

JOINT INFLUENCE OF CUSTOMER CREDIT CHECKS, CREDIT RISK ASSESSMENT AND CREDIT POLICY COMPLIANCE ON LOAN PERFORMANCE OF COMMERCIAL BANKS LISTED AT THE NAIROBI SECURITIES EXCHANGE, KENYA

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ABSTRACT

Loan default difficulties have been seen within the commercial banking sector. The study published by the Central Bank of Kenya (CBK) has provided empirical evidence indicating deficiencies in the lending performance of commercial banks throughout the years. This research is guided by particular goals, which aim to investigate the impact of client credit risk checks, credit risk assessment, and credit policy compliance on the loan performance of commercial banks listed at the Nairobi Securities Exchange in Kenya. This research is underpinned by three suppositions: adverse selection theory and the credit risk theory. The research design used in this study was descriptive in nature. The research population included of the twelve commercial banks registered on the Nairobi Securities Exchange. The investigation moreover examined the collecting of data via the use of both primary and secondary data classifications. Consequently, the research used both a questionnaire and a data collecting sheet in a sequential manner. The research used a combination of descriptive and inferential data analysis methods for the purpose of analyzing the data. The findings of the study were presented in the form of tables, graphs, and figures. The research demonstrated ethical considerations by obtaining authorization letters from both the

Kenyatta University graduate school and the National Commission for Science, Technology, and Innovation (NACOSTI), therefore ensuring the protection of the rights of all involved parties. The findings of the research indicate that the implementation of customer credit checks has a beneficial impact on the loan performance of commercial banks listed at the Nairobi Securities Exchange (NSE) in Kenya. The findings suggest that there is a positive relationship between client credit checks and loan performance among commercial banks listed at the Nairobi Securities Exchange (NSE) in Kenya, with a coefficient of 0.534. The findings of the credit risk assessment indicate a favorable influence on the loan performance of commercial banks listed at the Nairobi Securities Exchange (NSE) in Kenya. Specifically, it suggests that for every unit rise in credit risk assessment, there is a corresponding increase of 0.621 in the loan performance of these commercial banks. Additionally, it has been observed that adherence to credit policy has a favorable influence on the loan performance of commercial banks in Kenya that are listed at the Nairobi Securities Exchange (NSE). Specifically, for each unit rise in compliance to credit policy, there is a corresponding increase of 0.512 in the loan performance of these commercial banks.

INTRODUCTION

In most economies, be it developed or emerging ones, commercial banks participate in a pivotal manner and in many ways towards economic growth and development (Ngang'a, 2015). They are the so-called depository institutions and as it has just been hinted, these institutions ensure financial stability, economic growth and development, create employment vacancies and mobilize resources across the board (Accornero et al., 2018). The commercial bank's role of intermediation cannot be

overemphasized for they do collection of excess cash from net savers and supply the same to the net borrowers who wish to invest (Khan et al., 2020). That is to say, in the financial market which is dominated by demand and supply forces, commercial banks intermediate the net savers and net borrowers so as to match their financial and investment requirements as supposedly (Oketch *et al.*, 2018).

From the global perspective, these aforementioned financial institutions have proven to be economic drivers. In UAE, banking sector takes the lead in that economy and it is actively interlinked to the outside world through its increased financial activities. For instance, in 2017, the bank assets in volumes translated to AED 2,693 billion increasing to AED 3,033 billion by 2019. For deposits, the total amount was ranging AED 1,870.2 billion in 2019 which was an increase from AED 1,627.3 in 2017. In Australia, commercial banks participated in economic recovery for it created financial stability. It was evident that these banks directly enhanced the respective Gross Domestic Product (GDP) of a country, increased employment rate of 13% and a downward housing price adjustment of 30%. (APRA, 2020a). For instance, the commercial banks in Namibia play a key role of funding economic development. Those banks also provide credit facilities to small and medium enterprises (Paavo, 2017). The republic of Tanzania has set out banking policies which have fostered growth of the country's economy.

Kenyan based commercial banks have also had a replica of endeavors as it was in the case of global and regional viewpoint. For instance, these banks have critical contribution to the financial systems in the country through provision of financial support services which have translated to increased economic growth (Gitogo, 2019). In the financial years, 2016/2017 and 2017/2018, the financial sector fostered Gross Domestic Product (GDP) growth levels by 1.29bn USA dollars and above. So, this sector was the epicenter in the country (Kenya Bankers Association, 2021). The banking sector also plays an unparalleled role of creating employment and providing various investment doors and providing debt facilities to small and medium enterprises (Kamau, 2017). As per the opinion of Saruni, (2020), a banking sector which is actively involved in intermediation activities is key in economic growth for it creates conducive environment for all the market players.

On the same breath, the commercial banks endeavor to maintain their financial stability by fostering their financial performance which is a major goal achieved through issuance of loans as they continue playing their intermediary role in the economy (Ghosh, 2015). The banks' productivity in terms of banks' financial performance viewpoint. Again is anchored on the extent to which loan portfolio perform. In the process of generating income through increased profitability, commercial banks are exposed to imminent adverse environment of credit risk which arise through loan defaults (World Bank, 2020). On the other hand, the bank top management have not let it go but have been on the forefront to resolve this financial challenge by carry out credit risk management practices. The aforementioned practice is prevalent in the banking industry and it measures the end results of quality portfolio and growth can be reached by commercial banks (Siddique, Muhammad and Khan, 2022).

Statement of the Problem

Banks in the financial market and in any economic system plays a mainstream role that cannot be overemphasized. These deposit taking institutions play multifaceted roles such as deposit taking, safeguarding of currency and precious stones and documents and lending of loans (Deribew, 2022). The role of dispensing of loans is the mainstream function of the commercial banks. Basel (2002) classifies lending services of commercial banks to be the bottom line of commercial bank operations.

The commercial banks intermediate those who save their financial resources and those who want to invest. Further, commercial banks are imperative for employment and industrialization of a country (Mburu, Mwangi and Muathe, 2020). However, commercial banks have been experiencing loan performance short falls across the years (World Bank, 2020). It is evident that central bank institutions across the world have experienced a self-defeat game even with their critical endeavors to end financial crises amongst commercial banks through upholding of price stability and economic protection. Over the years, the Kenyan based commercial banks have been going through deteriorating loan performance evident by the low-performing loans in Billion (B) Kenya shillings as per Central Bank of Kenya report (CBK, 2020). This is further summarized as per Table 1.1 below.

Table 1: Loan Performance for commercial banks in Kenya

Non-Performing Loan (NPL)					
December 2016	December 2017	December 2018	December 2019	December 2020	December 2021
214.5B	264.6B	316.7B	335.9B	436.1B	460.0B

CBK Report, 2016 to 2021

The debate on credit risk management practices and loan performance conceptual framework have portrayed controversial debate amongst scholars. The focus by different studies portrayed diverse conceptual, methodological and contextual gaps from the global, regional and contextual viewpoint.

From the global perspective, a China based study by Gao, and Guo (2022) interrogated on the issues of the extent to which green credit policy influenced the commercial banks financial performance view point in China. Research findings revealed that green credit policy both fostered profitability of the banks through increased non-interest income and caused a decline in non-performing debts ratio in that order. In another study by Siddique, Muhammad and Khan, (2022), the main aim was to interrogate on specific factors of the banks which were selected and some aspects of credit risk management practices which were proposed to be influencing financial performance of commercial banks in South Asia. It was established that those independent variables aforementioned explained the variances in financial performance in a significant manner. More specifically, both non-performing loans and cost-efficient quotient significantly influenced profitability (i.e, ROA, and ROE financial performance indicators) which were used to gauge profitability of the banks.

In another similar study by Al Zaidanin and Al Zaidanin (2021) efforts were made on United Arabs Emirates based commercial banks to launch if there was impact on their financial performance by predictors such as credit risk management associated factors. It was established that both NPL and also the viewpoint of cost-income quotient was significant to the banks' profitability levels. However, the relationship had taken an inverse direction. The two studies portrayed that non-performing loan was the pure predictor of banks' financial performance in the two localities. In another research work carried out by Hu, Gu, and Zhou, (2017) in Europe which aimed at investigating the influence of comprehensive information sharing in credit market has on for commercial banks portrayed that this act fostered access to credit facilities and also increased default risk.

Regionally, in Kumasi Metropolis in Ghana, Yeboah and Oduro (2018) selected some specific credit Unions to investigate the causes of loan default rate amongst those organizations. It was established that the causes of loan default amongst the credit unions were, namely; education level of the borrower, loan diversion, the aspect of monitoring the loan amount, marital status of the borrower and the level of income of those borrowers. Again, in Uganda, another study was undertaken by Mafumbo, (2020) aimed at establishing conceptual positions of credit management and credit policy and profitability aspect in terms of financial performance of financial institutions (i.e banks). For your information, the credit risk control case, the research outcome was significant for this particular predictor explained the variances thereof. For the other predictor variable, namely credit policy it had no significant influence on the dependent variable.

Locally, studies carried out in Kenya on matters to do with loan performance portrayed diverse linkages. For instance, one of those studies were undertaken by Wanjagi (2018) for commercial banks physically domiciled in Kitengela, Kenya. The main aim of this endeavor was to interrogate the degree of causal-effect significance of credit risk management practices and commercial banks' financial performance conceptual argument. Outcome portrayed that risk identification had significant direct influence to performance. Other aspect such as credit appraisal, risk monitoring and risk measurement had diverse link with some positive and others negative and not significant. Also, the aspect of credit information sharing was of major concern to some researchers. For instance, Saruni (2016) focused on the subject matter of NSE listed banks to find out whether information sharing would affect their loan default rate. Results showed that as a predictor variable, reports for customers if shared significantly influenced loan default. In a similar manner, both reports of the clients of pulled nature and incurred cost or expenses arising from the allotment aspect of the credit information affected loan default of loans.

From those past studies, credit risk management practices were gauged differently. Hence a methodological gap exists. In some studies, the outcome factors were commercial banks' productivity level measured using financial performance where in form of non-performing loan, commonly referred to as loan default was used as the predictor variable. This is a conceptual gap that need to be filled. Again, although most past studies were similar in concept, the subject of the study was in diverse locality or of different nature such as a credit union or SACCO and the outcome gotten may not represent a Kenyan context like the commercial banks listed at NSE. Therefore, based on this backdrop, this study aimed at establishing the extent to which the facet of customer

credit risk checks done by commercial banks, credit risk assessment related activities and credit policy compliance viewpoint influence loan performance of NSE listed banks domiciled in Kenya.

Research Hypothesis

There is no significant joint effect of customer credit checks, credit risk assessment and credit policy compliance on loan performance of commercial banks listed at the Nairobi securities exchange, Kenya

LITERATURE REVIEW

aspect of theoretical perspective concentrates on the relevant or underpinning theories which relate to the various concepts discussed in this paper.

Adverse Selection Theory

Adverse selection theory is closely associated with Rothschild and Stiglitz (1976) who is the key proponent. In their proposition, they argued that the buyer has full knowledge of the possible accidental occurrences that can take place when he or she takes a certain action while on the other hand the seller is not in the same mode of awareness. Or else the reverse can happen that the seller has full knowledge of the possible accidental occurrences that can take place when he or she takes a certain action while on the other hand the buyer is not in the same mode of awareness. Such an argument applies where the party with full information as compared to the other one intentionally undertakes financial risks with anticipation that another person such as a third party will bear the burden of the losses thereof (González-Uribe & Osorio, 2014). This is a case of information asymmetry and it commonly applies to financial institutions such as banks and insurance companies where one party such as the bank issues a loan to a borrower whose full information of inability or risk of repaying the loan is not fully known. At the end of it all the agreement is breached.

This theory is anchored on the assumption that the loan debtor is able to meet the loan obligation when he or she is financially able to do so. The hidden charges make the loan facility to be more costly hence scaring the borrowers away. Hence, they do not borrow (Hu, Gu and Zhou, 2017). The supposition of adverse selection narrates the reasoning behind the need of adequate information from the borrowers so as to foster financial market efficiency (Cheng & Degryse, 2010). With sufficient data, there is increase of the accuracy of estimating the level of borrower default risk and as a result be in a position to set suitable credit terms and conditions. As a result, even those customers who are risky are also accommodated in the debt issuance schedule. For this to be achieved, the such borrowers are charged higher interest rates to compensate the possible future losses (Dierkes et al., 2013). Similarly, the low risky customers are equally spared of the exorbitant interest rates. So, they are charged less for being less risky. This action translates in to higher demand level of the products in the market (Barron & Staten, 2013). However, this supposition is faced with a short coming of helping the concerned party to differentiate between a good borrower and a bad one (Hu, Gu & Zhou, 2017).

Due to the aforementioned shortcoming, the lender ends up charging all the customers the same interest on their loans based on past experience. Further, the accessibility of the borrowers' credit information is of much help for the banks are able to assess the quality of the clients they are dealing with and as a result treat them fairly (Cheng & Degryse, 2010). Therefore, the improvement of the degree of information availability amongst commercial banks for the borrowers via CRB source ensures the previously discriminated customers especially those with low-risk characteristics are financed (Dierkes et al., 2013).

This supposition underpins the current study for it addresses the aspect of loan performance which is the dependent variable in two viewpoints. One, the theory portrays the inherent and underlying causes of loan performance variances such as lack of balanced information between the two counterparties which make the lender to be unable to differentiate between a good and bad borrower. Also lack of full information from the borrower make the lender make the wrong estimation of the credit risk associated to an individual borrower. Hence the lender dispenses loan to a riskier customer without an equal matching of high borrowing rate to compensate the same. On the same breath, the theory reveals one key source of low or high loan performance originates from the customer when he/she knows that loan agreement can be broken and a third-party chip in to compensate the loss. Two, the theory portrays equally a scenario where the lender can reduce the chances of adverse loan performance by accessing more information about the risk level of the borrower from a third-party confirmation. The current study is advocating accessing borrower's information from a third party such as credit reference bureaus and trade references which are independent third parties.

Credit Risk Theory

The key proponent of this supposition was Melton (Melton, 1974). In his argument, the theory advocates assessment of the risk level inherent to a counterparty to avoid financial losses in the future. He defined credit risk as the financial loss arising because of decline of the creditworthy assurance of a borrower in a debt-based contract (Liu, Mirzaei & Vandoros, 2014). According to this supposition, credit risk arises from the counterparty failing to honor his or her financial obligation of repaying the principle and the interest amount of the debt. This may end up to the closure of the financial institution once it turns to be bankrupt due to failure to meet the deposit demands in the future.

Melton, (1974) established two main credit risk modeling methodologies, namely; structural-based technique and the intensity-based technique (i.e., reduced form technique) which are useful in analyzing credit risk. Also, Clifford V. Rossi further developed another way of analyzing credit risk referred to as credit-based spreads, credit-based portfolio management and lastly loss distribution-based method arrived at through the Monte Carlo designed simulation function.

So that there is total elimination of credit risk, a lender can achieve this objective by carrying out a credit check to identify the right borrower who once identified is expected to insure through some financial institutions such as mortgage insurance company cover or alternatively seek guarantors of a 3rd-party nature. In all these endeavors, the more the risk level one exposes him/herself in, the more

the cost charges or burden will befall the borrower and the vice versa is true (Owojori, Akintoye and Adidu, 2011).

The credit risk theory supports the current study for its focus is generally realigning of the aspects which predict loan default. For instance, the theory addresses the aspect of creditworthiness of the borrower where it advocates that the borrower should not breach the contractual obligation gotten in to. To achieve this objective, the theory suggests that the lender need to carry out credit risk assessment using three types of models for analysis. This is actually a common practice by banks for it helps in reduction of the default risk aspect which in turn help in loan performance. Also, the theory suggests 'reduction of lenders' risk, by carrying out a credit check on the potential client. This is the current study's objective one which aims at establishing the influence this aspect has on loan default.

RESEARCH METHODOLOGY

Target Population and Sampling

Sampling Size and Sampling Procedure

The population chosen in this study is the whole universe of the study subject and this definition is in tandem with that of Mugenda & Mugenda (2009) who opined that a one hundred percent group of the subject matter being studied represents the study population and should have similar observable characteristics. The target population was the 12 commercial banks which are members of NSE, Kenya. (Capital Markets Authority, 2017).

Data Collection Procedure

Data collection is key and hence the right procedure need to be adhered to the letter. This ensures that sufficient data is collected which truly represents the whole population (Mohajan, 2018). In this study, research assistants were utilized. To achieve this objective, the research assistants were taken through some data collection guidelines so as to ensure that the right quantity of data is captures and also ensure adherence to ethical considerations.

The researcher used the methodology of drop and pick of the questionnaires and where there still some challenges of Covid-19 Pandemic fears, the researcher via the research assistants will adopt the Covid-19 Pandemic protocols to minimize anxieties. Amongst the respondents. These efforts only addressed collection of primary data. For the secondary data, a secondary data collection schedule/matrix was utilized to collect data for loan default. The data was accessed through the CBK website. The secondary data was for the five years from 2018 to 2022.

Data Analysis and Presentation

After data has been collected, the researcher carried out editing, sorting and data entry processes. This process will aid the actual data analysis process to get initiated effectively.

Inferential Analysis

Following the completion of a descriptive analysis, the research proceeded to conduct inferential data analysis. This included doing correlation analysis to evaluate the extent of the association between the variables under investigation and their respective levels of weakness or strength.

Multivariate regression analyses were conducted to examine the research hypothesis proposed previously in this work. In order to accomplish this goal, the research used multiple regression model, to examine the joint impact of credit risk management strategies (represented by a composite score) on loan default. The research used a triangulation approach to integrate primary cross-sectional data with secondary longitudinal data, so enabling the creation of a single data point for regression analysis.

Empirical Model

The empirical model that was used to test the theoretical relationship between and amongst study variables is presented as follows;

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

Where; Y = Loan Default

X₁ = Customer Credit Checks

X₂ = Credit Risk Assessment

X₃ = Credit Policy Compliance

β₀ = Constant term

ε = Error term

β₁, β₂, and β₃ are coefficients of independent variables.

RESEARCH FINDINGS

Multiple Regression

The objective of the study sought to examine the joint influence of customer credit checks, credit risk assessment and credit policy compliance on loan performance of commercial banks listed at the Nairobi securities exchange, Kenya.

The corresponding hypothesis was stated as follows; *“There is no significant joint effect of customer credit checks, credit risk assessment and credit policy compliance on loan performance of commercial banks listed at the Nairobi securities exchange, Kenya”*.

Table 2: Joint influence of customer credit checks, credit risk assessment and credit policy compliance on loan performance of commercial banks listed at the Nairobi securities exchange, Kenya

Model Summary						
R	R Square	Adjusted R Square	Std. Error of the Estimate			
.916 ^a	.839	.799	1.211			
ANOVA^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	108.918	3	36.306	20.844	0.000
	Residual	13.936	8	1.742		
	Total	122.854	11			
Coefficients						
	Unstandardized Coefficients		Standardized Coefficients			
	B	Std. Error	Beta	t	Sig.	
(Constant)	4.123	0.364		11.326	0.000	
Customer credit checks	0.659	0.241	0.534	2.954	0.005	
Credit risk assessment	0.779	0.2346	0.621	2.867	0.007	
Compliance to credit policy	0.534	0.222	0.512	2.473	0.025	

a. Dependent Variable: Loan performance of commercial banks in Kenya listed at NSE
 Source: (Researcher, 2023)

The results in Table 4.15 indicate that the customer credit checks, credit risk assessment, Compliance to credit policy had a joint significant effect on loan performance of commercial banks in Kenya listed at NSE e as shown by adjusted r^2 value of 0.839 indicating that the independent variables accounted for 83.9% of the variance on loan performance of commercial banks in Kenya listed at NSE. Whereas, 16.1% of Loan Performance of Commercial Banks Listed at the Nairobi Securities Exchange, Kenya was predicted or narrated by other variables not assimilated in this model.

The ANOVA results in table 4.15 show that the F statistics value was 20.844, with a p-value of $0.00 < 0.05$. This indicates that the model is significant and fit for the study as the P-value is significant. This is an indication that business ethics (customer credit checks, credit risk assessment as well as Compliance to credit policy) will foster the loan performance of commercial banks in Kenya listed at NSE.

Customer credit checks have a positive influence on loan performance of commercial banks in Kenya listed at NSE. It indicates that any unit increase in the customer credit checks will cause loan performance of commercial banks in Kenya listed at NSE to increase by 0.534. Credit risk assessment showed a positive impact on loan performance of commercial banks in Kenya listed at NSE which means that it increases loan performance of commercial banks in Kenya listed at NSE by 0.621 as a result of a unit increase. Further, Compliance to credit policy showed a positive impact on loan performance of commercial banks in Kenya listed at NSE which means that it increases loan performance of commercial banks in Kenya listed at NSE by 0.512 as a result of a unit increase.

The overall regression model for this model was:

$$LP = 4.123 + 0.534CCC + 0.621CRA + 0.512CCP + \varepsilon$$

Where;

LP is Loan Performance.

CCC is Customer Credit Checks

CRA is Credit Risk Assessment

CCP is Compliance to Credit Policy

The findings presented in Table 4.15 demonstrate that customer credit checks, credit risk assessment, and compliance to credit policy collectively exerted a statistically significant influence on the loan performance of commercial banks listed at the Nairobi Securities Exchange (NSE) in Kenya. This is evidenced by the adjusted R-squared value of 0.839, indicating that the independent variables accounted for 83.9% of the variability in loan performance among these banks. In this model, it was observed that 16.1% of the Loan Performance of Commercial Banks Listed at the Nairobi Securities Exchange, Kenya was influenced by factors that were not included in the analysis.

The analysis of variance (ANOVA) findings shown in table 4.15 indicate that the F statistic yielded a value of 20.844, accompanied by a p-value of 0.00, which is less than the conventional significance level of 0.05. This finding suggests that the model is statistically significant and appropriate for the investigation, as shown by the substantial P-value. This observation suggests that the implementation of business ethics, namely practices such as client credit checks, credit risk assessment, and adherence to credit policy, might positively influence the loan performance of commercial banks in Kenya that are listed at the Nairobi Securities Exchange (NSE).

The implementation of customer credit checks has been shown to have a beneficial impact on the lending performance of commercial banks in Kenya that are listed at the Nairobi Securities Exchange (NSE). The findings suggest that a one-unit increase in customer credit checks is associated with a 0.534 rise in the loan performance of commercial banks listed at the Nairobi Securities Exchange (NSE) in Kenya. The findings of the credit risk assessment indicate a favorable influence on the loan performance of commercial banks listed at the Nairobi Securities Exchange (NSE) in Kenya. Specifically, it reveals that a unit rise in credit risk assessment leads to a corresponding increase of 0.621 in the loan performance of these commercial banks. Moreover, it has been shown that adhering to credit policy has a favorable influence on the loan performance of commercial banks in Kenya that are listed at the Nairobi Securities Exchange (NSE). Specifically, for each unit increase in compliance to credit policy, there is an associated rise of 0.512 in the loan performance of these commercial banks.

Conclusion

The study null hypothesis was “there is no significant joint effect of customer credit checks, credit risk assessment and credit policy compliance on loan performance of commercial banks listed at the Nairobi securities exchange, Kenya.” This fourth hypothesis was anchored on multiple regression model. The research findings portrayed that customer credit checks, credit risk assessment and credit policy compliance statistically and significantly influenced loan performance with (Adjusted R² =0.799 and p=0.000), and it shows that that customer credit checks, credit risk assessment and credit policy compliance explained 79.9% of changes in loan performance of commercial banks listed at the Nairobi securities exchange. In general, it was established that there existed a positive and significant joint effect of customer credit checks, credit risk assessment and credit policy compliance on loan performance of commercial banks listed at the Nairobi securities exchange, Kenya. Therefore, the researcher rejected the null hypothesis three (H₀₄).

Recommendations

The management of government enterprise development funds should enforce the application of appraisal techniques and less of relationship lending. Proper and Sound appraisal techniques will guarantee loaning to the correct beneficiaries and reduces chances of default. The study recommends the utilization of different appraisal techniques on borrowers and not a single technique. According to the findings of the research, appropriate collection strategies and enforcement methods should be implemented so that funds are able to collect loans on time and within the contract term. Because of the high rate of conversion, implementing effective enforcement processes will help to lower the rate of default.

According to the findings of the research, senior management at commercial banks should adopt policies and processes for detecting credit risk, measuring it, monitoring it, assessing it, and managing it. They need to set up an independent internal control system for evaluation that is centered on the risk environment. The default rate may be lowered by effective risk management.

REFERENCES

- Accornero, M., Cascarino, G., Felici, R., Parlapiano, F. & Sorrentino, A.M. (2018). Credit risk in banks' exposures to non-financial firms. *European Financial Management*, 24(5), 775-791.
- Al Zaidanin, J. S. & Al Zaidanin, O. J. (2021). The impact of credit risk management on the financial performance of United Arab Emirates commercial banks. *International Journal of Research in Business and Social Science*, 10(3), 303–319.
- Barron, J. M. & Staten, M. (2013). The value of comprehensive credit reports. *Credit Reporting Systems and the International Economy*, 8, 273-310.
- Central Bank of Kenya (CBK). (2022). Central Bank of Kenya directory of licensed commercial banks, mortgage finance institutions and authorized non-operating holding companies.
- Central Bank of Kenya (CBK, 2018), Bank Supervision Report. Central Bank of Kenya (CBK, 2019), Bank Supervision Report. Central Bank of Kenya (CBK, 2020), Bank Supervision Report.

- Cheng, X., & Degryse, H. (2010). The impact of bank and non-bank financial institutions on local economic growth in China. *Journal of Financial Services Research*, 37(2-3), 179-199.
- Deribew, G. (2022). The impacts of loan policy on financial performance of private commercial banks in Ethiopia. Unpublished MBA Project of Addis Ababa University, Ethiopia.
- Dierkes, M., Erner, C., Langer, T. & Norden, L. (2013). Business credit information sharing and default risk of private firms. *Journal of Banking & Finance*, 37(8), 2867-2878.
- Gao, X. and Guo, Y. (2022). The green credit policy impact on the financial performance of commercial banks: A quasi-natural experiment from China.
- Ghosh, A. (2015). Banking-industry specific and regional economic determinants of non-performing loans: Evidence from US states. *Journal of Financial Stability*, 20(16), 93-104.
- Gitogo, W., (2019). The impact of banking sector development on Kenya's economy. Available <https://kenyanwallstreet.com/the-impact-of-banking-sector-development-on-kenyas-economy/>. Accessed on 11th October 2021.
- González-Uribe, J. & Osorio, D. (2014). Information sharing and credit outcomes: Evidence from a natural experiment. Working Paper. Department of Finance, London School of Economics.
- Hu, N., Gu, W. & Zhou, Y. (2017). The role of comprehensive information sharing in credit market: Theoretical analysis and new evidence from the European Union. *Journal of Modern Accounting and Auditing*, 13(2), 75-92.
- Kamau, P. (2017). Economic paradox in Kenya: More favorable perceptions amidst economic insecurity. *Afrobarometer Dispatch No. 169*, 1-14.
- Kenya Bankers Association (2021). State of the Banking Industry Report 2020. Available at <https://www.kba.co.ke/wpcontent/uploads/2022/05/State%20of%20the%20Banking%20Industry%20Report%20-%202020.pdf>. Accessed on 11th October 2021.
- Khan, M.A., Siddique, A. & Sarwar, Z. (2020). Determinants of non-performing loans in the banking sector in developing state. *Asian Journal of Accounting Research*, 12(11), 546-563.
- Liu, G., Mirzaei, A. & VANDOROS, S. (2014). The impact of bank competition and concentration on industrial growth. *Economics Letters*, 124(1), 60-63.
- Mafumbo, P.W. (2020). Credit management, credit policy and financial performance of commercial banks in Uganda. *International Journal of Business and Management Review*, 8(5), 68-99.
- Mburu, I., Mwangi, L., & Muathe, S. (2020). Credit Management Practices and Loan Performance: Empirical Evidence from Commercial Banks in Kenya. *International*
- Mohajan, H. K. (2018). Qualitative research methodology in social sciences and related subjects. *Journal of Economic Development, Environment and People*, 7(1), 23-48.
- Mugenda, O. M. & Mugenda, A. G. (2009). *Research methods: Quantitative and Qualitative approaches*. Nairobi: ACTS.
- Oketch, J., Namusonge, G., & Sakwa, M. (2018). Effect of financial leverage on performance of listed commercial banks in Kenya. *International Journal of Social Sciences and Information Technology*, 4(2), 2760-2766.
- Owojori, A.A., I.R. Akintoye & F.A. Adidu, (2011). The challenge of risk management in Nigerian banks in the post consolidation era. *Journal of Accounting and Taxation*, 3(2): 23-31.
- Paavo, E. (2017). The Impact of Commercial Banks Development on Economic Growth in Namibia. Unpublished Master of Commerce in Development Finance Degree. *Procedia—Social and Behavioral Sciences*, 10(6), 234-240.

- Saruni, L. (2020). Credit information sharing and default rate of loans issued by commercial banks listed at the Nairobi Securities Exchange.
- Saruni, L.A. (2016). Credit information sharing and default rate of loans issued by commercial banks listed at the Nairobi securities exchange. Unpublished MBA Project of Kenyatta University.
- Siddique, A., Muhammad, A.K. & Khan, Z. (2022). The effect of credit risk management and bank-specific factors on the financial performance of the South Asian commercial banks. *Asian Journal of Accounting Research*, 7(2), 182-194.
- Tanzania Banking Sector Report. (2021). A Review of the Calendar Year.
- Wang Y, Chen Y (2014). A comparison of madman and Sugeno fuzzy inference systems for traffic flow prediction. *J Comput* 9(1):12–21.
- Wanjagi, J.A. (2018). Effect of credit risk management practices on performance of commercial banks in Kitengela, Kenya. Unpublished MSC of KCA University.
- Yeboah, E. and Oduro, I. (2018). Determinants of loan defaults in some selected credit unions in Kumasi Metropolis of Ghana. *Open Journal of Business and Management*, 6(8), 778-795.