

**THE EFFECT OF FINANCIAL REPRESSION ON THE FINANCIAL PERFORMANCE  
OF COMMERCIAL BANKS IN KENYA**

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**DECLARATION**

I declare that this project is my original work and has never been submitted to any other University for assessment or award of a degree.

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## **ABSTRACT**

The study sought to establish the impact of financial repression on the financial performance of commercial banks in Kenya. There is limited empirical literature on the relationship between financial repression and financial performance of financial institutions in Kenya. The dependent variable in the study was financial performance measured by the return on assets. The independent variables used in the study were interest rate caps, cash reserve requirements and domestic credit uptake by the government of Kenya. Descriptive research design was used in this study. The population comprised of all the 42 commercial banks in Kenya. The study period was 5 years between years 2014 – 2019. Secondary data was used in this research. Data on interest rate caps, cash reserve ratio requirements and domestic credit uptake was obtained from the central bank of Kenya. Data on return on assets by the commercial banks was obtained from the financial statements of the financial institutions. Regression analysis and ANOVA were used to analyze the data and establish the significance levels respectively. The findings revealed that interest rate caps cash reserve requirements and domestic credit uptake negatively affect the financial performance of commercial banks in Kenya.

## **ABBREVIATIONS**

CRR Cash Reserve Ratio

CBK Central Bank of Kenya

NSE Nairobi Securities Exchange

ROA Return on Assets.

ROI Return on Investments.

ROE Return on Equity.

SPSS Statistical Package for the social Sciences

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# CHAPTER ONE: INTRODUCTION

## 1.1 Background of the Study

The actions of the government may influence how commercial banks function, for instance, changing their interest rates, cash reserves, decision on sectors to finance and which not to finance through offering credit (Gitau, 2015). More so, if the government regulates entry into the market, it also changes the competition environment of the banking sectors. All these factors show the link between financial repression and the operation of commercial banks, and therefore the importance of investigating whether financial repression has any impact on how financial institutions perform in Kenya.

Several measures have been taken by the Kenyan government in the last decade that fall under the definition of financial repression. In September of 2016 for example, the government of Kenya puts interest rates caps on credits provided by banks at 4%, which was equal to the base rate that the Central Bank of Kenya had set. The government has also been changing the reserve ratio requirements for commercial banks. In the wake of the Covid-19 for example, the Central Bank of Kenya cut the cash reserve ratio requirements to 4.25% from the previous 5.25%. This was in March 23, 2020 (Odhiambo, Weke and Ngare, 2020). Previously, the central bank has also made changes in the cash reserve ratio requirements. In 2011 for example, the cash reserve ratio was changed from 4.5% to 4.47% and from 4.75% 2012 to 5.25% in 2012. As a matter of fact, domestic debt mainly comprises of treasury bills and bonds others, whereas other comprise of pre 1997 government of Kenya debt, and Central Bank of Kenya (CBK) overdraft. In addition, others include tax reserve certificates coupled with commercial bank advances.



### **1.1.1 Financial Repression**

Financial repression is regarded as the means used to minimize government ratio of debt to Gross domestic product (Reinhart & Sbrancia, 2011). McKinnon & Shaw (1973) defined the term financial repression as a set of regulations, laws, and other non-market restrictions set by the government and are used to provide restrictions to financial entities from functioning as required. As such, financial repression is a concept that is mainly associated with caps and ceilings of interest rates, government controls of local financial institutions and banks, as well as the establishment of a captive local market for government debt. It also focuses on the restriction of entry into the financial sector alongside a direct credit to certain sectors. According to Hileman (2017), the funds are channeled by the government from the private sector as a form of debt reduction. As a result, it causes internal government borrowings at low interest rates. Therefore, it enables them to be in a position to finance their expenses at low costs. Beim and Charles (2001) observed that governments implement financial repression policies with the aim of controlling fiscal resources and channel financial resources to itself without going through the legislative procedures. McKinnon (1973) posits that financial repression is transmitted by reducing the efficiency of the banking sector operation, it is also imperative to understand that financial repression policies are usually implemented through commercial banks.

Interest rate entails the charges set by a lender, to be paid by a borrower for the reason of using an asset. It is accounted as a percentage of the borrowed principal. Interest rate caps are the restrictions imposed by the government on the financial institutions, especially on the commercial banks on the highest and or lowest interest rates, which are to be charged (Fabozzi, Frank J., 2000). Reserve ratio requirements are the regulation set by the central bank on the minimum reserve that should be maintained by the commercial banks.

Commercial bank reserves consist of a certain percentage of the deposit liabilities owed to the commercial banks customers (Kavwele, et.al 2018). Where the government seeks to enhance the money supply, the main strategy used is to cut the reserve ratio. The reserve ratio is increased where the government seeks to cut money supply; hence reducing commercial banks' lending power.

Domestic credit by the government is the internal debt which constitutes the total government debt that is owed to lenders within the country. Commercial banks and other financial institutions within the country have been in the forefront to avail this credit. Securitized domestic debt facilitate development of benchmark yield curve for private lending Abbas and Christensen (2010).2018/2019 budget year Kenya's domestic debt stood at \$3.08bn which was 66% of the total debt by the Kenyan government. (The Africa report, 2020)

### **1.1.2 Financial Performance**

Kennedy and McMullen (1986) noted that financial performance is considered as a scientific assessment of a company's profitability and financial strength. It indicates how well an organization uses its assets to make profits and improve its financial performance. The reason behind measuring an organization's financial performance is to establish its overall financial health. One of the major reasons that organizations exist is to create value for their owners, and a poor financial health means that the organization is not creating value for its owners as it is expected (Uotila, Maula, Keil, & Zahra, 2009). The following is a description of some of the metrics used to measure the financial performance of organizations.

Return on Equity is applied to determine the ability of a company to create income from the available equity. The formula used to measure RoA is the net income of a business divided by the shareholder's equity.

Return on Assets is a measure used to determine the ability of an organization to create income from the available company's assets. The formula used to calculate the return on assets of an organization is the division of net income by the total assets owned by the company.

Returns on investments are a measure that is mainly used to determine the ability of firms to generate income through different investments. As such, the formula for calculating the return on investments of an organization is the net return divided by the cost of investments. The net returns are calculated by subtracting the initial value of the investments from the final value of the investments.

### **1.1.3 Financial repression and financial performance**

The interventions by the government create a captive market for the commercial banks discouraging them to operate at their full potential. The interest rates are lower than the market dictated rates thereby discouraging saving and investments which directly affect the loans extended to customers and consequently bank customers invest in other higher income earning ventures as opposed to low returns from bank savings. Higher uptake of domestic debt by the government at dictated lower rates prevent the commercial banks from investing in more profitable investments. Increased reserve ration requirements by the government reduce the liquidity of the banks in terms of funds available for the bank to invest in other profitable ventures (Gitau, 2015).

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

The Banking Act of Kenya sets several regulations for opening, operating, and closing a commercial bank in the country. The Central Bank of Kenya (CBK) is the main entity that implements the regulations. All commercial banks in the country operate under CBK. Financial institution's role in the country include; safe custody of clients' money, transfer of fund from one account to another in-house or otherwise, lending funds to customers, providing foreign exchange services, facilitating international trade, investment services to customers, financial advice, safe custody of valuable items, acting as trustees among other services.

In regards to these functions of these financial institutions, it is apparent that they are affected by financial repression actions of the governments. Interest rate caps affect their ability to offer loans which generate interest income for the commercial banks. The increase in reserve ratio requirements affects the liquidity of the banks, by reducing the available funds to be utilized to pay off debts, to lend to customers, and to carry out other activities in the commercial banks. Domestic credit uptake by the government affects the ability of the banks to lend money to non-government entities which may generate more income to the commercial bank as compared to the government thereby affecting the performance of the commercial banks (G K & Gitau, 2015).

#### **1.2 Problem Statement**

Despite the main policies of financial repression such as caps on interest rates, reserve ratio requirements, directives to favor some sectors when giving credit, and credit uptake by the government being implemented through commercial banks in Kenya, the existing literate studies have not conclusively assessed the implications that financial repression has, based on the performance of commercial banks. Gitau (2015) asserts that interest rates ceilings, broad money and government borrowing was negatively related to economic growth however the research

concluded that there exists a high reserve requirement associated with a positive effect on economic growth. Mutemi and Makori (2019), observes that the caps on interest rates had a positive implication on how the banks and other financial institutions perform. However, there are financial and monetary policies that have a negative implication on the performance of financial institution and banks in various countries, such as India (Punita & Somaiyi (2006).

Studies have differed in their conclusions where some indicated a positive impact (such as, Mutemi & Makori, 2019) and the others a negative impact (such as, Kavwele, Ariemba, & Evusa,2018; Mbua, 2017; Ng'ang'a, 2017; Oganda, Mogwabo & Otieno, 2018), with respect to various aspects in the economy including economic growth, performance of commercial banks, and financial institutions profitability among others. Most of these studies specific have examined the effects of individual financial repression components, such as cash ratio and domestic credit uptake on various aspects of the economy and not exclusively performance of the financial institutions (such as, Abidi and Lodhi, 2015; Islam, Porporato and Waweru, 2014; Mwakima, 2017; Oganda, Mogwabo and Otieno, 2018). Gitau (2015) studied financial repression implications, its effects on the economy of Kenya. The researcher examined the impact of various elements, which included interest rates ceilings, broad money, coupled with government borrowing, which have an effect on economic growth. Nevertheless, the research does not examine the implications of the elements on performance of commercial banks. Despite the fact that these studies were carried out to establish the implication caused by interest rate capping on financial institutions and banks perform. However, no study is yet to be conducted that examines the implication of financial repression elements on the performance of the financial institutions and banks in Kenya.

### **1.3 Objectives**

#### **1.3.1 General Objective**

The research sought to establish the effect that financial repression has on the performance of banks and other financial institutions in Kenya.

#### **1.3.2 Specific Objectives**

- i. Evaluate the effects of interest rate caps on the financial performance of banks and other financial institutions in Kenya.
- ii. Evaluate the effects of reserve requirements on the financial performance of banks and other financial institutions in Kenya.
- iii. Evaluate the effects of domestic credit uptake by the government on the financial performance of banks and other financial institutions in Kenya.

### **1.4 Significance of the Study**

The existing literary works on financial repression has not conclusively documented the correlation between the concept under study, which is financial repression and commercial banks performance. The variables investigated include interest rates; cash reserve ratio and domestic debt, and the manner in which they impact the performance of the financial institutions. Addressing this problem and the research findings will help to fill this existing gap in literature regarding the link between financial repression and hoe the financial institutions perform. The findings will be useful in decision making to oversight authorities, policy-makers, investors, bankers, the government and economists of various banks. They will understand the impact that financial repression has on the performance of commercial banks, and thus will be able to make

more informed decisions. In addition, the findings of the study will be of help other relevant stakeholders such as the public, to try and influence the oversight authorities, policy-makers, and the government to make favorable decisions and policies. The research findings will also help to identify areas that need further investigation and will therefore be vital to scholars.

## **CHAPTER TWO: LITERATURE REVIEW**

### **2.1 Introduction**

This chapter addressed the theoretical framework of the investigation and provides a review of previous studies about the phenomenon under investigation, identification of the research gap, and the conceptual framework, that will act as guidance to the methodology of the research.

### **2.2 Theoretical Framework**

The research focuses on two main theories as mentioned below

#### **2.2.1 Free Market Theory**

The theory describes the economic system which has no government or very little government interventions when it comes to demand or supply of good and services. The discussions around free market theory have been around since the 19<sup>th</sup> century. The most notable contributors and proponents of this theory are Pierre-Joseph Proudhon, Benjamin Tucker and the Ricardian socialists. The main assumption of the free market theory is that the laws of supply and demand will always work to ensure that the market self-regulates itself (Canova, 1994). Therefore, financial repression in the case of the free market theory is seen as a government intervention that affects the laws of supply and demand.

Financial repression includes actions such as capping the interest rates offered by the commercial banks, government controls of domestic banks and financial institutions, establishment of a domestic market that is considered to be captive for government debt. Therefore, as discussed by Gelfond (2001), financial repression affects the free flow of the financial market and is against the free market theory of the economy. In an ideal free market, market forces of demand and supply



would be given a platform where they would influence the prices of the financial market in relation to interest rates, the amount of money banks are willing to lend and to whom they are willing to lend, and their liquidity ratios.

In regards to this, the free market theory of economics can be seen to affect three independent variables of this research, the interest rates capping, the cash reserve ratio requirements of banks, and the domestic credit uptake by the government. The actions of the government in regards to the financial repression policies go against the free market theory and affect these variables. It is important to determine how a manipulation of these variables by the action of the government through financial repression. On how it influence the financial performance of major financial institutions in the country.

### **2.2.2 Fractional Reserve Banking Theory**

In fractional reserve banking theory, banks run on a system in which they are only allowed to keep a certain amount of depositors' cash in reserves, and can lend or the other cash to lenders and make them possible for withdrawal (Cochran & Call, 1998). This theory was developed by Mises and Hayek. It is backed by the assumption that banks are necessary for the working of the economy and that they should only keep a fraction of bank deposits and lend the other money so that to improve the economy (Cochran & Call, 1998). Since banks are not required to keep the entire amount at hand, the amount they are allowed to keep at hand is regulated by the CBK in the case of commercial banks operating in the Kenyan environment.

One of the implications of setting a certain cash reserve ratio for banks is that it affects the amount available for lending to the economy. If for example a bank has total deposits of 100 million, and is required to keep a cash reserve ratio of 10%, it will only have 90 million available for lending

and withdrawal. On the other hand, if the same bank had cash reserve ratio requirement of 5% then it would have 95 million available for withdrawal and lending. Given that the most important source of income for the key financial institutions in the country's economy is interest rates on credit given, if the bank has less money to give as loans, then its income margin as a result of income on interest rates will be reduced. On the other hand, if the bank has more money, then its income margin as a result of income on interest rates will be increased. The reserve ratio affects the amount of money available for banks to lend (Cochran, Call, & Glahe, 1999). On the ground of the fractional reserve theory, financial repression actions by governments is considered to impact one key variable of the research, the cash reserve ratio requirements.

### **2.2.3 The Market Power Theory**

Robinson (1933) is responsible for the development of the theory. It holds that the market structure influences the individual firms' performance. Where the firm is able to manipulate the market prices it can control its profit margin and possibly the new entrants in the market. It is based on two hypothesis, relative market power and structure conduct performance. The government interventions on the interest rate, internal borrowing and cash reserve ratio regulations constitute external factors to the commercial banks. These interventions reduce the ability of the commercial banks to manipulate the environment and maximize profits.(Tregenna, 2009) Banks ability to differentiate their products and services is an important factor in profit maximization however commercial banks' ability to maximize returns on these products through increased interest rates, existence of cash to issue to borrowers for income generation, and freedom to lend to other profit generating sectors as opposed to the government is interfered with in turn reducing their profits

(Tregenna, 2009). The market power theory affects all the three variables in this research the interest rate, cash reserve requirements and domestic credit.

### **2.3 Review of Empirical Evidence**

Punita and Somaiyi (2006) studied the influence that monetary policy has on the performance of banks in India in terms of profitability. The researchers looked at different tools used in monetary policy, and how each of these tools affects the profitability of banks that operated in India. One of the items included in the research was the Cash Reserve Ratio that is given to Indian commercial banks. This is facilitated by the Reserve Bank of India. The study then used linear regression analysis to determine the impact that monetary policy (CRR), has on financial institutions as far as their profitability is concerned. Cash reserve ratio was revealed to cause a negative impact on the profitability of commercial banks both in the private and public sector.

Islam, Porporato and Waweru (2014) assessed the performance of financial institutions under the influence of interest rate caps. The study focused on the micro-finance institutions that operate in the financial sector of Bangladesh. The motivation behind the study was to determine the key determinants of sustainability in developing nations. The researchers used management accounting ideas and frameworks, and the principles of the contingency theory to identify the costs structures of microfinance institutions in Bangladesh, and how they are affected by restructuring and interest rate caps. The results of the study showed that micro financial institutions that have a good interest rate spread are likely to be more sustainable and perform better compared to those that have a lower interest rate spread.

Abidi and Lodhi (2015) examined the impact of changes in the cash reserve requirements on the profitability of commercial banks that operate in the Pakistani finance sector. The researchers

sought to determine whether there exists any relationship between the profits that banks make, and the cash reserve ratios that are set due to fiscal and monetary policies of a country. The variables used to determine the profitability of banks was both return on equity and on assets. Researchers collected data from the financial statements of banks operating in the Pakistani Financial sector for a period of 10 years that run from 2005 to 2014. The data was analyzed using correlational analysis and linear regression analysis. The cash reserve ratio requirements were realized to have an inverse relationship with the financial performance of commercial banks that operate in the Pakistani Financial sector.

MacCarthy (2015), investigated how financial performance was affected by Cash Reserve Ratio. This investigation was conducted among the Ghanaian financial institutions. According to MacCarthy (2015), although the general perception is that the CRR has an influence on the financial institutions; it was not clear what type of effect this was. Some studies showed a negative influence of CRR on banks' financial performance, other showed a positive influence, while in others no correlation existed between CRR and financial performance of commercial banks, (MacCarthy, 2015). In order to address these inconsistencies, the researcher collected data from 20 commercial banks in Ghana from the 2013 annual financial reports. The researchers then used Pearson's Product Moment Correlation and the LOS regression for analysis. In the process, financial performance was measured using the Return on Investments. As per the findings, financial performance of the banks was found to be significantly affected by CRR, especially in countries such as Ghana.

Studies have been undertaken to ascertain the impact of capped interest rates on the financial institutions performance. Ng'ang'a (2017) conducted a study to determine the effect of interest rate caps on the banks financial performance, it was noted that the government introduced the

interest rates capping in December 2016 to control the exorbitant interest rates charges that the Kenyan Commercial Banks had at the time. The study applied a descriptive research design to establish the implication that the caps on interest rates by the government had on the financial institutions performance in the country. The sample size consisted of 42 commercial banks in Kenya. The study relied on secondary data from the financial institutions financial statements. The study concluded that interest rate caps negatively affected the financial institutions performance suggesting that it was prudent that the government revised its policies regarding interest rates capping.

According to a study conducted by Mbua (2017) to determine the impact of interest rates capping by the Central Bank of Kenya, on how banks perform, especially those listed on the NSE. The main motivation behind the decision to investigate the impact of interest rates capping by the Central Bank of Kenya, on the performance of banks that have been listed on the NSE, was on the question of whether interest rates is an important factor to consider when investing in the stocks of a given bank. The researchers collected data from 11 banks that have been listed in the NSE, using checklist, and the research followed the observational survey research design. The researchers then performed correlation analysis on the collected data, using the IBM SPSS 22.0 statistical software version. The results showed that the introduction of interest caps has a negative impact on the lending rates of the banks. More so, it was seen that after the introduction of interest rates caps, the stock prices of banks plummeted, and thus interest rates is an important consideration when making a decision on whether to invest in a given banks shares, or not to invest in them. If the stock prices of a bank plummet, and the lending rates of the banks are affected negatively, then it can be inferred that interest caps negatively impacted on commercial banks performance in kenya.

Mwakima (2017) studied the impact of government borrowing on private sector credit in Kenya. The researcher examined the impact that treasury bills, treasury bonds and central bank credit have on private sector credit. The research focused on direct borrowing by the government and national debt measured semi-annually in a time series analysis for a 9 year period from 2006 to 2016. Descriptive statistical studies by trend analysis, distribution tables, percentages and spread graphs were used to analyze the collected data. The study concluded that domestic government borrowing to invest in capital projects had a negative impact on the private sector credit in the long run.

Kavwele, Ariemba, & Evusa (2018), conducted a study to establish the impact the interest rate capping has on the performance of the financial institutions. In order to measure the interest rates capping, the researchers used interest rate expense, non-interest income, and interest income as the variables. The variables used for performance measurement were earnings before taxation and interest rates and exceptional items. The data used was collected from the financial statements of selected financial institutions banks, four quarters before the capping of interest rates, and 4 quarters after the capping of the interest rates. In order to establish the impact that the interest rate capping has on the performance of financial institutions and commercial banks. The studies applied multilinear regression analysis, and paired it with sample T-test. The findings indicated that interest capping has a negative effect on the performance of the banks. There was decline in profits because the interest expense decrease could not compensate the loss of non-interest income, and the interest in income.

Oganda, Mogwabo and Otieno (2018), also conducted a study to determine the implication of cash reserves on the performance of financial institutions in the country. The researchers conducted a comparative study between the National Bank of Kenya, and the Equity Bank Kenya Limited. The researchers collected the data for two banks, the National Bank of Kenya, and the Equity Bank

Kenya Limited, from their financial statements of the years between 2007 and 2016, and also interviewed the Operations Directors, Chief Finance Officers, Credit Directors and Treasury Directors of the commercial banks. The researchers then used both inferential and descriptive statistics to analyze the data that was collected. Correlation matrix guided the data analysis of the research. The variables used for financial performance were Returns on Assets, Returns on Equity and Net Income Margin. According to the results of the study, cash reserves had a negative impact on the financial performance of banks. The higher the cash reserves that the banks maintained the lesser their financial performance. The study recommended that banks should instead invest their money, instead of holding up capital in the form of cash reserves. Diversifying investments using the funds held in cash reserves would help to improve their respective performances.

Mutemi & Makori (2019) studied the impact that interest rates capping has on the financial performance of the institutions. The researchers noted that interest rates are the main source of income for commercial banks operating in the Kenyan economy, and therefore, having a ceiling on their interest rates is bound to affect their financial performance. This is because a ceiling on the interest rates will put a ceiling on the margins that the commercial banks can generate through interest rates. The researchers used quarterly secondary data from the financial statements of the forty-two licensed commercial banks in the country for the years running between 2013 and 2017. The researchers then used the Ordinary Least Square (OLS) regression method and the descriptive analysis approach to analyze the data collected and hence determines the impact that interest rates capping have on the financial performance of financial institutions operating in Kenya. The results implied that the government should continue applying interest rates caps, since it has a positive impact on how banks and other financial institutions perform. The results of the current study

differ from those carried out by Kavwele, Ariemba, and Evusa (2018), Mbua (2017), and Ng'ang'a (2017).

## 2.4 Conceptual Framework

The independent variable for this research is financial repression, while the dependent variable is the financial performance of commercial bank. The measures of the independent variable (financial repression) interest rates caps, cash reserve ratio and domestic credit uptake by the government. The measure for the dependent variable is the return on assets (ROA).

ROA is the most appropriate measure of financial performance as it explains how effective a firm converts the money it invests into income. Commercial banks are highly liquid firms with virtually all their assets products and services inform of money. This measure will be most appropriate for his research since the units under study deal with liquid cash which is invested and in turn generates income for the commercial banks. The higher the return on assets the better for the firm since it means is earning more income from less investment.

The following is a diagram showing the connection between these variables.

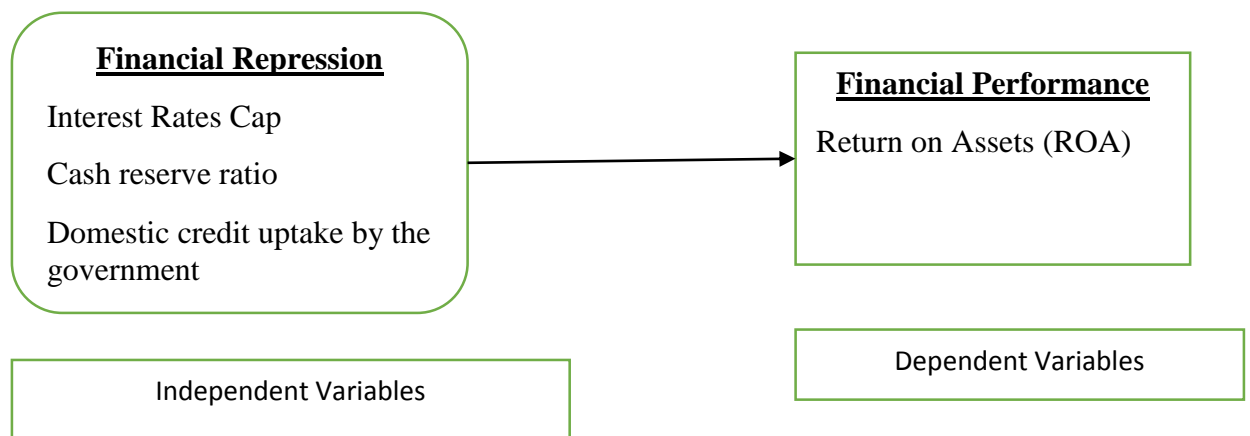


Figure 1: Conceptual Framework



## **2.5 Research gap arising from the Literature review**

The above literal studies have examined the impact that individual elements in their individual capacity, interest rate caps, and cash reserve ratio or domestic credit uptake, have on the performance of commercial banks. They have not conclusively exhausted the impact the interest rate caps, cash reserve ratios and domestic credit uptake collectively as elements of financial repression have on the performance of banks. There exists a knowledge gap on the effect that these three elements collectively have on the financial performance of banks and other financial institutions in Kenya.

## **CHAPTER THREE: RESEARCH METHODOLOGY**

### **3.1 Introduction**

The approach in which this study is undertaken is summarized in this chapter. The approach comprises of; research design, population, sample, data collection methods and analysis.

### **3.2 Research Design**

This is a comprehensive explanation of the framework of the research methods that the researcher has decided to use, inclusive of techniques used in gathering data, and how the variables of the study was analyzed. In quantitative research, the design can either be experimental, quasi-experimental, correlational research design, descriptive research design, or causal-comparative research design. The present study utilized descriptive research design.

Through the use of descriptive research design, it will be possible to investigate various variables through various research methods such as observation, case studies and surveys. This makes the descriptive research design suitable for this research since this research seeks to explore whether financial repression, which is an independent variable has any effect on the performance of financial institutions, which is a dependent variable. Descriptive research is outstanding in that it facilitates accuracy and systematic description of a population situation or phenomenon (Creswell, 2003). In the case of this research, it is not possible to manipulate the research variables and therefore descriptive research is the most suitable since the researcher can only be able to observe and measure the variables.

### **3.3 Population and sample**

Population is the aggregate totality of subjects that conform to a set of specifications within a given study (Polit & Hungler, 1999, p.37). Thus, the population included all commercial banks in Kenya. The population and sample included all the 42 commercial banks in Kenya.

### **3.4 Data Collection**

In this research, the researcher used secondary data. Government publications were used in order to collect data regarding the financial repression policies applied by the government in regards to caps on interest rates, cash reserve ratio requirements, and the domestic credit uptake by the government. The financial statements from the commercial banks provided information regarding the Returns on Assets.

The main advantage of using secondary data as opposed to the use of primary data is that it is time-saving and cost-efficient. Secondary data had already been collected by other entities and unlike the primary data; one does not have to go to the field to collect the data. A simple desktop research can avail the data needed (Christensen, Johnson, Turner & Christensen, 2011). The ability to collect the data without going to the field saves time and costs for the researcher.

### **3.5 Data Analysis**

In order to analyze the data, the researcher will use two major data statistical analysis techniques. Regression analysis applied to explore whether the independent variables affect the dependent variables (Zou, Lan, Wang, & Tsai, 2017). This is suitable as far as this study is concerned since it aims at determining if the independent variable (financial repression) affects the dependent variable (financial performance of commercial banks in Kenya). The econometric models used in regression analysis is  $Y = \alpha + \beta X_1 + \beta X_2 + \beta X_3$

Where;

Y is ROA, is the variable for measuring the performance of the commercial banks in Kenya. In addition,  $\alpha$  is the constant,  $\beta$  is the regression coefficient,  $X_1$  is the cap on interest rates variable,  $X_2$  is cash reserve ratio requirements variable,  $X_3$  is the Domestic credit uptake by the government variable.

The researcher used the ANOVA analysis as the test of significance. A test of significance used to help determine whether the effects of the individual independent variables on the dependent variable are significant. The p value to be used was 0.05. If the p value is less or equal to 0.05 then the test results was highly significant, while if the p value will be more than 0.05 then the test results was not significant.

For this SPSS was utilized to deduce the relationship between these variables and ease in interpretation of results and quick display of data tables.

## CHAPTER FOUR: DATA ANALYSIS

### 4.1 Regression Analysis

Regression analysis was utilized in examining the association existing between independent variables and the dependent variables. Specifically in this study, it's use was to determine whether the financial repression factors had any effect on the financial performance of banks and other financial Kenyan based institutions.

#### Financial Repression and Financial Performance

Objective number one was the determination of the effect caused by financial repression on financial performance of the banks. The model used for determination is as follows below.

$$Y = \alpha + \beta X_1 + \beta X_2 + \beta X_3$$

Where;

Y is ROA, is the variable for measuring the performance of the banks based in Kenya. In addition,  $\alpha$  is the constant,  $\beta$  is the regression coefficient,  $X_1$  is the cap on interest rates variable,  $X_2$  is cash reserve ratio requirements variable,  $X_3$  is the Domestic credit uptake by the government variable.

In line with this, the following were the findings of the research.

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	-.902 <sup>a</sup>	-.814	.612	.14054

a. Predictors: (Constant), Interest Rate Cap, cash reserve ratio requirements variable, Domestic credit uptake

As seen in the table, there are figures below R and R squared. The figure below R in the table shows the correlation in existence between the dependent variable and independent variables. While the R squared figure is an indication of the variation caused by independent variables on the dependent one. According to this table, the correlation between the independent variables (Interest Rate Cap, cash reserve ratio requirements variable, domestic credit uptake) and the dependent variable (financial performance of commercial banks) is 0.814. This is a strong negative correlation. On the other hand, the independent variables (Interest Rate Cap, cash reserve ratio requirements variable, Domestic credit uptake) explains a 0.612 (61.2%) variation in the dependent variable (financial performance).

### ANOVA<sup>a</sup>

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	25.525	3	8.845	437.829	.000 <sup>b</sup>
	Residual	5.063	207	.030		
	Total	31.578	300			

a. Dependent Variable: Financial Performance

b. Predictors: (Constant), Interest Rate Cap, cash reserve ratio requirements variable, domestic credit uptake

In this study, the ANOVA analysis was used as the test of significance. A test of significance facilitated the checking of whether the effects of each independent on the dependent variable was significant. The P value to be used was 0.05. If the significance level is not greater than 0.05, then it an enough indication that regression model is fit in predicting the value of the dependent variable, but if the significance value is greater than 0.05 then the model is not suitable for explaining the value of the dependent variable. According to the results in this table, the significance level was 0.000, which is less than 0.05. This implied that the regression model was significant in predicting the value of the dependent variable.

### Coefficients<sup>a</sup>

Model		Unstandardized Coefficients		Standardized Coefficients Beta	t	Sig.
		B	Std. Error			
1	(Constant)	-.345	.055		-6.309	.000
	Interest Rate Caps	-.500	.047	.567	10.579	.000

cash reserve ratio requirements	-.437	.033	.496	13.419	.000
Domestic credit uptake	-.043	.020	-.108	-2.141	.033

a. Dependent Variable: Financial Performance

The coefficients table is used to determine the magnitude and direction caused by the independent variable on dependent variable. The formula that was used to determine the effect of the individual independent variables have on the dependent variable is,

$$Y = \alpha + \beta X_1 + \beta X_2 + \beta X_3$$

Based on the results of the regression model above, the following are the results.

$$\text{Financial Performance} = -0.345 + -0.500 \text{ Interest Rate Caps} + -0.437 \text{ cash reserve ratio requirements} + -0.043 \text{ Domestic credit uptake}$$

Based on this, the results show that the interest rate caps have a negative influence on financial performance (-0.345), cash reserve ratio requirements have a negative influence on the financial performance of commercial banks (-0.437), and domestic credit uptake has a negative performance (-0.43) on the financial performance of the commercial banks.

#### 4.2 Discussion and interpretation of findings

This is a discussion that follows after the generation of results through regression analysis in relation to the study's objectives. The discussion is done in the light of the results that have been conducted by other researchers in relation to the same topic.



#### **4.2.1 Objective one: Evaluate the effects of interest rate caps on banks and other financial institutions in Kenya**

Objective one of this research was to evaluate the effects of interest rate caps on banks and other financial institutions in Kenya. The regression analysis showed that there is a negative influence of interest rate caps on banks and other financial institutions in Kenya. The ANOVA analysis showed that the effects of the individual independent variables on the dependent variable were significant. Therefore, according to the research results, this study finds out that financial performance of banks are negatively affected by interest rate caps in Kenya.

This is in line with various studies that have already been conducted. Kavwele, Ariemba, and Evusa (2018), conducted a study to assess how interest rate capping affected the performance of the financial institutions, it's effect on the financial performance was found to be negative.

Ng'ang'a (2017) conducted a study to determine the effect of interest rate caps on the banks financial performance, it was noted that the government introduced the interest rates capping in December 2016. Ng'ang'a (2017) conducted a study to determine the effect of interest rate caps on the banks financial performance, it was noted that the government introduced the interest rates capping in December 2016.

#### **4.2.3 Objective Two: Evaluate the effects of cash reserve requirements on the performance of financial institutions and banks.**

The second objective of this research was to evaluate the effects of cash reserve requirements on banks and other financial institutions in Kenya. The regression analysis showed that there is a negative influence of cash reserve requirements on banks as well as other financial firms based Kenya. The ANOVA analysis showed that the effects of the individual independent variables on

the dependent variable were significant. Therefore, according to the research results, this study finds a negative impact of cash reserve requirements on the banks' performance in Kenya.

This is in line with various studies that have already been conducted to determine the impact of cash reserve requirements on the financial performance of financial institutions. Oganda, Mogwabo and Otieno (2018), also conducted a study to determine the implication of cash reserves, to examine its effect on the performance of financial institutions based in Kenya. The researchers found that the higher the cash reserves that the banks maintained the lesser their financial performance. In another research, MacCarthy (2015), investigated the effects of Cash Reserve Ratio has on the financial performance of financial institutions in Ghana. These discoveries agree with those of this study, and the study conducted by Oganda, Mogwabo and Otieno (2018).

#### **4.2.4 Objective Three: Evaluate the effects of domestic credit uptake by the government on the performance of the financial institutions and banks in Kenya.**

This research also focused on evaluating the effects of domestic credit uptake by the government on banks as well as other financial institutions based Kenya. The regression analysis showed that there is a negative influence of domestic credit uptake by the government on banks as well as other financial institutions based in Kenya. The ANOVA analysis showed that the effects of the individual independent variables on the dependent variable were significant. Therefore, according to the research results, this study finds a negative impact of domestic credit uptake by the government on the performance of the banks financially.

This is in line with the studies identified in the literature review section which showed that there is negative impact of domestic credit uptake by the government on the financial performance of financial institutions. Mwakima (2017) studied the impact of government borrowing on private

sector credit in Kenya. The results of the findings showed that that domestic government borrowing to invest in capital projects had a negative impact on the private sector credit in the long run.

## **CHAPTER FIVE: CONCLUSIONS AND RECOMMENDATIONS**

### **5.1 Summary of Findings**

The study's objectives were to evaluate the effects of interest rate caps, cash reserve requirements, and domestic credit uptake by the government on banks and other financial institutions in Kenya, in line with this, the research findings showed that,

- a) Interest rate caps have a negative impact on the financial performance of financial institutions in Kenya.
- b) Cash reserve requirements have a negative impact on the financial performance of financial institutions in Kenya.
- c) Domestic credit uptake by the government have a negative impact on the financial performance of financial institutions in Kenya.
- d) The general objective of this research was to establish the effect that financial repression has on the performance of banks and other financial institutions in Kenya. In line with this, the research findings show that financial repression has a negative effect on the financial performance of banks and other financial institutions in Kenya.

## **5.2 Conclusions of the study**

The study findings have generally indicated that financial repression elements that is interest rates, cash reserve requirements and domestic credit uptake have a negative impact on the return on assets. Therefore, based on these findings, this study has concluded that financial repression negatively affects the return on assets of the commercial banks consequently the general financial performance of the institution

The regression analysis showed that there is a negative influence of interest rate caps on banks and other financial institutions in Kenya. This finding has led to the study conclusion that caps on interest rates by the government of Kenya negatively affects the return on assets of the commercial banks consequently the general financial performance of the institution.

The regression analysis showed that cash reserve requirements negatively affects the return on assets of the commercial banks consequently the general financial performance of the institution

The regression analysis showed that domestic credit uptake by the government on banks negatively affects the return on assets of the commercial banks consequently the general financial performance of the institution.

## **5.3 Policy Recommendations**

As per the results, financial repression has a negative effect on the financial performance of banks and other financial institutions in Kenya. In line with this, the recommendation of this research is to ensure that the government of Kenya has less financial repression policies, since they would have a negative impact on the performance of commercial banks in the country. In addition, this would have implications to the economy at large. According to Mbua (2017), where the interest rates of banks are capped, the stock prices of banks plummeted, and thus interest rates is an

important consideration when making a decision on whether to invest in a given banks shares, or not to invest in them. In addition, according to Kavwele, Ariemba, & Evusa (2018), interest capping makes most banks to reduce their lending to certain sectors of the economy and this affects the economy negatively.

Oganda, Mogwabo and Otieno (2018), posits that large cash reserve ratio requirements rob banks of a lot of capital which they would use to invest elsewhere in the economy. Oganda, Mogwabo and Otieno (2018), recommended that banks should instead invest their money, instead of holding up capital in the form of cash reserves. Diversifying investments using the funds held in cash reserves would help to improve their respective performances, and the performance of the economy at large. Mwakima (2017), also advised against government credit uptake from the private sector. The researcher examined the impact that treasury bills, treasury bonds and central bank credit have on private sector credit. Based on the results, Mwakima (2017), recommended that governments need to ensure that they do not over borrow from the private sector and especially from commercial banks.

#### **5.4 Limitations to the study**

Limitation on ascertaining the effect of financial repression on the performance of financial institutions since the control variables were interest rate caps, cash reserve ration requirement and domestic credit uptake by the government. Other aspects associated with financial repression such as restriction on entry the financial industry were not considered in the study.

The study relied on secondary data whose degree of precision is limited. While the data on the interest rate caps, domestic credit uptake and cash reserve requirements was verifiable by the

Central bank of Kenya, an assumption on the correctness of the data from the commercial banks had to be made.

The study was limited to a 5-year period between financial years 2014 to 2019 a longer duration would have been able to capture a broader dimension to the economic issue.

### **5.5 Suggestions for further studies**

The present study delved in assessing the impact of financial repression on the financial performance of commercial banks in Kenya specifically focusing on interest rate caps, cash reserve requirements and domestic credit uptake based on a 5-year period. The study recommends an in depth research encompassing all the elements of financial repression and a longer study period. Further studies should be conducted on the spin of periods between the policy implementation by the government in order to establish the implications on the Kenyan economy.

## 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.
- 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-composition-of-domestic-debt-in-kenya-and-implication-on-refinancing-risk>
- 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.
- 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 and 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-spiralling-out-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. *Research Journal's Journal of Finance*, 4(3), 1-12.
- 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).
- 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 International University-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.
- Ng'ang'a, A. K. (2017). The impact of interest rate capping on the financial performance of commercial banks in Kenya. *Unpublished MBA Project, University of Nairobi*.

- 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.
- 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.
- Zou, T., Lan, W., Wang, H. and Tsai, C.L., (2017) 'Covariance regression analysis,' *Journal of the American Statistical Association*, 112(517), pp.266-281.
- Fabozzi, J. *Bond Markets, Analysis and Strategies*. 4th ed. New York: Prentice Hall, 2000.

## Appendix

### Appendix 1: Commercial Banks in Kenya

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