

# **RELATIONSHIP BETWEEN INTEREST RATES SPREAD AND FINANCIAL PERFORMANCE OF COMMERCIAL BANKS IN BOMET COUNTY, KENYA**

**<sup>1</sup>Wilson Ronoh, <sup>2</sup>Dr. Isaac Naibei, <sup>3</sup>Dr. Peter Cheruiyot**

University of Kabianga

**Abstract:** The financial services sector plays a critical role in the economy of a nation. The Commercial banks have established themselves so as to serve their customers and get some income to sustain them. The banks mainly make business by giving loans and charging interest for it. Prior regulation, interest charged was fairly high in some banks even to a tune of say 30%, while interest earned by savers remained low. This provoked members of parliament to control the spread to ensure that banks were not ultimately the sole beneficiary. Their argument was that banks were exploiting its customers. It is not clear whether this argument has a scientific basis given the limited studies investigating this phenomenon, specifically in the study area. Thus, a need to inquire into the relationship between interest rates regulation spread and financial performance of Commercial Banks in Bomet County. A survey research design was used in this study where the target population was 158 Credit officers working in Commercial Banks in Bomet County. Census sampling method was used where a total of 158 questionnaires were administered and only 142 questionnaires were properly filled and returned indicating a response rate of 89.9% which was very good. Reliability of data was actualized by doing a pilot study in Commercial Banks in Kericho County where Cronbach Alpha of above 0.75 was actualized in every research variable. Research instrument was validated by experts who gave their views which were incorporated into the research instrument. Data was collected using self administered structured questionnaire whose response was processed and analysed using SPSS version 24. The results of this study may be beneficial to commercial banks who will use the information to review their performance so as to review their lending amount and reduce on their lending risk for them to remain competitive.

**Keywords:** Commercial Bank Performance, Interest rates, Profitability, Interest Rates Spread.

## **1. BACKGROUND TO THE STUDY**

Globally Commercial Banks have played a pivotal role in the distribution and allocation of economic resources of a Country. As intermediaries, banks facilitate movement of funds from depositors to borrowers (Ongore, 2013). In order to perform the intermediation function properly, banks must generate income sufficient enough to cover their operational costs incurred in the process. Despite the recent trends of financial disintermediation and the growth in mark et- based finance, the role of banks is still essential to the performance and operation of modern economies (Dietrich & Wanzenried, 2010).

According to Robert (2007), adoption of Structural Adjustment Programme (SAP) the regulatory framework guiding the operations of banks changed. Steps were taken to liberalize interest and lending rates. Many more banks were allowed entry into the sector. Competition increased a great deal among banks and the face of the industry changed within a few

**International Journal of Recent Research in Commerce Economics and Management (IJRCEM)**  
 Vol. 8, Issue 3, pp: (8-15), Month: July - September 2021, Available at: [www.paperpublications.org](http://www.paperpublications.org)

years. At different times ceilings on interest rates were removed, replaced and then removed again. In 1994, the ceilings and floors on interest rates were again restored.

Regulatory authorities took steps to correct some of the endemic afflictions of banks that were carrying poor quality assets and had little cushion for it. Capital adequacy, liquidity and credit restrictions were enhanced to forestall the possibility of continuous deterioration in the health of the critically affected banks (Robert, 2007). “Meanwhile, the newer banks developed new products and created various opportunities for exploiting profit. They grew in profits by leaps and bounds, though industry watchers claim the bulk of their profits are accounted for by their undue emphasis on foreign exchange trade and the sharp practices in which they engaged. Banking reforms have been an ongoing phenomenon in the world right from 1980s, but has been more intensified in recent time because of the effect of globalization which is precipitated by continuous integration of the world market and economies. Banking reforms involve several elements that are unique to each country based on historical, economic and institutional imperatives (Field & Pande, 2008).

Public policy paradigm on banking regulation has shifted from economic regulation to regulation and prudential regulation. On one hand the economic justification of financial deregulation is based on the presumption that deregulation fosters bank competition, which in turn may engender bank productive efficiency. Bank competition is seen as a stimulus to exert downward pressure on costs, reduce managerial slacks and even incentivize innovation (Nickell, 2016). On the other hand, concern about the adverse effect of increased competition on bank risk taking behaviour has motivated the adoption of prudential re-regulation alongside deregulation.

In Africa, most small businesses fail to pay loans they borrow from banks in the first year due high interest rate of support from bank regulatory authorities. In Zimbabwe, for instance, most banks were liquidated in the year 2004 and 2005 (Monetary Policy Statement, 2012). This Commercial banks closed included the Barbican Bank, the Royal Bank, and Trust Bank. The MPs point out that the termination of this organization was considerably credited to due to interest rate payment in loans. In January 2012, the director of the Reserve Bank limited in Zimbabwe, Dr Gideon Gono distinguished by means of gradual worsening in investment value as reflected by the intensity of interest on loans to investing on business activities (Monetary Policy Statement, 2012). ”

In Ethiopia, banks and MFIs have been persisted to look on average between 20% and 40% bad debts written off yearly. Non-Performing Asset Recovery Trust (NPART) report 2006 revealed that 84 billion shillings were still held in their books as unrecovered debt with 31 billion shillings individual commercial banks collection (Aboagye, 2008). In Tanzania, interest rate was free in 2010 as well as in the company of price water house coopers which stuck between 2007 on the way to 2009 the entirety in profits of the banking business more than twice as 793 million during 2007 on the way to 1.5 billion within 2009. On matching interest rate becomes quick declining of the business which is negatively affected by interest rate margins (Richard, 2011).

Loan impairment charges for non-interest rate on loans in excess of three year period greater than 60. The central bank of Ghana was shown by loan ratio measures the ratio of loan losses to total loan advances, increased as of 16.2% during December 2009 on the way to 17.6% since December 2010 (Chandra, 2015).

“Interest rates are important sources of revenue to commercial banks but affect owners investment decisions in Kenya. Interest rates going on in lending uncertain in the business enterprise for the reason that repayment of loans can rarely be fully assured. The potential of loan borrowers on the way to reimburse their loans is significant and difficulty in consideration. Borrowers can reimburse their loan or otherwise make a decision in the direction of defaulting. Borrower defaults may possibly be unpaid or unintentional (Fufa, 2008). In Kenya bank loans amounting to ksh80.6 billion had gone for more than three months without being serviced as at December 2013, which was an increase from 61.6 billion the previous year (CBK Annual Report, 2014).

In Kenya, the banking sector plays an important role in the financial services sector, particularly with respect to mobilization of savings and extending credit. African countries, particularly at the bank level like Kenya have for a long a period of time been grappling with the challenge of high interest rates which stifles investment through credit and economic growth. According to the banking supervision annual report (2015) the banking sector comprised of the Central Bank of Kenya, as the regulatory authority, 434 banking institutions where 42 are commercial banks and 1 mortgage finance company, 8 representative offices of foreign banks, 12 Microfinance Banks (MFBs), 3 Credit Reference Bureaus (CRBs), 15 Money Remittance Providers (MRPs) and 80 Foreign Exchange (Forex) Bureaus.

Out of the 43 banking institutions, all commercial banks, 10 were local subsidiaries of foreign banks while 4 were branches of foreign banks. All licensed microfinance banks, credit reference bureaus, forex bureaus and money remittance providers were privately owned (CBK Annual Report, 2014). “The banking industry in Kenya is governed by the Companies Act, the Banking Act, the Central Bank of Kenya Act and various prudential guidelines issued by the CBK. The Kenyan Government adopted the CBK Amendment Act in 2001 which allowed the CBK to regulate interest rates. In the Kenyan banking sector, the last decade has witnessed drastic changes in the sector. According to a study by Irungu (2013), interest rate charged to borrowers rose to highs of up to thirty percent and above in 2012 while interest rate earned by savers remained relatively low. The banking sector in Kenya continued to register increasing profitability while most sectors in the economy are stagnating or declining since customers of most banks get less from their savings.

The high profitability in the sector was perceived to be increasing against a backdrop of decreasing access to credit or credit uptake which was further stifling the growth of Kenya’s economy. This situation resulted in increased debate by the public and members of parliament to control bank interest rate charged by banks to borrowers. On the other hand, banks argued that control of bank interest rates would ultimately lead to the collapse of the banking industry. Members of Parliament passed a bill to amend the Banking Act in August 2016 which imposed restrictions on the interest rates at which banks should offer loans setting a cap on the lending rate and the rate at which banks can take deposits setting a floor on the interest rate payable for deposits (CBK Annual Report, 2017).

The Amendment led to an interest rate lending cap of no more than four percent above the Central Bank Rate (CBR) and a floor on the deposit rate at no less than seventy percent of the Central Bank Rate. This was however not the first attempt at controlling interest rates by law in Kenya. In 2001, there was an attempt to amend the Central Bank of Kenya Act which proposed that the lending rates be capped at four percent above the 91 day Treasury bill and deposit rates at four percent below the 91 Day Treasury bill rate leading to a spread of eight percent. In 2013, the Kenya Parliamentary Budget office proposed to benchmark the deposit rates to the lending rates. In all these attempts, the restrictions were not successful.

According to Gregoriou, Hoppe and Wehn (2013) in their analysis of the effect of the interest rate capping law is critical to understanding on whether or not the desired effect of the law such as increase financial access and lower cost of credit are being achieved and the overall effect on financial intermediation role of the banks in the greater economic context. The variables considered in this study were bank profitability, credit uptake and non-performing loans.”

## 2. STATEMENT OF THE PROBLEM

Banking sector plays a pivotal role in the economy. Banks thrive by lending and charging interest. However, interest rates remain a controversial issue in banking industry today. The banks rely mainly on the interest they charge on the loans (Bolbaatar 2006). According to Ng’etich (2011) posits that banks performance depends on customer management and management of interest rates. Majority of the banks have benefited greatly through the interest they charge their customers. Ideally, interest rates should be determine competitively by the forces of demand and supply.

“In the past one year interest charged was fairly high in some banks to a tune of say 30%, while interest earned by savers remains low, while interest rate charged was increasing interest rate earned remained static this resulted to a very wide spread over 20%. When the interest rate spread is too wide, the consumers suffer as the cost of capital may be too high thus diminishing return on investments. It is against this background that the parliament decided to control spread to ensure banks are not ultimate beneficiary. Their argument was that banks were exploiting its customers while on the other side, banks argued Kenya is a free market and such intention would cripple banks.

Many studies have been carried out on interest spread and its effect on financial performance, most studies conclude interest rate spread is as result of inefficiency (Boldbaatar, 2006). According to Ngugi (2001), interest rate spread effect bank financial Performance his study did not involve all banks in Kenya and other aspects of performance. As much as this is the case, relationship between regulation of interest rates spread and financial performance of Commercial banks had received little academic attention hence a need to inquire into this aspect with specific reference to Commercial Banks in Bomet County.”

### 2.1 Interest rates spread and profitability of Commercial Banks

In early literature, the interest rate was normally used to expose the bank’s financial position. The net interest margin rate of the banks is very sensitive to fluctuate. According to Shiller and McCulloch (2011) and Samuelson (2015) the general

market situation, the bank's profit increase rapidly with increase in interest rate of banks. "Samuelson, (2015) stated that banking system as a whole is immensely assisted rather than hindered by an increase in the interest rate and commercial banks would profit more than savings banks.

In the same way, Hancock (2005) originated a very relevant proof for the study when they observed that with the enhancement of interest rate, the output and employment reduce even at the level of collective. Ben Naceur and Goaied (2008) observed the effect of particular variables associated to commercial banks of Tunisia in addition to macroeconomic indicators along with effect of financial structure on banks profitability in Tunisia from 1980-2000. They concluded that Capital ratio has positive and size has negative effect on Profitability. There exists little or zero effect of macro-economic components on the profitability of banks in Tunisia. Advancement in money markets has posted positive effect since banks in Middle East and North Africa countries have developed their income through the income generated from the intermediation and the administration of arrangement of stock that compensates the reduced margin to compare the ownership structure (Naceur and Omran, 2011). In the same way, (Sufian and Habibullah, 2009) posit that privately owned banks perform superior as contrasted with publically owned banks.

Athanasoglou et al. (2008) examined the effect of bank's inside components, industry related elements identified with macro economy on the productivity of banks in Greek amid 1985-2001. The evaluated results demonstrated that capital, credit risk, working expel, inflation and manufacturing development, business cycle (cyclical yield) have the positive and also huge effect, where as there is a negative effect of size on the banks' profitability (Delis and Kouretas, 2011). The bank's sensitivity with net interest margin, profitability and term structure set across product specializations. Hanweck and Ryu (2005) examined that the changes of interest rate are most sensitive with bank's portfolios which are related to the net interest margin."

As reveals in the study of English (2002) and Hanweck and Ryu (2005), the fluctuations of the interest rate have significant effect on bank's net income incurred by interest. Furthermore, slope of the yield curve also have a positive effect and it is a most famous over view in the financial market observation including. The short term interest rate is closely related to the return on the bank's liabilities which will quickly adjust with the changes by interest rate in financial market. With that part of the discussion, returns on assets of the bank are more likely to be closed with long term interest rate and slowly get adjusted with the changes in the market rate. In the sustaining period, when the yield curve is steeper, one can expect the net interest margin to be higher.

Profitability of bank is described as income by interest or non-interest and after tax profits which are computed as amount of income (both interest & non-interest) after the subtraction of provisions and operating costs (Albertazzi and Gambacorta, 2006). In our routine life, interest rate plays an important function. It can considerably influence purchasing power of people. Therefore, as depositor it is essential to focus on these trends in interest rate because the common trends in interest rate can have a major influence on savings of people. The major variation in these trends makes it essential to examine the existing investment opportunities and potential opportunities. The changes in interest rate have significant effect on banks. The major part of bank's revenue comes from the difference in the interest rate that it charges from and pays to customers.

To earn much profit bank charges higher interest rate as much as it is possible and on the other hand pays lower rate as much as possible. However, to attract the same borrower and depositor banks are competing to each other which maintain the interest rates in comparable range. Due to the competition among the banks interest rate remains in a comparable range. For tracking and managing the significant development interest rate is to be addressed a significant economic problem. On the other hand, in the profit and loss statement interest rate also engage in managing the interest component entirely (Buiter & Panigirtzoglou, 2013). In addition, the interest rate also summarizes the way of whole business debt summary, including the receipt of debt, excellence of the debt, expectations of visions participation proportions and fixed floating mixture of the debt (Einav, Jenkins, & Levin, 2008).

Interest rates are applied in various shapes like there are different interest rates for saving account and for taking loan. Central bank sets the interest rate to control the interest rate that transforms the interest rates to control the lively of financial system. But the results of the variation in the interest rate are not constantly the projected results. Central bank plays many important roles in the economy but the major task of it is to regulate the interest rates which affect the financial system. For instance, this can be completed by regulating the interbank loan rate. The rates that commercial

banks present for saving and lending are influenced by interbank interest rates and banks as result present their rates which are below or above from the interbank rate in certain percentage. In this way commercial banks earn their profit (Brigo & Mercurio, 2016).

When interest rate rises up, businesses have to pay more for borrowing. In other words their cost of taking loan increases which decreases their profitability and due to decrease in profitability market price of their share also decline. Moreover, a rise in interest rate also decreases the worth of corporate bond. The interest rate that a bond pays to its holder is not much attractive due to high interest rate. For borrowing and saving there are various types of interest rates that bank offers. To set the rate of interest that influence the lively of financial system, central bank plays a significant role. The central bank executes that job by controlling the loan rate for interbank. Because it considerably influences the interest rates for loan and savings that commercial banks offer. The main source of commercial bank's income is the interest income by interest rate which is to some extent below or above the inter-bank loan rate. Typically, Central Bank encourages the people to keep their funds with bank by offering hand sum saving interest income (Brigo & Mercurio, 2016).

Rising interest rate and over spending cause stress on inflation. While on the other hand, when interest rate goes up make borrowing more expensive which results into fall in mortgage and investment. Ultimately, it influences the currency revaluation to increase the value of money. Moreover, improved rate of interest may enhance the demand of Government Issue bond. Interest rate not merely charged to loans, however it is also charged to unpaid bills, mortgages and credit cards and it is only applicable on the unpaid portion of bills or loans. So, it is very necessary to be familiar with your interest rates and to know that how it is added to your loans or bills. If for example, your interest rate adds more than the amount you are paying, it possibly means your debts increase although you are paying for debts. Interest rates are not same even though they are more competitive. When a bank feel doubt that the debt will not be repaid it will usually charge higher interest rate. Loans like credit cards are very expensive to handle, so banks usually charge higher interest rates to them. Moreover, bank also charges high interest rate to risky people. So, it is essential to know about the score of your credit card and the ways to improve your credit card scores because when your card have higher scores then you have to pay less interest rates (Boulier, Huang & Taillard, 2011; Laubach, 2010)."

"The study of Samuelson (2015), showed that when interest rate increases it actually effect to borrowers but it does not affect the bank's performance. The borrower will tolerate the effect of high interest rate while the financial performance of bank would not be affected by high interest rates. Because when interest rates go upward then the bank charges more to borrower than the return it pays to depositors. Therefore, both the borrower and depositor will tolerate the cost.

According to the study of Khawaja and Musleh (2007), Increase in the interest rate depresses the borrowers and depositors, like investment and saving. Banks by charging high interest rate gain high returns from borrowers and discourage the depositors by giving low return to them which results in inclusive spreads. In Pakistan spreads are higher. Finally, interest rate increases when spreads are taken into account that results into high returns to banks on investments and lending. And beside this, depositors have no other option to save their money except on prevailing rates offered by the banks.

The profitability of bank is typically spoken as a function of interior and exterior determinants. The interior determinants are called micro or bank specific determinants of profitability because they are initiated from bank accounts like balance sheet or profit and loss account. While on the other hand the exterior determinants are the variables which are not in the control of bank's management. These variables reflect the legal and economic environment which can influence the process and performance of an economic body. Moreover the expenses of bank are considered significant determinant of bank's profitability which is directly associated to the concept of capable management (Bourke, 2009).

Molyneux and Thornton (2012) discovered an encouraging affiliation among profitability and better-quality management. Another appealing matter is that whether the bank's ownership status is associated with its profitability or not but to support the assumption that private organization will earn comparatively higher profit, small proof is founded. The study of Short (2009) is from one of the few studies contributing cross country proof of direct negative correlation among public owned organization and the profitability of banks.

The final set of the determinants of banks profitability works with macro-economic control variables. Growth rate of money supply, inflation rate and long term interest rates are usually used as variables. The issue of the association among inflation and bank's profitability has been introduced by Revell (2009) who noted that the consequence of inflation on the

profitability of banks depends upon whether wages and other operating expenses of banks are increasing faster than the inflation."

### 3. RELATIONSHIP BETWEEN INTEREST RATES SPREAD AND PROFITABILITY FINDINGS

Descriptive statistics was done on the study variables relating to interest spread regulation on profitability of Commercial Banks and the results are as per Table 1 where disagree was between 1.0 to 2.5 and agree was between 2.6 to 5.0.

**Table 1 Descriptive statistics on Interest Rates Spread on Profitability**

Statements	Mean	Std. Dev
The bank's profits increase with increase in interest rates	2. 3923	1.25788
The interest rate regulation has made the banks to be more sensitive	2.3392	1.11438
Interest rate regulation has reduced the bank's profit	2. 6364	1.39637
Liquidity has negatively affected the bank profitability	2. 6436	1.26863
Interest rate regulation has affected borrowers and bank's performance	2.8303	1.30863

Source: Research Data (2020)

Table 1 shows that the respondents disagreed that bank's profits increase with increase in interest rates since it had a mean of 2.32, respondents disagreed that the interest rate regulation has made the banks to be more sensitive for it had a mean of 2.34. Respondents agreed that interest rate regulation has reduced the bank's profit for it had a mean of 2.63; liquidity has negatively affected the bank profitability for it had a mean of 2.64 and that interest rate regulation has affected borrowers and bank's performance for it had a mean of 2.83. This implies that interest rates spread on profitability has made the banks to be more sensitive, it has reduced the bank's profit, it has affected borrowers and bank's performance and that liquidity has negatively affected the bank profitability but it has not enabled bank's profits to increase with increase in interest rates.

The findings of Samuelson (2015) that under the general market situation, the bank's profit increase rapidly with increase in interest rate of banks and that banking system as a whole immensely assisted rather than hindered by an increase in the interest rate and commercial banks would profit more than savings banks. This is contrary to the study findings since after the introduction of interest rate regulations Commercial Banks have been recording low profit hence interest rate regulation had a negatively affected banks' profitability and these agrees with the findings of Delis and Kouretas (2011), who noted that to earn much profit bank charges higher interest rate as much as it is possible and on the other hand pays lower rate as much as possible. Were and Wambua (2014) also found out that macroeconomic factors and bank specific factors play a great role in determination of interest rates spreads, these factors include inflation, liquidity ratio, return on average assets and credit risk. This finding is in line with Ahokpossi (2013) findings which established that credit risk influences interest rate spread.

This finding also concurs with those of Hawtrey and Liang (2008), who investigated the effect of credit risk on interest rates spread and found credit risk to be a main determinant of interest rates spread. The findings are similar to those of Were and Wambua (2013), who revealed that inflation rate highly influences interest rates spread. Tarus *et al* (2012) in his study on determinants of interest rates found out that one of the key determinants of interest rates spread was inflation rate and other macroeconomic factors. His findings were similar to those got from this study.

The findings are in line with Ahokpossi (2013) findings who established that credit risk influences interest rate spread. This finding also concurs with those of Hawtrey and Liang (2008), who investigated the effect of credit risk on interest rates spread and found credit risk to be a main determinant of interest rates spread.

### 4. RELATIONSHIP BETWEEN INTEREST RATES SPREAD AND PROFITABILITY CONCLUSIONS

The findings revealed that Commercial Banks profits does not increase with increase in interest rates; banks have become more sensitive since the interest rate regulation was introduced; bank's profit has reducing annually because of the introduction of interest rate regulation; liquidity has negatively affected the bank profitability and that interest rate regulation had affected borrowers and bank's performance.

The study concludes that Commercial Banks profits does not increase with increase in interest rates; they are more sensitive since bank's profit was reducing annually; liquidity had negatively affected the bank profitability and the interest rate regulation had affected borrowers and bank's performance. Commercial Banks experience loss in economic value due to interest rate regulation; interest rate regulation exposes banks to risk in lending hence they reduce its lending due to risk involved and the measure of interest rate risk exposure was not based on banks' lending. Commercial Banks are sensitive to giving loans to customers due to interest rate regulation; they are exposed to risks and have reduce their lending capacity due to interest rate regulation; they scrutinize customers before giving them loans and their ability to restore its required capital level by issuing new equity is limited. Commercial bank still has and retains its customers despite interest rate regulation; they do not benefit better from credit conditions; the bigger the bank is the more sustainable it is; the demands for loans has increase due to interest rate regulation and has negatively affected the profitability of bank.

## 5. RECOMMENDATIONS

The study recommends that Commercial Banks should adopt a monetary policy to exploit the enhanced liquidity in the banking sector and channelize the same as loans grant to individuals and firms at a competitive margin interest rate since this which will motivate customers and banks to increase their financial performance. Moreover, the government must make efforts to maintain low inflation, government borrowing and encourage savings by coming up with investment policies.

A similar study should also be carried out on the relationship between interest rate spread incorporating more financial and accounting variables and also taking into account the prevailing macroeconomic situation in the country as opposed to the current study which took into consideration of only four interest rate spread variables.

## REFERENCES

- [1] Aboagye, Anthony & Akoena, S.K. & Antwi-Asare, Theodore Oboo & Gockel, A.F.. (2008). Explaining Interest Rate Spreads in Ghana. *African Development Review*. 20. 378 - 399.
- [2] Athanasioglou, G. Agusto, P. and Adegbite, L. (2008). *Banking Industry Survey*, Lagos
- [3] Boldbaatar,D.(2006). *Effect of interest rate spread shocks on the performance of banking sector*. Malaysia:Lorong Universities
- [4] Best, J.W. & Khan J.V. (1993). *Research in education*. Boston: Edward Arnold.
- [5] Bichsel, R. and Perrez, J. (2005). In quest of the bank lending channel: evidence for Switzerland using individual bank data, *Swiss Journal of Economics and Statistics* 141(2), 165–190
- [6] Brigo, D., & Mercurio, F. (2016). *Interest rate models: theory and practice: with smile, inflation, and credit*: Springer Verlag.
- [7] CBK (2015). *Banking supervision annual report*. Nairobi: Government Printers
- [8] CBK Annual Report (2012) *Kenya Gazette and CBK Report 2011*Kenya.
- [9] CBK Annual Report (2014) *Kenya Gazette and CBK Report 2013* Kenya.
- [10] CBK Annual Report (2017) *Kenya Gazette and CBK Report 2016* Kenya.
- [11] Chenn,M.(2011). *Interest rate spread*. Washington, D.C.: International Monetary Fund, Monetary and Capital Markets Dept
- [12] Chirwa, S.(2012). *Banks financial performance*. Malawi:Institute of Development Economics.
- [13] Crowley, S. (2004). *Interest rate spread*. Cambridge, Mass.: National Bureau of Economic Research.
- [14] Delis, S. and Kouretas (2005). Financing Loan on financial performance. *Journal Business and Management*.
- [15] Emmanuelle, J.(2003).*Monetary and fiscal policy*. Kenya: University of Nairobi.
- [16] English, H. (2012). *Interest rate swaps and other derivatives*. New York: Columbia Business School.

**International Journal of Recent Research in Commerce Economics and Management (IJRCEM)**  
 Vol. 8, Issue 3, pp: (8-15), Month: July - September 2021, Available at: [www.paperpublications.org](http://www.paperpublications.org)

- [17] Field, B. and Pande, L.(2008). *Bank loom on investment*. Wiston University, United Kingdom.
- [18] Fufa (2008). *The interest rate on financial performance*, Kenya.
- [19] Gambacorta, L. and Mistrulli (2014). *How Do Banks Set Interest Rates?* doi:10.3386/w10295
- [20] Hancock, R. (2016). Rethinking Framework of Integrated Interest Rate and Credit Risk Management in Emerging Markets. *Risk Management in Emerging Markets*, 143-185.
- [21] Hanson, S. G. and Stein, J. C. (2015). Monetary policy and long-term real rates, *Journal of Financial Economics* 115(3), 429–448.
- [22] Irungu, P. N. (2012). *The effect of interest rate spread on financial performance of commercial banks in Kenya*, 1(1).
- [23] Khawaja, Idrees & Musleh-ud Din, (2007). *Determinants of Interest Spread in Pakistan*, PIDE-Working Papers 2007:22, Pakistan Institute of Development Economics.
- [24] Lispon (2012). *The value of interest rate on investment* New York.
- [25] Mwangi (2012). Non performing loans in Kenya.
- [26] Ng`etich,J,C.,&Wanjau,K.(2011). *The effects of interest rate spread on the level of non-performing assets in Kenya*. Nairobi, Kenya :Jomo Kenyatta University of Agriculture and Technology
- [27] Ngugi, R. (2004). *Determinants of interest spread in Kenya* . Nairobi, Kenya: Kenya Institute for Public Policy Research and Analysis.
- [28] Ngugi,R.(2013). *Interest rate spread in Kenya*. Nairobi, Kenya: Kenya Institute for Public policy research and analysis
- [29] Naceur, S. & Goaied, N. A. (2005). *Interest rate risk modeling*: The fixed income valuation course Hoboken, NJ: J. Wiley & Sons.
- [30] Omole V. (2013). Effect of bank lending rate on the performance of Nigerian deposit money banks. *International Journal of Business and Management Review*, 1, 33-34.
- [31] Reily (2006). *The study of long term loans on investment securities* in Uganda.
- [32] Samuelson, A. (2015). The effects of interest rate increases on banking system. *The American economic review*, 35 (1), 16-27.
- [33] Valverde,M. (2004). *High yields: the spread on German interest rates* . Cambridge, MA: National Bureau of Economic Research. .
- [34] Wensheng,p.,Lai,K.,Leung,F.,& Shu,C.(2002). *Effect of interest rate spread rate shocks on the performance of Banking sector*. Hong Kong:Hong Kong monetary authority,
- [35] Were, R.,& Wambua,S. (2013). *Determinant of interest rate spread* . Nairobi, Kenya: Kenya Institute for Public Policy Research and Analysis