debt may lead to an improvement in financial performance.

#### 5.2.4 The Effects of Financial Repression on Financial Performance

The study's findings indicate a weak and significant correlation between financial repression and financial performance. 36.6% of the independent variables in the study were found to accurately predict the dependent variable, according to the R squared value of 0.366. The relationship between financial repression and financial performance is weak. Financial performance was significantly correlated with all the variables considered in the study. Overall, the findings indicate that there was a weak and significant correlation between financial repression and financial performance.

### **5.3 Conclusions of the Study**

According to the study results, there is a weak relationship between financial repression and financial performance. Furthermore, the results of the research demonstrate that government debt has a positive and significant impact on banks' financial performance. The financial performance of the banks has a negative and significant relationship with cash reserve requirements and interest rate caps. The relationship between the variables was evaluated using the T-test and F-test. The low value of R squared shows a weak correlation between the variables. The F-value has a significance of 0.047 and it demonstrates that the independent variables reliably predict the dependent variable. From the findings of the research, it is justified to conclude that cash reserve requirements, interest rate caps, and government debt reliably predict financial performance because of the significant relationship with financial performance.

### **5.4 Study Recommendations**

The study's findings indicate a significant but positive correlation between commercial banks' financial performance and government debt. As a result, it is unlikely that reducing the government debt would significantly impact the banks' financial performance. Therefore, it is recommended that the government should continue borrowing money from commercial banks to finance its operations. The

findings of the study indicate that interest rate cap has a negative and significant impact on financial performance. The research recommended that policymakers and the government not to focus on interest rate caps to improve their financial performance. The interest rate cap have a weak relationship with financial performance, showing that the government should not recommend using the variable to improve financial performance. Financial performance is negatively and significantly correlated with the cash reserve requirements. Therefore, it is recommended for policymakers and the government lower the cash reserve requirements to improve financial performance. Generally, it is recommended to use other variables apart from interest rate caps, government debt, and cash reserve requirements to determine whether they will provide a strong relationship with financial performance.

#### **5.4 Study Limitation**

The data extraction was one of the study's limitations because most data were unavailable online. Therefore, the researcher used their finances to get the information from paid websites and commercial banks. Time was another limitation because it was hard to sift through all the available information to get the needed information. Another limitation of the study was the potential bias of the findings because the research relied on the work of others by collecting secondary data. Getting reliable and up-to-date data was another issue in the study that made the researchers take more time to analyze the findings.

#### **5.5 Suggestions for Further Researcher**

The research did not consider all the variables related to financial repression. Therefore, future research can use other variables related to financial repression to find whether there is a stronger relationship with financial performance. Future studies have to consider the financial performance of other institutions apart from commercial banks in Kenya. It can major on SACCOs or NSE-listed companies to evaluate whether financial repression impacts the financial performance of commercial banks. Future research also has to consider other analysis methods to find whether they will get a different result from the linear regression model used in the study.

#### REFERENCES

- Abebe, A. (1990). Financial repression and its impact on financial development and economic growth in the African least developed countries. *Savings and development*, 55-87.
- Adams, M. & M. Buckle. (2003). The Determinants of Corporate Financial Performance in the Bermuda Insurance Market. Applied Financial Economics, Routledge, 13: 133-143.EBMS Working Paper. 1470-2398
- Agwaya, R., & Kimunge, J. (2019). *Composition of Domestic Debt in Kenya and Implication on Refinancing Risk*. https://kippra.or.ke/index.php/resource-centre/blogs/39-compositionof-domestic-debt-in-kenya-and-implication-on-refinancing-risk
- Baltagi, B. H., Pirotte, A., & Yang, Z. (2021). Diagnostic tests for homoskedasticity in spatial cross-sectional or panel models. *Journal of Econometrics*, 224(2), 245-270.
- Canova, T. A. (1994). The Transformation of US Banking and Finance: From Regulated Competition to Free-Market Receivership. *Brook. L. Rev.*, *60*, 1295 - 1304.
- Collis, J. & Hussey, R. (2013) Business Research: A Practical Guide for Undergraduate and Postgraduate Students. 4<sup>th</sup> ed. London: Palgrave-MacMillan.
- Cochran, J. P., & Call, S. T. (1998). The role of fractional-reserve banking and financial intermediation in the money supply process: Keynes and the Austrians. *The Quarterly Journal of Austrian Economics*, 1(3), 29-37.
- Cochran, J. P., Call, S. T., &Glahe, F. R. (1999). Credit creation or financial intermediation? Fractional-reserve banking in a growing economy. *The Quarterly Journal of Austrian Economics*, 2(3), 53-64.
- Cohen, L., Manion, L., & Morrison, K. (2013) 'Validity and reliability,' In *Research methods in education*. pp. 203-240). Routledge.

Creswell, J. (2003). Research design: Qualitative, quantitative, and mixed methods approach. London, England: Sage.

Creswell, J. W., & Creswell, J. D. (2017). Research design: Qualitative, quantitative, and mixed methods approach. Sage publications.

Fabozzi, Frank J. (2000). *Bond Markets, Analysis and Strategies*. 4th ed. New York: Prentice Hall.

Gitau, G. K., &Kosimbei, G. (2015). The effects of financial repression on economic growth in

Kenya. International Journal of Business and Commerce, 5(2), 15-37.

- Heale, R., & Twycross, A. (2015) 'Validity and reliability in quantitative studies,' *Evidence- based nursing*, 18(3), pp. 66-67.
- Hileman, G. (2017). Identifying and Measuring Financial Repression: The British Case in the Mid-20th Century. *Available at SSRN 2973254*.
- Islam, Z., Porporato, M., & Waweru, N. (2014). Cost structure and financial sustainability of microfinance institutions: the potential effects of interest rate cap in Bangladesh. *International Journal of Financial Services Management*, 7(1), 54-72.
- Kavwele, D. T., Ariemba, J. M., & Evusa, Z. (2018). Effect of Interest Rate Capping on the Financial Performance of Commercial Banks in Kenya. *International Journal of Business Management and Economic Research (IJBMER)*, 9(1), 1182-1190.
- Kennedy & McMullen. (1986). Financial Appraisal of industrial Corporations in India, *Pratiksha publication, Gopaljika Rasta, Jaipur.*
- Kiruga, M. (2019, April 9). Kenya's domestic debt is spiralling out of control. The Africa Report.Com. https://www.theafricareport.com/11499/kenyas-domestic-debt-is-spirallingout-of-control/
- Kotrlik, J. W. K. J. W., & Higgins, C. C. H. C. C. (2001) 'Organizational research: Determining the appropriate sample size in survey research appropriate sample size in survey research,' *Information technology, learning, and performance journal*, 19(1), pp. 43-50.
- MacCarthy, J. (2015). The Effect of Cash Reserve Ratio (CRR) on the Financial Performance of Commercial Banks and Their Engagement in CSR in Ghana.
- Matar, A., & Eneizan, B. M. (2018). Determinants of financial performance in the industrial firms: Evidence from Jordan. Asian Journal of Agricultural Extension, Economics & Sociology, 22(1), 1-10.
- Mbua, S. N. (2017). Effect of interest rates capping by the Central Bank of Kenya on the banks listed on the Nairobi Securities Exchange (Doctoral dissertation, United States International University-Africa).
- Mbugua, A. (2020). The effect of financial repression on the financial performance of commercial banks in Kenya (Doctoral dissertation, UoN).
- McKinnon, R. I. (1973). Money and Capital in Economic Development (Washington, DC:

Brookings Institution, 1973); and Edward S. Shaw. Financial Deepening in Economic Development

- Murerwa, C. B. (2015). Determinants of banks' financial performance in developing economies: evidence from kenyan commercial banks (Doctoral dissertation, United States InternationalUniversity-Africa).
- Mutemi, K., &Makori, D. (2019). Interest Rate Capping and Financial Performance of Commercial Banks in Kenya. International Journal of Current Aspects, 3(IV), 119-130
- Odhiambo, J., Weke, P., &Ngare, P. (2020). Modeling Kenyan Economic Impact of Corona Virus in Kenya Using Discrete-Time Markov Chains. Journal of Finance and Economics, 8(2), 80-85.
- Oganda, A. J., Mogwambo, V. A., & Otieno, S. (2018). Effect of Cash Reserves on Performance of Commercial Banks in Kenya: A Comparative Study between National Bank and Equity Bank Kenya Limited. International Journal of Academic Research in Business and Social Sciences, 8(9), 685-704.
- Ong'ong'e, C. A., & Eddie, S. (2021). Financial repression policies and performance of selected commercial banks in Kenya. International Journal of Social Sciences Management and Entrepreneurship (IJSSME), 4(1).
- Pandey, P., & Pandey, M. M. (2021). *Research methodology tools and techniques*. Bridge Center.
- Reinhart, C. and B. Sbrancia (2011), 'The liquidation of government debt', NBER working paper no. 16893.
- Shalev, M. (2007) 'Limits and alternatives to multiple regression in comparative research,' Comparative Social Research, 24(3), pp. 261-308.
- Schenker, J. D., &Rumrill Jr, P. D. (2004) 'Causal-comparative research designs,' Journal of vocational rehabilitation, 21(3), pp. 117-121.
- Uotila, J., Maula, M., Keil, T., & Zahra, S. A. (2009). Exploration, exploitation, and financial performance: analysis of S&P 500 corporations. Strategic Management Journal, 30(2), 221-231.
- Xie, X., Tiggelaar, S., Guo, J., Wang, M., Vandersluis, S., & Ungar, W. J. (2022). Developing Economic Models for Assessing the Cost-Effectiveness of Multiple Diagnostic Tests: Methods and Applications. *Medical Decision Making*, 0272989X221089268.

Xun, W. (2013). Financial repression and ODI of developing countries. International Economic Review, 1(6).

### **Appendix 1: List of Commercial banks in Kenya**

- 1. The Co-operative Bank
- 2. UBA Kenya Bank Ltd
- 3. Suntra Investment Bank Ltd
- 4. Sterling Investment Bank
- 5. Standard Investment Bank
- 6. Standard Chartered
- 7. Prime Bank
- 8. Paramount Bank
- 9. Oriental Commercial Bank Ltd.
- 10. NIC Bank
- 11. ABC Bank
- 12. National Bank
- 13. K-Rep Bank
- 14. Kenya Post Office Savings Bank
- 15. KCB Bank
- 16. Investments & Mortgages Bank Limited I&M Bank
- 17. Imperial Bank Limited
- 18. Housing Finance
- 19. Guardian Bank Ltd.
- 20. Giro Commercial Bank Ltd
- 21. Fina Bank
- 22. Fidelity Bank
- 23. Faida Investment Bank FIB

#### 24. Equity Bank

- 25. Equatorial Investment Bank
- 26. Equatorial Commercial Bank Limited
- 27. Dyer & Blair Investment Bank
- 28. Dubai Bank Kenya Ltd
- 29. Dry Associates Limited
- 30. Development Bank Of Kenya Ltd
- 31. Co-operative Bank
- 32. Consolidated Bank
- 33. Commercial Bank of Africa
- 34. Citibank N A
- 35. Chase Bank
- 36. CFC Stanbic Bank Limited
- 37. Central Bank of Kenya
- 38. Bank Of Baroda (Kenya) Ltd.
- 39. Bank of Africa Kenya Ltd
- 40. Afrika Investment Bank
- 41. African Development Bank Group
- 42. African Banking Corporation

## Source: Central bank of Kenya directory

# Appendix 2: Data Collection Schedule

Year	ROA	Interest	Cash Reserve-	Govern
		rate cap	Requirement	ment
				debt
2001				
2002				
2003				
2004				
2005				
2006				
2007				
2008				
2009				
2010				
2011				
2012				
2013				
2014				
2015				
2016				
2017				
2018				
2019				
2020				
2021				