

**THE EFFECT OF LENDING RATE ON LOAN PERFORMANCE OF
COMMERCIAL BANKS IN KENYA**

BY

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DECLARATION

I, the undersigned, declare that this is my original work and has not been presented to any institution or university other than the University of Nairobi for examination.

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D63/83977/2016

This research project has been submitted for examination with my approval as University Supervisor.

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DEDICATION

I dedicate this research project to my late mother Priscilla Njeri who encouraged me to commence this journey, my father Engineer Duncan Ngondo and to my partner Elizabeth Nduta for their support and love during this study

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LIST OF ABBREVIATIONS

ANOVA	Analysis of the Variance
CBK	Central Bank of Kenya
CEE	Central and Eastern European Countries
CRB	Credit Reference Bureau
FDI	Foreign Direct Investment
FEB	Foreign Exchange Bureaus
GDP	Gross Domestic Product
KSH	Kenya Shilling
LDC	Less Developed Countries
NBFIs	Non-Banking Financial Institutions
NSE	Nairobi Securities Exchange
ROA	Return on Assets
ROE	Return on Equity
SAP	Structural Adjusted Programs
SOE	State Owned Enterprise
SSA	Sub Saharan Africa

ABSTRACT

The banking sector in Kenya has recently had new laws introduced that sought to cap interest rates, notwithstanding the warnings by the commercial banks, the CBK governor, Kenya Bankers Association on the adverse effect on various sectors in the economy for implementation of the law. One year after the implementation of the law, this study sought to look at the effects of the lending rate on the loans performance for commercial banks in Kenya. In recent, times especially with the interest rate capping, banks have registered either an increase or decrease in their loans performances which is usually measured by the levels of non-performing loans in their portfolios. In addition, loan performance is a key indicator on how well these financial institutions perform in terms of profits and the amount of cash flow that they have. Banks in Kenya have exhibited these kinds of tendencies in recent times. The study identified financial performance, capital adequacy and bank size as control variables. Data was collected by the use of secondary data collection methods for all the commercial banks licensed in Kenya for the period 2013 to 2017. However full information was obtained for 35 commercial banks as some banks did not have information on some years for the study period. This represented a response rate of about 83% which was significant for data analysis. The study used a multiple linear regression model to determine the effect of lending rates on loan performance. The data was first diagnosed on whether it complied with the normality, collinearity, and autocorrelation requirements. The resulting regression model had a coefficient of determination of 27.8% and the F test conducted rejected the null hypothesis and was significant as the p value was less than the alpha value of 0.05. This meant that the effect of lending rate on loan performance for commercial banks in Kenya, was statistically significant.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

In any economy, financial systems are of great importance where economic development process is involved. They mediate borrowers and savers in an economy. The lending rate that these financial institutions give to the borrowers usually has an impact on the loan performance of the banks in Kenya. Economies that have developed thriving financial systems possess liquidity that is created by financial institutions which exhibit prowess in the way they manage these loans.

Key theories that was used or anchored on included the loanable funds theory developed by Froyen (1996) which in summary talks about how interest rates are determined which is based on the availability of the loan amounts. The banking sector is the keystone of any economy and assumes an essential obligation in nation's financial system. The other key theory used was the Keynes's liquidity preference theory advanced by Keynes (1936) which states that interest rates are determined by the demand and supply of money balances.

In the global scene especially recently in the America and the European economies, interest rates that have been advanced to individuals and corporate organizations have had key impacts in the amounts of non-performing loans held by these banks. In America for instance during the global crisis, many customers were unable to pay their mortgage loans which led to the collapse of investment banks and financial institutions and eventually they were able to be rescued by respective Governments. Lending rates stands out amongst the most imperative factors that have an effect on the loan performance. money or a financial

Lending rates assume an essential role in the development of economies and directly affect the profits on investments achievable from various financial instruments. Lending rate is a financial tool that is utilized to control expansion and to support financial advancement (Corb, 2012). It is broadly trusted that variances in market lending rates apply effect on loan performance in commercial banks. Lending rates impact credit take-up given that higher financing costs prompt diminished level of credit appetite from the resultant surprising expense of borrowing.

Higher Lending rates additionally result in expanded likelihood of default as borrowers will battle to meet instalment commitments under their advance offices. At last, the level of credit take-up and expanded risk of default at various levels of financing cost specifically influences loan performance.

1.1.1 Lending Rates

Lending rate is the amount that a bank charges on money that it lends. Most interest rate charged by banks is given short term loan to creditworthy customers. Prime rate is a guide for computing interest rates for other borrowers, Brown. W. M (1992). According to Brown. W. M (1992) defined base lending rate as minimal interest rate on which financial institutions base the rates use for lending. The Federal Reserve is where the credit facility which financial institution goes borrowing funds. In reserve market, the loan priced at the discount rate, which are well structured. All this ensure that liquidity reduced, and stability of financial markets restored at the banks. This will alleviate potential crisis in financial institutions.

In Kenya, lending rate is determined by CBK through its monetary policy committee and the decision to increase or decrease the lending rate depends on inflation rate. Increases on credit borrowing rate affected by interest rate charged by commercial bank. According to Kiva (2015), microfinance generates its revenue though lending credit, however some microfinance institutions are not dependent on Central Bank of Kenya and commercial banks, which may react differently.

1.1.2 Loan Performance

Performance of loans in the financial institutions is measured by the loan default rate of the borrowers. The shortcoming of the 37 banks leading to the year 1998 was caused by having so many non-performing loans by those banks. The definition of a non performing loan is one in which is the sum of borrowed money in which a borrower has not made any scheduled payments in a period of at least 90 days. It usually includes not paying the scheduled payments on both the principal and Interest. (Central Bank of Kenya, 2015). Before the inception of the information sharing strategy and the CRB regulation, banks had no mechanisms of finding out about the financial relations of their new clients with other financial institutions.

According to Central Bank of Kenya (2014), the ratio of gross non-performing loans stood at 5.6% in 2014. Correspondingly, there was an increase in those loans held by the commercial banks from Ksh 81.8 billion of December 2013 to Ksh 108.3 billion of December 2013 (Central Bank of Kenya, 2014). Loan performance is the core reason behind the demise of wound up banks in Kenya (Waweru & Kalani, 2009). The reason for this is whenever these non-performing loans are high in one specific bank, then the other assets that have been provided as a provision for them cannot adequately protect them

against any kind of risk particularly defaulting when it comes to its payments. (Kwambai & Wandera, 2013).

In comparison from other countries, Michael, et al. (2006) concludes that in India, the inclusion of non-performing assets in loan portfolios affects the operational efficiency of the banks, a situation that in turn affects the profits, liquidity and solvency of that bank. Further, non-performing assets also affect the psychology of the bankers in respect to the disposition of the funds towards credit delivery (Batra, 2003).

1.1.3 Lending Rates and Loan Performance

Over the beyond few years, lending costs of business banking device has caught researchers 'interest during the arena. Lending charge is the charge a borrower can pay for using cash they borrow from a lender/monetary institutions or price paid on borrowed belongings (Crowley, 2007). For a bank, lending price is typically defined as any margin which you get while you minus the yield obtained from advances and hobby and the charge it may pay at the borrowings and deposits. Lending rate is an crucial indicator of loan overall performance in industrial banks. It displays earnings maximizing ability of the monetary intermediaries (Bandaranayake, 2014).

With maximum enterprise banks in Kenya, then lending is generally the core hobby bringing in big quantities of income consistent with year. When it comes to know-how the price of the loan then we typically keep in mind the chance that the interest and fundamental can be paid on time and the lending price. The mortgage common overall performance is in maximum instances the maximum vital asset and the maximum dominant supply of income with the aid of enterprise banks. In this regard, it becomes the finest foundation of risk to a bank with regards to soundness in addition to protection. The degree at which the hazard of the lending fee is accredited to the lending sports of banks is determined by way of way of the framework of the loan performance and the quantity in which the epithet of its loans for instance, rate shape, maturity and options which may be embedded that screen the sales stream of banks fee modifications. (Kaggwa, 2013). Therefore overall performance of a loan alludes to the quantity of go back that an company gets from its kind of loans advanced to humans and corporates.

1.1.4 Commercial Banks in Kenya

Kenya banking records eras back to 1896 during the time Indian National Bank was officially opened in Kenya (John, Fredrick & Jagongo, 2014). The financial banking sector includes Central financial institution of Kenya, that is the governing frame authority in Kenya and the monitored: Commercial Banks (CBs), Non-Bank Financial Companies, Bureau de trade businesses. CBs and mortgage financial institutions are regulated and licensed inside the banking Act, cap 488 and the prudential guidelines.

FEBs are monitored and licensed within the Act of the critical Bank, 491 Cap and FX hints for bureaus issued there under (CBK). There are currently forty three banks in Kenya already licensed and a sole mortgage business enterprise and locally owned establishments are 29 with 15 being overseas owned. The Government also owns a widespread percentage in three of the locally owned ones. According to Daniel (2014), banks in Kenya are each locally and overseas owned. A massive extensive sort of them which might be taken into consideration most of the people are typically smaller in length and offer retail banking for both individuals and company groups, the six huge ones provide special essential services especially in investment banking and are indexed inside the NSE.

In the last couple of years, we have seen a surge in the number of Banks in Kenya grow especially in the amounts of profits being made, the amount of assets that they hold or possess and products offering.

This kind of growth has been anchored by an industry which has expanded widely in terms of branches in Kenya and East Africa, mainly through new innovation and automation and also an emphasis of the demands of customers in terms of complexity and commercial off the shelf products. (CBK, 2008).

1.2 Research Problem

The Lending rate is the amount that a banks charge on money that it lends. Studies on the effect of the financial repression on investment and economic growth by Shaw and McKinnon (1973). The bank lending rates are always charged on loans by the commercial banks to private individual and companies. The main function of the lending rates is to entice those with the money to lend it to other individuals or organizations. If there are no financial institutions then there is no reason to lend the money. This could ultimately, be very harmful to the economy and cause hardship to the borrower.

In Kenya, lending rates fluctuates depending on the Central Bank Rate that monetary policy committee has settled on. Loan performance in the commercial banks is measured by the loan default rate of the customers. The non-performing loans have increased in recent times and this has also created liquidity problems in banks which in turn has led decrease in financial performance in recent times. The recent interest rate capping also affected the profitability of these banks but in effect also improved their loan performance as the interest rates were quite affordable to the individual borrower. There has also been an increase in the CRB cases in Kenya as default cases have gone up due to the unsecured loans being given to entry level employees in corporate organizations. This has an effect pushed the amounts of NPLs up. The need for this study has been first drawn to the fact that lending rates do fluctuate as evidenced by Central bank of Kenya banks annual reports from 2010-2014 as well as gradual increases in banking sector profit before taxes. We have seen this relationship in the Banking sector where if lending rates fluctuate then financial performance in the Banks is affected either in a positive or a negative way.

Global studies conducted have also shown that there is a relationship between lending interest rates and loan performance. Enyioko (2012) looked at the Nigerian Banking sector performance based on the lending interest rates. That study showed that there was a slight change in the performance of banks when interest rates changed. Aburime (2008) concluded that there was a positive relationship between inflation, exchange rate and the bank size in relation to Return on Assets of Nigerian Banks. However, Jog Kun and Bosson (2002) found out that big banks were more profitable than smaller banks in terms of size.

Local studies finished on this take a look at is similarly supported through the reality that maximum research finished with regards to mortgage performances in business banks in Kenya has centered on indoors determinants that have an effect on loan performance and no longer using a check specializing in lending charges and business enterprise loan common general overall performance. Prior empirical studies generally investigate determinants of banks' profitability in modern on one-of-a-type ranges and instructions, (Ommeren, 2011). And as such, interest is to research whether or not or no longer lending expenses have an impact on mortgage ordinary overall performance in Kenyan commercial enterprise banks predominant to this studies. Therefore, the primary research query that this have a have a look at sought to reply is the connection among lending rate and loan fashionable overall performance of organization banks in Kenya.

1.3 Research Objective

The study objective was to determine the effect of Lending rates on loan performance of commercial Banks in Kenya.

1.4 Value of the Study

This study's findings will help provide useful information to guide existing theoretical propositions on the effect of lending rates on loan performance of commercial banks in Kenya. It is expected to contribute to the existing knowledge base.

The Commercial banks will be able to uncover the relationship that the lending rates have with the loan performance hence empower them to adopt essential strategies to respond to the issues hindering loan performance. The government will also get to understand how this affects the economic growth and development of the country. The discoveries will hence help the government to think of suitable budgetary advancement approaches that can improve the loan performance hence growth of the banking sector as well as the economy of the country. From the outcome of the study the banks will be at a better position to negotiate with policy makers on the issue of the lending rates.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

For a proper understanding of loans performance in Kenyan commercial banks, it is important to get reference to past investigations on loans performance and lending rates. Many studies on the loan performance have been done in the past by researchers, some researches only focused on bank internal factors but others also considered external factors in their studies

2.2 Theoretical Literature

2.2.1 Expectation Theory

This concept has become advanced by Lutz (1940). It is built on the idea people have in destiny situations. Investors normally need to keep short time period securities whilst future lending fees are anticipated to decrease and could opt to hold long time securities at the same time as future interest fees are anticipated to be high. Similarly, quick time period fees are more volatile than long time charges. However, Expectation concept cannot make clear why long time yields are often higher than short time period gains, because it have been, the cause the yield bend is typically upward slanting. In the occasion that the short prices are low now, they're relied upon to head up in destiny.

The expectation theory assumes that investors normally have perfect knowledge on various factors. These are: taxes, short term interest rates and investors are able to maximize profit among others the theory concludes that long term rate will constantly move in similar direction short term rates moves (Bakaert, 1998)

As indicated by Backus et al. 1997, expectations theory holds if in the accompanying forward regression the slope $c_{n=1, f_{n-1, t+1} - y_{1,t} = \text{constant} + c_n (f_{n,t} - y_{1,t}) + \text{residual}$. This is on account of the expectations theory of term structure holds with constant term premiums as: $f_{n,t} = E_t (y_{1,t+n}) + \lambda_n$

2.2.2 Liquidity Premium Theory

This speculation is one of the varieties of one-sided expectancies principle. Span estimates the rate threat of protecting a bond. This will supplement a top beauty of Liquidity that is receptive to that Bond's states of loose marketplace activity (Mishkin, 2009).

Term increments because the bond's development extends. Hazard avoidance will motive in advance prices to be correctly more prominent than expected spot charges, for the most detail with the useful resource of a sum increasing with improvement. The time period top rate is the addition required to incite monetary specialists to maintain long run securities. Indeed, even default loose securities are volatile due to vulnerability approximately boom and destiny loan fees. Investors care approximately acquiring depth of the appearance real move returned-no longer genuinely the ostensible estimation of the coupon instalments. Vulnerability about swelling makes vulnerability about a bond's right return, making the bond a risky investment.

The similarly we examine the future, the greater notable the vulnerability about the quantity of swelling, inferring that a bond's boom risk increments with its opportunity to improvement. Financing price threat emerges from a jumble amongst speculator's challenge skyline and a bond's a remarkable possibility to improvement.

On the chance that an investor intends to provide a protection in advance than improvement, adjustments within the financing cost create capital will increase or losses. Woodward (1980) proceeds to make clear that the liquidity top magnificence and the concord top fee are each controlled thru the cooperation of loan costs and income at preceding and later dates.

2.2.3 Keynes's Liquidity Preference Theory

Liquidity preference theory was first advanced by Keynes (1936). He noted that investors usually prefer long term securities investment than short term and therefore in order to entice this bunch of people especially the bond holders, create a yield higher for the long term than short term investment. He further stated that investors hold money for precautionary and speculative purposes and not transactional purposes and therefore interest is determined by money demand and money supply. The precautionary demand has a positive increase with income and the speculative demand has a negative increase with money.

In this case, the curve yield will always be sloping up. This is because people like holding onto cash rather than investing the money in illiquid assets like bonds or real estate they therefore would prefer getting a premium from it and the more time increases the more premium they demand. According to Auerbach (1988), stated that the amount demanded in terms of premium decreases when time continues for getting the cash back. In financial terms, this theory is expressed as "forward rates should exceed the future spot rates". The expectation, therefore, is that the more premium should be given to those investors who hold a forward exchange rate than the ones with future exchange rates. This is because

those investors who take more risks should be compensated more or given a premium than those who don't. This in turn offer more incentive to long term investors than short.

In most cases people who are employed tend to save more with a general increase in income. Therefore, Reilly and Norton (2006) noted that investments that are long term in nature should provide higher yields so as to cushion those investors with higher risks than ones with short term investments who possess lower risks especially when it comes to bonds with longer maturities than bonds with short term maturity.

Were and Wambua (2014) argued as this theory suffers as a result of the false determination which is mutual in nature. Keynes explains that the interest rate is based on the preference of the liquidity. In reality however, Keynes treats the liquidity preference being determined by the rate of interest. Consequently, Keynesian alleges that there other economic factors that influence particularly elements which is mysterious and a force that is unexplained which determine the rate of interest and not liquidity per se.

In relevance to the study, interests are mostly fuelled by demand and supply of money in an economy whereby, the preference for liquidity by the investors or savers will tend to either push the rate of interest up or down Hence, the variation in the premium depends totally on the payment scope of the level of liquidity in an economy. The mathematical implication of the preference theory of interest finds expression in the discount function which simply means that with increase in the preference, the discount rates escalate on the receivable returns in future.

2.2.4 Loanable Funds Theory

Loanable funds theory was first developed by Froyen (1996) he stated that interest rate is decided by the extent at which the demand for securities is equal to the supply for those securities and the elements that determines interests are actual savings and actual interest demand, what the new classical economist named the normal forces of 'thrift as well as productivity'. The ascertainment of the rate of interest when it comes to the above funds theory depends on how available the loan amounts to be given are. The accessibility of these amounts of loan is established on particular factors like the net increase in deposits in terms of currency, how much savings are made that intensify the balances in cash and new chance that will bring in new capital. According to Fixler and Zieschang (1998) he stated that this theory is an optimizing theory which is dynamic and consolidates the theories of portfolio and production and also financial intermediation. That particular model which is unified offers insights on the importance between output of bank services vis a vis the portfolios of the assets which are risky. The risks of these portfolios are the ones that determine the return on the loans for the banks and also the discount used for future profits.

The amount of the output of service is ostentatious by the risk only to the degree that portfolios of disparate risk demand for a variety of amounts in processing information. In that respect, the models reveal that the loanable funds are solely a transitional process that goes through banks, whereas what can be said as value addition is when services provision by these institutions is when it facilitates the funds provision. This model further initiate that there should be a separate function between the funds use and how available these funds are.in order to avoid the optimality problem. The importance of this theory to the

topic is that in this theory, the lending rate is exhibited by the relationship between how the demand is on the loanable funds are and its supply. When you have the level of supply that is the same and the demand for these funds increase through an informed decision on your part, then this will lead to a dramatic positive increase of the lending rate and the same goes with a negative change relationship. In addition, an increase in supply of these loanable funds would in effect create a decrease in the rate in but consequently, if both change, that is supply of these funds which are loanable and demand for them, then the difference in rate would lean towards the enormity and level of the gesticulation of the supply and demand of these funds which are given as loans.

2.3 Determinants of Loan Performance

Cognitive factors of the performance of loans can be internal or external. Internal determinants of bank loan performance regularly comprise of elements that are within the control of the commercial banks. They are the elements which impact on the revenue and the expenditure of the banks. A few examinations arranged them into two detailed classifications as the monetary proclamation factors and non-budgetary factors. External factors are said to be the variables that are not within the control of the administration of banks. The determinants which are external of loan performance are aberrant components, which are wild, yet enormously affect bank's benefit. They mainly include the lending rate, Return on Assets, Capital Adequacy and Firm Size.

2.3.1 Lending Rate

This is the interest rate at which the lender is paid for the money owed to them by the borrowers. This is usually the percentage of principal that is paid a number of times per portion of time or length of time. A perfect example might be an SME borrows capital from

a financial institution like a Bank to purchase new assets for its business, and in return the lender receives interest at intervals of which both the lender and borrower have agreed for use of the funds. The lending rate is usually expressed as a percent of the principal for a one year period.

2.3.2 Return on Assets

This Ratio shows or measures how worthwhile a company's property are being in producing sales. It is a detailed indicator of the way profitable a corporation is whilst you compare it to its property. In clean terms it is a tremendous indicator on how effectively employer uses its assets to generate profits for agency. Furthermore, it signifies how a manipulate of the agency generates profits from the overall resources of an enterprise. (Kharwish, 2011). A greater than normal ROA indicates that an agency is greater green in using its property. (Wen 2010)

2.3.3 Capital Adequacy

This is usually to cushion Banks in ensuring that they are reasonably able to absorb huge amount of losses before they lose customer funds by becoming insolvent. This ensures that a country's banking sector is efficient and stable and lowers the risk of banks becoming bankrupt. Depositors are therefore given a higher priority than Bank's capital and so customers can only lose their savings in case the losses exceed a bank's capital adequacy. It is mostly expected that a bank with a high capital adequacy ratio will experience the least financial hardships which will in then lead to a more profitable company and of which it will be able to lend at flexible interest rates and therefore improving on their loan performance.

2.3.4 Firm Size

This is usually computed a logarithm of total assets. The size also tries to capture the economies and dis economies of scale. The bigger the bank then the higher the sales which translates to better profits. This in turn will make banks provide affordable loans to customers and improve the loan performance of these banks. This also provides a control variable for diversification of the risk and product as well as differences in cost. (Rachdi 2013)

2.4 Empirical Literature

Many studies on the profitability of commercial banks have been done in the past by researchers. Some researches only focused on bank internal factors but others also considered external factors in their studies. Saira Javaid (2011) found that total asset or bank size does not lead any impact on profitability of commercial banks but deposits and equity have impacted significantly the profitability.

2.4.1 International Empirical Literature

Hassan Olanrewaju Makinde (2016) considered the impact of loan fee on business bank stores in Nigeria from 2000 to 2013, utilizing the needy variable business bank store and free factors Gross Domestic Product (GDP) and financing costs. The exact discoveries demonstrated that loan cost has a negative and measurably irrelevant relationship with business bank. Gross domestic product has a positive and measurably irrelevant relationship with commercial bank deposits. The creator presumed that interest rates did not have any effect on commercial bank deposits.

Yiyou Wang (2015) has concentrated the examination on an exploratory investigation of loan cost advancement in business banks in China utilizing net premium spread, non-premium pay extent and fixation proportion of state-claimed banks as the reliant factors one by one and benchmark premium spread as the autonomous variable. The outcome demonstrated that there was a negative huge connection between non-premium salary extent and benchmark premium spread, while a positive noteworthy relationship was seen between benchmark premium spread and Concentration proportion of state-possessed banks. Though, benchmark intrigue spread had a positive immaterial association with net intrigue spread.

Sheng and Tong (2007) said that to make profits, banks count more on the spread of interest and concluded that to manage well the interest rate liberalization, banks should set interest rate level according to market demand. Wang et al (2012) added that interest rate liberalization results to business risk challenges and inflation.

Onwumere, Okore Amah Okore and Imo G. Ibe (2012), analyzed the impact of lending rate of interest when it comes to liberalization of such savings in Nigeria. They suggested that the policymakers should liberalize the interest rates step by step, firstly the wholesale transactions interest rates among sophisticated entities, secondly lending rates and finally deposit rates. These will make safety the banks' profitability while providing time for firms and people to adapt to the liberalization.

Qishui Chi and Shiwen Fu (2016) focused their research on the Impact of Interest Rate Liberalization on Banks and Small Firms in China, and discovered the outcomes that under the financing cost advancement, the bank credits of little firms are not presented to non-

performing dangers. This can empower banks in creating business with little firms to get a fulfilled outcome as win-win.

Saidu and Tumin (2011) researched the execution and budgetary proportions on tests of four Malaysian and nine Chinese business banks from 2001 to 2007. The examination made utilization of board information and the relapse results demonstrate that credit, capital and working proportions have impact on the execution of banks in China which isn't valid for Malaysia. The investigation found that liquidity and size of the banks don't impact the performance of the banks in the two nations.

Influence of lending rate on loan performance is a big issue in financial theory keeping the real rates positive we have to increase the level of financial savings. This author concluded that positive real deposit rates are important, but are not enough to increase the mobilization of deposit in the financial institutions.

Macharia, (2013) contemplated the ones impacts for worldwide financial emergency of the loan average performance of the banks in Kenya offering settlement fund. The exam led to an antipathetic connection linking boom, lending charge because of worldwide economic emergency and mortgage overall performance of enterprise banks presenting settlement fund in Kenya.

A unit increase in inflation and interest fees precipitated a zero.543 and zero.425 lower respectively within the rankings of the overall overall performance of the loans in the ones banks in Kenya that offers mortgages. In addition, this take a look at was decided to have a excellent end result with regards to banks that provide loans and the trade expenses thereof.

2.5 Conceptual framework

A conceptual framework is a diagrammatical expression of the relationship between a set of independent variables on one side and a dependent variable on the other. The framework shows the sub constructs that's re used to measure every variable. The arrows depict the direction of hypothesized relationship. Figure 2.1 depicts the expected relationship between commercial bank profitability and interest rate liberalization.

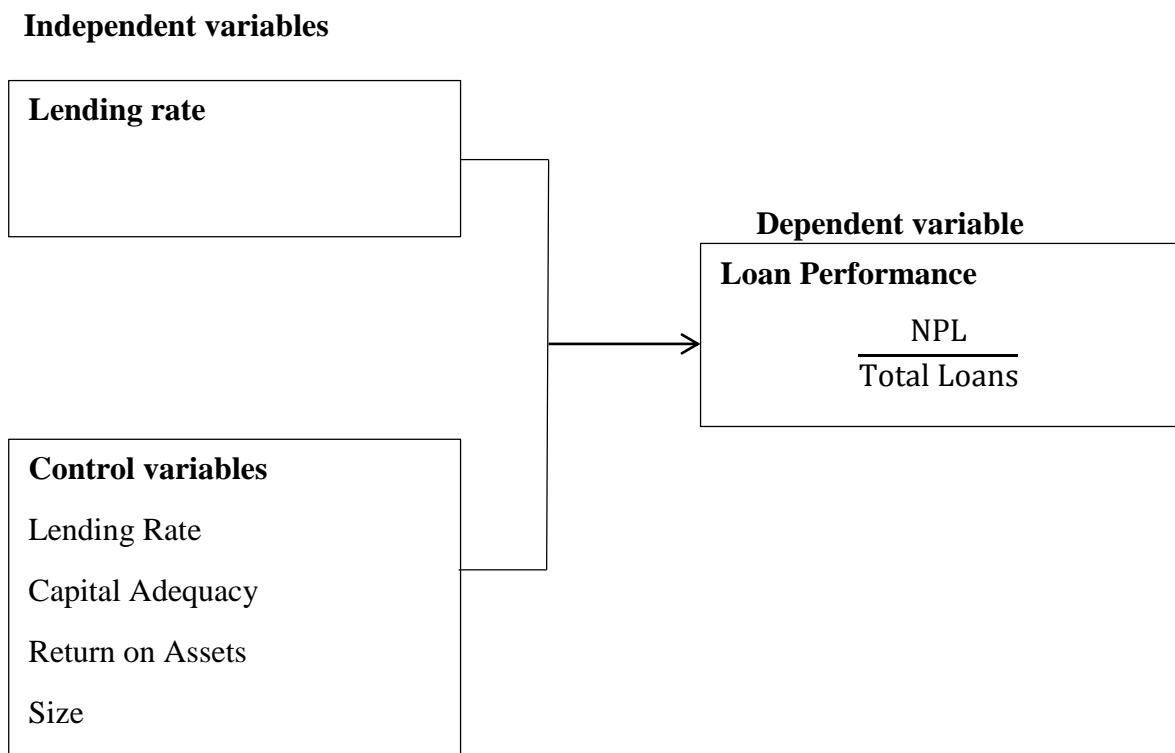


Figure 2.1: Conceptual Framework

2.6 Summary of the Literature Review

The studies that have been done unfortunately have focussed on the banking industry sector which is specific to the overall sector in banking performances or the ones comprising of banks and not many studies focussed on the relationship between lending rate and loan performance. No specific study have examined this fact and yet lending rates have been very unpredictable lately and there is the need to determine how they affect loan performance in commercial banks.

The review done as seen above especially the empirical studies have shown that there are macro-economic factors that influence the bank performance when it comes to being providers of loans to the borrowers or serving as an intermediary between the borrowers and savers. In addition, studies done have been majorly on the macro economic factors in the global scene and none have examined the local ones especially here in Kenya. There is therefore a gap in literature regarding the effect of lending rates on loan performance in commercial banks in Kenya hence this study seeks to bridge this gap.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter looked at the different stages which was followed in order to complete the study. It involved a layout for how data was collected, measured and analysed. In details it contains sections the design of the research, how population was targeted, and the instruments in which data was collected, the procedures used and finally how such data was analysed.

3.2 Research Design

The study utilized secondary data since the nature of the data was quantitative. According to Kothari (2004), collecting data involves bringing together first-hand proof so as to be able to acquire an understanding of the given circumstances. Data collection also helps in giving solutions to the queries that initiate the commencement of a particular piece of work. The research utilized descriptive research design. Descriptive research design technique helps in gathering data about the current status of the environment with the end goal to depict what exists in regard to factors. This strategy is utilized on the grounds on what kind of achievement the examination in exploring such relationship between the factors of the investigation (Kothari, 2008).

The statistics has been extracted from Bank scope. This test focused at the results of lending costs on loan regularly occurring basic performance in industrial banks in Kenya thru using regression assessment and descriptive evaluation. The study finished information it clearly is empirical for the variables to investigate the relationship among lending rate and loan universal performance through offering the correlation coefficients

the various variables and mortgage primary basic performance of commercial banks in Kenya measured through ROA.

3.3 Population of the Study

A populace refers to the whole employer of individuals, topics that the researcher needs to investigate and from which the instance may be drawn and brought into consideration. The purpose populace for this observe was all 44 industrial banks in Kenya. There have been forty-four commercial banks in Kenya as at 2015. All the commercial banks will constitute the test population (Central Bank of Kenya, 2014). According to Central Bank of Kenya 31 are locally owned whilst thirteen are foreign owned (See appendix I). All of the forty-four commercial banks could be centered on this observe.

3.4 Data Collection

Data collection refers back to the strategies by which facts is obtained from the selected topics of an exam or an investigation. It alludes to the strategies connected in removing the required have a look at facts for research (Mugenda and Mugenda, 2008). The information required for the studies become received from secondary resources that had been carried out to research the relationship amongst based and based totally variables. In the exam, 8 years facts (2009 to 2016) changed into accrued.

The secondary records property blanketed diverse like Central Bank of Kenya, Kenya National Bureau of Statistics, World Bank internet websites and commercial enterprise banks monetary statements. The amassed information related to based variable this is the loan ordinary basic ordinary overall performance as measured with the useful resource of circulate lower again on property and the impartial variables which protected lending fees and length of agency banks.

3.5 Data Analysis

Data analysis involves review and analysing data collected to come up with a conclusion that can support decision making. A descriptive analysis technique was employed to analyze data. This included the use of table, charts, graphs, percentages and frequencies (Mugenda & Mugenda, 2008). Multiple regressions were used to determine the relationship between loan performance and various lending rates using the Statistical Package for Social Sciences (SPSS) version 21.

3.5.1 Analytical Model

This study employed an empirical model to determine the relative significance of each of the variables identified above. The model took the following format;

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon$$

Where:

Y = Loan Performance as measured by NPL divide by Total Loans.

X₁ = Commercial Banks Lending Rate

X₂ = Return on Assets that measures financial performance

X₃ = represent Capital Adequacy Ratio that measures the minimum capital requirements

X₄ = Size which was measured by natural log of total assets

ε = Represents the error in the model

β_1 , β_2 & β_3 are the coefficient of the explanatory variables

Analysis of variance (ANOVA) became applied to check the significance of the overall version with 95.0% diploma of importance.

Coefficient of correlation (R) have come to be used to decide the strength of the connection some of the based totally totally and impartial variables.

Coefficient of willpower (R²) modified into moreover be used to reveal the share for which each unbiased variable and all unbiased variables blended have been explaining the exchange inside the set up variable.

3.6 Test of Significance

Test of Significance F statistic and significance f will be used as a measure of the overall significance of the regression model i.e. whether the resulting regression model was reliable to predict the values of economic growth. The model is significantly fit at 5% level of significance if the calculated p value is less than 0.05. However, the model is rendered unfit for estimation if the calculated p value is greater than 0.05 (rule of the thumb). t-Statistics will be used to gauge if the regression coefficient is significant in causing the variation in the dependent variable

CHAPTER FOUR

DATA ANALYSIS RESULTS AND DISCUSSIONS

4.1 Introduction

This chapter will undertake an analysis of data collected by the use of linear regression model. Data validity will be undertaken by use of data diagnostic tests. The significance of the study will be undertaken by the use of F test statistic. A summary of the results and findings will then be undertaken.

4.2 Response Rate

There have been 42 certified business banks as at November 2018 in Kenya. The have a take a look at undertook a take a look at for a period of five years from 2013 to 2017. There had been however simplest 35 corporation banks that had all the statistics required for evaluation. This represented a reaction rate of 83.0%. Mugenda & Mugenda (2003) cautioned that a response fee of 50.0% is considered unique for statistics evaluation and a response fee of 60.0% and above became outstanding. The facts have become consequently appropriate enough to adopt evaluation and draw conclusions relevant to the entire populace.

4.3 Data Validity

The validity of data was determined by the use of diagnostic tests that determined whether data can be modelled in a way to use linear regression analysis in undertaking the analysis. The tests undertaken by the study include normality tests that uses Skewness or Kurtosis values to show whether there is a variable that is not normally distributed. This is determined by looking at the scores for each variable on Kurtosis and Skewness. A Kurtosis

and Skewness value greater than +3 or less than -3 shows that the variable is not normally distributed.

Table 4.1: Normality Test

	Skewness		Kurtosis	
	Statistic	Std. Error	Statistic	Std. Error
Y = NPL	-.569	.184	2.803	.365
X1= Lending Rate	.073	.184	-.860	.365
X2= ROA	-.929	.184	1.371	.365
X3 = Capital Adequacy	1.363	.184	2.764	.365
X4 = Size	.180	.184	-1.231	.365
Valid N (list wise)				

Source: Author, 2018

The kurtosis and skewness are within the relevant range and we therefore consider all the variables as normally distributed. Collinearity test on the other hand checks whether variables are collinear. Presence of collinearity means that the variables are highly related to each other as they have quite a number of similar characteristics. Collinearity is determined by Variable inflation Factor (VIF score). A score of 10 and above shows that there is presence of collinearity. Durbin Watson value on the other hand measures the autocorrelations in the data that shows inherent errors in the model. A value of more than 4 shows presence of autocorrelations.

Table 4.2: Multi - Collinearity Test

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	X1= Lending Rate	.977	1.024
	X2= ROA	.610	1.639
	X3 = Capital Adequacy	.840	1.191
	X4 = Size	.545	1.836

Source: Author 2018

The VIF values for all the variables are below 10 which shows absence of multicollinearity in the data.

4.4 Descriptive Statistics

Table 4.3: Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
	Statistic	Statistic	Statistic	Statistic	Statistic
Y = NPL	175	-2.4078	5.5559	2.059373	.9565598
X1= Lending Rate	175	13.0	28.0	19.478	4.0039
X2= ROA	175	-7.5000	7.7000	2.340114	2.7340919
X3 = Capital Adequacy	175	5.1000	58.6000	22.541714	8.3980107
X4 = Size	175	8.2188	13.2279	10.666670	1.3011567
Valid N (list wiseq123)	175				

Source: Author, 2018

Data descriptive enables to explain the statistics as a manner to understand the statistics in shape of the minimal price for each variable, maximum, suggest and fashionable deviation.

The whole sample length changed into crafted from a hundred seventy five facts elements while you keep in mind that there had been 35 commercial banks that had been discovered in a duration of 5 years every. The established variable for the examine end up mortgage overall performance that have become decided via the general non - performing loans as a percent of gross extraordinary loans. The data changed into transformed by manner of use of natural log. The minimum turned into -2.Forty one and maximum five.Fifty six with an average of .06 and a fashionable deviation of 1.

Lending fee become determined by way of the percentage of the hobby charge charged through using commercial enterprise banks on loans issued. The lowest price within the

have a observe duration changed into at thirteen% and the very great became at 28% with an average of 19.Five% and a famous deviation of four%.

The control variables then again consisted of financial performance of the commercial banks and grow to be measured via return on property, capital adequacy and the size of the monetary organization that end up determined via log of property. The mean for financial performance become 2.34% with a general deviation of 2.34 and preferred deviation of 2.73%. Capital adequacy had a median of twenty-two.54.0 % with popular deviation at 8.4%. Size however had an average of 10.67 and a widespread deviation of 1.3.

4.5 Correlation Analysis

The Spearman’s correlation assessment determines the correlation that exists some of the variables. Variables may be truely or negatively correlated with every unique. Positive correlation method growing the charge of 1 variable the alternative variable increases too. Negative correlations as an alternative manner that developing the cost of 1 variable the opposite variable decreases. It suggests the inverse relationship that exists between the variables. The correlation might be both inclined or robust depending on the importance of the correlation some of the variables. Values drawing close +1 or -1 are said to be robust even as values coming near 0 are stated to be willing correlation.

Table 4.4: Correlation Analysis Table

	<i>Y = NPL</i>	<i>X1= Lending Rate</i>	<i>X2= ROA</i>	<i>X3 = Capital Adequacy</i>	<i>X4 = Size</i>
<i>Y = NPL</i>	1				
<i>X1= Lending Rate</i>	-0.0336	1			
<i>X2= ROA</i>	-0.496	0.12706527	1		

X3 = Capital Adequacy	-0.142	-0.06484813	-0.069567148	1	
X4 = Size	-0.258	0.047559928	0.596588205	-0.352729609	1

Source: Author, 2018.

The lending rate shows a correlation value of -0.0336 against loan performance. We note that the correlation is negative meaning that increase in lending rate decreases loan performance. The relationship is however weak.

Financial performance also has a negative correlation with loan performance and the correlation is also weak. All the other variables too have negative correlation against the dependent variable.

4.6 Regression Analysis

In order to determine the effect of lending rate on loan performance for commercial banks in Kenya, the study used a multiple linear regression model. The model was in the form

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon$$

4.6.1 Regression Summary Model

The summary model summarises the output in the regression by showing how the model is able to explain the changes in the dependent variable.

Table 4.5: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.527 ^a	.278	.261	.8224335

The model summary shows the coefficient of determination that is denoted by R squared. The value is 27.8% which shows that the model can explain the changes in loan

performance up to 27.8% the other 72.2% is explained by other factors that are outside this model.

4.6.2 One-way ANOVA Table

The significance of the model is determined by the use of F test statistic which is calculated by the use of one-way ANOVA.

Table 4.6: ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	44.224	4	11.056	16.345	.000 ^b
	Residual	114.987	170	.676		
	Total	159.211	174			

Source: Author, 2018

One manner Anova uses F check to check importance of the version. This is achieved in components the number one detail is to study the F calculated with F crucial value in which if the F calculated is extra than F essential, we reject the null speculation. If the vice versa applies then we fail to reject the null speculation.

The F calculated in step with one way ANOVA is 16.345. The F essential at four and one hundred and seventy stages of freedom is two.7. We consequently reject the null hypothesis and quit that there exists considerable effect of lending charge on mortgage common universal performance. The second element is to look at the alpha fee of zero.05 with the p charge that is established as 0.000. Since p cost is a great deal less than the alpha price we finish that the model is great.

4.6.3 Regression Coefficients

Table 4.7: Table of Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	3.084	.825		3.736	.000
X1= Lending Rate	.004	.016	.018	.280	.780
X2= ROA	-.173	.029	-.493	-5.912	.000
X3 = Capital Adequacy	-.021	.008	-.185	-2.604	.010
X4 = Size	-.022	.065	-.029	-.333	.739

Source: Author, 2018

The regression coefficients are denoted in the table 4.7 above. The predicting equation is thereby generated as

$$Y = 3.084 + 0.04X_1 - 0.173 X_2 - 0.021X_3 - 0.022X_4 + 0.825$$

4.7 Interpretation of the Findings

This look at was finished to find out the impact of lending fee at the loan normal performance of commercial enterprise banks in Kenya. The statistics collected showed that lending hobby fees and mortgage normal performance is negative with a coefficient of correlation of 0.37. In addition, the information additionally suggests a co inexperienced of electricity of thoughts of zero.28 due to this that lending interest expenses had been capable of expect loan ordinary overall performance with the useful resource of 28.0%.

The ANOVA effects shows a P Value that is a ways lots a lot less than 0.05 which truly way that the relationship is huge at 95.0%. The consequences also installation that internet interest margin have a high-quality courting with monetary traditional common performance Gilchiris (2013) but whilst you examine the relationship between the Loan standard ordinary performance and lending fee, it become terrible. In reality all our unbiased variables confirmed a horrible courting with the hooked up variable which have become mortgage traditional overall performance measured by using non-appearing loans divide with the aid of overall loans.

The analytical model superior for this have a take a look at ($Y=3.084+0.04X1-0.173X2-0.02X3-0.024X4+0.825$), in which X1 is the lending hobby costs, X2 is the ROA, X3 is the Capital adequacy and X4 is the financial organization length which become measured via the natural logarithm of assets. This method that for each percentage trade inside the lending hobby rate, loan universal overall performance will alternate by using the usage of 4.0%, for every percentage change in capital adequacy, mortgage performance will trade thru 2.0%.

These findings be given as authentic with those of Sattar (2014) who furthermore determined that lending interest charges do have an impact on loan universal typical overall performance in Pakistan. Locally, Odhiambo (2009) installation that the hobby income which make up the primary income in economic institutions has a huge impact of lending costs and loan performance of industrial business enterprise banks in Kenya.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter summarises the results and findings of the study, makes conclusions from these findings and generates recommendations from the conclusions. It also highlights the limitations of the study and makes suggestions for further research.

5.2 Summary

The take a look at geared closer to searching at the impact of lending fee at the general overall performance of loans in industrial banks in Kenya. The lending charge become defined as the interest prices which is probably charged by using manner of commercial banks on everyday loans issued to customers. The place has solicited sufficient hobby inside the america with new regulation being established vicinity that caps hobby expenses. Commercial banks are consequently no longer allowed to price hobby on loans beyond the capping.

The lending rate come to be the independent variable inside the take a look at with mortgage performance being the hooked up variable of the observe. The look at used a linear regression model on the way to define the effect of lending price on mortgage overall performance. Loan general overall performance modified into determined with the useful resource of taking the non-acting loans inside the economic group divided by way of the total loans. This way that the lower the rate for loan performance in a commercial financial institution, the better the bank is than with a higher mortgage performance that would imply that there are greater non- performing loans. The manipulate variables described by means

of the take a look at have been monetary overall performance measured thru return on belongings, capital adequacy and financial institution duration.

Data emerge as first examined for normality, presence of collinearity and autocorrelations. The variables surpassed these assessments and as this kind of linear regression evaluation may be undertaken at the information amassed. The correlation evaluation that changed into achieved confirmed that the all the unbiased variable were negatively correlated with loan ordinary overall performance. It consequently supposed that increasing these variables ought to end result to lower in loan performance which in this example meant that the industrial banks could be at a better feature. The regression model summary had a coefficient of determination of 27.Eight% due to this that the variables inside the model have been able to are expecting the structured variable by means of manner of 27.Eight%. The model changed into therefore susceptible in predicting Y however accurate sufficient for our have a examine.

One manner ANOVA turned into used to calculate the F check statistic of which the have a observe rejected the null speculation because the calculated fee of F modified into positioned to be larger than important fee of F. The p cost of the version became a lot much less than alpha charge of zero.05 and as such the study concluded that there was a big effect on mortgage consequences of business banks specially proper right here in Kenya.

5.3 Conclusions

The have a check made numerous conclusions from the findings. The examine made the simple large give up that lending rate affects loan famous universal overall performance in a big way for commercial banks in Kenya. It consequently follows that lending fee is an

vital desire making tool for industrial economic business enterprise as it might have an effect at the form of acting and non - appearing loans.

The look at showed a horrible correlation among financial performance that have become measured by way of skip again on assets and mortgage vast universal performance measured through the use of the ratio of NPL to the loans large. It manner that boom in financial regular general performance resulted to lower within the degrees of non-acting loans. Similarly the size of the economic financial agency had a horrific correlation with mortgage everyday usual usual performance. We might therefore end that massive banks had been able to beautify loan regular ordinary standard overall performance as that they had techniques of ensuring that they collect non -performing loans. The massive commercial enterprise banks had additionally issued a number of loans which is going an extended manner to reduce the ratio of acting loans over desired loans.

The take a look at furthermore concluded that the regression version can be utilized in predicting the mounted variable albeit in small percentage. As such it is probably possible to make forecasts referring to non-performing loans or mortgage simple typical overall performance with the useful resource of the use of capital adequacy, lending fee, financial institution period and economic preferred overall performance of the monetary organization.

5.4 Recommendations

The study draws its recommendations from the conclusions made by the study. One of the recommendation is that the management of the commercial banks should actively monitor and set appropriate lending rate for the loans they issue. This is because the lending rate

has a negative significant effect on non - performing loans. Increase in lending rate means that the non-performing loans would decrease albeit in small quantities.

The study also recommends that commercial banks should make substantial expenditure in undertaking their due diligence before issuing loans. This can be drawn from the fact that large banks have a lower ratio of non-performing loans than smaller banks. It shows that there is something that the big banks do in which case the small banks are not able or do not do it, in order to reduce their non-performing loans to total loans ratio. The most practical explanation for such a result would be the big banks are able to employ advanced technology and more resources in scrutinizing their clients before issuing loans.

5.5 Limitations of the Study

There are several shortcomings that was observed in undertaking such a study. First of all the study relied on secondary data that was obtained from secondary sources. These sources are websites from CBK and NSE websites. The data collected may be prone to errors of omissions, round off errors among others. Primary data collection methods may have less of such errors as it would be easier to authenticate the truthfulness of data collected or observed.

The study only used three control variables. Perhaps if the study applied more control variables, the results would have been different from the results observed. The variables employed were lending rate, financial performance, capital adequacy and size of the commercial banks.

There was an element of costs implications. This is because obtaining information from websites such as NSE website had costs implications. Availability of such resources was

thus a limiting factor as such costs had not been previously budgeted for. The researcher had therefore had to work outside the budget in order to access vital information that led to the result findings of this study.

Data was also collected for the years 2013 to 2017. This period did not have much turbulences in form of economic growth or calamities affecting the country. The study period therefore might have limited us to make the conclusions in this study. A different study period may give different results.

5.6 Suggestions for Further Research

The study makes various suggestions that would be useful to future researchers and also in improving the findings and information on lending rate and loan performance for commercial banks. For instance the study would suggest that a similar study should be undertaken for longer period of time such as the last twenty years. The results of that study would have to be related with what was observed when this study was undertaken.

Another suggestion is that the researcher might consider collecting both secondary data and primary data in form of making observations or questionnaires that would ascertain the information collected through secondary sources. The results for that study would also be compared to the results in this study.

Future researcher should also make budgetary provisions that would allow for unexpected costs, such as the costs for obtaining crucial data and information. It would help in ensuring

that the right information is obtained in good time to allow for analysis of data collected and making conclusions and recommendations.

A similar study would also be undertaken in another third world country and the results compared to the results of this study. A study in a middle income generating country should also be undertaken and results compared to results in this study.

REFERENCES

- Ali, K., Akhtar, F. & Ahmed, Z. (2011). *Bank Specific and Macroeconomic Indicators of Profitability*. Empirical Evidence from the Commercial Banks of Pakistan.
- Amrik, H. & Michael, K. (2015). *Kenya's Financial Transformation in the 21st Century*.
- Bean, A.M. (2017). *Determinants of Interest Rate*.
- Berger, A. (1995). Problem Loans and Cost Efficiency in Commercial Banks. *Economics and Policy Analysis Working Paper*, 95.
- Bikker, A., & Hu, H. (2002). Cyclical Patterns in Profits, Provisioning and Lending of Banks and Pro cyclical of the New Basel Capital Requirements. *BNL Quarterly Review*, 221, 143-175.
- Buyinza, F. (2010). *Determinants of Profitability of Commercial Banks in Sub-Sahara Africa Countries*. Department of Economics, Johanassen Keppler University, Linz – Austria.
- Central Bank of Kenya (2011). *Bank Supervision Annual Report*, Kenya.
- Central Bank of Kenya (2013). *Licensed Commercial Banks and Mortgage Companies*.
- Central Bank of Kenya report (July 2016). *Performance and Developments in the Kenyan Banking Sector for the quarter ended 31st March 2016*.
- Cooper, R., & Schinder, S. (2008). *Business Research Methods* (10th ed.). New York: McGraw Hill.50.
- Easterly, W., Islam, R., & Stiglitz, J. (1999). *Shaken and Stirred, Explaining Growth Volatility*. Annual Bank Conference on Development Economics, the World Bank, April.
- Emmanuelle, N.Y. (2003). *A European Study of Bank Interest Margins. Is net fees revenue a determinant?* Doctoral Thesis. United Kingdom, U.K. University of Birmingham.
- Flamini, C., Valentina C., McDonald, G., & Liliana, S. (2009). *The Determinants of Commercial Bank Profitability in Sub-Saharan Africa*. IMF Working Paper.
- Friedman, M. (1963). *Inflation, Causes and Consequences*. Bombay: Asia Publishing House
- Gilchris, M. (2013). Influence of Bank Specific and Macroeconomic Factors on the Profitability of 25 Commercial Banks in Pakistan during the Time Period 2007 - 2011. *American Journal of Business and Finance*.

- Gul, S., Irshad, K., & Zaman, K. (2011). Factors Affecting Bank Profitability in Pakistan. *The Romanian Economics Journal*
- Hara, M., (1983). A dynamic Theory of the Banking Firm. *The Journal of Finance* 38,127-140.
- Herrero, G. (2003). Determinants of the Venezuelan Banking Crisis of the Mid 1990s: An Event History Analysis, Banco de Espana
https://www.centralbank.go.ke/index.php/bank-supervision/commercial-banksmortgage_finance-institutions *International Journal of Business and social sciences*.
- International Monetary Fund, (2001). Regional Economic Outlook: Sub-Saharan Africa. World Economic and Financial Surveys. IMF Working Papers, 0258-7440.60
- Kamau, A.W. (2009). *Efficiency and Productivity in the Banking Sector in Kenya*. Doctoral thesis, University of Nairobi, 2009.
- Keynes, M. (2006). *The General Theory of Employment, Interest and Money*. New York: Atlantic Publishers & Distributors; orig. pub. 1936.
- Khrawish, A., & Siam, Z. (2011). Determinants of Islamic Banks Profitability: Evidence from Jordan. *Middle Eastern Finance and Economics Journal*, Issue 13: 42 – 57.51
- Kiruri, M., & Olkalou, K. (2013). The Effects of Ownership Structure on Bank Profitability in Kenya. *European Journal of Management Science and Economics*.
- Kothari, R. (2008). *Research Methodology*. New Delhi: New Age International Publishers.
- Macharia, E. (2013). The Effects of Global Financial Crisis on the Financial Performance of Commercial Banks Offering Mortgage Finance in Kenya. *International Journal of Social Sciences and Entrepreneurship*, 688-701.
- Mboka, T. (2013). Effects of macro-economic variables on nonperforming loans of commercial banks in Kenya. *MBA Project, University of Nairobi*
- Mbua S.N. (2017). *Effect of Interest Rate Capping by the Central Bank of Kenya on the Banks Listed*.
- Miller, M. (2003). *Can Credit Registries Reduce Credit Constraints? Empirical Evidence on the Role of Credit Registries in Firm Investment decisions*.
- Mugenda, A., & Mugenda, O. (.2003). *Research Methods; Quantitative and Qualitative Approaches*. Africa Centre for Technology (ACTS), Nairobi Kenya
- Mulei, A. (2003). Commercial and Financial Institutions. Central Bank of Kenya

- Ongore, V. (2013). Determinants of Financial Performance of Commercial Banks in Kenya. *International Journal of Economics and Financial Issues*, ISSN: 2146-4138.
- Otuori, H., (2013). Influence of Exchange Rate Determinants on the Performance of Commercial Banks in Kenya. *European Journal of Management Sciences and Economics*, 1(2), 86-98.
- Panayiotis P., Athanasoglou, P., Delis, M., & Staikouras, C. (2006). “Determinants of Bank Profitability in the South Eastern European Region”. Bank of Greece Economic Research Department –Working Paper No.47. ISSN 1109-669152
- Podjadek, R. & Genay, H. (2014). *What is the Impact of a Low Interest Rate Environment on Bank Profitability?* The Federal Reserve Bank of Chicago.
- Rachdi, H. (2013). What Determines the Profitability of Banks During and Before the International Financial Crisis? Evidence from Tunisia. *International Journal of Economics, Finance and Management*.
- Saidu, M., & Tumin, H. (2011). *Performance and Financial Ratios of Commercial Banks in Malaysia and China*. International Review of Business Research Paper.
- Sayed, S. (2013). Bank specific, industrial specific and macroeconomic determinants of banks profitability in Nigeria. *Journal of Finance*.
- Seibel, D. (2001). Financial Systems Development and microfinance, Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ) Publication.
- The European Parliament. *How Do Low and Negative Interest Rates Affect Bank's Activity and Profitability in the Euro Area?* Monetary Dialogue, November 2016.
- Wainaina, G. (2013). Effect of Macroeconomic Factors on Commercial Banks' Lending to the Private Sector in Kenya. MBA Project, University of Nairobi
- Were, M. & Wambua. (2014). *What Factors Drive Interest Rate Spread of Commercial Banks?* Empirical evidence from Kenya. Africa and Growth.
- Yuqi, L. (2008). Determinants of Banks' Profitability and its Implication on Risk Management Practices: Panel Evidence from the UK in the period 1999–2006. University of Nottingham, UK.

APPENDICES

Appendix 1: Commercial Banks

1. Banks as per Central Bank of Kenya Survey (2013)
2. Equity Bank Ltd
3. Kenya Commercial Bank Ltd
4. Standard Chartered Bank (K) Ltd
5. Barclays Bank of Kenya Ltd
6. Co-operative Bank of Kenya Ltd
7. CFC Stanbic Bank (K) Ltd
8. I&M Bank Ltd
9. Diamond Trust Bank (K) Ltd
10. NIC Bank Ltd
11. Citibank N.A. Kenya
12. Commercial Bank of Africa Ltd
13. Bank of Baroda (K) Ltd
14. Imperial Bank Ltd
15. Chase Bank Ltd
16. Prime Bank Ltd
17. National Bank of Kenya Ltd
18. Family Bank Ltd
19. Bank of India
20. Bank of Africa (K) Ltd
21. Victoria Commercial Bank Ltd

- 22 African Banking Corporation Ltd
- 23 K - Rep Bank Ltd
- 24 Habib Bank Ltd
- 25 Habib Bank A.G. Zurich
- 26 Gulf African Bank Ltd
- 27 Guaranty Trust Bank Ltd
- 28 Guardian Bank Ltd
- 29 Giro Commercial Bank Ltd
- 30 Fidelity Commercial Bank Ltd
- 31 Development Bank of Kenya Ltd
- 32 Trans - National Bank Ltd
- 33 First Community Bank Ltd
- 34 Oriental Commercial Bank Ltd
- 35 Equatorial Commercial Bank Ltd
- 36 Paramount Universal Bank Ltd
- 37 Jamii Bora Bank Ltd
- 38 Middle East Bank (K) Ltd
- 39 Credit Bank Ltd
- 40 Dubai Bank Ltd
- 41 Consolidated Bank of Kenya Ltd
- 42 UBA Kenya Ltd
- 43 Ecobank Kenya L