

EFFECT OF INTEREST CAPPING ON FINANCIAL PERFORMANCE IN COMMERCIAL BANKS IN KERICHO COUNTY, KENYA

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Abstract: The general objective of this study was to establish the effects of interest capping on financial performance of commercial banks in Kericho County, Kenya. The specific objectives of the study were to determine the influence of short loan interest capping on financial performance of commercial banks in Kericho County, to investigate the effect of mortgage interest capping on financial performance of commercial banks in Kericho County, to determine the influence of deposit interest rate capping on financial performance of commercial banks in Kericho County and to establish the effect of fixed deposit interest capping on financial performance of commercial banks in Kericho County. The theoretical framework of the study consisted of interest rate parity theory, lien theory of mortgages, liquidity preference theory and loanable funds theory. This research adopted a quantitative cross-sectional survey research design aimed at collecting large number of qualitative and quantitative data at a point in time to address the formulated hypotheses. Stratified sampling technique was used to select sample size of 70 respondents from the target population of 86 respondents in commercial banks in Mombasa County, Kenya. Primary data was collected by use of self-administered structured questionnaires which was distributed through the drop and pick method. The secondary data collected was used to cross validate the primary data results. The collected data was analyzed quantitatively and qualitatively. Descriptive and inferential statistics was done using Statistical Package for Social Sciences (SPSS) version 24 and specifically multiple regression model was used for hypotheses testing. Set of data was described using percentage, mean standard deviation and coefficient of variation and presented using tables, charts and graphs. The study revealed that interest capping had a statistically significant effect on financial performance of commercial banks in Kericho County. Short Loan Interest Capping had a statistically significant effect on financial performance of commercial banks in Kericho County. Mortgage Interest Capping had a statistically significant effect on financial performance of commercial banks in Kericho County. Deposit interest rate capping had a statistically significant effect financial performance of commercial banks in Kericho County. Fixed deposit interest capping had a statistically significant effect on financial performance of commercial banks in Kericho County. The study recommended that the regulator should be cautious on setting capping rates as it affects financial performance of banks.

Keywords: interest capping, financial performance, commercial banks.

1. INTRODUCTION

Castellanos (2012) maintained that the role of the financial institutions is to use the savers short-term deposits and create credit to loan to long-term borrowers in what is referred to as the maturity intermediation. In any economy, banks act as an intermediary through which people deposit funds and get loans. For any bank to attain or achieve the desired or projected financial performance in line with the strategic objectives there is need to promote transparency and

accountability in all the operations of the organizations. Chai (2011) made a significant suggestion that in today's dynamic and global competitive environment, advancement is primarily due to three major trends: concentrated international competition, disjointed and challenging markets, and assorted and swiftly changing technologies. Banks essentially make money from the difference between the rate which they pay depositors and the rate which they charge borrowers. These rates are determined by market forces, that is, demand and supply, but also several other factors come into play. Iff and ZEW (2010) pointed that placing a cap on interest rates will have an effect on the industry's efficiency as it doesn't account for several factors that might affect the banks' decision to opt for certain spreads. Interest rate cap is the maximum interest rate that a financial institution can charge a borrower for an adjustable rate mortgage or loan according to the contractual terms of the mortgage or loan (Maimbo & Gallegos, 2014).

Iff and ZEW (2010) opined that interest rate caps are most likely to bite at the lower end of the market is intuitive; interest rates charged by microfinance institutions are generally higher than those charged by banks and this is driven by a higher cost of funds and higher relative overheads. Transaction costs make larger loans relatively more cost effective for the financial institution. If it costs a commercial bank \$100 to make a credit decision on a \$10,000 loan then it will factor this 1% into the price of the loan (Maimbo & Gallegos, 2014). The cost of loan assessment does not fall in proportion with the loan size and so if a loan of \$1,000 still costs \$30 to assess, the cost which must be factored in rises to 3%. This cost pushes the higher rates of lending on smaller loans. The higher prices are usually paid because the marginal product of capital is higher for people with little or no access to it. Ingram (2011) states that interest rates are important because they control the flow of money in the economy. High interest rates curb inflation but also slow down the economy. Low interest rates stimulate the economy, but could lead to inflation. When interest rates are high, people do not want to take loans out from the bank because it is more difficult to pay the loans back, and the number of purchase of real assets goes down. The effects of a lower interest rate on the economy are very beneficial for the consumer. When interest rates are low, people are more likely to take loans out of the bank in order to pay for things like houses and cars. Policies to promote competition among credit providers, combined with relevant consumer protection measures like truth-in-lending laws, can go a long way toward expanding the reach of sustainable microcredit while safeguarding consumer interests (Maimbo & Gallegos, 2014).

Interest rate capping affects financial performance direct and indirect, when interest rate is high borrowers are discourage to borrow. Were and Wambua (2013) noted interest rate earned by banks drops, this have direct impact on bank profitability. Low interest rate period has opposite impact many people will borrow and if spread remains the same banks will benefit from increased interest earning. Interest has indirect impact on financial performance through impacting economy, high interest rate to borrowers discourages borrowing this result to shrink investment through multiplier effects savings are reduced and this will have negative impact on banks performance argued by Ngugi (2004). The opposite is true during period of low interest rate. In the financial crisis of 2007/08, however, the level and volatility of interest rate spreads increased dramatically, raising the issue of how alternative monetary policy procedures impact on the economy (Osuagwu & Nwokoma, 2017).

1.1 Statement of the Problem:

A belief in the effectiveness of interest rate caps endures especially by the Kenya Bankers Association emphasizing that interest rate capping does not only address market failure but also introduces market failure due to the expectations that commercial banks will prefer lending to the government than households and businesses leading to credit rationing and distortions thus suggesting that not only are the interest caps ineffective, they harm their intended beneficiaries, despite the IMF (2016) stressing that interest rate capping by Central Bank of Kenya is likely to strengthen monetary policy framework (Miller & Black, 2016; Umuro, 2017). Nonetheless, the Loanable Funds theory holds that an inverse relationship exists between the loanable funds and interest rate (Umuro, 2017; Osuagwu & Nwokoma, 2017). Consequently, setting interest rate caps on loans has long been a focus of religious leaders and a wide variety of governments and their agents (Umuro, 2017; Osuagwu & Nwokoma, 2017). There are increasing scholarly debates on the direction of policy to effectively improve the performance of banks (Adeleye, Osabuohien, Bowale, Matthew, & Oduntan, 2018; Osuagwu, 2014). Osuagwu & Nwokoma (2017) found that interest rate deregulation stimulates financial deepening encouraging savings and increasing financial assets in the long run, but such may not be the case in the short-run, while Orji, Aguegboh, & Anthony-Orji, (2015) found that financial liberalization (proxied by domestic credit) promotes real sector activities (Adeleye *et al.*, 2018).

The interest rate caps generally target loan sharks and predatory lending practices and have increased in popularity since the onset of the financial crisis and the growth of payday loan companies (Castellanos, 2012; Osuagwu & Nwokoma, 2017). However, Since Kenya's interest capping bill became a law in August 2016, interest rates dropped to a maximum of 14.5 per cent, banks paid depositors 7.35 per cent on their money, forcing upon them the narrowest spreads since Kenya liberalized its financial markets in 1990s. Prior to the capping law, the amount earned from interest rate products was KSh 273.11 billion for the banking sector accounting for 60 per cent of the total KSh 448.03 billion income made by the bankers during the year 2015 (CBK, 2016). The Markit Stanbic Bank Kenya Purchasing Managers' Index (PMI) dropped to 49.9 in May 2017 from 50.3 the previous month, falling below the 50.0 level which separates growth and contraction. The ratio was at 5.8% in early 2015 before rising to 9.5% in August 2016 a month to the rate capping. Post capping, it has been on a general decline hitting a low of 8.9% in January 2017 before rising to 9.6% in February 2017 (CBK, 2016). A consumer survey dated 22nd March 2017 commissioned by KBA recommended repeal of the law due to lack of growth of credit coupled with a stagnated growth of credit to private sector at single digit levels of circa 4% over the first 6 months (Kangethe, 2017).

Alshebami and Khandare (2015) carried a study on the impact of interest rate ceilings on microfinance industry, while Heng (2015) conducted a study on the impact of the new financial services law in Bolivia on financial stability and inclusion. Miller (2013) investigated the relationship between interest rate caps and their impact on financial inclusion. Iff and ZEW (2010) studied the interest rate restrictions in the EU. Locally, Owidhi (2016) wrote a paper on capping interest rates as the best economic sacrifice for Kenya, Moguche (2013) assessed the determinants of interest rate exposure of commercial banks in Kenya, while Ngetich and Wanjau (2011) investigated the effects of interest rate spread on the level of non-performing assets of commercial banks in Kenya. The foregoing studies generally focused on different contexts and different aspects of interest rates hence a contextual and conceptual gap on the effects of interest rate capping on the financial performance of banks in Kenya. This study sought to establish the influence of interest capping on financial performance in commercial banks in Kericho County, Kenya.

1.2 Research Objectives:

This study was guided by one general and four specific objectives.

1.2.1 General Objective:

The general objective of the study was to assess the effect of interest rate capping on financial performance in commercial banks in Kericho County, Kenya.

1.2.2 Specific Objectives:

- 1) To find out the effect of short loan interest capping on financial performance of commercial banks in Kericho County, Kenya.
- 2) To examine the effect of mortgage interest capping on financial performance of commercial banks in Kericho County, Kenya.
- 3) To determine the effect of deposit interest rate capping on financial performance of commercial banks in Kericho County, Kenya.
- 4) To find out the effect of fixed deposit interest capping on financial performance of commercial banks in Kericho County, Kenya.

1.3 Research Hypotheses:

- 1) H_01 : Short loan interest capping has no significant effect on financial performance of commercial banks in Kericho County, Kenya.
- 2) H_02 : Mortgage interest capping has no significant effect on financial performance of commercial banks in Kericho County, Kenya.
- 3) H_03 : Deposit interest Rate capping has no significant effect on financial performance of commercial banks in Kericho County, Kenya.
- 4) H_04 : Fixed Deposit interest capping has no significant effect on financial performance of commercial banks in Kericho County, Kenya.

2. LITERATURE REVIEW

2.1 Theoretical Framework:

This quantitative cross-sectional descriptive correlational on the effect of interest rate capping on financial performance in commercial banks in Kericho County, Kenya was grounded in the interest rate parity theory and the lien theory of mortgages.

2.1.1 Interest Rate Parity Theory:

The interest rate parity theory posits that the market determines exchange rates in such a way that high interest rates are compensated for by an expectation of currency depreciation, and vice versa. According to Cashin, Liang and McDermott (2000), the basis for this parity is also the law of one price, in that the purchase of one investment asset in one country should yield the same return as the exact same asset in another country otherwise exchange rates would have to adjust to make UP for the difference. With the adjustment of the exchange rates the forex bureaus would either make a profit or loss and this would affect the growth as it affects their profitability and sale volumes. In this case, there would be no opportunity to profit from interest differentials, and hence no incentive to borrow in a low-interest currency in order to invest the proceeds in a high-interest currency. In practice, high-interest currencies often experience prolonged periods of sharp appreciation spurred by capital inflows. Lured by interest differentials, short-term private capital flows can be highly destabilizing.

The interest rate parity theory is significant in this study since it helps to explain the reason why business organizations may not achieve high financial performance because of servicing loans that were acquired at high interest rates. Organizations may also not have much incentive to borrow at high interest rates and this is likely to affect the magnitude of projects undertaken and the financial performance attained. By manipulating interest rates, central banks exert influence over both inflation and exchange rates, and changing interest rates impact inflation and currency values. Higher interest rates offer lenders in an economy a higher return relative to other countries. The impact of higher interest rates is mitigated, however, if inflation in the country is much higher than in others, or if additional factors serve to drive the currency down. The opposite relationship exists for decreasing interest rates, that is, lower interest rates tend to decrease exchange rates (Bergen, 2010). It implies that there is no relationship between past price changes and future price changes. This means that price changes are independent and random. The share prices therefore fully reflect all publicly available information including historical information and hence investors who depend on such information cannot earn above average profits from their transactions.

2.1.2 Lien Theory of Mortgages:

Hester (1975) developed the lien theory. In the lien theory, the mortgagor retains legal and equitable title to the property, but conveys an interest that the mortgagee can only foreclose upon to satisfy the obligation of the mortgagor. This is equivalent to a future interest in the property which allows the mortgagee to use the process of foreclosure. The interest is a security interest or mortgage, which forms a lien on the property (Makori & Memba, 2015). The theory allows title to remain with the mortgagor and the mortgage that is placed on the property is a charge on the title. The mortgage instrument says nothing about title but under the lien theory of mortgages the debt is the principal obligation and the mortgage collateral agreement to secure the debt (Nwankwo, 2014).

The lien theory states that the mortgagee has only a lien on the property and is entitled to possession and rents only upon foreclosure (Jennings, 2013). The lien theory of mortgages presupposes that foreclosures generally require a civil action against the borrower-owner who is in default (Brueggeman & Fisher, 2011). Lien theory provides that a mortgagee of property holds only a lien, not title, to the property until such time as the mortgage is fully paid, at which time the lien is removed. Under this system, when a loan is made, title is invested in an independent third party (trustee). The trustee receives a deed of trust containing instructions to be followed if the lender provides notice to the trustee that a mortgagor is in default. In this event, the trustee usually notifies the borrower that the deficiency must be cured by a certain date or the trustee will proceed to auction the property (Brueggeman & Fisher, 2011).

In a lien theory bank, the mortgagor retains legal and equitable title to the property, but conveys an interest that the mortgagee can only foreclose upon to satisfy the obligation of the mortgagor (Akenga, Olang & Galo, 2015). The lien theory requires the mortgagee to wait for the foreclosure of the mortgaged property and allows the mortgagee to obtain

satisfaction for the mortgagor’s debt from the proceeds of the foreclosure (Morgan, 2015). The rationale behind the title theory is that up until default and subsequent foreclosure, the mortgagor maintains full control and possession of the property. The practical application is that a mortgagor can otherwise deal with the property as his own estate, conditioned on the mortgage. This theory is essential in studying the influence of mortgage interest capping on n financial performance of commercial banks.

2.2 Conceptual Framework:

Bryman and Bell (2015) defined conceptual framework as a diagrammatical representation that shows the relationship between dependent variable and independent variables. A conceptual framework shows the relationship between independent and dependent variable. The independent variables for the study are Loans interest capping, Mortgage interest capping, saving interest capping and fixed deposit interest capping rate. The dependent variable is financial performance of commercial banks in Kenya.

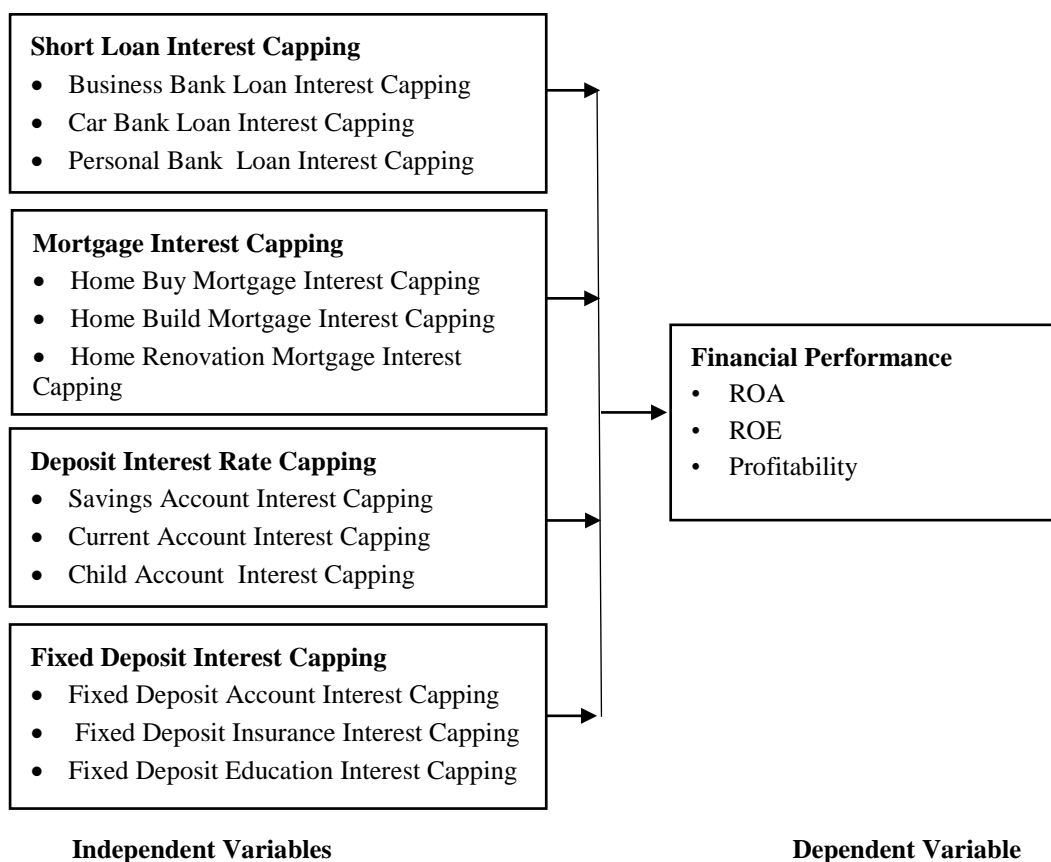


Figure 2.1: Conceptual Framework

2.3 Review of literature on variables:

2.3.1 Short Loan Interest Rate Capping:

Short-term loans were invented to fill that gap, to provide the small financial aid which was troublesome to obtain. Määttä (2010) argued where the short-term loan is quickly achievable, unsecured, less than three months, minor consumer credit, and which is attainable via internet or text message. The amount of short-term loan is typically from around 20 euros to couple hundred euros, and the price is based on fixed costs rather than variable interest rate. Obtaining the credit through computer or mobile devices is easy and fast, and the loans are not bound on buying commodities. Depending on the amount of loan and payback time, the annual percentage rate varies from around 200 to over 1000 percent (Valkama, Mutttilainen, 2008). In terms of annual percentage rate, short-term loans are very expensive compared to conventional consumer credit. Pönkä and Parkkali (2010) have made comprehensive research on legal problems of short-term credit, whereas Länsineva (2010) has viewed the regulation of instant loan lenders in relation to the basic rights of an individual.

Tapani (2010) has reflected the amendment of criminal law to the operations of instant lenders. Määttä (2010) has made a review of the regulation of instant loans from a legal perspective. Juurikkala (2012) has presented divergent opinion about the functionality of the interest rate cap and proposed different solution to the problem. DeYoung and Phillips (2013) studied the interest rate restrictions related to short term consumer credit and indicated that short-term financial need is usually fulfilled by using credit card or installments, since getting a small loan from a bank might be time consuming and not available for everyone.

Nodeng, Rosenboom, and Wang (2013) argues that basic interest rate caps are most likely to bite at the lower end of the market is intuitive; interest rates charged by microfinance institutions are generally higher than those charged by banks and this is driven by a higher cost of funds and higher relative overheads. Transaction costs make larger loans relatively more cost effective for the financial institution. If it costs a commercial bank \$100 to make a credit decision on a \$10,000 loan then it will factor this 1% into the price of the loan (the interest rate). The cost of loan assessment does not fall in proportion with the loan size and so if a loan of \$1,000 still costs \$30 to assess, the cost, which must be factored in, rises to 3%. This cost pushes the higher rates of lending on smaller loans. The higher prices are usually paid because the marginal product of capital is higher for people with little or no access to it. Gandhi & Lustig (2015) reviewed the return on bank stocks in the USA based on size and determine that the adjusted risk returns on the stock of large banks are low compared to those of medium and small sized commercial banks. This confirms that the high adjusted risk for small and medium-sized banks is related to the willingness of the government to protect large banks. Since banks are less profitable when less liquid, bank managers should be encouraged to invest in more liquid assets. This will not only improve bank profitability but it will also enable banks meet their short term obligations as they fall due. It is possible that liquid bank assets are more profitable due of some market inefficiency.

2.3.2 Mortgage Interest Rate Capping:

The high risk premiums associated with mortgages cause their interest rates to be expensive to lenders. Njongoro (2013) stated that mortgage interest rates reflect the general lending rate of financial institutions as any other loan. Positive Interest rates (lending in excess of inflation rates) are viewed as prerequisite for successful and sustainable finance (Buckley, 2011). Long term loans, such as mortgage financing loans have higher interest rates as a result of expectation of higher inflation among other factors (Gitman, 2012). The market rate of interest on mortgage loans is established by what borrowers are willing to pay for the use of funds over a specified period of time and what lenders are willing to accept in the way of compensation for the use of such funds. Real estate tends to be highly levered and thus the rate of return earned by equity investors tends to be affected by changes in interest rate. Even where the investor has a fixed rate of mortgage, an increase in interest rate may lower the price a subsequent buyer is willing to pay.

Furthermore, the yield rate (required rate of return) that an investor requires for real estate tends to increase with the overall levels of interest rates in the economy (Maranga & Nyakundi, 2017). Many studies of the financial impact of the mortgage interest deduction in other nations have been more mixed. Jappelli and Pistaferri (2007) study an Italian reform that changed the deduction from one linked to marginal rates to a flat deduction across all brackets. They find no effect on mortgage debt on either the extensive or intensive margins. Kleven & Schultz (2014) and Alan (2016) study the change in Danish tax policy. Kleven & Schultz (2014) estimate an elasticity of negative capital income that vary between -0.10 and -0.13, while Alan (2016) find an elasticity of interest expenses of -0.07 with respect to the tax subsidy. De-Fusco and Paciorek (2014) investigated the relationship between the mortgage interest rate and a household's demand for mortgage debt. The study used detailed data of over 2.7 million mortgages to provide novel estimates of the interest rate elasticity of mortgage demand. The study also exploited a discrete jump in interest rates generated by the conforming loan limit - the maximum loan size eligible for securitization. The study found that a reduction in total mortgage debt of between 1.5 and 2 percent per percentage point increase in the interest rate.

With the introduction of interest rate capping, large banks may have a comparative advantage in using transaction technologies such as credit scoring and asset-based lending (Berger & Udell, 2016). Larger banks are thus in a better position to offer mortgage financing and as banks grow in size, mortgage financing grows. The size of a bank may also influence its customer profile. Large banks may have a comparative advantage in lending to large customers as they can exploit scale economies in evaluating the hard information that is available on such customers. Small banks, however, may not be able to lend largely especially for risky ventures like mortgages because of size limitations. They are, for

instance, more constrained by regulatory lending limits (De la Torre, Martinez & Schmukler, 2008). Bhayani (2010) observed that the size of a financial institution will determine the amount invested in loans and mortgage financing level and overall profitability and growth of the firm. In this study, the size of the firm was measured by the amount of total assets.

Excessive high interest rates in Kenya Finance sector have strongly discouraged long-term investment and constrained Kenya's ability to grow. With nominal interest rates ranging from 20-30% the private sector is unable to borrow to finance long term investments in the mortgage sector (Njoroge, 2013). In addition, the 11-18% point spread between lending and deposit rate is much higher than the 5 point spread common in other developing countries (Economic Report on Africa 2002). Inflation stabilization can be implemented through a Taylor rule in which interest rates are adjusted in response to output and inflation. In using interest rates, the Central Bank sets a target inflation rate then interest rates are steered to move inflation to its intended levels. Interest rates therefore are increased when the inflation rate is above the target rate, and reduced when inflation is below the target rate. The Central Bank of Kenya (CBK) Monetary Policy Committee (MPC) is responsible for the regulation of interest rates in Kenya (CBK Mortgage Finance Survey, 2016).

2.3.3 Deposit Interest Rate Capping:

Low interest rates on savings has been known to drive output production in many developed economies, as it creates enabling environment for private business expansion through the provision of easy access to capital for further production purposes. According to Mangeli (2012), interest on deposit usually finances investments in somewhere to live as well as purchases of other long-lasting goods through raising funds within credit market. These money transactions are too characterized through asymmetric information evils flanked by the borrowers (home) along with the lenders (banks). Consequently, households' capacity with/or conditions beneath which they are able to get hold of funds, for this reason their expenditure, are also prejudiced via their net worth. Since pragmatic in a large amount of households' borrowings are protected by real estate investment, the prose has been listening carefully above all on the effect of rate changes in residence investing values. Lisbon (2015) indicated that in December 2013 the United States all share index continued to soar amidst the Fed report to maintain interest rates at an all time low following the withdrawal of the stimulus finally signaling an end to the US financial crises. A study by Anthony (2012) investigated the determinants of bank savings in Nigeria as well as examined the impact of bank savings and bank credits on Nigeria's economic growth from 1970-2006. The study adopted two impact models; Distributed Lag-Error Correction Model (DL-ECM) and Distributed Model. The empirical results showed a positive influence of values of GDP per capita (PCY), Financial Deepening (FSD), Interest Rate Spread (IRS) and negative influence of Real Interest Rate (RIR) and Inflation Rate (INFR) on the size of private domestic savings. Also a positive relationship exists between the lagged values of total private savings, private sector credit, public sector credit, interest rate spread, exchange rates and economic growth.

Bhattacharya (2011) indicated that in China, banks look to put emphasis on deposits than the borrower's capability to settle up the loans in terms of interest rates. In 2006, the Indian governments splintered down on two large micro financial institutions subsequently to suicide of slightest sixty of their consumers who were in stress to repay loans on high interest rates. This rise in deceptive movement, ensuing in some cases to company failure with disastrous effects for shareholders, employees and other stakeholders has brought into sharp focus on the importance of interest rates. Such IR will not only reduce the frequency of loans borrowed within companies, but also facilitate bank management to deal with quickly changing economic investment, shifting customer demands and priorities, and restructuring for future growth. In effect, interest rates are utilized to maintain the company on the course of profitability goals, achievement of its surprises along the way. Aboagye (2008) in a study on the effects of banking rates on deposits and withdrawal in Ghana study found out that the effects of banking rate increase market dynamics.

2.3.4 Fixed Deposit Interest Capping:

Dore, Makken and Eastman (2013) indicated that fixed savings account interest rates have strong consequences on overall average bank deposit and in most cases it is also affected by bank specific lending interest rates since it is customer deposits that are lent to private sector business with the expectations of returns on borrowed capital, making nominal interest rates to have a back-effect on fixed savings interest rates. According to Luis and Alvarez (2010), the influence of interest rate on investment scale is operate as the opportunity cost of investment on total investment, Under the condition of unchanged in investment income, the rising interest rates increase the cost of investment and then inevitably cause

lower income investors to withdraw from the area of investment, so that the demand for investment is reduced. However, falling interest rates means that investment costs decline, thereby stimulating investment and the total social investments increase.

Dore, Makken, and Eastman (2013) in a study of the monetary transmission mechanism, non-residential fixed investment and housing established that the savings and demand deposits are volatile accounts because these accounts are easily introduced into by their owner. Time deposit is a much more predictable account because it has a definite time dimension attached to it. In our analysis it is important to recognize the fact that most savings are voluntary and depends on a wide range of factors particularly the level of income. i.e., the household, firms and government all save and that each of these three sectors uses savings to make investment. Giovanni (2012), argued that small economies are affected by conditions in large countries in that a high interest rate experienced in a large country has the concretionary effect on the annual real GDP growth in the domestic economy. But this effect is centered in countries with fixed exchange rates. The effects on interest rate in fixed deposits are through direct monetary policy channel and the general capital market or trade effect.

Orji-Anthony (2012) concluded that there is positive impact of GDP per capita, Financial Deepening, Interest rate spread on the size of private domestic saving and negative impact of Real interest rate and inflation rate on the size of private domestic saving. They also concluded that there is positive relationship between the lagged value of total private saving, private sector credit, public sector credit, interest rate spread, exchange rates and economic growth. They suggested that government should take step to reduce unemployment rate in Nigeria and try to increase saving in order to enhance economic growth in the country. Siaw and Lawer (2015) did study on determinants of bank deposits in Ghana and concluded that in long run deposit interest rate, inflation has negative impact on bank deposits however growth in money supply has positive impact. But in short run both inflation and growth in money supply has significant negative impact in determining bank's deposits.

2.3.5 Financial Performance:

The banking industry being a service industry means the success of individual financial institution as well as the industry a whole is based is built upon meeting the needs of the customers. For banks to survive in contemporary highly competitive environment they should be able to attract and retain customers. Globalization has greatly influenced modern banking. Regulatory factors such as interest rate capping, structural and technological factors all are significantly changing the banking environment throughout the world leading to intense competitive pressures (Grigoroudis, Politis and Siskos, 2010).. To meet customers' needs banks, need to understand what is valuable to them and how they make their decisions. Sometimes marketing planning of organizations fail due to improperly identifying the factors or determinants that consumers consider in bank selection (Were &Wambua, 2013).

Generally, customer employ a number of process for product/service evaluation which eventually leads to the choice and of a particular product or service provider. Financial services are characterized by high levels of credence and experiential features thus making it difficult to evaluate them before consumption (Owusu, 2013).Thus to minimize the risk and uncertainty related to the purchase of a service customers rely on the tangible cues as evidence of service quality (Morley, 2012). Kotler and Keller (2006) observed that customers are becoming harder to please; they are smarter, more price conscious more demanding less forgiving and are approached by many more with equal or better offers. This is no different from retail customers in pursuit of financial services, most studies have concluded that customers show high preference for commercial banks unlike other banks due to the large branch network and the large size of the bank assets.

3. RESEARCH METHODOLOGY

3.1 Research Design:

A research design is the researcher's overall plan or outline for obtaining answers to the research questions (Donaldson, Qiu, & Luo, 2013). A quantitative cross-sectional descriptive correlational survey design was used to gather data, describe the data, and identify correlations, if any, between the dependent (financial performance) and independent variables (interest rate capping in commercial banks in Kericho County, Kenya). The quantitative cross-sectional descriptive correlational survey design was appropriate for the present study because it allowed the collection of numerical and measurable data to address the research questions and represents a statistical approach that focuses on assessing the variance among naturally occurring variables (Fink, 2013; Cullen & Gordon, 2014; Kising'u, 2017; Tabachnick & Fidell, 2013).

3.2 Target Population:

The target population of the study comprised of the 86 all top and middle level management consisting of the branch managers, credit managers, personal banking managers, business banking managers, debt recovery managers and mortgage managers and corporate banking managers in all the 9 listed commercial banks operating in Kericho County, Kenya as per the CBK (2018) data base. Table 1 presents the target population.

Table 1: Target Population

Strata	Target Population
Branch Managers	9
Credit Managers	12
Personal Banking Managers	15
Business Banking Managers	15
Mortgage Managers	15
Debt Recovery Managers	9
Corporate Banking Managers	11
Total	86

3.3 Sample Size and Sampling Technique:

Sampling is the process of selecting some study units from a defined target population (Tabachnick & Fidell, 2013).

3.3.1 Sample Size:

Sample size determination is the act of choosing the number of observations or replicates to include in a statistical sample (Kising'u, 2017). The sample size is an important feature of any empirical study in which the goal is to make inferences about a population from a sample (Bryman & Bell, 2015). The total sample size for this study will be obtained using the formulae developed by Cooper and Schinder (2013) together with (Kothari, 2014). The sample size is 70. An acceptable sample size is one that is both statistically viable and economically feasible (Tabachnick & Fidell, 2013).

$$n = N / (1 + N (\alpha)^2)$$

Where:

- n = Sample Size
- N = Target Population
- α = Precision Error (0.05%).
- n = $86 / 1 + 86(0.05)^2 = 70$

Table 1 presents the sample size.

Table 2: Sample Size

Respondents	Number of Staff	Calculation	Sample Size
Branch Managers	9	70/86*9	7
Credit Managers	12	70/86*12	11
Personal Banking Managers	15	70/86*15	12
Business Banking Managers	15	70/86*15	12
Mortgage Managers	15	70/86*15	12
Debt Recovery Managers	9	70/86*9	7
Corporate Banking Managers	11	70/86*11	9
Total	86	86/(1+86*0.05²)	70

3.3.2 Sampling Techniques:

Stratified random sampling design was used in the study. Kombo and Tromps (2013) points out that it involves dividing ones' population into homogenous sub groups and then taking a simple random sample in each sub group. The stratified random sampling method was best suited in this research because the population consisted of different staff from different sections of commercial banks in Kericho County –Kenya. This method was appropriate because it was able to represent not only the overall population but also the key sub groups in the populations. The general procedure for taking a stratified sample was to stratify population, defining a number of separate partitions using sample size, and then the research was combined the results to obtain the required stratified sample. The sample was therefore drawn from each stratum from which respondents' were selected.

3.4 Data Collection Methods:

The study used both primary and secondary data sources.

3.4.1 Primary Data:

Primary data was collected through self-administered semi-structured questionnaires which were dropped and picked later. The selection of this tool was guided by the nature of the data to be collected, the time available as well as the objectives of the study. The structured questionnaire was closed- ended questions used to collect data on the independent variables from respondents Each item will have a five-point scale ranging from 1=No extent, 2=Little extent, 3=Moderate, 4=Great extent, and 5=Very great extent. The head of departments who were targeted were informed about the purpose of the study. The questionnaires had been preferred because personal administration of questionnaires to individuals helped to develop close relationships with the respondents. The questionnaire also provided the clarifications sought by respondents on the spot by collecting the questionnaire.

3.4.2 Secondary Data:

Information related to the financials of commercial banks was collected from individual banks websites, CBK supervisory data bank and National daily newspapers (Nation and Standard). These sources are authentic thus reliable, suitable and valid. Statement on financial performance was extracted from the financial statements for the commercial banks for a five-year period (2012 to 2017). Weighted average deposit rates and weighted average lending rates data were established from the Central bank of Kenya and Kenya national bureau of statistics databases.

3.5 Data Collection Procedures:

The data collection instrument for this study was questionnaires. The research instrument were taken to the respondents through the drop and pick technique. The study was concerned with variables that cannot be directly observed such as views and opinions, perceptions and feelings of the respondents, as such this kind of information are best collected through questionnaires. The target population encompassed mostly literate individuals who were not likely to have difficulties responding to questionnaire items. The researcher approached each respondent, introduce herself to the respondents by explaining to them the nature and purpose of the study and then leave the questionnaires with the respondents to be completed and be picked later within two to three weeks' time. A covering letter explaining the objectives of the study and assuring the respondents' confidentiality and asking them to participate in the study accompanied the questionnaire.

3.6 Pilot Study:

Pilot studies are normally carried out before large-scale quantitative research. This was aimed at reducing the possibilities of time and money being wasted on an inadequately designed projects or projects that are not feasible (Tabachnick & Fidell, 2013). A pilot study was carried out on participants of the relevant population, but not on those who will form part of the final sample. This is because it may influence the later behavior of research subjects if they have already been involved in the research. A pilot experiment/study is often used to test the design of the full-scale research which then can be adjusted (Kising'u, 2017). It is a theoretically valuable insight, and should anything be missing in the pilot study it can be added to the full-scale research to improve the probabilities of a clear outcome.

3.6.1 Validity:

Validity is the degree to which results obtained for the analysis of the data actually represent the phenomena under study. It indicates how accurate the data obtained in the study represent the variables of the study (Kising'u, 2017). The researcher used the most common internal consistency measure known as KMO Bartlett's test. It may be mentioned that its value varies from 0 to 1 but, satisfactorily value is required to be more than 0.6 for the scale to be reliable (Bryman & Bell, 2015). The recommended value of 0.7 is the cut off of reliability.

3.6.2 Reliability:

Testing of the reliability of the scale is very important as it shows the extent to which a scale produces consistent results if measurements are made repeatedly. This was done by determining the association in between scores obtained from different administrations of the scale. If the association was high, the scale yields consistent results, thus it is reliable. Cronbach's alpha was used to determine the internal reliability of the questionnaire that was used in this study. Values range between 0 and 1.0; while 1.0 indicates perfect reliability, the value 0.70 is deemed to be the lower level of acceptability (Kising'u, 2017; Tabachnick & Fidell, 2013).

3.7 Data Processing and Analysis:

Kothari and Gang, (2014) argue that data collected has to be processed, analyzed and presented in accordance with the outlines laid down for the purpose at the time of developing the research plan. Data analysis involves the transformation of data into meaningful information for decision making. It involved editing, error correction, rectification of omission and finally putting together or consolidating information gathered. The collected data was analyzed quantitatively and qualitatively. Descriptive and inferential statistics was done using SPSS version 22 and specifically multiple regression model was applied. Set of data was described using percentage, mean standard deviation and coefficient of variation and presented using tables, charts and graphs. Fraenkel and Wallen, (2014) argue that regression is the working out of a statistical relationship between one or more variables. The researcher used a multiple regression analysis to show the influence of the independent variables on the dependent variables.

The multiple regression analysis model was specified as:

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

Y = Financial Performance (Dependent Variable)

β_0 = Intercept of regression line

$\beta_1 - \beta_4$ = Regression Coefficient of the Independent Variables $X_1 - X_4$

X_1 = Short Loan Interest Capping

X_2 = Mortgage Interest Capping

X_3 = Deposit Interest Rate Capping

X_4 = Fixed Deposit Interest Capping

ε = error term or stochastic term.

4. RESEARCH FINDINGS AND DISCUSSIONS

4.1 Response Rate:

High response rate guarantees that the findings are representative of the target population. Questionnaires were self-administered whereby a total of 70 questionnaires were given out by the researcher to respondents. Sixty three (63) questionnaires were completely filled, returned and used for analysis in this study. This meant that the active sample was 63 respondents and this represented a response rate of 66.3% percent of the sample size which fell within a large sample size. Table 4.1 presents the percentage of response rate of the respondents. Kothari and Gang (2014) maintained that a response rate of 50% is adequate for analysis and reporting; a rate of 60% is good and a response rate of 70% and over is excellent; therefore, this response rate was adequate for analysis and reporting. Table 3 presents the response rate.

Table 3: Response Rate

	Frequency	Percentage
Response	63	90%
Non-Response	7	10%
Total	70	100%

4.2 Correlation Analysis:

Pearson’s product moment correlation analysis was carried out to assess the relationship between the interest rate capping and financial performance in commercial banks I Kericho County, Kenya. Sekaran, (2015) maintained that relationship is assumed to be linear and the correlation coefficient ranges from -1.0 (perfect negative correlation) to +1.0 (perfect positive relationship). The Pearson’s product moment correlation coefficient was calculated to determine the strength of the relationship between dependent and independent variables (Kothari and Gang, 2014). The Pearson’s product moment correlation results indicated that short loan interest capping had statistically significant relationship on financial performance ($r = 0.595$; $P \leq 0.05$; $n = 63$), mortgage interest capping had statistically significant relationship on financial performance ($r = 0.312$; $P \leq 0.05$; $n = 63$), deposit interest rate capping had statistically significant relationship on financial performance ($r = 0.394$; $P \leq 0.05$; $n = 63$), and fixed deposit interest rate capping had statistically significant relationship on financial performance ($r = 0.257$; $P \leq 0.05$; $n = 63$) in commercial banks in Kericho County, Kenya. Table 4 presents the Pearson’s product moment correlation analysis results.

Table 4: Pearson’s Product Moment Correlation Analysis

Variable		Y	X ₁	X ₂	X ₃	X ₄
Financial Performance (Y)	Pearson Correlation	1				
	Sig.					
	n	63				
Short Loan Interest Capping (X ₁)	Pearson Correlation	.397**	1			
	Sig.	.001				
	n	63	63			
Mortgage Interest Capping (X ₂)	Pearson Correlation	.487**	.272*	1		
	Sig.	.000	.031			
	n	63	63	63		
Deposit Interest Rate Capping (X ₃)	Pearson Correlation	.291*	.326**	.441**	1	
	Sig.	.021	.009	.000		
	n	63	63	63	63	
Fixed Deposit Interest Capping (X ₄)	Pearson Correlation	.595**	.312*	.394**	.257*	1
	Sig.	.000	.013	.001	.042	
	n	63	63	63	63	63

****. Correlation is significant at the 0.01 level (2-tailed).**

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

4.3 Regression Analysis:

To assess the research model, a confirmatory factors analysis was conducted. The four factors were then subjected to linear regression analysis in order to measure the success of the model and predict causal relationship between independent variables (short loan interest capping, mortgage interest capping, deposit interest rate capping and fixed deposit interest capping), and the dependent variable (financial performance) in commercial banks in Kericho County, Kenya.

4.3.1 Model Summary:

The model explains 61.2% of the variance (Adjusted R Square = 0.585) on financial performance. Clearly, there are factors other than the four proposed in this model which can be used to predict financial performance. However, this is

still a good model as Cooper and Schinder, (2013) pointed out that as much as lower value R square 0.10-0.20 is acceptable in social science research. This means that 61.2% of the relationship is explained by the identified four factors namely short loan interest capping, mortgage interest capping, deposit interest rate capping and fixed deposit interest capping. The rest 38.8% is explained by other factors in the financial performance not studied in this research. In summary the four factors studied namely short loan interest capping, mortgage interest capping, deposit interest rate capping and fixed deposit interest capping 61.2% of the relationship while the rest 38.8% is explained or determined by other factors. Table 4.12 presents the model summary results on the effect of interest rate capping (short loan interest capping, mortgage interest capping, deposit interest rate capping and fixed deposit interest capping), and the financial performance in commercial banks in Kericho County, Kenya. Table 5 presents the model summary results of the regression analysis.

Table 5: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.782 ^a	.612	.585	2.12432

a. Dependent variable: Financial Performance

b. Predictors: (Constant), Fixed Deposit Interest Capping, Deposit Interest Rate Capping, Mortgage ,Short Loan Interest Capping

4.3.2 Analysis of Variance:

The study used ANOVA to establish the significance of the regression model. In testing the significance level, the statistical significance was considered significant if the p-value was less or equal to 0.05. The significance of the regression model is as per Table 4.13 below with P-value of 0.00 which is less than 0.05. This indicates that the regression model is statistically significant in predicting factors of financial performance. Basing the confidence level at 95% the analysis indicates high reliability of the results obtained. The overall ANOVA results indicates that the model was significant at F = 22.825, p = 0.000. Table 4.13 presents the ANOVA results on the effect of interest rate capping (short loan interest capping, mortgage interest capping, deposit interest rate capping and fixed deposit interest capping), and the financial performance in commercial banks in Kericho County, Kenya. Table 6 presents the ANOVA results.

Table 6: ANOVA

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	412.008	4	103.002	22.825	.000 ^b
	Residual	261.738	58	4.513		
	Total	673.746	62			

a. Dependent Variable: Financial Performance

b. Predictors: (Constant), Short Loan Interest Capping, Mortgage Interest Capping, Deposit Interest Rate Capping, Fixed Deposit Interest Capping

4.3.3 Regression Coefficients:

The multiple regression model for this study had been specified as:

$$Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \varepsilon$$

Where

Y = represents Financial Performance (the dependent variable)

β_0 = Intercept

β_1 = regression coefficient of Short Loan Interest Capping

β_2 = regression coefficient of Mortgage Interest Capping

β_3 = regression coefficient of Deposit Interest Rate Capping

β_4 = regression coefficient of Fixed Deposit Interest Capping

X_1 = Short Loan Interest Capping

X_2 = Mortgage Interest Capping

X_3 = Deposit Interest Rate Capping

X_4 = Fixed Deposit Interest Capping

ϵ = stochastic term

Therefore, the predictive multiple regression model for this study then becomes:

$$Y = 5.501 + 0.578X_1 + 0.673X_2 + 0.313X_3 + 0.201X_4$$

The regression equation above has established that taking all factors into account (financial performance as a result of short loan interest capping, mortgage interest capping, deposit interest rate capping and fixed deposit interest capping) constant at zero financial performance was 5.501. The findings presented also shows that taking all other independent variables at zero, a unit increase in short loan interest capping will lead to a 0.578 increase in the scores of financial performance; a unit increase in mortgage interest capping will lead to a 0.673 increase in financial performance; a unit increase in deposit interest rate capping will lead to a 0.313 increase in the scores of financial performance; a unit increase in fixed deposit interest capping will lead to a 0.201 increase in the score of financial performance. This therefore implies that all the four variables have a positive relationship with mortgage interest capping contributing most to the dependent variable. From the table it can be seen that the predictor variables of financial performance as a result of short loan interest capping, mortgage interest capping, deposit interest rate capping and fixed deposit interest capping got variable coefficients statistically significant since their p-values are less than the common alpha level of 0.05. Table 4.14 presents the multiple regression coefficients results on the effect of interest rate capping (short loan interest capping, mortgage interest capping, deposit interest rate capping and fixed deposit interest capping), and the financial performance in commercial banks in Kericho County, Kenya. Table 7 presents the regression coefficients results.

Table 7: Multiple Regression Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients t	Sig.
	B	Std. Error		
(Constant)	5.501	2.439	2.255	.028
1 Short Loan Interest Capping	.578	.111	.530	5.187 .000
Mortgage Interest Capping	.673	.149	.461	4.502 .000
Deposit Interest Rate Capping	.313	.145	.210	2.163 .035
Fixed Deposit Interest Capping	.201	.108	.194	2.862 .002

a. Dependent Variable: Financial Performance

4.3.4 Results of Hypotheses Testing:

Short loan interest capping had significant effect on financial performance of commercial banks in Kericho County-Kenya ($\beta = 0.530$; $t = 5.184$; $P \leq 0.05$). This was consistent with Amalia, Robert and Harald (2013) who carried out an investigation of the interest rate risk and exchange rate risk of the European Financial Sector: Euro Zone Versus Non-Euro Zone Countries. Mortgage interest capping had significant effect on financial performance of commercial banks in Kericho County-Kenya ($\beta = 0.461$; $t = 4.502$; $P \leq 0.05$). This was consistent with Jiaqi (2011) who conducted a study aimed at establishing a modelling process of short-term interest rate risk management for the South African Commercial Banking Sector. Deposit interest capping had significant effect on financial performance of commercial banks in Kericho County-Kenya ($\beta = 0.210$; $t = 2.163$; $P \leq 0.05$). This was consistent with Wambua (2013) who conducted a study on the effect of interest rate volatility on financial performance of class “a” road construction companies in Nairobi County. Fixed deposit interest capping had significant effect on financial performance of commercial banks in Kericho County-Kenya ($\beta = 0.194$; $t = 2.862$; $P \leq 0.05$). This was consistent with Kipnetich (2011) who investigated the relationship between interest rates and financial performance of commercial banks in Kenya. Table 8 presents the hypotheses test results.

Table 8: Hypotheses Testing Results

Research Hypothesis	β	t	Sig.	Comments
H₀1: Short loan interest capping has no significant effect on financial performance of commercial banks in Kericho County-Kenya	.530	5.184	.000	Reject H ₀ 1
H₀2: Mortgage Interest capping has no significant effect on financial performance of commercial banks in Kericho County-Kenya	.461	4.502	.000	Reject H ₀ 2
H₀3: Deposit Interest rate capping has no significant effect on financial performance of commercial banks in Kericho County-Kenya	.210	2.163	.035	Reject H ₀ 3
H₀4: Fixed deposit Interest capping has no significant effect on financial performance of commercial banks in Kericho County-Kenya.	.194	2.862	.002	Reject H ₀ 4

5. SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1. Summary:

Interest capping had a significant positive effect on financial performance in commercial banks in Kericho County, Kenya.

5.1.1 Effect of Short Loan Interest Capping on Financial Performance

Short loan interest capping had a significant positive effect on financial performance in commercial banks in Kericho County, Kenya.

5.1.2 Effect of Mortgage Interest Capping on Financial performance

Mortgage interest capping had a significant positive effect on financial performance in commercial banks in Kericho County, Kenya.

5.1.3 Effect of Deposit Interest Rate Capping on Financial performance

Deposit interest rate capping had a significant positive effect on financial performance in commercial banks in Kericho County, Kenya.

5.1.4 Effect of Fixed Deposit Interest Capping on Financial performance

Fixed deposit interest capping had a significant positive effect on financial performance in commercial banks in Kericho County, Kenya.

5.2 Conclusions:

The general conclusion is that interest rate capping plays a significant positive effect on financial performance of commercial banks in Kericho County, Kenya.

5.2.1 Effect of Short Loan Interest Capping on Financial Performance

The first specific conclusion is that short loan interest capping plays a significant effect on financial performance in commercial banks in Kericho County, Kenya.

5.2.2 Effect of Mortgage Interest Capping on Financial Performance

The second specific conclusion is that mortgage interest capping plays a significant positive effect on financial performance in commercial banks in Kericho County, Kenya.

5.2.3 Effect of Deposit Interest Rate Capping on Financial Performance

The third specific conclusion is that deposit interest rate capping plays a significant positive effect on financial performance of commercial banks in Kericho County, Kenya.

5.2.4 Effect of Fixed Deposit Interest Capping on Financial Performance

The fourth specific conclusion is that fixed deposit interest capping plays a significant positive effect on financial performance of commercial banks in Kericho County, Kenya.

5.3 Recommendations:

Interest rate capping by Central Bank of Kenya is likely to strengthen monetary policy framework and foster financial performance of commercial banks in Kenya.

5.3.1 Managerial Recommendations

Managers in commercial banks should implement the interest capping by Central Bank of Kenya, because it plays a significant effect on financial performance in commercial banks in Kenya.

5.3.2 Policy Recommendations

The Central Bank of Kenya should monitor the full implementation of the interest rate capping, because interest rate capping plays a significant positive effect on financial performance in commercial banks in Kenya.

5.3.3 Areas for Further Research

Future researchers may adopt mixed methods research design in assessing the effect of interest rate capping on financial performance of commercial banks in Kericho County, Kenya. A longitudinal survey research design may be adopted in assessing the effect of interest rate capping on financial performance in commercial banks in Kericho County, Kenya in order to understand the long term effect of interest rate capping on financial performance in commercial banks.

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