

International Journal of **Modern Statistics** (IJMS)

**Influence of interest rates and performance of lending institution in
Africa. A Critical Literature Review**



CARI
Journals

Influence of interest rates and performance of lending institution in Africa. A Critical Literature Review

Dr. Robert Kariuki

Kenyatta University, School of Statistics and Social Science

Corresponding author's email: journals@carijournals.org

Abstract

Purpose: Financial performance is a key determinant of assessing organization success. The financial performance is geared toward determining whether the firms have generated enough income for maximizing shareholder's wealth as opposed to the mere maximization of the firm's net profit. The overall objective of this study was to examine influence of interest rates and performance of lending institution in Africa. A critical literature review

Methodology: The paper used a desk study review methodology where relevant empirical literature was reviewed to identify main themes and to extract knowledge gaps.

Findings: The study also concluded that interest rates on loans and advances became significant in affecting performance in terms of profits before tax and exceptional items (PBTEI) and also returns on equity (ROE). This conforms to the study by Kibuthu (2005) that those who borrow from lending institutions are sensitive to interest on loans, borrow more when rates are low and favourable allowing banks to make more in profits.

Unique Contribution to Theory, Policy and Practice: The study recommends that since majority of African banks continued making huge income from loans then the information on total cost of loans to the borrowers should be made very clear on all platforms that hold this information. Diversification to other non- interest revenue sources is a way to reduce banks' overreliance on interest income.

Keywords: *Influence, Interest Rates, Performance, Lending Institution, Africa.*

INTRODUCTION

The emergence of microfinance provides an avenue for provision of various services to the MSEs such as microcredit, microsavings, microinsurance, financial literacy services, training and business networking. These services are often designed in relatively small transactions and are accessible and affordable to the MSEs (Copestake et al., 2001; Tedeschi, 2008). Therefore, participation in microfinance can help MSEs overcome challenges such as inadequate capital, lack of access to affordable credit, lack of collateral and inadequate managerial and technical skills (Aligonby, 2016).

Financial Leverage refers to the proportion of long-term debt in the capital structure. In this study, financial leverage refers to the long-term debt to equity ratio (Enekwe et al., 2014). Financial Leverage influences the financial performance of conventional financial firms' more than Islamic financial firms in Turkey. The lower effects in the Islamic financial firms are explained by lower Financial Leverage in the Islamic market due to Sharia screening criteria which put on a cap the upper limit of the bearing the interest-based debts (Ahmet, 2016).

Mugo et al., (2018) observed that for the deposit-taking SACCO (Savings and Credit Cooperative) to maintain a good financial position they must be ready to invest in financial innovations especially Information Technology. The SACCO must adopt mobile communication services to be able to offer efficient services to their customers. The SACCO will need to invest a lot in technology to be able to remain relevant in the competitive financial sector. However, the study ignored other factors like access to cheaper loans from financiers; mobilization of deposits from the customers, and other internal factors that affect the overall performance. The effects of market risk variables need to be minimized for the organization to generate excess income to implement the financial innovations which are costly.

Kimunge (2017) observed that caps on rates of interest increasingly resulted in adverse outcomes on stock returns for commercial banks quoted in Nairobi Securities Exchange. Ng'ang'a, (2017) in the study on capping of interest rates and its effect on commercial banks' financial performance in Kenya, based on 36 banks over 3 years and using secondary data, concluded interest rate spread affected performance negatively after interest capping as opposed to period before capping when interest spread was higher. CBK (2018) observed that, commercial banks' profits have reduced from the introduction of caps on interest rates. The return on equity (ROE) reached its least point of 19.8% in February 2017 while the return on assets (ROA) touched the least point of 2.3% in January 2017. With time this reduction in earnings might present hazards to financial health as a result of heightened balance sheet hazards of declined potential to accumulate capital reserves to mop up shocks. Return on Equity (ROE) is a measure of return to the equity holders of a firm and it has been on a decline since the introduction of the law capping the interest rates.

Commercial banks financial performance is affected in different ways as a result of interest rate capping. According to Matundura (2018), banks are unlikely to extend loans to persons and organisations without security which results to a decline in profitability. Income arising out of loans and advances to clients made the most contribution to income by commercial banks accounting for 58.95 per cent of overall income in the 5 years beginning 2011 up to 2015 (CBK Bank Supervision Annual Report). According to the Kenya National Bureau of Statistics, KNBS MSME Survey, (2016) loans to MSMEs continued to dwindle with the passage of time as commercial banks began slowly moving from lending to the MSMEs: From a survey by Finances (2015), banks' loans to the MSMEs in Kenya were a high of 23.4% in the year 2015. Kenya Bankers Association, KBA Survey (2016), however, showed that the mean lending had declined to 17%, with small peer group banks' lending 39% of MSMEs loans. This was against a background of 72.7% market share of listed commercial banks in large and medium peer groups. The apparent gradual edging out of this vital sector is in itself testament of the failures of interest rates capping law. It therefore would appear prudent if a review of the law was to be considered.

Statement of the Problem

In any given economy, banks act as a link through which clients deposit funds and get credit facilities. Commercial banks are the dominant players in the financial services in Kenya. Consequently commercial banks make money from the difference between the rate at which they accept customers' deposits and the rate which they charge the borrowers. These two rates vary and are largely open to market forces of demand and supply and other several factors. The assenting of interest cap into law have a sequel on the industry's efficiency as the interest capping does not account to several factors that might affect the banks, decisions to opt for certain spread r. There is need for an in-depth and an extensive evaluation to determine influence of high cost of living, oil price, government expenditure and exchange rate effect on stock market return volatility. It is therefore important to understand the effect of regulating interest rates on the performance of banks in Africa.

Were and Wambua (2014) examined the factors that drive interest rate spread of commercial banks using empirical evidence from Kenya. Robison (2010) established in his study that the bank earnings are affected by the anticipated changes in the lending interest rates in Kenya. The effect of interest rates on the performance of commercial banks has been of great concern to scholars, policy makers and the bankers for a long period of time. Mang'eli (2012) using descriptive research design showed the relationship between interest rate spread and financial performance of commercial banks in Kenya pointing out that interest rate affect the performance of commercial banks, as it increases the costs of loan charged. This has led to an increased number of non-performing loans thus forcing banks to maintain high lending rates in order to minimize losses associated by these loans (Matu 2016). However this studies were done in a specified geographical

location (Kenya) it is prudent to do extensive study in other African countries to find out the influence of interest rates and performance of lending institution in Africa.

Objective of the Study

The overall objective of this study was to examine influence of interest rates and performance of lending institution in Africa. A critical literature review.

Significance of the Study

To future researchers and academicians, the study will be important as it will offer suggestions of areas requiring further research to build on the topic of effects of interest rates and financial performance of lending institution in Africa. In addition, the findings of the study will also be important source of reference for future scholars and researchers and further contribute to the existing body of knowledge on interest rates and performance of financial sector players.

THEORETICAL REVIEW

This study will benefit from the resource-based theory which was developed by Barneys (1991), expectations theory of interest rates developed by Irvings (1930).

Resource-Based Theory

Resource-Based View (RBV) is a theory introduced by Barneys in 1991 and postulates that firms are heterogeneous, and they possess heterogeneous resources. It emphasized that different firms would apply different strategies since they possess different resource mixes. The theory focuses on how the management of the firms puts a lot of attention on what firms internal resources are to be able to identify those assets, capabilities, and competencies which will put the firm into a superior competitive advantage (Barney, 1991). Firms operate in an external business environment that is very volatile and thus the firm must determine internal resources and capabilities that will determine their strategic choices to be competitive. The abilities identified by the firm will ensure they add value to the customer value chain and will help the firm to develop new products and successfully enter new markets. Not all resources possessed by firms enable it to have competitive advantages but only those that are different across firms and there exists resource immobility where there is the inability of competing firms to acquire resources from other firms (Madhani, 2010).

Proponents of RBV argue that RBV is a theory that combines both strategic and organizational insights on a firm's competitive advantage. In project management, firms have identified how to spread their resources according to alignment with their strategy and capabilities to shape their competitive advantages. The study indicated that when a firm has a better position in terms of marketing strategy, this helps in maximization of the firm's potential and improves the overall performances (Almarri & Gardiner, 2014). When an organization uses the dynamic managerial capability on managerial cognition, social capital, and human capital in undertaking human

resource strategy, RBV theory is applied. The recruitment of employees based on Competitive advantages plays a major role in mediating the relationship between marketing capabilities to financial performances. Marketing and operational capabilities influence the financial performance of an organization positively (Kamboj et al., 2015). Kraaijenbrink et al., (2010) observed that although RBV helps in the improvement of a firm's performances, it is limited to deal with dynamic issues such as boundaries, timing, innovation, and entrepreneurship. It put more emphasis on resources and capabilities.

The theory does not explain the timing of when the value has been created and when firms have innovated and generate new sources of sustainable competitive advantage. Nason and Wiklund (2018) observed that VRIN resources which are valuable, rare, inimitable, and non-substitutable, and efficient are the basis of RBV and do not contribute to the firm's growth and performance. The versatile resource provides means to exploit opportunities when they are recognized and confer the flexibility to adapt to evolving environmental conditions and leads to firm growth and performances. The RBV theory relates well to this study since financial performance is a key variable under this study. The organization must identify its competitive advantage over the other players in the industry, taking into consideration market risk factors, for it to become leaders in the market and this improves its financial performance (Collins, 2020).

Expectations Theory of Interest Rates

This theory was similarly created by Irving Fisher in 1930. Expectations theory of interest rates implies to clarify the state of the yield bend, or the term structure of interest. The powers that decide the state of the yield bend have been generally bantered among scholastic business analysts for various years (Fisher, 1930). The American financial analyst Irving Fisher propelled the desires hypothesis of loan fees to clarify the state of the bend. As indicated by this hypothesis, longer-term rates are dictated by financial specialist desires for future here and shortterm rates. In mathematical terms, the theory suggests that: $(1 + R_2)^2 = (1 + R_1) \times (1 + E(R_1))$ Where; R_2 = the rate on two-year securities, R_1 = the rate on one-year securities. $E(R_1)$ = the rate expected on 22 one-year securities one year from now. The left side of this equation is the sum per dollar contributed that the investor would have after two years in the event that he put resources into two-year securities. The correct side exhibits the whole he can want to have following two years in case he places assets into one-year duties. Competition is relied upon to make the left side proportional to the right side. The theory is easily summed up to cover any number of improvement classes. In addition, anyway various improvement classes there may be, the speculation reliably illuminates the nearness of longer-term rates similarly as expected future shorter-term rates (Keynes, 1933). The desires hypothesis of credit costs gives the theoretical introduce to the usage of the yield twist as a logical gadget by fiscal and cash related analysts.

For example, an upward-slanting yield twist is cleared up as a sign that the market expects ascending without a moment's hesitation rates later on. Since rising rates commonly occur in the

midst of money related augmentations, an upward-inclining yield twist means that the market expects continued with improvement in the level of financial development (Keynes, 1933). Financial agents at times use this condition to get a market-related gauge of future interest rates. It can be rewritten as follows: $E(R_1) = [(1 + R_2)^2 / (1 + R_1)] - 1$ The equation suggests that short-term rate expected by the market next period can be gotten from information of rates today (Kregel, 1985). On the off chance that desire for the general population is that premium will rise numerous individuals will abstain from getting this consequently will influence bank execution because of diminished procuring on interest rate, however in the event that individuals anticipate that loan fee will drop individuals would acquire and this will enhance banks performance because of increment in interest rate gaining (Bekaert, 1998)

EMPRICAL REVIEW

Kinuthia (2022), conducted a study to examine whether stock market liberalization, by improving the functioning of domestic stock market accelerates economic growth in Kenya. The study also evaluated the nature of the relationship between stock market performance and economic growth in Kenya. The stock market liberalization and performance were measured using two variables namely stock market size as measured by stock market capitalization and stock market turnover respectively. The study used quarterly time series data collected through secondary sources and covered a period of 22 years from January, 1991 to December, 2012. The study utilized econometric techniques of Vector Autoregressive (VAR) and Granger Causality Tests to explore the relationships. The empirical results showed a uni-directional causal link that runs from stock market development to economic growth and there is evidence of an indirect transmission mechanism through the effect of stock market development on investment. The study found that stock market liberalization has a significant positive impact on the economic growth in Kenya. The study presented a conceptual gap as it focused on whether stock market liberalization, by improving the functioning of domestic stock market accelerates economic growth in Kenya while our study will focus on influence of interest rates and performance of lending institution in Africa. A critical literature review.

Kahihu (2021), conducted a study on to investigate microfinance in Africa, the interplay of interest rate, financial leverage and financial performance, experiences, and lessons from microfinance institutions in Kenya. The study employed positivism philosophy as the research philosophy and used explanatory research designs. The targeted population was all the thirteen registered Deposit Taking microfinance institutions in Kenya. The sampling method that was used was the census approach and used secondary data from MFI's (Microfinance Institutions) published accounts for the period between 2014-2018. The study was anchored on 3 theories: Resource-Based theory, Dynamic Capability Theory, and International Fisher Effect theories. Various diagnostic tests were applied to ensure we had a suitable empirical model. Data analysis was carried out using both descriptive and inferential statistics using panel data multiple regression analysis. The study results

indicated that interest rates and financial leverage have a positive effect on the financial performance of microfinance institutions. The MFIs owners and managers should put in place risk management measures such as risk identifications to prevent the MFIs from the effect of interest rate and financial leverage as they affect their financial performance. The study however presented a geographical gap as it was conducted in Kenya while our study will be conducted in Africa.

Mutemi (2019), conducted a study to determine the effect of interest rate capping on financial performance of commercial banks in Kenya. Specifically, the study seeks to establish the effect of credit supply on financial performance of commercial banks in Kenya as well as to analyze the effect of asset quality on financial performance of commercial banks in Kenya. Moreover, the study seeks to determine the effect of cost of credit on financial performance of commercial banks in Kenya. The study is anchored on three key theories: Financial intermediation theory, fractional reserve theory of banking, the credit creation theory of banking; and theory of rational expectation. The study used quarterly secondary data from 2013 to 2017 collected from forty commercial banks licensed in Kenya. The choice of period is justified on the ground of data availability and the period when this study was started. The data was obtained from the bank's financial statements and other publications by the Central Bank of Kenya. To analyze the data, the study used descriptive analysis approach and Ordinary Least Square (OLS) regression method. The descriptive statistics and the regression results indicate that Interest rate capping has a positive effect on financial performance of commercial banks. It is evident from the results that capping interest rate has impacted commercial banks positively. In addition, the results reveal that the quality of assets measured by the share of Non-performing loans affects financial performance negatively. Further, it was evident that credit supply measured by gross loans and advances has negative effect on banks' financial performance. Based on the findings, this study recommends commercial banks to look into ways of reducing the proportion of non-performing loans in their books in order to improve their returns on assets. The study used descriptive research design presenting a methodological gap, our study will use desktop literature review method

Kibuthu (2011), conducted a study on the extent that borrowings respond to interest rate fluctuations. The results of the study show that there exists a strong negative linear relationship between lending rates and volume of borrowings. Interest rate are an important factor determining amounts borrowed. Amounts borrowed will increase with declining lending rates, as the private sector will be more willing to take on more credit. The policy lessons that emanate from these results relate to the management of interest rates as a monetary policy tool. Low interest rate policy will stimulate borrowings and consequently spur economic growth. A low interest regime has been associated with economic growth in many countries including Japan, Korea and USA. The study therefore recommends to the monetary authorities to closely monitor interest rate movements. The study however present a conceptual gap as our study focus on influence of interest rates and

performance of lending institution in Africa while this study focus on extent that borrowings respond to interest rate fluctuations.

METHODOLOGY

The study adopted a desktop literature review method (desk study). This involved an in-depth review of studies related to influence of interest rates and performance of lending institution in Africa. Three sorting stages were implemented on the subject under study in order to determine the viability of the subject for research. This is the first stage that comprised the initial identification of all articles that were based on influence of interest rates and performance of lending institution in Africa. The search was done generally by searching the articles in the article title, abstract, keywords. A second search involved fully available publications on the subject influence of interest rates and performance of lending institution in Africa. The third step involved the selection of fully accessible publications. Reduction of the literature to only fully accessible publications yielded specificity and allowed the researcher to focus on the articles that related to influence of interest rates and performance of lending institution in Africa. After an in- depth search into the top key words (influence, interest rates, performance, lending institution, Africa), the researcher arrived at 4 articles that were suitable for analysis. This were findings from:

Kinuthia (2022), who conducted a study to examine whether stock market liberalization, by improving the functioning of domestic stock market accelerates economic growth in Kenya. The study also evaluated the nature of the relationship between stock market performance and economic growth in Kenya. The stock market liberalization and performance were measured using two variables namely stock market size as measured by stock market capitalization and stock market turnover respectively. The study used quarterly time series data collected through secondary sources and covered a period of 22 years from January, 1991 to December, 2012. The study utilized econometric techniques of Vector Autoregressive (VAR) and Granger Causality Tests to explore the relationships. The empirical results showed a uni-directional causal link that runs from stock market development to economic growth and there is evidence of an indirect transmission mechanism through the effect of stock market development on investment. The study found that stock market liberalization has a significant positive impact on the economic growth in Kenya.

Kahihu (2021), who conducted a study on to investigate microfinance in Africa, the interplay of interest rate, financial leverage and financial performance, experiences, and lessons from microfinance institutions in Kenya. The study employed positivism philosophy as the research philosophy and used explanatory research designs. The targeted population was all the thirteen registered Deposit Taking microfinance institutions in Kenya. The sampling method that was used was the census approach and used secondary data from MFI's (Microfinance Institutions) published accounts for the period between 2014-2018. The study was anchored on 3 theories: Resource-Based theory, Dynamic Capability Theory, and International Fisher Effect theories.

Various diagnostic tests were applied to ensure we had a suitable empirical model. Data analysis was carried out using both descriptive and inferential statistics using panel data multiple regression analysis. The study results indicated that interest rates and financial leverage have a positive effect on the financial performance of microfinance institutions. The MFIs owners and managers should put in place risk management measures such as risk identifications to prevent the MFIs from the effect of interest rate and financial leverage as they affect their financial performance.

Mutemi (2019), who conducted a study to determine the effect of interest rate capping on financial performance of commercial banks in Kenya. Specifically, the study seeks to establish the effect of credit supply on financial performance of commercial banks in Kenya as well as to analyze the effect of asset quality on financial performance of commercial banks in Kenya. Moreover, the study seeks to determine the effect of cost of credit on financial performance of commercial banks in Kenya. The study is anchored on three key theories: Financial intermediation theory, fractional reserve theory of banking, the credit creation theory of banking; and theory of rational expectation. The study used quarterly secondary data from 2013 to 2017 collected from forty commercial banks licensed in Kenya. The choice of period is justified on the ground of data availability and the period when this study was started. The data was obtained from the bank's financial statements and other publications by the Central Bank of Kenya. To analyze the data, the study used descriptive analysis approach and Ordinary Least Square (OLS) regression method. The descriptive statistics and the regression results indicate that Interest rate capping has a positive effect on financial performance of commercial banks. It is evident from the results that capping interest rate has impacted commercial banks positively. In addition, the results reveal that the quality of assets measured by the share of Non-performing loans affects financial performance negatively. Further, it was evident that credit supply measured by gross loans and advances has negative effect on banks' financial performance. Based on the findings, this study recommends commercial banks to look into ways of reducing the proportion of non-performing loans in their books in order to improve their returns on assets.

Kibuthu (2011), conducted a study on the extent that borrowings respond to interest rate fluctuations. The results of the study show that there exists a strong negative linear relationship between lending rates and volume of borrowings. Interest rate are an important factor determining amounts borrowed. Amounts borrowed will increase with declining lending rates, as the private sector will be more willing to take on more credit. The policy lessons that emanate from these results relate to the management of interest rates as a monetary policy tool. Low interest rate policy will stimulate borrowings and consequently spur economic growth. A low interest regime has been associated with economic growth in many countries including Japan, Korea and USA. The study therefore recommends to the monetary authorities to closely monitor interest rate movements.

SUMMARY, CONCLUSION AND RECOMMENDATIONS

Conclusion

The study also concluded that interest rates on loans and advances became significant in affecting performance in terms of profits before tax and exceptional items (PBTEI) and also returns on equity (ROE). This conforms to the study by Kibuthu (2005) that those who borrow from lending institutions are sensitive to interest on loans, borrow more when rates are low and favourable allowing banks to make more in profits.

Recommendations

The study recommends that majority of African banks continued making huge income from loans. Therefore information on total cost of loans to the borrowers should be made very clear on all platforms that hold this information. Diversification to other non- interest revenue sources is a way to reduce banks' overreliance on interest income.

REFERENCES

- Aligonby, J. (2016 August 25). *Shares in Kenyan bank hit after interest rates cap move*. Financial Times
- Almazan, A., Martín-Oliver, A., & Saurina, J. (2015). *Securitization and Banks' Capital Structure*. Review of Corporate Finance Studies, 4(2), 206-238.
- Bali, T. G., Engle, R. F., & Murray, S. (2016). *Empirical asset pricing : the cross section of stock returns*. Hoboken, NJ: John Wiley & Sons
- Blau, B. M., & Whitby, R. J. (2015). *The Volatility of Bid-Ask Spreads*. Financial Management, 44(4), 851-874
- Cao, J., & Illing, G. (2015). "Interest Rate Trap", or Why Does the Central Bank Keep the Policy Rate Too Low for Too Long? Scandinavian Journal of Economics, 117(4), 1256-1280.
- Darrat, A. F., Gray, S., Park, J. C., & Yanhui, W. (2016). *Corporate Governance and Bankruptcy Risk*. Journal of Accounting, Auditing, and Finance, 31(2), 163-202
- Gandhi, P., & Lustig, H. (2015). *Size Anomalies in U.S. Bank Stock Returns*. Journal of Finance, 70(2), 733-768.
- Iftimie, B., & Chiru, S.-M. (2016). *Macroeconomic Performance Under Inflation Targeting: The Case of Romania*. Economic Computation & Economic Cybernetics Studies & Research, 50(3), 193-209
- Irresberger, F., Mühlhnickel, J., & Weiß, G. N. (2015). Explaining bank stock performance with crisis sentiment. *Journal of Banking & Finance*, 59, 311-329.

Matundura E. (2018). *The Effects of Capping Interest Rate on Profitability of Kenya Commercial Bank*. IOSR Journal of Economics and Finance. Pgs. 34- 37.

Mbua, N.S. (2017). *Effect of Interest Rates Capping by the Central Bank of Kenya on the Banks Listed on the Nairobi Securities Exchange*. Unpublished research project. United States International University.

Ng'ang'a, K. A. (2017). *The Impact of Interest Rate Capping on the Financial Performance of Commercial Banks in Kenya*. Unpublished research project. University of Nairobi.

Tuyishime, R., Memba, F., and Mbera, D. (2015). *The Effects of Deposits Mobilization on Financial Performance in Commercial Banks in Rwanda*. A case of Equity Bank Rwanda Limited. International Journal of Small Business and Entrepreneurship Research.

Werner, A.R. (2016). *A Lost Century in Economics: Three theories of Banking and the Conclusive Evidence*, International Review of Financial Analysis. Pgs. 361- 379