EFFECT OF INTEREST RATE CAPPING ON LENDING OF COMMERCIAL BANKS IN KENYA

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DECLARATION

The research project is my original work and has not been presented for award in any other university.

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DEDICATION

I also would like to dedicate this project to my parents Mr. and Mrs. Daniel M. Muthui for their advice, dedication, inspiration and sincere guidance during the study.

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ABBREVIATIONS AND ACROYNMS

CAEMC Central African Economic Monetary Community

CBK Central Bank of Kenya

CBR Central Bank Rate

CRR Cash Reserve Ratio

GDP Gross Domestic Product

KBA Kenya Bankers Association

LOA Loan Advances

NSE Nairobi Securities Exchange

ABSTRACT

The introduction of interest rate capping in Kenya triggered commercial bank lending. Change in lending amongst commercial banks has so often resulted to credit rationing. As a result of the evolving loaning, little credits are not promptly accessible, numerous shopper money organizations shut their activities, vault money lenders quit making little purchaser advances and unregulated advance suppliers like pawnbrokers rose. The examination analyzed the impact of topping of loan cost on the loaning of Kenyan business banks. The autonomous variable for the investigation was interest rates and control factors (bank size, money save proportion, credit chance, and volume of deposit). The examination utilized unmistakable research structure. The outcomes were dissected utilizing Stata Version 14.0. From the outcome of relationship investigation, there exists a positive and factually huge connection between's bank size and loaning by business banks. The results additionally found there is a negative yet unimportant relationship linking CRR and loaning by business banks. Credit risk revealed a negative and critical relationship with loaning of business. Volume of deposit revealed a strong positive and noteworthy relationship with loaning of business banks. Interest rate had a negative and noteworthy relationship with loaning of business banks. The model rundown uncovered that bank size, cash reserve ratio, credit risk, and volume of store and interest rate capping clarify 78.76% of the variety in loaning of commercial banks. Relapse results revealed that bank size is positively associated with loaning conduct of commercial banks. Board results likewise indicated that cash reserve ratio revealed a negative yet with irrelevant association with loaning conduct of commercial banks. Credit risk uncovered a negative and critical association with loaning of commercial banks. The discoveries of the examination additionally showed volume of deposits has a positive and critical association with loaning by commercial banks post introduction of rate caps. Interest rate capping has a negative and huge association with loaning of commercial banks. The investigation reasons that bank size, credit risk, volume of store and interest rate impacts loaning conduct of commercial banking. This examination suggests that commercial banks may need upgrade their ability in credit investigation and advance payments while the administrative entity should give more consideration to the banks' supervision concentrating on the consistence of applicable arrangements and orders towards the banking activities. Commercial banks ought to conform to banking rules and guidelines to stay away from the expanding occurrence of nonperforming advances and the administrative specialists ought to routinely get to the loaning conduct of the banking business. The credit strategies of the commercial banks ought to be integrated with the loaning rules among the commercial banks and effective credit procedures ought to be proposed. Credit risk was presented after the presentation interest rate capping. Commercial banks ought to have set up unmistakably characterized strategies on risk recognizable proof. Commercial banks may need to fortify and upgrade their credit risk examination practices to distinguish credit worth borrowers before giving out advances.

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

The major objective for capping interest rate as implemented by central bank was to encourage banks to stretch out more credit to advance searchers. The lending institutions were making abnormal profits from credit services and so government intervened to create equality (Meja, 2017). More so, the commercial banks decreased the lending to the general borrowers and instead invested on other avenues like in the real estates and giving out of loans to the government (Bhattarai, 2016). The total lending to the public decreased and the investment by the small and mid-businesses significantly reduced due to insufficient finances. The interest rate capping has the possibility of hurting part of the populations with low income by limiting their accessibility of finances.

This study was guided by several theories which include: Credit market theory, theory of rational expectations, classical theory and loanable funds theory. In Credit Market Theory, credits scores describe a market structure. As the model shows, the interest rate being a pricing technique which addresses the credit market provided the loan collateral remains constant (Bongaerts, De Jong, & Driessen, 2011). The rational expectations theory is anchored on argument that the expectations of future conditions determine the interest rates. Classical theory proposed that the estimate of the interest rate is regarded as the key factor in determining the willingness to save money and the state of demand for the investments (Marshall & Fisher, 1930). The loanable funds theory postulates that the

relationship of the quantities of the loanable funds demanded and interest rates is inversely related (Wicksell, 1898).

Commercial Banks are among financial entities that offer financial services like giving credit and accepting deposits from its customers. Gikombo and Mbugua (2018), listed Banking business in Kenya is comprised of a number of commercial banks summing to forty three. Two credit reference bureaus, six microfinance institutions that are deposit taking in nature, two mortgage finance company, three representative offices and foreign exchange bureaus are one hundred and twenty four. The major players among the forty three banks that are commercial comprise of, Equity, Barclays Bank, Cooperative Bank, Kenya Commercial Bank and National Bank. Commercial Banks Institutions are registered and monitored in consonance with the stipulations of theBanking Act,Act of registrar of companies, Central bank of Kenya regulations and best procedures provised in CBK guidelines on regular basis. An indication that the banking sector in this country contributes essentially to the growth of the economy and it cannot be underestimated at some point is the growth from Kshs. 13.2 billion to 1.3854 trillion between 2008 and 2015 balance sheet, therefore, more emphasizes should be embarked to enhance it for their sustainability (Safavian & Zia, 2018).

1.1.1 Interest Rate Capping

The phenomenon's definition is management of rate of interest levied by financial lending institutions on loans given towards borrowing entities. Interest rate cap mitigates the propensity of commercial banks from increasing rate of interest on the amount borrowed particularly in financial markets where financial information to

consumers is often limited. Governments employ different techniques of interest rate ceiling to enhance credit accessibility by low income individuals and small business enterprises. The justification in support of interest rate ceiling is because of the abnormal gains by the commercial financial institutions, overburdening the borrowers while hindering the sustainability of small business enterprises.

The primary idea is that capping of the interest rate constraints efforts of the financial banks in increasing the interest yield; the summation of the income earned from the loans as the ratio of the average lenders yearly list of financial assets of the gross loans. Nevertheless, the initiative led to unfavorable outcome as the banks created higher limits to borrow and as a result of this, only consumers with wider levels of collateral assets could access the credit with large section of small borrowers being left out. Interest rate caps are often successful in the short period and this call for the Central Bank to explore other alternate strategies to support small scale borrowers. The other alternate measures include developing a financial market platform that competes favorably based on the competitiveness of credit products offered. Interest rate capping is evaluated by studying the effects the initiative before the cap, during the capping and post interest capping.

1.1.2 Lending

Lending is a prime business endeavor of the commercial banks (Thiong & Kiama, 2018). Commercial banks having a clear system of lending and credit management guidelines are able to sustain their business operations even during volatile and dynamic business environment. The business of giving out credit is the core of banking (Bhattarai, 2016).

Lending can be for different time periods depending on the engagement binding the lender and the borrower (Malede, 2014). Banks grants credit loans and advances to individual persons, enterprise entities and government institutions to invest or channel to various developmental projects (Olokoyo, 2011).

The most worrying issue of the lender when giving out credit is the ability of the borrowers to get back the money within the agreed period, implying that the agreement between lender and the borrower is often associated with default risks (Ayieyo, 2016).The risk element could be significant with borrower having reputable relationship with the lender and willingness to pay back the lender except the borrowers falls short of funds to repay the loan borrowed (Eke, Eke & Inyang, 2015). Invention of interest capping rate drastically impact on commercial banks' lending norms since the most common factor that the commercial banks rely upon is interest rates (Bhattarai, 2016).

1.1.3 Interest Rate Capping and Lending

Rate of interest and lending finances are positively related and when the interest rates are higher, the lending activities become higher and vice versa (Ayieyo, 2016). The establishment of interest rate capping drastically impacted on commercial banks' lending behaviors (Meja, 2017). Interest rate ceiling was enacted following complaints from the public in regard to expensive credit access in Kenya that was perceived as a deterrent to access to credit by a huge portion of the people (Kavwele, Ariemba & Evusa, 2018). The execution of the ruling, was thus, anticipated to lessen the expense of credit and promote access to loans.

The implementation of interest rate ceiling in Kenya triggered commercial bank lending behavior. As noted by Ayieyo (2016) commercial banks shift their lending focus on government and big corporations. Though credit demand rose immediately after the enforcement of interest rate cap law, credit advances to selected segment of the business have kept on declining (CBK, 2018). Interest rate capping, by limiting the capacity of commercial banks to generate interest income, promotes the banks desire in introducing or increasing non-interest fees in an attempt to recoup for lost income. Accordingly, it ends up hard for borrowers to understand total expenses of obtaining and furthermore to make viable decisions when asking for credit advances.

1.1.4 Commercial Banks in Kenya

Commercial banks entail financial entities that offer a variety of financial services, for example accepting deposits and releasing credit facilities. Currently, the Kenyan banking business is involved forty three commercial banks (Gikombo & Mbugua, 2018).The CBK is mandated to devise and execute fiscal and monetary policies in the country. The body acts as the central controller of thefinancial banks and becomes the lender of last resorts to banks which are facing financial problems (Kiseu, 2017).The interest rate ceilings affected net interest income initially generated by the commercial banks (Safavian & Zia, 2018). The advocates of capping of interest rate proposes the move can make credit more affordable and at last open it up to the low income earners of the economy thus promoting financial inclusion resulting from in credit development.

The capping of interest tends to create a distortion in the market and consequently create market biases. Empirical investigations points out that such partiality lead to deficiency of

finance by clients that are deemed high risk. It means that both the client and the banks suffer and customers are compelled to look for funds from other service providers (Safavian & Zia, 2018). The caps leads to commercial banks opting to extend loan advances to the government who are thought to have minimal risks related to default ultimately drawing away capital from the general public and makes the situation unprofitable (CBK, 2018). It is fundamental for this research to examine both the adverse and the positive impact capping has had on lending of commercial banks.

1.2 Research Problem

The introduction of capping of interest rate is drastically impacting on commercial banks' lending behavior. Empirical evidence shows that the interest rates capping resulted to the locking out of small enterprises and individual loan seekers from obtaining affordable loans as banks shifts their targets to loaning government institutions and large corporations (CBK, 2018). Many financial lending institutions have been closed out from the interbank market and as result need to give out inflated loan at rates that are more than what they are receiving at the moment and must just loan out within agreed limits. Evidence from emerging studies indicates that business banks are adjusting their engagement leading to a decline in financial intermediation, shifting lending target to big commercial business and government in an attempt to avoid small individual borrowers and other small enterprises that are risky to lend out to (Kiseu, 2017).

The presentation of interest rate caps in Kenya activated commercial bank loaning. Change in loaning among commercial banks has the vast majority of the occasions lead

to credit apportioning (Ayieyo, 2016). As a result of the evolving loaning, little credits are not promptly accessible, numerous shopper fund organizations shut their activities, vault banks quit making little buyer advances and unregulated advance suppliers like pawn brokers developed (Babu, 2018). Greater part of the individuals accept that the capping of the financing costs will altogether decrease the expense of credit administrations and improves straightforwardness in the expenses charged on the advances by loaning organizations in Kenya (Kiseu, 2017). The nearby speculators with low capital have gotten it harder and have been compelled to consolidate the accessible resources for meet the base edge of verifying the venture capital. Also, a portion of the banks\' laborers have been compelled to lay off certain specialists laid off. Little and medium endeavors that rely upon credit offices from the commercial banks have crumpled because of high loan fees (Mbua, 2017).

All around, a concentrate by Bhattarai (2016) concentrated on the determinants of Lending Conduct of Nepalese Business Banks and uncovered that bank size has huge beneficial outcome on advances and advances though liquidity ratio, investment portfolio and cash hold ratio have noteworthy negative impact on banks' advance propels. Nonetheless, the examination didn't set up the influence of interest rate capping on business banks conduct change. A concentrate by Aurello (2016) did an investigation in Mauritania on the effect of interest rate capping and the money related execution of business banks recorded in the Protections Trade, didn't illustrate the effect brought by interest rate ceiling on lending conduct of business banks. Coutts (2015) in a concentrate on the budgetary exhibition of business banks in Mauritius, Ethiopia and Egypt found that the initial two nations had a powerless monetary part because of the

interest rate tops. Notwithstanding, the investigation neglected to call attention to lending conduct change because of interest rate capping by their individual governments.

Locally, greater part of concentrates directed concentrated on the impacts of interest rate capping on money related execution of financial banks. Meja (2017) concentrated on the impact of interest rates capping on the degrees of individual credits conceded by commercial Banks operating here Kenya with no endeavor to reveal change in commercial bank lending conduct. A concentrate by Ayieko (2016) concentrated on the predictors of lending conduct in selected commercial banks in Kenya; however the study comes up short on the impacts of interest rate capping on banks' lending conduct. This examination looks to fill the reasonable hole by basically responding to the inquiry, does interest rate caps affects the lending of commercial banks in Kenya?

1.3 Research Objective

The research objective was to examine the effect of capping of interest rate on the lending of Kenyan commercial banks.

1.4 Value of the Study

The results of the model may be employed in policy making by the Commercial Banks to deduce management policies that guarantee efficient decision making in matters relating to the capping of the interest rates levied by commercial banks. Also, the commercial banking institutions may employ the findings of the investigation to monitor and enhance the service delivery in the commercial banks, so that they remain more efficient and

effective in meeting the demands of the borrowers. The commercial banks can formulate other means that may lessen the threats available in the lending of the loans while promoting transparency in the services offered to the clients.

The policy makers may illuminated in transit forward with respect to interest rates and comprehend contemplations that ought to be made before executing such critical bills. The results may help the government via the CBK to evaluate whether the law passed resulted to any effects on the lending pattern of commercial Banking institutions. The CBK plays as a regulatory body of the Kenya financial system through monetary policies set out from time to time.

The results informed Credit Market Theory, theory of rational expectations theory, classical theory and Theory of Loanable Funds. Furthermore, the study findings may be beneficial to other scholars and can find a way forward on the other impacts of the capping interest rates that have not been discussed and brought out clearly in the current study, for the benefit of all the parties involved in the financial segment of the country. Moreover, the research findings can be used in the future as a source reference.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

The subsection outlines literature relevant and related to the effect of the interest rate caps on the lending of the financial institutions. The chapter has the theoretical literature, conceptual framework, and empirical review. It is from this literature that a critique is established and the knowledge gap is revealed.

2. 2 Theoretical Literature Review

The research's theoretical background is based on four theoretical propositions that are relevant to the capping of interest rate on lending of the commercial banking institutions. These theories include Credit Market Theory, theory of rational expectations theory, classical theory and Loanable funds theory.

2.2.1 Credit Market Theory

The theorem states that credits depict the market structure. Under this model, the financing being primary valuing approach to processes credit market provided that the loan collateral stays consistent (Bongaerts *et al.,* 2011). With a developing prerequisite for credit, loan and advances provisions by commercial banks, financing cost can possibly increase especially when credit market is evident, and the switch is valid (Semmler, 2011).

The rise in need for credit resulting from lower interest rates, often may lead to falling of the currency value (Brunner & Meltzer, 1966). CBK thus needs to adjust the rate of the

interest levied so as to increment the cost of obtaining credit. Responding on this, commercial banks raise their rates which in the long term contract their lending criteria. Although, central bank requires banks to deposit a certain amount of money with them, increased cash requirement ratio also acts as a mechanism of restricting credit available taking consideration of macro-economic environment. This leaves commercial banks with close to no alternative other than lowering lending volumes.

2.2.2 Theory of Rational Expectation

The theorem was originally developed by Muth (1960) and further improved by Pesaran (1987) to illustrate the different phenomenon in business (Coibion & Gorodnichenko, 2015). The current situation in the economy can be used to explain what will happen in the future. For instance, the future interest rate can be forecasted by employing current interest rates and the expected outcome will eventually move them to the projected figure (Romer, 2018). Market observations remain to be the primary determinants of real outcome, for instances in the scenarios of bonds and shares in the economy. Market entrants will tend to act in certain ways as a result of market observations in the near future with the nature of actions certifying expected outcomes. The unexpected adversities in economic elements may result to changes in the expected interest rate (Tily, 2015).

The economy does not generally waste information and desires of the future conditions of the whole economy depend majorly upon the nature of the whole system. The type of information employed and how it was generated to picture out an estimation of future circumstances is very relevant since the nature of the dynamic process is generally sensitive to the way business desires are affected by the true cause of occurrences (Gennaioli, Ma &

Shleifer, 2016). Capping of the interest rates gets rid of supposition on the projected size of interest rate. Nonetheless, if the financial banking institutions anticipate that the dispensation of loan advances to particular entities are unfavourably affected by capping of interest rate, the use of such measures may make banks deny loans to perceived risk groups, for example, the low-income investors. The adverse conditions of capping rate of interest on profitability often causes commercial banks to commence cost-reduction mechanisms for example retrenchment, shutting down other outlets and minimizing the number of unbound loan advances thus reducing accessibility of credit in the market.

2.2.3 Classical theory

The theory was initially postulated in the early 1930s by Marshall and Fisher, the economist and later was advanced by other scholars such as Pigou, Taussing and Knight (North, 2016). The theory proposed that the value attached to the interest rate is regarded as the key factor in determining the willingness to save money and the state of demand for the investments. It implied that when savings are greater than the level of the investment, the interest rate will fall and when the investment is bigger than saving, the interest rate escalates. The increase in the rate of the levied interest rate will move the level of savings up.

The equilibrium of the interest rate is gotten in the section when the demand and supply of the fund in a given economy is equal (Meja, 2017).The market drive of demand and supply are the primary predictors of the level of the interest rate and are achieved at a section at which the rate of the interest from the venture is same to the value saved at that rate (Fontana & Setterfield, 2016). The classical theory, thus, clarified the rate of the interest is

described via supply and level of demand of the savings to be put in investment. The theory applies to the current study and supports that the level of investment is largely impacted by the rate of the interest in the economy.

2.2.4 Loanable Funds theory

The theorem was advanced by Ackley (1957) and states that the relationship of the quantities of the loanable funds required and the level of the interest rates in inversely (Berg, Hartley & Richters, 2015). The equilibrium of the interest rate can be obtained at a point at which demand and supply of the loanable money meet. Moreover, the theorem tried to link them together with the investment, savings and the quantity of the money and then the liquidity preference and establishes the key role played by the commercial banks as important sources of the loanable funds (Berg *et al.*, 2015). The theory considers both the facets of the challenges of the monetary and non-monetary and points out that the rate of the interest as the price that brings out equity in the supply and the demand of the loanable finances (Kiseu, 2017).

The presentation of the capping of the interest rates contorts the market forces of the organic market of the loanable funds and last stifles the current stockpile and the banks may not be in a situation to give out funds to all gatherings that need them. This outcomes in the proportioning as the bank considers the predominant interest rate lower for the sort of the current requirement of the credits. The theory was important to the examination and supports that capping of the interest rate builds the demand of credits and lower the stockpile of the lending exercises which thus essentially lessen the degree of interest in the economy.

2.3 Determinants of lending

It is important that because of this avoidance, an expanding number of commercial banks are happening for the reason of meeting the financial related demands of the business entities. Be that as it may, there exist varied factors that decide commercial banks' lending. According to Olokoyo (2011) size of deposits, bank size, credit risk, investment portfolio, cash reserve ratio and volume of deposits affect the lending pattern of commercial banking institutions.

2.3.1 Interest rate capping

A significant portion of revenue from commercial banks is generated from interest rates. A higher interest rate margin by commercial banks leads to a higher reported profit (Ngugi, 2015). Banks maximize on their interest rate spread in order to boost their performance. A larger spread guarantees them more revenue thus increasing their profits. In periods when the market interest rates were exceedingly low due to macro-economic conditions banks reported lower profit margins as compared to periods that the market interest rates were high (Aliko, 2015).

In a study conducted in Mauritius by Aliko (2015) among commercial banks on determinants of bank performance he found out that interest rates capping, asset quality, management efficiency and the general macro-economic conditions determined commercial bank performance in that order respectively. In that study interest rate capping was established to be the most critical factor to the growth of banks. In a similar study but restricted to listed commercial banks. Mwega (2014) established that interest rate capping,

management efficiency, asset quality and the general macro-economic conditions determined the prosperity of commercial banks in that order respectively.

2.3.2 Bank size

The size of the commercial bank is mostly operationalized as value of total assets possessed by the banking institutions. The bank size is used to determine the lending of the banks as it defines the economics of scale being enjoyed by the bank at a particular time (Adzis, Sheng &Bakar, 2018). Studies have found that lending pattern in Africa is described by the size level of the bank. Constant & Ngomsi (2012) did a study on the explanatory factors of banking long-term lending in the CAEMC. The findings of the investigation found that the size of the bank was a critical factor that determined the tendency to give out loans.

In Kenya, three banks control large volume of assets and possess the financial strength to offer huge loan offers in the economy compared to other small credit providers. Kiseu (2017) found that larger banks are so much financially diversified, control multiple avenues of funds and can be access easily by big borrowers. The banks also command the necessary resource strength to create a sophisticated mechanism to oversee and monitor credit risks. It was found that the size of a bank and credit accessibility to the borrowers have a positive relationship. Barketer *et al.* (2013) argued that a banks size has an effect on its financial performance. It was argued that large banks attracted cheap source of funding and competitively advanced it to borrowers at high margins while small banks were forced to pay expensively for their deposits because of the perception that creditors have of them as being risky therefore requiring a high return for the risk undertaken.

2.3.3 Cash reserve ratio

CRR is an important monetary tool for regulating the lending capacity of commercial banks (Bawa, Akinniyi, & Njarendy, 2018). CRR predicts the percentage of total deposits that financial firms are mandated to reserve within the Central Bank. Bijoy and Maud (2015) documented that CRR may have an impact on financial firms lending. A rise in CRR results in littler value of assets at use by commercial banks, increment in loan fee, and decline in liquidity and profitability in the model and the other way around (Cucinelli, 2015). CRR is a monetary tool used to set the require reserve percentage on specific customer deposits and every bank must keep money in vault cash with the Central Bank (Abid & Lodhi, 2015).

This is so in order to stimulate banks to be more proactive in performing their role of financial intermediation rather than depending much on government fund as their main source of deposit. In most countries, the central bank is responsible for watching over the CRR. CRR is an instrument of monetary policing employed to manage the circulation of currency in the economy (Oganda, Mogwambo & Otieno, 2018). Any development created in CRR affects the accessibility of funds within the bank for credit in the system along these lines impacting the cash availability in the country. At any section when CRR is increased, it becomes an expense to the bank deposits. Any effects touching the lending and deposit levies often affecting bank's spreads and thus its productivity.

2.3.4 Credit risk

Credit risk in financial firms describes to the timely manner where loan seekers meet the legal binding commitments (Alhassan, *et al.* 2014). According to Malede (2014) credit risk

has inverse relationship with value of nonperforming assets. When loaned the advances are assets since future economic resources are projected to stream to the firm. Credit risk is measured as nonperforming loans divided by total loans (Ombaba, 2013). Mannasoo (2013) posits that financial efficiency of commercial banks is measured by asset quality also referred as credit risk; it is projected as the value of net NPLs to total loans. A report released by the regulatory authority in 2015 showed that the asset quality of financial banking institutions in Kenya has been steadily rising since 2006. Issuing loans being a key income producing activity of banks, an increase in non-performing loans signals poor performance while a decrease signifies improving performance. Commercial banks usually adopt prudent credit appraisal in order to lessen the risk of defaults.

Advancing loans being the major income generating undertaking of banking entities, an increase in non-performing loans signals poor performance while a decrease signifies improving performance. Commercial banks usually adopt prudent credit appraisal so as to lessen default related risks. Commercial banks have in this era adopted technological tools and software's that help in appraising loan applicants and credit scoring them according to their risk levels. These tools have been extended to mobile applications since loan advances through this platform have become a major revenue source and disbursement tools of banks. All this measures are geared towards improving the asset quality of the banking entity thus improving their credit scoring in the long run.

2.3.5 Volume of deposits

Lending decision of commercial depend on deposit base and density of the deposit. Bank deposits describe to funds put into a bank to keep them safely (Bhattarai, 2016). Bank deposits are made to store accounts at a financial enterprise, for example, investment accounts, current records and money market accounts (Ongore & Kusa, 2013). McCarthy, Schneider and Tibbs (2010) have asserted that deposits made by customers are the primary source of bank loans. According to Ayieyo (2016) the size of consumer deposits has direct positive influence on lending.

Commercial banks ought to endeavor hard to deal with their deposits proficiently so their target of productivity can be accomplished and the multiplier impacts kept up to the most extreme (Bhattarai, 2016). Because commercial banks rely on deposits as origin of funding, it signifies the existence of some linkages between ability of commercial banking to make deposits and the value of credit given out to customers (Mukoya & Muturi, 2015). As indicated by Olokoyo (2011) volume of deposit presents the largest effect on lending pattern of commercial banks and an adjustment yields most noteworthy shift in banks' advances and loans (Ongore & Kusa, 2013).This suggests a result of more deposits is in line to the sustainability of commercial banks' lending ability. Volume of deposit is operationalized as ratio of banks total loans to total deposits.

2.4 Empirical Review

Bhattarai (2016) did an investigation on elements that affect lending behaviour of Nepalese commercial banking institutions. In the investigation, descriptive and causal research design was used. A pool of data for 4 commercial banks covering the year 2007 to 2014

was analyzed by employing a regression technique. The dependent variable employed in the investigation was loan advance (LOA) and the independent variables used are: bank size, liquidity, investment portfolio, CRR and deposit to capital ratio. The regression findings revealed that size of a bank has noticeable and positive impact on loans and advances whereas liquidity ratio, investment portfolio and that CRR and banks' loan advances (LOA) are negatively and significantly related. The outcome from the analysis showed that the key factors of commercial banks' lending pattern in Nepal are: size of the bank, liquidity, investment portfolio, and cash reserve ratio. This study recommends that commercial banking institutions in Nepal need improve their overall capacity in loan monitoring and loan issuance while the overseeing jurisdictional to observe close keenness to the banks' supervision focusing on the compliance of relevant provisions and directives towards the banking activities. Nonetheless, the study concentrated on lending pattern of commercial banks in Nepal, moreover, the paper did not relate interest rate capping to changes in commercial bank lending behavior.

In Pakistan, Abid and Lodhi (2015) did an examination on the result of changes for possible later use store on business banking turnover. Engaging examination configuration was utilized. The information assembled was quantitative in nature. In this manner optional information were assembled for a range of ten years covering the years 2005-2014. Correlation technique and linear regression were directed to anticipate the affiliation and relationship among factors separately. The outcomes uncovered that CRR as indicator for Hold Prerequisite delineated a remarkable and reverse linkage with banks' loaning conduct. Be that as it may, the investigation focused on loaning of business banking organizations

in Pakistan's also, the paper didn't relate interest rate capping to changes in business bank loaning behaviour.

Malede (2014) studied the causal factors affecting lending behavior of Ethiopian commercial banks covering the years2005 to 2011. The study used quantitative research design. Linear regression was employed to predict impact of the determining elements on commercial banking lending pattern. The outcome showed a major comparability linking commercial bank lending pattern and its liquidity ratio, bank size and credit risk. However, interest rate, investment, deposits and cash required reserve did not have an impact on lending of Ethiopian commercial banking lending trends for period covered. Nonetheless, the paper focused on loan ratio of commercial banks in Ethiopia, moreover, the empirical model did not relate interest rate capping to changes in commercial bank lending behaviour.

Mukhanyi (2016) assessed factors affecting lending behaviour of commercial banking institutions in Kenya. The analysis employed secondary panel data collected from 35 commercial banking institutions for a span of ten years (2006-2015). Fixed Effects Model was employed in estimation. Estimation outcome indicated that bank capitalization, amounts of deposits, and interest spread were positive and statistically relevant while real GDP growth rate revealed negative and significant effects on total loans offered by financial banks. Basing on these empirical results, the study recommends for comprehensive review of bank's assets and investment strategies since capitalized banks are capable of mobilizing more funds. The study did not relate interest rate capping to changes in commercial bank lending.

Khangalah (2016) investigated a study to uncover factors affecting lending pattern by commercial banking institutions in Kenyan banking sector with a specific aim on lending pattern of banks owned by the country. The study applied descriptive survey and employed both inferential and descriptive techniques in the analysis. It was established out that liquidity ratio and capital adequacy positively affected credit extension significantly whereas interest rate and credit risk inversely affected credit creation of the banks. The effect of loan pricing on lending behavior was found to be statistically significant whereas asset quality proved to be statistically insignificant. The study did not relate interest rate capping to changes in commercial bank lending behavior.

2.6 Summary of Literature Review and Research Gap

The theories critiqued in this section include credit market theory, theory of rational expectations theory, classical theory and loanable funds theorem. The neoclassical credit market model suggests that the conditions attached on the credits clear the market. The rational expectations theory is anchored on the proposition that the expectations of future conditions predict interest rates. Classical theorem states that the rate of interest is determine the willingness to save money and the state of demand for the investments. The loanable funds theory states that there resides an inverse linkage between quantities of the loanable financial resources demanded and the level of the interest rates.

An empiric investigation on the determinants of lending behavior used liquidity, bank size, CRR and investment portfolio as variables for analysis (Bhattarai, 2016). On another investigation on factors of commercial banks' lending of commercial banks in

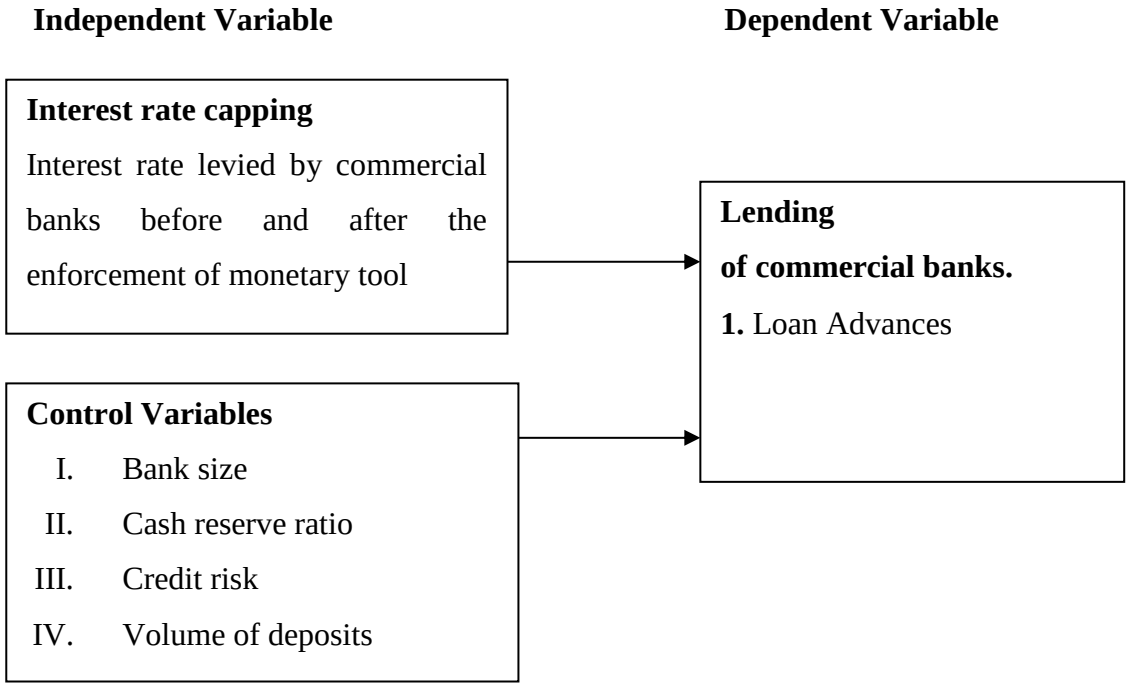
Ethiopia and used variables such as size, credit risk, GDP, liquidity ratio, deposit, investment, CRR and rate of interest (Malede, 2014). These studies used different variables while on the other hand this study will use bank size; cash reserve ratio, credit risk and volume of deposits as the variable in the aim of unifying the study conclusions so as to validate the study.

Aurello (2016) investigated the effect of capping of rate interest and the financial growth of Mauritius commercial banks, but did not illustrate the change in lending pattern brought by interest rate caps by the commercial lenders. Only limited empirical investigations focused on the area of lending and interest rate capping. These include; Meja (2017) focused on the impact of capping of interest rates on size of personal loans given by Kenyan financial banks with no attempt to uncover change in commercial bank lending behavior. Majority of studies conducted have concentrated on the concept of how capping of interest rates affects the performance in the commercial banks whereas this study intended to reduce the gap by studying interest rate capping and lending pattern among Kenyan commercial banks.

2.5 Conceptual Model

Figure 2.1 shows that interest rate capping is the independent element. The other control variables include bank size, CRR, credit risk and volume of deposits. The outcome variable is lending of commercial banks. It is hypothesized that rate of interest capping is concomitant to lending of Kenyan commercial banking institutions.

Figure 2.1 Conceptual Model



Author (2019)

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This subsequent part of this chapter highlights the research design, population and sampling design, data gathering method, analytical model and diagnostic tests.

3.2 Research Design

Descriptive research design was selected for this research. Cooper and Schindler (2013) stated that descriptive research design is appropriate in measuring cause and impact relationship among factors in study. This approach was suitable since the study aim is to check the nexus that exists in between capping of interest rate and lending pattern of Kenya's commercial banks.

3.3 Population

Commercial banking institutions approved by the regulator comprised the target population of this investigation. The research was restricted to the commercial banking institutions licensed by the end of 31st October 2018. The research employed census approach in order to study the population under investigation.

3.4 Data Collection

Secondary data were collected for use in this study. The data were gathered from the banks websites, and the Nairobi Securities Exchange annual reports. The data to be obtained covered the year 2014 to the year 2018.This was done because of the relative short time the law has come into effect, census survey helped the researcher expand data points. The specific data to be collected were; bank size, cash reserve ratio, credit risk and volume of deposits.

3.5 Data Analysis

Stata version 15 was utilized in analyzing the data collected. A panel model approach was utilized to determine how lending behaviour is affected by the interest rate capping and other control variables which include bank size; cash reserve ratio, credit risk and volume of deposits.

$$\Delta\text{Loan Advances}_{it} = \beta_0 + +\beta_1 CAP_{dummyit+} \beta_2 SIZE_{it} + \beta_3 CRR_{3it} + \beta_4 CR_{it} + \beta_5 DR_{it} + \epsilon$$

Where:

ΔLoan Advances $_{it}$ = Change in Loan growth rate an operationalization of lending behavior of commercial banks.

CAP_{dummy} = Interest rate capping taking the dummy values (0=period before introduction of interest rate caps; 1 = period after introduction of interest rate caps).

$SIZE_{it}$ = Bank size operationalized as natural log of total assets of bank i at time t

CRR_{it} = Cash reserve ratio of a commercial bank as measured as % cash reserve ratio on a quarterly basis of bank i at time t

CR_{it} = Credit risk measured as nonperforming loan divided by total asset on a quarterly basis of bank i at time t

DR_{it} = Volume of deposits measured as deposits to capital ratio on a quarterly basis of bank i at time t

ε = error term

β_0 = constant value of the model.

β_1, β_2, β_3, β_4 &β_5 = are the coefficients of regression.

Table 3.1 Operationalization Table

Variable	author	Indicators	Measure
Interest rate capping	Central Bank of Kenya (2016)	Interest rate taking dichotomous values of (before introduction of caps and 1 after	Dummy 0=before capping 1= after capping
Lending	Malede (2014)	Size of loan advances	Change in Loan advances
Bank size	Barketer *et al.* (2013	Total assets	Natural logarithm of total assets.
Cash reserve ratio	Bawa, Akinniyi and Njarendy (2018).	total deposits to be kept l Central Bank	Percentage (%) of total deposits
Credit risk	Afriyie and Akotey (2012).	non-performing loans risk weighted assets	ratio of nonperforming lo divided by risk weighted assets
Volume deposits	Bhattarai (2016)	Banks total loans and Total deposits	Value of bank total loans total deposit.

Source: Author (2019)

CHAPTER FOUR

RESEARCH RESULTS AND DISCUSSION

4.1 Introduction

The sections present the results and discussions of the study. The results are highlighted as per the study goals. The analysis techniques include descriptive and inferential analyses. The findings are presented using figures and tables.

4.2 Descriptive Statistics

Summary findings are shown in this part. The outcomes include measurements of central tendency. The descriptive findings are shown in Table 4.1.

Table 4.1 Descriptive Results

Variable	Obs	Mean	Std. Dev.	Min	Max
Bank size in million KES	210	79,160.8	102,238.6	2,584	55,5630
cash reserve ratio	210	0.16334	0.079426	0.100099	0.847187
Credit risk	210	0.80919	0.942401	0.030525	11.21418
Volume of deposit in million KES	210	62,899.53	88,269.21	1,181	493,937
Loans Advances in KES	210	54,167.29	76,573.53	785	430,000

The outcomes showed that the average of bank size predicted using total assets was KES 79,160.8 million. The lowest and highest value of bank size was KES 2,584 million and KES 555,630 million individually. Its standard deviation was KES

102,238.6 million which shown that average bank size fluctuated all through the study period. The outcome is likewise in concurrence with Aduralere (2019) that firm size effects on financial growth of commercial banks. This is an effect of the economies of scale delighted in by large firms instead of little firms.

The average CRR estimated as the percentage of total deposits to be maintained by commercial banks as per the CBK guidelines. The average mean of cash reserve ratio was 0.16334 (16.3%). The lowest and the highest of cash reserve ratio were 0.100099 and 0.847187 separately. The SD was 0.079426 demonstrating that cash reserve ratio fluctuated all through the estimation time frame. CRR is a monetary policy used to set the require reserve percentage on explicit customer deposits and each bank must keep cash in vault cash with the Central Bank. As per Bhattarai (2016) CRR have noteworthy negative impact on banks' credit progresses. Further, MacCarthy (2015) noticed that CRR essentially and emphatically predicts financial growth of commercial banking institutions.

The average credit risk estimated as nonperforming loan separated by total resource was 0.80919. The min. and the max. of credit risk were 0.030525 and 11.21418 separately. The SD was 0.942401 showing that credit risk differed all through the measurement period. Credit risk shows the chances that the loanee will keep the promise of remitting back the loan or fail to owner the agreement by not paying. Loans are the biggest well spring of credit risk to a financial establishment. As indicated by Luqman (2014) inappropriate credit risk the executives lessen the bank’s profit margin,

influences the nature of its assets and increment loan misfortunes and non-performing loans that can in the long run lead to financial distress.

The descriptive results likewise demonstrated that the average volume of deposits was 62,899.53 million KES. The minimum and the maximum of volume of deposits were 1181 million KES and 493,937 million KES individually. Its standard deviation was 88,269.21 million KES which shown that average volume of deposits changed all through the measurement period. As showed by Olokoyo (2011) volume of deposit displays the biggest impact on lending pattern of commercial banks and an alteration yields most significant move in banks' advances and loans. The results are in accordance with Akinyomi (2014) that there is a positive and critical nexus existing between volume of deposits conducted and loan and advances in the chose banks.

Lending measured as change in loan advances had an average mean of 54,167.29 million KES. The minimum and the maximum of loan advances were 785 million KES and 430 billion KES separately. Its standard deviation was 76,573.53 million KES which shown that average loan advances differed all through the measurement period. LOA conceded by commercial banks is exceptionally helpful to individuals and companies. LOA allowed by banks assist in meeting current needs and expansion of firms.

4.3 Trend Patterns

This part displays trend growth of various variables under consideration over time. The examination directed a trend patterns to build up the growth pattern of study variables

across time. Trend analysis for bank size, CRR, credit risk, LOA and volume of deposits are displayed in the resulting sub-sections.

4.3.1Bank Size

The study opted to determine the trend line for bank size of commercial banks from 2014-2018 after introduction of interest rate capping. Trend line is drawn from mean average of bank size for all commercial banks. The trend line for bank size is presented in Figure 4.1.

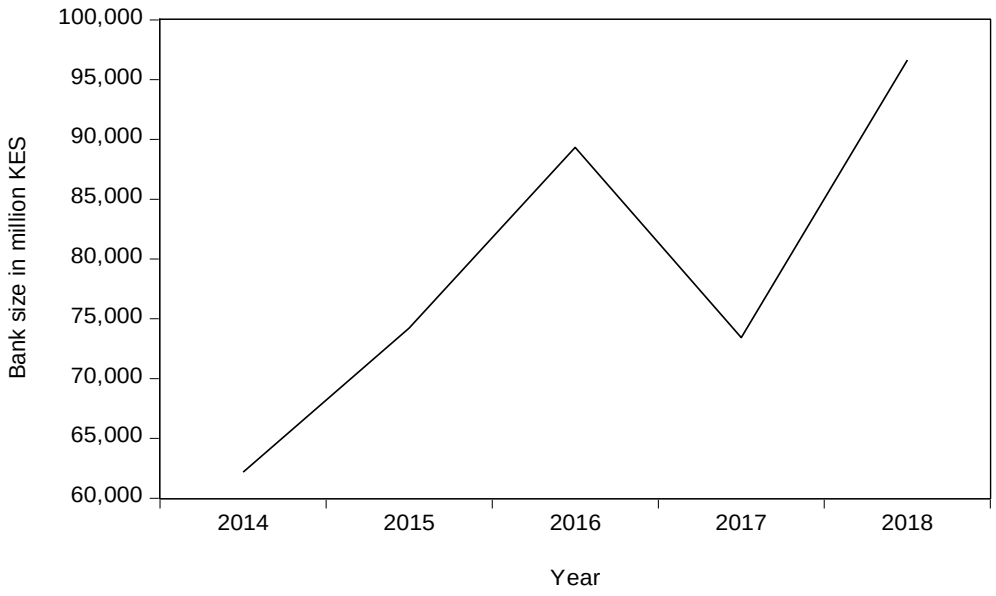


Figure 4.1 Trend on Bank size 2014-2018

The trend line shows that bank size rose steadily from 2014 to 2016. However, bank size dropped in 2017 a phenomenon that was attributed to elections effects. Further, in 2017, interest rate capping effects could now be felt after introduction in 2016. Elections Business shrinks during election period. Bank size later rose in 2018. Big banks in terms of assets have the benefit of giving a larger portion of monetary tools to the clients and there by assemble more assets.

4.3.2 Cash Reserve Ratio

The study looked to build up the trend line for credit reserve ratio of commercial banks from 2014-2018 after introduction of interest rate capping. Trend line is drawn from mean average of credit reserve ratio for all commercial banks. The trend line for credit reserve ratio is presented in Figure 4.2.

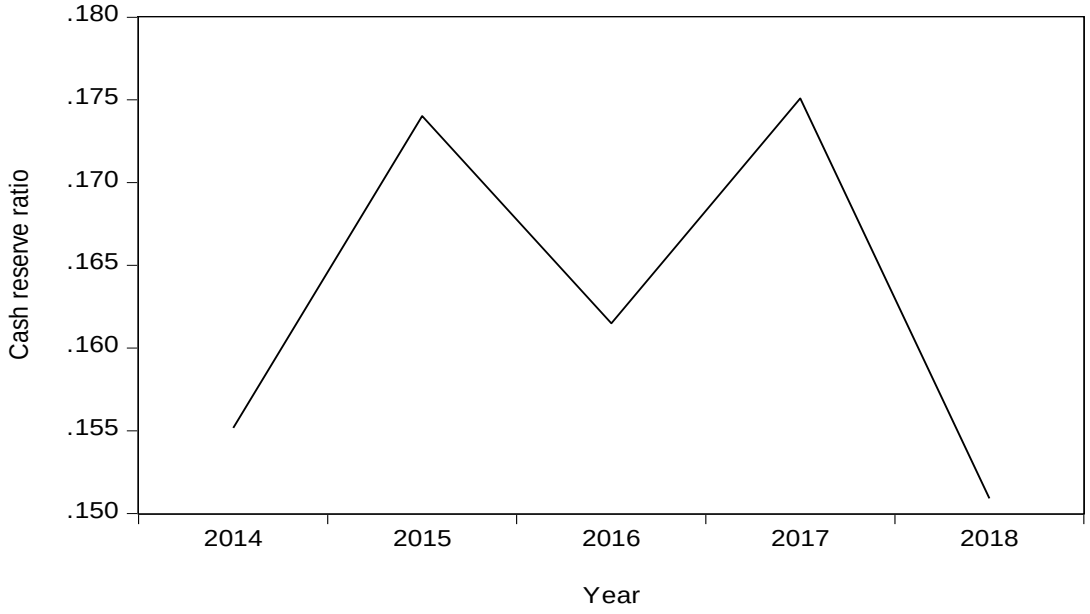


Figure 4.2 Cash Reserve Ratio 2014-2018

Cash reserve ratio has been sharply fluctuating as shown in Figure 4.2. CRR is a monetary policy used to set the require reserve percentage on specific customer deposits and every bank must keep money in vault cash with the CBK. According to Bhattarai (2016) CRR is negatively and significantly related banks' loan advances.

4.3.3 Credit risk

The research looked to set up the trend line for credit risk of commercial banks from 2014-2018 after introduction of interest rate capping. Trend line is drawn from mean

average of credit risk for all commercial banks. The trend line for credit risk is presented in Figure 4.3.

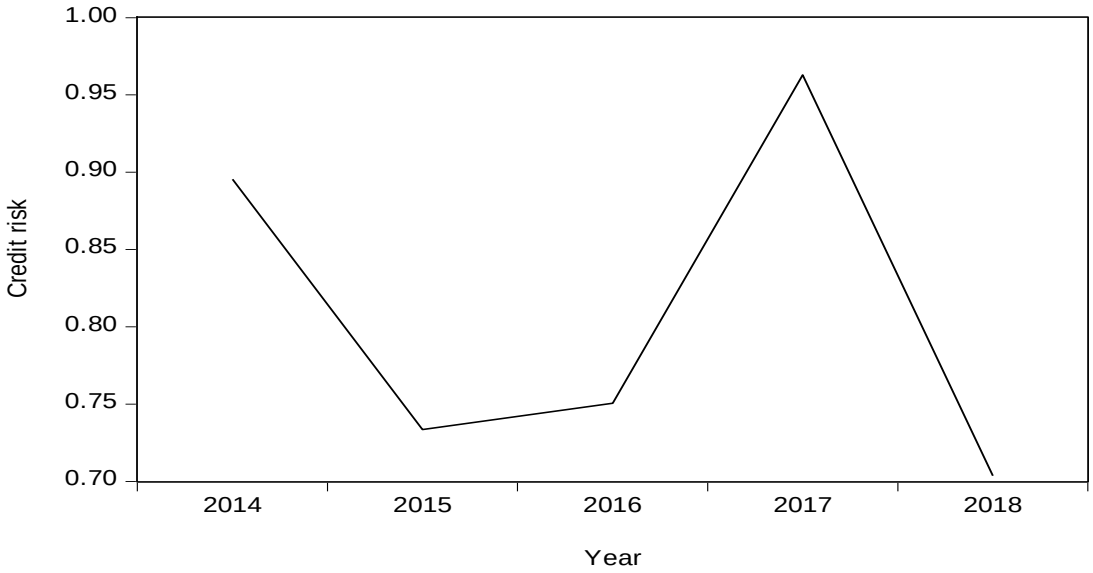


Figure 4.3 Credit Risks 2014-2018

Credit risk was lowest in 2018 and highest in 2017. Credit risk was high in 2017 a situation attributed to elections. In 2017, interest rate capping was now fully in effect after signing in 2016. Credit risk in financial firms describes to the timely manner where loan seekers meet the legal binding commitments (Alhassan et *al.*, 2014). The credit risk has inverse relationship with value of nonperforming assets. When loaned the advances are assets since future economic resources are projected to stream to the firm.

4.3.4 Loan Advances

The study looked to build up the trend line for loan advances of commercial banks from 2014-2018 after introduction of interest rate capping. Trend line is drawn from mean average of loan advances for all commercial banks. The trend line for loan advances is presented in Figure 4.4.

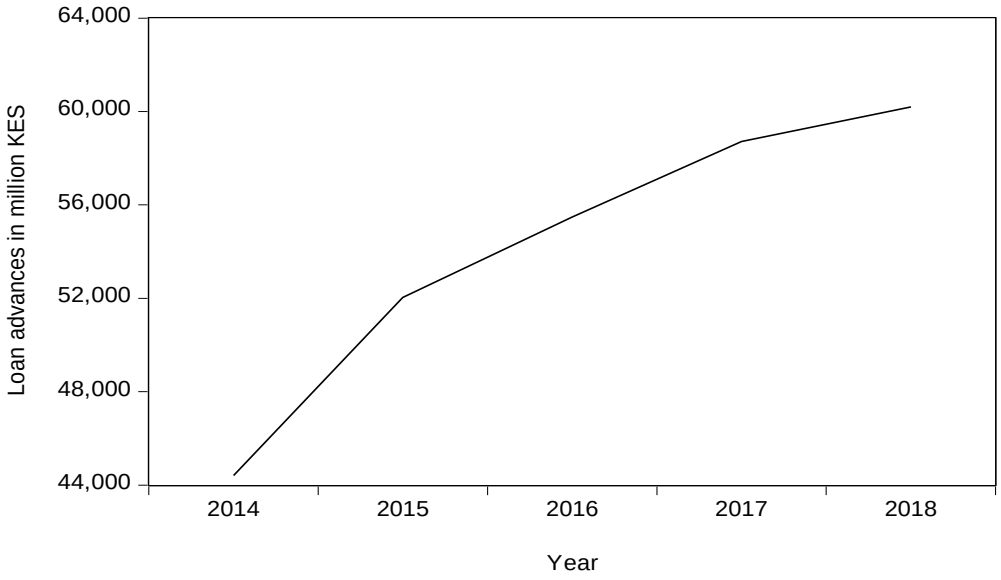


Figure 4.4 Loan advances 2014-2018

Loan advances have been growing gradually though at slow rate. Loans and advances can be organized from banks with regards to the adaptability in business activities. Effective lending create customer satisfaction, reduces loan loss defaults and thereby increasing commercial banks profitability.

4.3.5 Volume of deposits

The study looked to build the trend line for volume of deposits for commercial banks from 2014-2018 after introduction of interest rate capping. Trend line is drawn from mean average of volume of deposits for all commercial banks. The trend line for volume of deposit is presented in Figure 4.5.

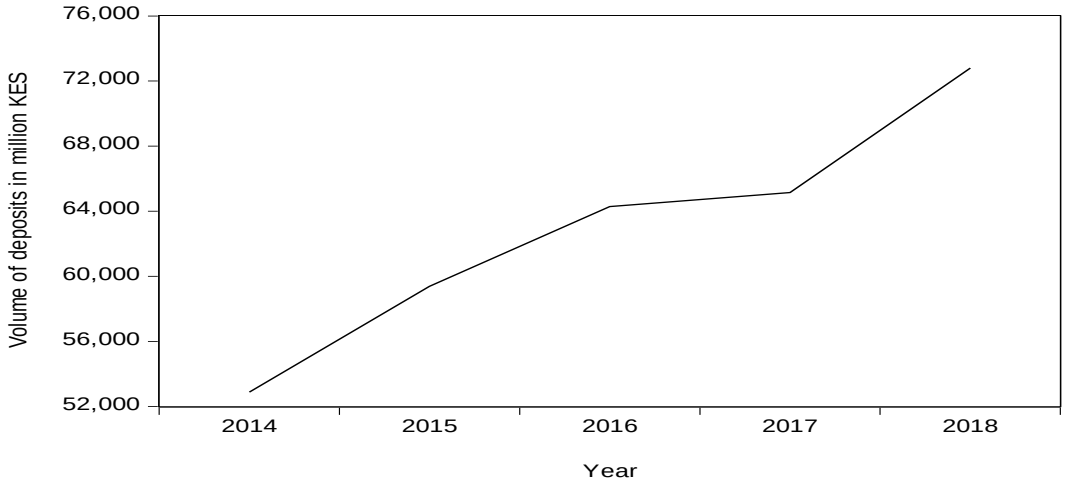


Figure 4.5 Volume of deposits in million KES 2014-2018

Volume of deposits has been rising steadily. However, in 2017 loan volume decreased. This could be attributed to effects interest rate caps and elections moods. Interest rate capping became effective from late 2016 and so the effects could be felt in 2017.

4.4 Diagnostic Tests

This part presents the significance of conducting diagnostic tests to make sure that there isn't breaching of classical linear regression (CLRM) model assumptions before estimating equations. Estimating model if the assumptions of the CLRM are breached will lead to the risk of getting incorrect and inconsistent parameter measures. The diagnostics tests to be estimated include autocorrelation, multicollinearity test and normality.

4.4.1 Autocorrelation Test

Serial correlation test was directed to detect for correlation of error terms crosswise over time spans. This investigation utilized the Wooldridge test for serial correlation. The test tested for the accompanying hypotheses. The results are presented in Table 4.2.

H_0: Residuals of the panel model does not have serial correlation

H_1: Residuals of the panel model have serial correlation

Table 4.2 Serial Correlation Results

Loan advances
Wooldridge method for testing autocorrelation in panel data set H_0: no first-order autocorrelation
F(1, 41) = 2.984 Prob> F = 0.9010

Source: Stata 14 computations

The H_0 was serial/autocorrelation is absent in the data. At the point when Serial Connection was run, the test statistic arrived at is F-test of 2.984and a p estimation of 0.9010>0.05. The H_0 that no serial/auto correlation is present was not dismissed in the two cases. We at that point infer that serial connection doesn't exist. If the serial relationship is recognized in the panel data, at that point the FGLS approach is adopted.

4.4.2 Multicollinearity Test

As indicated by Garg and Tai (2013), multicollinearity lays to the nearness of correlations amongst the indicator variables. Multicollinearity was tested utilizing the variance inflation factors (VIF). As per Yu, Jiang and Land (2015) VIF values more than 10 means that the nearness of Multicollinearity. The results in Table 4.3 indicated lack of multicollinearity since the VIF of all the variables were less than 10.

Table 4.3 Multicollinearity Test

Variable	VIF	1/VIF
Bank size	1.19	0.839592
cash reserve ratio	1.18	0.847043
Volume of deposits	1.02	0.983351
Credit risk	1.01	0.988896
interest rate capping (dummy)	1.00	0.997866
Mean VIF	1.08	

Source: Stata 14 computations

The results in Table 4.3 indicated lack of multicollinearity since the VIF of all the variables were less than 10.The VIF values for bank size, cash reserve ratio, Volume of deposits and credit risk, interest rate capping were less than 10 indicating absence of multicollinearity.

4.4.3 Normality Test

The normality test ($ut \sim N(0, \sigma 2)$) was to ensure that data is normal and there is no outlier that can undermine the accuracy of the results (Brooks, 2008). Table 4.4 shows normality finding using for skewness and Kurtosis test for the commercial banks. The research checked data that is normal with no outliers.

H_0: The data are not normally aligned

H_1: The data are not normally aligned

Table 4.4 Normality Test

Variable	Observation	Skewness	Kurtosis
Lending	210	1.0670	0.7324
Bank size	210	3.3921	0.9205
cash reserve ratio	210	2.0211	0.6413
Volume of deposits	210	4.8153	0.5104
Credit risk	210	3.0634	0.5679

Bera and Jarque (1981) tests of normality were conducted. The rejection criterion is that if the p-calculated is smaller than 0.05, the hypothesis that data is not normal is rejected. Non parametric tests are considered if data is found not to be normal. Table 4.4 presents the normality results using for skewness and Kurtosis test. The P-values were higher than the critical 0.05 and thus it was found that the data is normal with no outliers.

4.5 Correlation Analysis

Correlation matrix is utilized to test association between variables (positive or negative). So as to get an outline of the association between needy and independent variables, the analyst directed pair wise correlation analysis. The study conducted correlation analysis between interest rate capping, bank size, cash reserve ratio, credit risk, loan advances and lending. Table 4.5 shows the correlation matrix of interest rate capping, bank size, cash reserve ratio, credit risk, loan advances and lending

Table 4.5 Correlation Matrix Table

	Lending	Bank size	Cash reserve ratio	Credit risk	volume of deposit	Interest rate capping (Dummy)
Lending	1.000					
Bank size	0.1607	1.000				
	0.0198*					
Cash reserve ratio	-0.0179	-0.3883	1.000			
	0.7966	0.000				
Credit risk	-0.0793	-0.0413	0.062	1.000		
	0.028**	0.5515	0.3715			
volume of deposit	0.8925	0.0973	-0.0257	0.0793	1.000	
	0.000*	0.1599	0.7107	0.2528		
Interest rate capping	-0.0578	0.0442	-0.013	-0.0046	0.0162	1.000
	0.045*	0.5239	0.8517	0.9474	0.8156	

** significant at 1% and 5%

* Significant at 5%

The correlation findings illustrated that bank size has a moderate positive and significant association with lending ($r=0.1607$, $p=0.0198<0.05$). The empirical findings also showed a weak negative and insignificant correlation between cash reserve ratio and lending as evidenced by ($r = -0.0179$, $p = 0.7966>0.05$). Credit risk had a moderate negative and significant association with lending of commercial banks as evidenced by

(r = -0.0793, p = .028<0.05). Volume of deposit had a strong positive and significant association with lending of commercial banks in Kenya as evidenced by (r=0.8925, p = .000<0.05). Finally, interest rate capping (dummy) was had a moderate negative and significant association with lending of commercial banks as evidenced by (r = -0.0578, p = .000<0.05).

4.6 Panel Regression Analysis Results

The investigation looked to complete panel regression examination to set up the statistical essentialness connection between the independents variables that is bank size, cash reserve ratio, volume of deposits and credit risk on loaning estimated utilizing advance advances. According to Moon and Weidner (2017), regression examination is a statistical procedure of estimating the nexus among elements of the study. It incorporates numerous procedures for modeling and breaking down a few elements, when the attention is on the connection between outcome and predictor variable.

Regression investigation encourages one to see how the run of the mill estimation of the outcome variable changes as some changes in the predictor variables (Baltagi, 2005). On a similar note, McManus, (2015) indicates that regression investigation helps in creating a condition that portrays the statistical linkage between predictor and outcome variable. The panel model is introduced in Table 4.6.

Table 4.6 Panel Model of Interest rate capping and Lending

Lending	Coef.	Std. Err.	z	P>z
Bank size	0.046357	0.023132	2.000	0.045

Cash reserve ratio	-0.02774	0.12192	-0.230	0.820
Credit risk	-0.02572	0.008418	-3.055	0.037
volume of deposit	0.281374	0.040214	7.000	0.000
Interest rate capping (Dummy)	-0.057831	0.014054	-4.110	0.000
_cons	6.923237	0.491039	14.100	0.000
R-squared:	=0.7876			
Wald chi2(4)	= 75.04			
Prob> chi2	=0.000			

The regression modes was;

Lending = 6.923237+0.046357Bank size-0.02774Cash reserve ratio-0.02572Credit risk+0.281374volume of deposit+0.057831Interest rate capping

The regression results found that bank size, cash reserve ratio, credit risk, volume of deposit and interest rate capping were satisfactory in predicting lending pattern of commercial banks post interest rate caps. The results were predicted by R square of 0.7876. The result implies that bank size, cash reserve ratio, credit risk, volume of deposit and interest rate capping explain 78.76% of the variation in lending of commercial banks. Interest rate cap mitigates the propensity of commercial banks from increasing rate of interest on the amount borrowed particularly in financial markets where financial information to consumers is often limited. According to Ayieyo (2016) rate of interest and lending finances are positively related and when the interest rates are higher, the lending activities become higher and vice versa.

Further, Wald statistic brings about Table 4.6 demonstrated that the general model is statistically significant. The outcomes suggest that interest rate capping and control variables bank size, cash reserve ratio, credit risk, volume of deposit are great indicators of lending rate of commercial banks. The result was upheld by Wald value of 75.04 and a p vale (0.000) less than 0.05. The execution of interest rate capping in Kenya activated commercial bank lending conduct. As confirmed by Ayieyo (2016) commercial banks move their lending center around government and big corporations. Despite the fact that credit request rose following the requirement of law of interest rate capping, credit advances to private section of business have continued declining.

Panel coefficients outcome in Table 4.6 indicated the size of a bank is positively and significantly associated to lending behavior of commercial banks though the relationship is moderate (β =0.046357, p=0.045<0.05). The findings imply that a unit rise in bank size results to subsequent rise in lending by commercial banks by 0.046357 units. The size of a bank plays a very crucial role in determining the availability of loans for lending. The findings are in line with Malede (2014) that a major comparability between commercial bank lending and bank size exists. The bank size is used to determine the lending of the banks as it defines the economics of scale being enjoyed by the bank at a particular time (Adzis, Sheng & Bakar, 2018).

CRR has a weak negative but with insignificant relationship with lending behaviour of commercial banks (β= -0.02774, p=0.820>0.05). The results implicate that a unit decreases in credit reserve ratio results to a reduction in the lending of commercial banks by -0.02774 units. CRR is an important monetary tool for regulating the lending

capacity of commercial banks. CRR predicts the percentage of total deposits that financial firms are mandated to reserve within the Central Bank. Bijoy and Maud (2015) documented that CRR may have an impact on financial firms lending. A rise in Cash reserve ratio results in littler value of assets at use by commercial banks, increment in loan fee, and decline in liquidity and profitability in the model and the other way around.

Further, regression of coefficients results shows that the credit risk has a weak negative and significant linkage with lending of commercial banks (β=-0.02572, p=0.037<0.05). This implies a unit increments in credit risk will prompt a consequent decrease in lending by commercial banks by - 0.02572 units. Credit risk variation shows the adjustment in strength of loan portfolio offered in the bank. Credit hazard is essentially the probability of a bank to lose money as a result of bad loans. The outcomes are in accordance with Geitangi (2015) that commercial banks uses credit chance recognizable proof, as it were, which brought about decrease in default rates among bank clients. According to Khangalah (2016) credit hazard inversely influences credit creation for commercial banks.

The outcome of the panel model likewise showed that volume of deposits has a strong positive and significant linkage with lending by commercial banks after interest rate capping (β=0.281374, p=0.000<0.05). This implies a unit increment in volume of deposits would prompt a consequent increment in lending by commercial banks by volume of deposits units. Volume of deposits made to the banks decides their capacity to give propels. Lending action is made conceivable just if the banks can prepare

enough assets from their clients. As all out deposit builds the all out advance and credit increments relatively.

An expansion in deposit of a bank is probably going to improve its capacity to loan more assets to its clients. Lending and deposits move together in light of the fact that quicker deposit development sign developing interest for advances. Positive relationship is expected. As demonstrated by Olokoyo (2011) volume of deposit displays the biggest effect on lending example of commercial banks and a change yields most imperative move in banks\' advances and credits. The outcomes are in accordance with Akinyomi (2014) that there deposit volume and credit and advances are positively and significantly related.

The panel results likewise uncovered that interest rate capping has a moderate negative and significant linkage with lending of commercial banks (β=-0.057831, $p=0.000<0.05$). This implies a unit increments in interest rate capping would prompt a consequent reduction in lending by commercial banks by - 0.057831 units. The introduction of interest capping rate drastically impact on commercial banks' lending norms since the most common factor that the commercial banks rely upon is interest rates. Interest rate cap mitigates the propensity of commercial banks from increasing rate of interest on the amount borrowed particularly in financial markets where financial information to consumers is often limited. The implementation of interest rate ceiling in Kenya triggered commercial bank lending behavior. As noted by Ayieyo (2016) commercial banks shift their lending focus on government and big corporations. Though credit demand rose immediately after the enforcement of interest rate capping

law, credit advances to the private segment of the business have kept on declining (CBK, 2018). Interest rate capping, limiting the capacity of commercial banks to generate interest income, promotes the banks desire in introducing or increasing non-interest fees in an attempt to recoup for lost income. Accordingly, it ends up hard for borrowers to understand total expenses of obtaining and furthermore to make viable decisions when asking for credit advances.

In the panel model in Table 4.6, the constant = 6.923237 implies that if interest rate capping and control variables (bank size, cash reserve ratio, credit risk, volume of deposit) are rated zero, lending by commercial banks would be 6.923237.

4.7 Discussion of Research Findings

The empirical model revealed that bank size, cash reserve ratio, credit risk and volume of deposit and interest rate capping were satisfactory in predicting lending of commercial banks after interest rate capping. Bank size, cash reserve ratio, credit risk, volume of deposit and interest rate capping explain 78.76% of the variation in lending of commercial banks. Interest rate cap mitigates the propensity of commercial banks from increasing rate of interest on the amount borrowed particularly in financial markets where financial information to consumers is often limited.

Model results showed that bank size has a positive and relationship with lending conduct of commercial banks. The outcomes infer that as size of bank expands the lending capacity of w commercial banks increments. The size of a bank assumes a critical job in deciding the accessibility of advances for lending. The bank size is

utilized to decide the lending of the banks as it characterizes the financial matters of scale being appreciated by the bank at a specific time. The outcomes are in accordance with Malede (2014) where bank size is positively related to commercial bank lending. The outcomes likewise concur with Bhattarai (2016) that size of a bank has recognizable and positive effect on advances and advances.

It was noticed that CRR has a negative however with insignificant linkage with lending trend of commercial banking institutions. The outcomes suggest that as credit reserve ratio builds, lending capacity of commercial banks diminishes. Interest rate capping changed affected CRR. CRR is a significant monetary tool for controlling the lending limit of commercial banks. CRR predicts the level of all out stores that money related firms are ordered to reserve inside the National Bank. Bijoy and Maud (2015) archived that CRR may affect budgetary firms lending. An ascent in CRR brings about humbler estimation of advantages at use by commercial banks, increase in credit expense, and reduction in liquidity and profitability in the model and the different way.

Credit risk is negatively and significantly related with lending of commercial banks. The outcomes infer that a unit increment in credit risk would prompt a consequent lessening in lending by commercial banks. Credit risk predicts whether the loanee will pay back in time or not. Credit risk is essentially the chances of a bank to lose money as a result of bad loans. The outcomes are in accordance with Geitangi (2015) that commercial banks uses credit risk recognizable proof to an exceptionally extraordinary degree which brought about decrease in default rates among bank customers. As

indicated by Khangalah (2016) credit risk contrarily influences credit creation for commercial banks.

Volume of deposits positively and significantly related with lending by commercial banks post interest rate capping. The outcomes suggest that an expansion volume of deposits would prompt a resulting increment in lending by commercial banks. Be that as it may, interest rate capping affected on volume of deposits from customers. Volume of deposits made to the banks decides their capacity to give progresses. Lending action is made conceivable just if the banks can prepare enough assets from their customers. As all out store expands the all out advance and loan increments relatively. As showed by Olokoyo (2011) volume of store exhibits the biggest outcome on lending example of commercial banks and an alteration yields most imperative move in banks\' advances and loans. The outcomes are in accordance with Akinyomi (2014) that there is a positive and significant relationship between store volume and loan and advances in the chose banks.

It was likewise discovered that interest rate capping has a negative and significant linkage with loaning of commercial banking institutions. The presentation of interest capping rate radically sway on commercial banks' loaning standards since the most widely recognized factor that the commercial banks depend upon is interest rates. Interest rate top mitigates the inclination of commercial banks from expanding rate of interest on the sum obtained especially in financial markets where financial data to purchasers is frequently restricted.

The usage of interest rate roof in Kenya activated commercial bank loaning conduct. As confirmed by Ayieyo (2016) commercial banks move their loaning center around government and huge enterprises. Despite the fact that credit request rose following the requirement of law of interest rate capping, credit advances in private section of business have continued declining (CBK, 2018). Interest rate capping, by restricting the limit of commercial banks to generate interest pay, advances the banks want in presenting or expanding non-interest expenses trying to recover for lost pay. As needs be, it winds up difficult for borrowers to comprehend complete costs of acquiring and moreover to settle on feasible choices when requesting credit progresses.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

The part shows the findings of the past chapter, conclusion, constraints experienced during the investigation. This chapter additionally features the policy suggestions that Commercial banks can execute to upgrade lending. In conclusion the suggestions for further research are highlighted.

5.2 Summary of Findings

The study inspected the effects of capping of interest rate on lending of Kenyan commercial banks. The autonomous variable for the study was interest rate capping and control factors (bank size, cash reserve ratio, credit risk, volume of deposit). The study utilized graphic research plan. The outcomes were dissected utilizing Stata Version 14.0.

The findings of correlation analysis, there is a moderate positive and strong significant association between bank size and lending by Kenyan commercial banks. Further, empirical research found a weak negative and insignificant correlation between cash reserve ratio and lending by commercial banks. Credit risk had moderate negative and significant correlation with lending of commercial banking institutions. Volume of deposit presented a strong, positive and significant association with lending among commercial banks. Interest rate capping presented a moderately negative and significant association with lending pattern by commercial banking institutions.

The model summary revealed that bank size, cash reserve ratio, credit risk and volume of deposit and interest rate capping explain 78.76% of lending pattern of commercial banks. Interest rate cap mitigates the propensity of commercial banks from increasing rate of interest on the amount borrowed particularly in financial markets where financial information to consumers is often limited. Further, Wald statistic results of 75.04 revealed that the overall model was statistically significant showing that interest rate

capping and control variables bank size, cash reserve ratio, credit risk, volume of deposit are perfect indicators of lending rate of commercial banks.

Regression results demonstrated that the size of a bank has a moderate, positive and significant linkage with lending conduct of commercial banks. CRR revealed a negative but insignificant relationship with lending pattern of commercial banks. Credit risk uncovered a moderate negatively and significantly linkage with lending of commercial banks. The findings of the examination additionally showed volume of loans strongly, positively and significantly related with lending pattern by commercial banks after introduction of interest rate caps. Interest rate capping is moderately, negatively and significantly related with lending of commercial banks. The panel results likewise uncovered that interest rate capping has a moderate negative and significant relationship with lending of commercial banks.

5.3 Conclusion

The study reasons that bank size impacts lending conduct of commercial banking. After the presentation of financing cost topping, huge commercial banks had the option to fulfill client loans need when contrasted with little commercial banks. Banks adequacy and proficiency spoke to by benefit is unequivocally identified with all out resources. Littler banks embrace private venture advance endorsing rehearses that are less risk compared to those of big banks.

From the investigation discoveries, the examination infers that Cash reserve ratio has a negative however inconsequential association with lending by commercial banks. The amount of cash reserves at the bank disposal affects banks' lending ability. The more

the money holds, all the more lending assets thus the expanded conceivable outcomes of expanded bank accepting that the loans progressed are performing. The money holds by the bank run from money held in both the nearby and outside foundations and the money debt remainders from the national bank.

It was additionally concluded that credit risk impacts lending by commercial banks. Presentation of interest rate capping expanded credit danger of lending. The administration of credit danger of credit portfolios is along these lines one the most significant assignments before giving out advances. With expanded affectability of banks to the credit dangers and changes in lending conduct and credit value, this is significant before lending advance advances to customers.

In light of research finding it can likewise be concluded volume of deposits impacts lending by commercial banks. Interest rate capping affected the volume of deposits to the commercial banks. Volume of deposits made to the banks chooses their ability to yield moves. Lending is possible just if banks can amass sufficient resources from the clients. Banks rely on the measure of deposits profited to those looking for loans.

The study concluded that interest rate capping activated lending example of commercial banks. Lending pattern changed after enactment of interest rate capping. Commercial banks shifted their interest from small borrowers who are more risky to large borrowers and government institutions that are perceived to be less risky.

5.4 Recommendations

Volume of deposits was influenced after presentation interest rate capping. The ramifications of this are volume of deposits affected lending pattern. Sufficient deposits imply enough funds to issue loans. Hence banks ought to endeavor hard to deal with their deposits productively so their lending isn't influenced because of inadequate deposits from customers. This suggests age of more deposits is digression to the endurance of commercial banks all in all. Along these lines, there is requirement for bank the executives to devise new techniques for improving customers' deposits. Also, there are different components which may apply some effect on the lending conduct of store cash banks among commercial banks adjacent to store volume.

The study makes recommendation that commercial banks ought to improve their volumes in credit assessment and advance organization while administrative authority should give more consideration to the banks' supervision concentrating on the consistence of pertinent arrangements and orders towards the banking exercises.

Commercial banks ought to follow banking policies and guidelines to manage the rate of expanding nonperforming loans and the administrative specialists ought to consistently get to the lending conduct of the banking sector. The credit approaches of the commercial banks ought to be aligned with the lending rules among the commercial banks and sound credit procedures ought to be presented.

Credit hazard was presented after the presentation interest rate capping. Commercial banks ought to have set up obviously characterized strategies on hazard distinguishing

proof. Commercial banks ought to fortify and upgrade their credit chance examination practices to recognize credit worth borrowers before giving out loans.

5.5 Limitations identified in the Study

The confinement that the study went through in this examination included irregularity in recovery of information and data from the commercial banks reports. Some commercial banks didn't post their budgetary data for specific years. Be that as it may, this was relieved by receiving unbalance board relapse model.

The extent of the examination was short. Interest rate capping was passed into law in Kenya in October 2016. The period was too short to even think about collecting adequate information to build up the linkage between interest rate capping and lending example of commercial banks within the country. Nonetheless, this test was relieved by expanding number of perceptions.

The examination concentrated on Kenya commercial banks. Thus, micro finance banks should also be looked into. The effects brought by interest capping exclusively apply to commercial banks canvassed in the examination.

The study is dependent on a political platform whereby the law can be signed that the interest rate cap is lifted at anytime hence affecting the validity of the study in terms of relevance to the future economic changes

5.6 Suggestions for Further Research

The study concentrated on commercial banks. Micro finance banks were strongly affected by the law presenting interest rate capping. Future research ought to include commercial banks by explicitly studying the linkage between interest rate capping and lending pattern of micro finance banks. These may shape a premise of examination between the two sections of budgetary establishments.

The extent of the examination was short. Interest rate capping was passed into law in Kenya in October 2016. The period was too short to even think about collecting adequate information to build up the linkage in interest rate capping and lending of commercial banks in Kenya. Future research may include stretching out study period to make increasingly convincing outcomes.

Up to date the interest rate cap has been lifted by the signing into law of the bill to lift the cap hence making the effects of the law quite visible. A study should be conducted to give the banks a good structure such that they can survive any adverse conditions that may come across due to decisions of CBK. The KBA should also take charge and come up with plans to ensure stability in banks for the near future to avoid losses that are brought about by the changes in the financial market.

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Appendix I: Raw Data

Year	Bank	Bank size in million KES	cash reserve ratio	Credit risk	volume of deposit in million KES	interest capping	Loans Advances Million KES	dummy1	dummy2
2014	African Banking Corporation	19071	0.19	0.797425	16050	0	13513	1	0
2015	African Banking Corporation	19639	0.19	0.829812	15774	0	15538	1	0
2016	African Banking Corporation	21439	0.14	0.82642	15498	1	15022	0	1
2017	African Banking Corporation	22058	0.14	0.775641	16078	1	16371	0	1
2018	African Banking Corporation	22422	0.11	0.703704	19701	1	19000	0	1
2014	Bank of Africa	24804	0.1	0.832331	49674	0	31308.08	1	0
2015	Bank of Africa	48958	0.13	0.761807	47488	0	39236	1	0
2016	Bank of Africa	52683	0.13	0.843775	64874	1	41075	0	1
2017	Bank of Africa	42212	0.14	0.817018	31572	1	37480.16	0	1
2018	Bank of Africa	69280	0.1	0.632653	26098	1	33589	0	1
2014	Bank of Baroda (K) Ltd	50996	0.11	0.646444	48683	0	29002	1	0
2015	Bank of Baroda (K) Ltd	54191	0.13	0.62394	52929	0	32263	1	0
2016	Bank of Baroda (K) Ltd	46138	0.12	0.552704	64874	1	38089.5	0	1
2017	Bank of Baroda (K) Ltd	52022	0.14	0.54472	73005	1	43943	0	1
2018	Bank of Baroda (K) Ltd	61945	0.15	0.483333	81136	1	43000	0	1
2014	Bank of India	68178	0.16	0.445621	24668	0	12438	1	0
2015	Bank of India	82907	0.16	0.400564	24613	0	17973	1	0
2016	Bank of India	96132	0.13	0.410227	31852	1	19354.22	0	1
2017	Bank of India	24877	0.16	0.362134	31286	1	20771	0	1
2018	Bank of India	30721	0.16	0.457868	30720	1	19000	0	1
2014	Barclays Bank	34370	0.17	0.910473	176915	0	128204	1	0
2015	Barclays Bank	42163	0.16	0.929373	165359	0	148846	1	0
2016	Barclays Bank	47815	0.18	0.922161	198515	1	176348.5	0	1

2017	Barclays Bank	56631	0.19	0.897108	186245	1	177224	0	1
2018	Barclays Bank	185102	0.15	0.787879	173975	1	190000	0	1
2014	CFC Stanbic Bank	207010	0.15	0.809673	102244	0	89797	1	0
2015	CFC Stanbic Bank	226043	0.17	0.817231	108130	0	103535	1	0
2016	CFC Stanbic Bank	241153	0.15	0.877283	122888	1	118483.1	0	1
2017	CFC Stanbic Bank	260429.5	0.14	0.860832	153009	1	135443	0	1
2018	CFC Stanbic Bank	271682	0.14	0.821429	163130	1	160000	0	1
2014	Citibank, N.A.	133378	0.13	0.832968	56518	0	24541	1	0
2015	Citibank, N.A.	170726	0.13	0.765029	62022	0	27683	1	0
2016	Citibank, N.A.	171347	0.15	0.704657	65170	1	28241.78	0	1
2017	Citibank, N.A.	198578	0.13	0.787401	64369	1	38080	0	1
2018	Citibank, N.A.	204895.2	0.14	0.790698	63568	1	27000	0	1
2014	Commercial Bank of Africa	103324	0.18	0.689271	121963	0	92667	1	0
2015	Commercial Bank of Africa	98232	0.19	0.878036	148537	0	110000	1	0
2016	Commercial Bank of Africa	100456	0.16	0.663132	161197	1	110000	0	1
2017	Commercial Bank of Africa	124882	0.13	1.556737	178378	1	110000	0	1
2018	Commercial Bank of Africa	175809	0.1	0.695652	195559	1	120000	0	1
2014	Consolidated Bank of Kenya	198484	0.1	0.87146	11125	0	9971.305	1	0
2015	Consolidated Bank of Kenya	210877.9	0.11	0.70839	9996	0	10766	1	0
2016	Consolidated Bank of Kenya	229525	0.11	0.91026	9535	1	10000	0	1
2017	Consolidated Bank of Kenya	18001	0.29	11.21418	13120	1	10000	0	1
2018	Consolidated Bank of Kenya	16779	0.23	0.846154	16705	1	9900	0	1
2014	Coop bank	15077	0.2	0.907396	219416	0	179500	1	0
2015	Coop bank	14136	0.22	0.98854	263709	0	208600	1	0
2016	Coop bank	13918	0.27	0.913191	256796	1	236900	0	1
2017	Coop bank	13456	0.17	0.030525	285566	1	253900	0	1
2018	Coop bank	199663	0.15	0.902439	314336	1	245400	0	1
2014	Credit Bank Ltd	228874	0.14	0.697688	7323	0	5887	1	0

2015	Credit Bank Ltd	282689	0.13	0.871391	7267	0	7388	1	0
2016	Credit Bank Ltd	339550	0.13	0.885183	8972	1	8360.64	0	1
2017	Credit Bank Ltd	349997.8	0.15	1.153059	7463	1	10171	0	1
2018	Credit Bank Ltd	382830	0.15	1.055556	5954	1	13000	0	1
2014	Development Bank of Kenya	14465	0.18	0.399906	10800	0	9332	1	0
2015	Development Bank of Kenya	13417	0.1	0.436404	9665	0	9094	1	0
2016	Development Bank of Kenya	15581	0.16	0.490133	6635	1	10082.53	0	1
2017	Development Bank of Kenya	16954	0.1	0.493873	6429	1	10710	0	1
2018	Development Bank of Kenya	16943	0.1	0.593333	6223	1	10000	0	1
2014	Diamond Trust Bank Kenya	16418	0.11	0.936944	102060	0	95258	1	0
2015	Diamond Trust Bank Kenya	16320	0.12	0.897003	126229	0	128266	1	0
2016	Diamond Trust Bank Kenya	94512	0.13	0.750533	170421	1	141702.3	0	1
2017	Diamond Trust Bank Kenya	114136	0.14	0.755471	15141	1	156843	0	1
2018	Diamond Trust Bank Kenya	141176	0.16	0.75	23097	1	150000	0	1
2014	Dubai Bank Limited	190948	0.13	0.36627	1751	0	19859	1	0
2015	Dubai Bank Limited	244124	0.12	0.492933	2024	0	20574	1	0
2016	Dubai Bank Limited	270082	0.13	0.513621	2297	1	13965	0	1
2017	Dubai Bank Limited	2584	0.61	0.180294	2570	1	11565	0	1
2018	Dubai Bank Limited	3546.987	0.29	0.127212	2843	1	22044	0	1
2014	Ecobank Kenya Ltd	4509.974	0.29	0.717704	32363	0	21932.83	1	0
2015	Ecobank Kenya Ltd	3065.494	0.42	0.756957	34479	0	24116	1	0
2016	Ecobank Kenya Ltd	3787.734	0.62	0.830129	32239	1	30902	0	1
2017	Ecobank Kenya Ltd	3787.734	0.35	0.701418	43686	1	27392.64	0	1
2018	Ecobank Kenya Ltd	31771	0.14	0.648148	55133	1	21456	0	1
2014	Equitorial Commercial Bank	36907	0.14	0.8112	14331	0	11555	1	0
2015	Equitorial Commercial Bank	45934	0.11	0.805045	10378	0	10400	1	0
2016	Equitorial Commercial Bank	52427	0.17	0.843791	5425	1	8319.31	0	1
2017	Equitorial Commercial Bank	47124	0.15	0.85549	6472	1	6867	0	1

2018	Equitorial Commercial Bank	53456	0.11	0.771739	8481	1	6100	0	1
2014	Family Bank	14743	0.13	0.842331	47318	0	39681	1	0
2015	Family Bank	215829	0.14	0.906589	62731	0	57975	1	0
2016	Family Bank	238194	0.15	1.001469	41473	1	53485.1	0	1
2017	Family Bank	277116	0.15	0.958813	47425	1	46928	0	1
2018	Family Bank	341329	0.14	0.970149	53377	1	47000	0	1
2014	Fidelity Commercial Bank	81190	0.14	0.06063	14216	0	9990	1	0
2015	Fidelity Commercial Bank	69432	0.17	0.131158	10403	0	11532	1	0
2016	Fidelity Commercial Bank	69051	0.16	0.201969	6590	1	11925.98	0	1
2017	Fidelity Commercial Bank	11772	0.18	0.111216	8094	1	10995	0	1
2018	Fidelity Commercial Bank	12779	0.18	0.063168	9598	1	11000	0	1
2014	Fina Bank Limited	20875	0.18	0.169729	2648	0	9360	1	0
2015	Fina Bank Limited	19302	0.17	0.210543	3090	0	9244	1	0
2016	Fina Bank Limited	195493	0.11	0.054488	3926	1	9117	0	1
2017	Fina Bank Limited	220524	0.12	0.096593	3598	1	9865	0	1
2018	Fina Bank Limited	222636	0.13	0.083499	4674	1	7031	0	1
2014	First community Bank	16515	0.15	0.812475	13339	0	14177	1	0
2015	First community Bank	15025	0.16	0.906658	12350	0	14922	1	0
2016	First community Bank	15025	0.16	0.940449	12660	1	14367	0	1
2017	First community Bank	14836	0.11	0.758813	6816	1	19377	0	1
2018	First community Bank	9959	0.1	0.666667	8934	1	17393	0	1
2014	GTB	12280	0.14	0.56832	23030	0	12851	1	0
2015	GTB	13623	0.15	0.634813	15490	0	12826	1	0
2016	GTB	15082	0.15	0.695466	17051	1	13418.47	0	1
2017	GTB	15810	0.17	0.721116	19469	1	13746	0	1
2018	GTB	16254	0.18	0.76	21076	1	13000	0	1
2014	Giro Commercial Bank	11305	0.1	0.489739	12455	0	7135.097	1	0
2015	Giro Commercial Bank	15278	0.13	0.529399	12802	0	8095.78	1	0

2016	Giro Commercial Bank	14613	0.1	0.675375	14149	1	7786	0	1
2017	Giro Commercial Bank	14962	0.13	0.745161	13496	1	9389	0	1
2018	Giro Commercial Bank	17360	0.11	0.733604	15843	1	9716.813	0	1
2014	Guardian Bank	15715.33	0.25	0.727472	12643	0	10295	1	0
2015	Guardian Bank	14198.75	0.85	0.770484	12495	0	9926	1	0
2016	Guardian Bank	25638	0.16	0.76763	12313	1	9604.09	0	1
2017	Guardian Bank	32992	0.14	0.743277	1181	1	10303	0	1
2018	Guardian Bank	29374	0.17	0.705284	5867	1	10321.36	0	1
2014	Gulf African Bank	29619	0.18	1.178749	15335	0	14068	1	0
2015	Gulf African Bank	27628	0.19	0.995104	19024	0	15864	1	0
2016	Gulf African Bank	11745	0.1	0.839152	21213	1	16685.77	0	1
2017	Gulf African Bank	12835	0.12	0.953091	26074	1	20144	0	1
2018	Gulf African Bank	14571	0.12	1	29935	1	24000	0	1
2014	Habib AG Zurich	14609	0.14	0.496913	8929	0	3443	1	0
2015	Habib AG Zurich	14705	0.15	0.663227	9996	0	5329	1	0
2016	Habib AG Zurich	15803	0.17	0.538895	11753	1	5361.37	0	1
2017	Habib AG Zurich	13562	0.11	0.561524	8646	1	5680	0	1
2018	Habib AG Zurich	16054	0.17	0.545455	90567	1	6500	0	1
2014	Habib Bank Limited	19754	0.15	0.456801	6399	0	4075.372	1	0
2015	Habib Bank Limited	24714	0.16	0.554221	10116	0	4800.537	1	0
2016	Habib Bank Limited	27156	0.16	0.626945	13833	1	4707	0	1
2017	Habib Bank Limited	31316	0.17	0.564614	12550	1	4271	0	1
2018	Habib Bank Limited	9702	0.15	0.432683	10267	1	4300	0	1
2014	Housing finance	11009	0.16	8.83182	36310	0	46260	1	0
2015	Housing finance	12147	0.18	0.768116	41888	0	55000	1	0
2016	Housing finance	14440	0.17	0.795491	38772	1	56785.56	0	1
2017	Housing finance	17033	0.17	0.862363	36898	1	52630	0	1
2018	Housing finance	18708	0.15	0.859649	39024	1	49000	0	1

2014	I & M Bank	7014	0.19	0.7636	87185	0	91163	1	0
2015	I & M Bank	8078	0.2	0.934614	103741	0	104302	1	0
2016	I & M Bank	9449	0.2	0.904324	118553	1	104302.2	0	1
2017	I & M Bank	10230	0.18	0.942931	132801	1	126983	0	1
2018	I & M Bank	12508	0.17	0.869565	147049	1	140000	0	1
2014	Jamii Bora Bank	14786	0.15	0.798859	8497	0	4165.853	1	0
2015	Jamii Bora Bank	40686	0.1	0.732451	10946	0	6464	1	0
2016	Jamii Bora Bank	46755	0.13	0.843225	7924	1	10767	0	1
2017	Jamii Bora Bank	60491	0.14	0.883236	6249	1	10497.28	0	1
2018	Jamii Bora Bank	68809	0.12	0.945919	7574	1	9929	0	1
2014	Middle East Bank of Kenya	147846	0.16	0.613273	4632	0	3719	1	0
2015	Middle East Bank of Kenya	159255.7	0.16	0.668017	4099	0	4009	1	0
2016	Middle East Bank of Kenya	183953	0.16	0.716278	3894	1	4014.75	0	1
2017	Middle East Bank of Kenya	3480	0.38	0.241554	10940	1	3242	0	1
2018	Middle East Bank of Kenya	7010	0.2	0.462963	13986	1	3100	0	1
2014	NIC	323312	0.16	0.955926	91997	0	97984	1	0
2015	NIC	376969	0.15	0.945739	105194	0	111286	1	0
2016	NIC	467741	0.12	0.910854	103402	1	112509	0	1
2017	NIC	504777.7	0.14	0.859089	130561	1	118459	0	1
2018	NIC	555630	0.13	0.85	147720	1	120000	0	1
2014	National Bank(NBK)	13118	0.17	0.654645	104458	0	68093	1	0
2015	National Bank(NBK)	16782	0.13	0.60071	110622	0	72842	1	0
2016	National Bank(NBK)	15724	0.17	0.767283	97851	1	68615.72	0	1
2017	National Bank(NBK)	12851	0.18	0.800404	94544	1	68153	0	1
2018	National Bank(NBK)	304112	0.14	0.775	87237	1	66000	0	1
2014	Oriental Comm. Bank	5870	0.18	0.720158	6231	0	5078	1	0
2015	Oriental Comm. Bank	5766	0.2	0.72646	6218	0	5582	1	0
2016	Oriental Comm. Bank	5937	0.2	0.726512	6937	1	7108.71	0	1

2017	Oriental Comm. Bank	5678	0.22	0.256878	7729	1	7741	0	1
2018	Oriental Comm. Bank	5234	0.22	0.790909	8521	1	8000	0	1
2014	Paramount-Universal Bank	5121	0.22	0.519515	8035	0	5389	1	0
2015	Paramount-Universal Bank	67155	0.14	0.603173	8067	0	6485	1	0
2016	Paramount-Universal Bank	92493	0.11	0.634242	7708	1	6242.85	0	1
2017	Paramount-Universal Bank	122865	0.12	0.62614	7874	1	6345	0	1
2018	Paramount-Universal Bank	125295	0.11	0.555556	8040	1	6200	0	1
2014	Prime Bank Limited	125295	0.1	0.73018	45022	0	35060	1	0
2015	Prime Bank Limited	109942	0.13	0.743342	50819	0	41617	1	0
2016	Prime Bank Limited	101772	0.15	0.743457	49165	1	40170.01	0	1
2017	Prime Bank Limited	121062.7	0.15	0.686543	57555	1	39763	0	1
2018	Prime Bank Limited	145780.5	0.16	0.545455	65945	1	38000	0	1
2014	Sidian Bank	156762	0.14	0.75	12066	0	11000	1	0
2015	Sidian Bank	161847	0.16	0.802847	13380	0	13317	1	0
2016	Sidian Bank	192817	0.14	0.786587	13684	1	14487.83	0	1
2017	Sidian Bank	6220	0.18	1.055694	2080	1	12330	0	1
2018	Sidian Bank	7007	0.19	1.08	7095	1	14000	0	1
2014	Standard Chartered Bank Ltd	7858	0.18	0.822441	161904	0	128768	1	0
2015	Standard Chartered Bank Ltd	8496	0.24	0.810431	172036	0	122905	1	0
2016	Standard Chartered Bank Ltd	9920	0.27	0.804402	191082	1	132497.4	0	1
2017	Standard Chartered Bank Ltd	10577	0.26	0.800042	213349	1	139406	0	1
2018	Standard Chartered Bank Ltd	7255	0.15	0.75	235616	1	130000	0	1
2014	Transnational Bank Limited	8029	0.15	0.861719	7659	0	6609	1	0
2015	Transnational Bank Limited	10402	0.13	0.899364	7593	0	7339	1	0
2016	Transnational Bank Limited	10526	0.14	0.953082	7922	1	7026.35	0	1
2017	Transnational Bank Limited	9427	0.16	0.647207	12468	1	7365	0	1
2018	Transnational Bank Limited	9541	0.16	0.91	13014	1	7600	0	1
2014	UBA BANK	43463	0.13	0.408537	3136	0	785	1	0

2015	UBA BANK	49461	0.1	0.60455	4137	0	2790	1	0
2016	UBA BANK	54918	0.12	0.989288	1731	1	3126.7	0	1
2017	UBA BANK	65001	0.13	0.857033	3908	1	3309	0	1
2018	UBA BANK	65338	0.15	0.44	4085	1	3500	0	1
2014	Victoria Comm. Bank Ltd	76438	0.15	0.833681	12289	0	10979	1	0
2015	Victoria Comm. Bank Ltd	9546	0.15	0.899301	14024	0	13124	1	0
2016	Victoria Comm. Bank Ltd	13199	0.14	0.874838	15696	1	15292.83	0	1
2017	Victoria Comm. Bank Ltd	15799	0.15	0.933808	18677	1	18887	0	1
2018	Victoria Comm. Bank Ltd	19107	0.2	0.90625	21658	1	23000	0	1
2014	equity	14109	0.11	0.968973	202560	0	192973	1	0
2015	equity	15562	0.14	0.953579	236610	0	229394	1	0
2016	equity	16589	0.12	0.937693	277135	1	221038.8	0	1
2017	equity	14470	0.11	0.920785	298703	1	221698	0	1
2018	equity	12351	0.13	0.909091	320271	1	240000	0	1
2014	kcb	68085	0.13	0.898952	276750	0	257399	1	0
2015	kcb	62127	0.13	0.849808	347702	0	324284	1	0
2016	kcb	91520	0.13	0.853522	386391	1	373031.3	0	1
2017	kcb	110316	0.13	0.871058	440164	1	411666	0	1
2018	kcb	137299	0.14	0.870968	493937	1	430000	0	1