

Full Length Research Paper

Financial risk and financial performance of deposit money banks in Nigeria

Ademola Olufemi* and Ismaila Sunmisola

Department of Finance, Babcock University, Ilishan-Remo, Ogun State, Nigeria.

Received 8 August, 2021; Accepted 22 December, 2022

The study examined the risk and stability of the Nigerian deposit money institutions. The study, which is a quasi-experimental one, examines how an independent variable that participants already had before the study's start influences a dependent variable, hence the ex post facto design was adopted. As of December 31, 2019, the population will consist of all Deposit Money Banks that have been listed on the Nigerian Stock Exchange throughout the last ten years (2010-2019). Ten Deposit Money Banks that were listed on the Nigerian Stock Exchange as of December 31, 2019, make up the sample size for this study, which was chosen at random and comprised of those ten institutions. Panel data with statistical information were employed in the study (STATA, 17). The proposed analysis was carried out utilizing STATA as it is the best system-based tool for evaluating panel data (version 17). Panel data regression analysis was also used in the study to evaluate the research hypotheses. According to the study, credit risk and liquidity risk have a substantial impact on the financial performance (ROE) of Nigeria's deposit money institutions. The results of the study indicate that financial risk adversely affects the financial performance of Nigerian deposit money institutions.

Key words: Deposit money banks, banking industry, Nigeria, financial risk, financial performance.

INTRODUCTION

To maintain the balance between the surplus and deficit units of the economy, Deposit Money Banks (DMBs) transfer deposits from the surplus unit to the deficit unit through loans and other financial services (Mamman and Hashim, 2014). DMBs are exposed to a range of risks because of the complexity and volume of their operations (such as financial risk, operational risk, market risk, reputational risk, etc.) that, if improperly managed, could endanger their capacity to generate revenue, uphold a positive reputation, and generally continue to exist

(Central Bank of Nigeria, 2019). DMBs typically deal with a variety of financial risks in order to carry out their mandate and fulfill their obligation for financial intermediation. Oldfield and Santomero (1997) define financial hazards as any of the several types of risk related to finance, such as financial transactions. These risks frequently consist of a variety of different risk factors, the magnitude of which determines the potential financial loss to which a bank is exposed. These risk factors may eventually lead to volatility in a bank's

*Corresponding author. E-mail: femiademola@gmail.com.

reserves, costs, and corporate value. These specific risk elements include Credit/Default Risk, Insolvency Risk, Liquidity Risk, Market Risk, and others. Credit/Default Risk is the risk of defaulting on a debt. Insolvency Risk is the risk that DMBs won't be able to pay their debts, deposits, and other obligations. Liquidity Risk is the risk that DMBs won't be able to pay their short-term obligations while Market Risk is the risk of losses in treasury positions due to unfavorable price movement (Ajayi and Oseyomon, 2019). According to Vij and Bedi (2016), financial performance is an indicator of how successfully a corporation may use resources from its main line of business to generate revenue. In general, it relates to how successfully financial objectives have been attained. Because inadequate risk management can have an impact on profitability, solvency, and going concern, the financial performance and sustainability of a bank depend on the successful management of its financial risks. According to Muriithi and Muigai (2017), financial risks jeopardize the financial sector's stability and overall financial performance. In Nigeria, financial risks and DMB financial performance are quite problematic and unresolved, with issues ranging from low and insufficient profitability to sustainability concerns, an inability to create economic value for the shareholders, and meager returns on assets because of inefficient use of the banks' available assets (Clementina and Isu, 2016). Financial risk is separate from other hazards that DMB faces and is a little bit difficult to handle. Olalere et al. (2018) agreed that financial risk is both systemic and asymmetrical, which has an adverse effect on banks' financial and non-financial performances, results in substantial financial losses, and undermines investors' and depositors' confidence.

According to John (2020), a risk management framework is a group of components that serve as both the conceptual foundation and the organizational frameworks for developing, implementing, supervising, reviewing, and continuously improving risk management throughout the organization. To simplify decision-making and the accomplishment of organizational goals, a framework for financial risk management should be linked with an organization's operational policies and strategic planning. Pandey (2014) noted that a company's inherent risks do not have to be completely eliminated in order for risk management to be successful. Because they might charge interest for doing so, banks are able to make money by taking on the risk. For instance, inherent risks are associated with banks' role in providing credit to consumers, such as the possibility of a loan default or credit risk. Imola (2017) thinks that banks should only take on financial risk when it is absolutely necessary for them to be able to make a significant amount of money. Given the foregoing, taking risks is a crucial part of how bankers make money. Risk management has not had much of an impact on the Nigerian financial system in terms of improving financial performance because of

issues brought on by bad judgment, insider loans and advances, insensitivity to economic and environmental trends, and inadequate risk management policies implemented by the banking operators (Christopher, 2019). Giving loans and advances to friends, relatives, politicians, and corporate directors without carrying out sufficient appraisals has long been a tradition in Nigerian banks. By engaging in this unethical action, these banks were unable to retrieve the loans and advances they had provided to these stakeholder groups, which resulted in a string of bad debts brought on by insufficient recovery procedures and added to financial distress. Imola (2017) highlighted further the fact that bank management's disregard and ignorance of the regulatory frameworks and standards necessary to reduce these risks leads to risk. Some management groups, including some bank employees in Nigeria, either are not aware of the dangers involved in conducting banking activities or completely disregard the regulations put in place to prevent potential losses. Performance and risk-related challenges are the most important ones facing the banking sector. Risk management "does not stand in isolation," according to Hoseininassab et al. (2018), and as banks are essential to the Nigerian economy, it is important to investigate its risk management procedures. Risk is a statistic that can affect the effectiveness and profitability of a business.

Statement of the problem

Throughout history, individuals and groups have had to handle a wide range of awful situations that were brought on by things like fire, theft, social upheaval, environmental degradation, and life itself. These are but a few illustrations of the dangers that individuals, groups, and institutions, such as banks, must manage. Additionally, there are hazards that apply specifically to banks' finances. Even though it is uncommon to be able to totally eliminate these risks, it is usually possible to lessen the possibility of a loss by altering some of the variables that lead to the loss. More so than ever before, banks must today successfully manage the many diverse risks they face, including but not limited to plug risk, credit risk, liquidity risk, rate of interest risk, and inflation risk. This is because financial institutions have a particular role in driving economic growth in a nation. In order to lower this risk, banks must develop risk management strategies that utilize a strong risk management framework. Nigerian banks are now having problems coming up with a long-term fix to the risk management issue facing the sector. The objective of this study is to assess the techniques employed by Nigerian commercial banks to control financial risk. Several very negative consequences of a bank failure can affect the general banking public, investors, and the economy as a whole. The demise of financial institutions surely has some very painful consequences for operators and regulators.

Generally speaking, bank failures impede efficient resource allocation and financial intermediation, which impedes both improving people's lives and accelerating economic growth. This study aims to clarify the effectiveness of financial risk management, which is often used in Nigerian banking systems to boost profitability in light of the aforementioned information.

Research objective

The primary objective of this study is to determine how financial risks impact Nigeria's Deposit Money Banks' financial performance.

Research hypothesis

H₀1: The financial performance of Nigeria's Deposit Money Banks is not significantly impacted by financial risk.

REVIEW OF THE LITERATURE

This section looked at the theoretical foundations of the study, including the ideas of risk, financial risk, and financial performance. The empirical evaluation of past studies on financial risk and performance was also discussed in this paragraph.

Concept of financial risk

Financial hazards have many different root causes, one of which is loan repayment defaults, which result in non-performing loans (NPL) for banks. These risks are some of the most significant and challenging ones that banks encounter when carrying out their legally mandated operating responsibilities (Mostafa et al., 2016). Financial risks include, but are not limited to, those related to credit, liquidity, markets, and insolvency. In a financial transaction, interest rate risk, currency risk, and business risk are additional potential financial problems (Ghenimi et al., 2017). Deposit Money Banks (DMBs) must put policies in place to manage the multiple risks that financial organizations like these confront. All of the aforementioned financial risks must be considered by banks, but it seems that credit and liquidity risks are the most important to their regular business operations. This is so that the bank's capacity to maintain its financial stability won't be significantly impacted by the bulk of other risks, which can be shifted to consumers. The links between credit and liquidity issues have a big influence on a bank's bottom line. When a business decides to invest, it exposes itself to a range of financial risks, both commercially and financially. Depending on the kind of

financial instrument, these risks are available in various sizes (Yimka et al., 2015). A few possible financial hazards include market volatility, bankruptcy, rising inflation, and recession. The interaction between human factors and specific risk factors, according to Tsevisani (2017), emphasizes the need for close attention to both human factors and the main drivers for risk management: a change driver that derives primarily from the need to comprehend how people behave in dynamic environments and in the presence of risks.

Management of financial risk

Financial risk management may be described as a systematic technique for analysing, evaluating, and addressing financial risks. This increases the possibility that goals will be achieved and ensures that businesses, people, and communities remain sustainable. It also assists the company in keeping track of new customers. A full comprehension of the relevant dangers, an assessment of their relative importance, and a methodical monitoring and control strategy are necessary for risk management to be successful. To lessen or totally prevent the possible loss, it is vital to recognize potential risks, assess and analyze them, and take precautionary action. The objective of financial risk management is to lower risk. According to Res et al. (2016), risk management involves a variety of steps that set the context, recognize and assess deviations, monitor, and alert personnel to risks. Additionally, by taking these steps, decision-making may be continually improved. The primary goals of risk management in the financial sector include developing strategies to lower risk and, more crucially, monitoring the bank's profile (Soyemi, 2019). Risk management is vital in determining the total profitability of banks, according to researchers Oluwafemi et al. (2018), Kambi and Ali (2016), Stephen and Akele (2014), Yusuf (2019), Ghani (2015), Res et al., (2016), as well as Olamide et al. (2015).

A bank's ability to make timely payments on its debts or invest in asset expansion when it is necessary is subject to liquidity risk (Yusuf, 2019). Therefore, both a scarcity of resources and a surplus of underused ones pose a liquidity risk. For gap analysis and management in banks to be effective, a "reasonable fit between the average maturities of the sources and uses of funds" must be kept (Christopher, 2019). The danger of late loan payments, often known as credit risk, must be managed by banks. Credit risk may arise if a borrower is unable or unwilling to meet its obligations (Anthony and Shanise, 2018).

Credit risk is primarily brought on by factors such: a lack of non-executive directors on the board; lax credit assessment practices; poor lending practices; a lack of capital and liquidity; directed lending; extensive bank licensing; subpar loan underwriting; reckless lending; and subpar credit assessment (Yimka et al., 2015). Other

forms of risk that are external to a bank include inflation risk, market risk, rate of exchange risk, and political risk.

Deposit money bank financial performance

A bank's financial performance has an impact on investors, stakeholders, and eventually the entire economy. The efficiency with which a bank can achieve its objectives given its available resources determines how profitable it is. Accurate assessment and evaluation of all resources, including people, tools, capacities, and talents, is necessary. To assess whether the company's objectives have been reached, this is done carefully (Amelia, 2017). Indicators of bank profitability include cost-to-income ratio, return on asset, return on equity, and interest rate spread. But in this study, ROE will have the biggest impact on bank profitability. Although there are other essential and crucial indicators of financial performance, ROE is one that is particularly pleasing since it demonstrates how expertly and efficiently a bank uses the shareholders' or owners' equity at its disposal. Additionally, most users of financial data, especially investors, are more concerned with the returns on their bank assets than with other factors. The financial success as a result of these factors is represented by ROE in the study.

Relationship between financial risk and banks' performance

The bank's financial success can be viewed from the shareholders' perspective as the difference between revenue and costs. It demonstrates that the bank's management seeks to increase sales and reduce costs in order to increase profit. Banking-specific issues such as the regulatory environment, the economy, political turmoil, and others can all change over time, making it difficult for banks to function as they were intended to (Bikker and Boss, 2018). Total profitability is used to gauge a bank's financial success and is associated with the risks that particular banks have taken (Olteanu, 2015). The interaction of gain and risk defines a bank's total financial performance. The capital adequacy ratio (CAR) is one financial indicator that is generated and disclosed in a bank's financial statements and is directly associated with the risk that the bank has assumed. Banks pay close attention to ongoing monitoring indicators that reflect the effectiveness of banking activities and analyze their effectiveness in close relationship with the bank's exposure to risks because the effectiveness of banking activities is closely correlated with the bank's exposure to risks or potential risks that can jeopardize the activity (Imola, 2017). Academics have, however, developed numerous definitions of financial performance. Finding out how a company's

operations and policies will impact its financial outcomes is the process of doing this. Ajayi and Oseyomon (2019) contends that a company's financial performance is a good indicator of the management's efficacy, overall operational efficiency, and ability to make the most of its resources. Shrivastava et al. (2018) and Makokha et al. (2016) contend that a company's financial performance reflects how well it uses its resources to generate revenue. In order to maximize returns as displayed in a company's financial statements, resource utilisation is assessed using financial performance measurements.

A review of the gaps in the literature

Currently, there is debate on how financial risk affects banks' financial performance in most countries, but especially in Nigeria. The subject has been thoroughly examined, however depending on the factors utilized and the stage of the analyzed jurisdictions' economic life cycle, different findings could have been reached. The relationship between the risk management process and profitability has been the subject of numerous researches (Yusuf, 2019; Amelia, 2017; Thomas et al., 2014), with an emphasis on how the process influences profitability. In other studies, the impact of financial risk on the financial performance of banks in countries other than Nigeria was examined (Anthony and Shence, 2018; Imola, 2017). The study's results shed a great deal of light on how financial risks impact banks' bottom lines. In an effort to add to the corpus of earlier research on the subject, this study will exclusively employ financial risk variables, such as credit and liquidity hazards, as well as financial performance, or ROE. Additionally, it will be limited to Nigeria. This is expected to result in a better comprehension of how financial risks impact banks' financial performance.

EMPIRICAL REVIEW

Empirical researches have focused on financial risk management and the success/performance of deposit money institutions. Amelia (2017) reviewed empirical evidence on the profitability of Nigerian banks and financial risk management. An ex-post facto research design was used in the study to investigate data from 14 Deposit Money Banks. The results demonstrate a substantial inverse relationship between credit risk and return on asset (ROA), and a significant positive relationship between capital adequacy risk and liquidity risk and default risk (ROA). If liquidity and capital adequacy risk are appropriately managed, full-service banks are proven to have a higher possibility of quickly making a profit. Yusuf (2019) assessed the performance of Islamic banks during a 15-year span, from 2004 to 2018, utilizing risk management techniques. Results reveal a considerably unfavorable statistical impact on

performance and capital risk management strategies from methods for managing liquidity, credit, and operational risk. To determine the relevance of the connection between bank risk management techniques (credit, liquidity, operating, and capital risk) and their financial performance (ROA and ROE), cross-sectional data were analyzed (ROA and ROE). Kumar (2018) looked at how financial risk and performance have changed in the twenty-first century. The income statements and statement of the financial condition of the company were examined as part of the study undertaken to produce the performance and risk ratio estimations. Over a 17-year period, the information was acquired and reviewed (2000 to 2016). This aided in defending the choice to designate the financial crisis as an analytical turning point. According to the findings, the financial risk was in good financial standing and had a successful strict risk management plan. Anthony and Shence (2018) looked into how the credit risk component affected the financial performance of the Deposit Money Banks in Barbados using a multiple regression model as their analytical tool. The findings show that whereas capital risk and interest rate risk have large positive associations with return on equity (ROE), credit risk, liquidity risk, and operational risk have only weakly positive relationships with ROE. As a result of the study's findings, banks are advised to improve their risk management practices in order to boost profitability because risk factors frequently have a bigger influence than external factors. Imola (2017) examined credit risk analysis for banks in the Romanian banking sector using a descriptive research analysis as the research design. According to the analysis's results, there are negative correlations between interest rate risk and return on asset (ROA), negative correlations between liquidity risk and ROA, and positive correlations between return on asset (ROA) and credit risk (ROA). The study's findings demonstrate that banks are able to concurrently generate high revenue since their exposure to the main type of financial risk is well within acceptable limitations. In their study on risk management in the Nigerian banking sector, Thomas et al. (2014) used data from 23 full-service banks as the population and 1 commercial bank as the sample. The descriptive study was conducted using a questionnaire that was completed by a sample of 88 respondents. The findings demonstrated that bank fraud and forgeries endangered the bank's performance and adversely impacted its operations.

METHODOLOGY

The study's use of panel data to examine the financial risks and performance of Nigeria's Deposit Money Banks over a ten-year period is its main weakness (2010 to 2019). Typically, quantitative statistical inference techniques were used to create the model results. Ex post facto research often involves a quasi-experimental study that examines how an experimental variable that was present in the participants before the investigation on a variable affected

that variable. The 50 Financial Services Companies registered on the Nigerian Stock Exchange made up the population as of December 31, 2019. The data was explicitly estimated using Panel Data Regression in STATA version 17 based on a panel data set. Ten Deposit Money Banks that were listed on the Nigerian Stock Exchange as of December 31, 2019, made up the study's sample size, which was determined using the sampling technique. First Bank of Nigeria Plc., Guaranty Trust Bank Plc., Zenith Bank Plc., Access Bank Plc., Stanbic IBTC, United Bank for Africa (UBA), Fidelity, First City Monument Bank (FCMB), Polaris, and Unity are among the financial institutions that take deposits. The only Deposit Money Banks whose annual financial reports were used as the secondary source for the data in this study were the ten Deposit Money Banks that were listed on the Nigerian Stock Exchange as of December 31, 2019. The only institutions that have access to data on the primary study variables are banks; hence accessing secondary sources of information is an alternative. Because a distinct audit firm audits the financial accounts, this source of information has the advantage of being much more trustworthy. Panel data multivariate analysis was employed in the study to check the research hypotheses. Because STATA (version 17) is the best system-based application for handling the panel data analysis, it was frequently employed to complete this task.

Model specification

A mathematical depiction of the economic connection between the dependent and independent variables is known as a "model specification" (s). Model specification aids in determining the link between the independent and dependent variables. The model was adapted from the research works of Kolapo et al. (2012).

Therefore, the regression model for this study is stated below:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \epsilon \quad (1)$$

$$ROE = \alpha + \beta_1 LR + \beta_2 CR + \epsilon \quad (2)$$

Where: Y= Dependent variable; ROE=Return on Equity; X_1 and X_2 = Independent variables; β_1 β_2 = Beta coefficients; LR=Liquid Risk; α = Intercept or constant term; CR=Credit Risk; ϵ = Error term

Apriori expectation

The apriori expectation for this study is that the beta coefficients, or the ratio of the liquid risk to the credit risk, should be more than zero, or that the beta coefficients will be bigger than zero.

Assessment of the variables

Return on Equity (ROE) is used to measure the dependent variable (financial performance), whereas Liquid Risk and Credit Risk are used to measure the independent variable (financial risk).

Justification of method employed

The study employed secondary data, namely information derived from the annual financial reports of the listed Banks, in order to assess the effect of financial risks on the financial performance of Deposit Money Banks in Nigeria. The Panel Data Regression technique was the most helpful analytical technique for the study since it allowed researchers to determine how financial risks affected the financial performance of Deposit Money Banks in Nigeria. The most efficient system-based tool for analyzing panel

Table 1. Regression results.

Variable	Coefficients	Z-statistics	P-value
Intercept	-3.47689	-6.04	0.000
Liquidity Risk	0.4234641	4.09	0.001
Credit Risk	0.3980345	0.24	0.000
R-square	26.82		
Wald chi2	73.76		
Prob.	0.000		

Source: Output from STATA.

data is STATA, which was used to do the necessary analysis.

Test of Hypothesis:

H0₁: Financial Risk has no significant impact on the Financial Performance of Deposit Money Banks in Nigeria.

The R-square represents the degree to which the explanatory variables explained the result variable. According to Table 1, the independent variables (liquidity risk and credit risk) have an overall R-square of 26.82% and a 26% influence on the financial performance (ROE) of listed Deposit Money Banks in Nigeria. The model fits, as indicated by the likelihood value of 5%. This evidence strongly suggests that the interaction of these factors has an impact on the financial performance of Nigeria's listed Deposit Money Banks. The data also show that the debt equity ratio and total leverage ratio are both significant at 5%. The study rejects the null hypothesis, which states that financial risk has no discernible impact on Deposit Money Banks' financial performance in Nigeria, and accepts the alternate hypothesis, which states that financial risk significantly affects Deposit Money Banks' financial performance in Nigeria, based on the aforementioned finding and its interpretation.

FINDINGS AND DISCUSSION

The results show a strong correlation between liquidity risk and the financial health of Nigeria's listed deposit money institutions. This is clear from the result, which displays the statistical significance of the association and a P-value less than 5%. Furthermore, the results demonstrate that a 1% increase in liquidity risk led to a statistically significant, but consistent with economic a priori predictions, 42% increase in the financial performance of Nigeria's listed deposit money institutions. In light of the possibility that a significant improvement in financial performance may be the reason for the rise in liquidity risk as a source of external funds, a positive correlation between liquidity risk and financial performance is therefore expected. This finding backs up Caleb's (2019) assertion that liquidity risk has a significant impact on financial performance measures (ROE). The study also showed that credit risk significantly ($p=0.000$) influences how profitable Nigerian Deposit Money Banks are. The result demonstrates a significant correlation between credit risk and financial

performance for Nigeria's listed deposit money institutions. This is evident from the results, which show the statistical significance of the association and a P-value of less than 5%. The findings also show that a 1% increase in the credit risk ratio resulted in a statistically significant, though consistent with economic a priori predictions, 39% enhancement in the financial performance of manufacturing firms. This implies that a positive correlation between the overall leverage ratio and financial performance is reasonable to expect. This is because credit risk may be increasing as a source of outside funding due to Nigeria's rapidly rising deposit money bank profitability. The results support those of Anthony and Shanise (2018), who demonstrated that credit risk has an impact on financial performance.

Research and practice implications

The paper lists several theoretical, practical, and regulatory effects. Deposit Money Banks have a significant advantage in that they provide financial services to individuals and lend to them so they can start their own homes and businesses and thereby widen their branch networks. Deposit Money Banks may use the findings of this study to determine the best capital sources and methods of managing their funds. The results of this study would contribute to the body of knowledge because, despite the fact that there are numerous studies on financial risk and Deposit Money Bank performance around the world, there are few studies using data on Deposit Money Banks in Nigeria. The results of the study would therefore serve as both a foundation for future research in this area and as a manual for emerging scholars.

Conclusion

The results of the study indicate that financial risk adversely affects the financial performance of Nigerian deposit money institutions. The findings demonstrate that return on equity of Deposit Money Banks in Nigeria is positively and significantly ($p=0.001$) influenced by

liquidity risk, a measure of financial risk. Credit Risk significantly affects the return on equity of Nigerian Deposit Money Banks, according to the study's findings ($p=0.000$). The study concludes that, as measured by return on equity, financial risk, which includes credit risk and liquidity risk, has an effect on the financial performance of Deposit Money Banks in Nigeria. Based on the findings and conclusion, it is recommended that:

1. The management of Nigeria's publicly traded Deposit Money Banks should keep bad debt losses and other pertinent credit fees to a minimum while also maintaining a healthy level of overall and liquid assets. Businesses should put in more effort to find factoring agents.
2. The top managers of Nigeria's publicly traded Deposit Money Banks should develop strategic plans to draw in enough deposits to support their operations.

Recommendation

The study examined a small number of Nigerian Deposit Money Banks over a ten-year period. More time must be spent in Nigeria and more research is required in a number of different sectors. In order to provide finance managers in Nigeria with clear instructions on the ideal financing mix that would maximize a firm's value, researchers in the field can conduct comparable studies using other financial performance measures like return on asset, return on investment, and return on sales as their dependent variables. This is due to the fact that the vast majority of earlier studies mostly used data from other nations.

CONFLICT OF INTERESTS

The authors have not declared any conflict of interests.

REFERENCES

- Ajayi MG, Oseyomon EP (2019). Credit risk management and performance of Deposit Money Banks in Nigeria. *African Review of Economics and Finance* 11(1):157-177.
- Anthony W, Shanise C (2018). The impact of time factors on the financial performance of the commercial banking sector in Barbados. *Journal of Governance and Regulation* 7(1):20-25.
- Amelia MR (2017). Financial risk management and profitability of banks in Nigeria. *Journal of money, Credit and Banking* 20(34):56-67.
- Bikker J, Boss J (2018). Bank performance; a theoretical and Empirical Framework for the Analysis of profitability, competition and Efficiency, Routledge International Journal in Money and Banking 45(23):768-801.
- Caleb OS (2019). Capital structure on the financial performance in Nigeria. *International Journal of Business and Social Research* 5(2).
- Central Bank of Nigeria (2019). Guidelines for the Management of Reputational. Abuja: Central Bank of Nigeria.
- Christopher U (2019). Loan Administration, Calabar: University of Calabar Printing Press.
- Clementina K, Isu IG (2016). Security challenge, bank fraud and commercial bank performance in Nigeria: An evaluation. *Journal of Business and Management* 5(2):1-21.
- Ghani RA (2015). Risk management practices and performance of micro-financing banks in Malaysia. *Academyia Journal UiTMT* 4(2):26-33. Available At: <http://Journal-Academiauitmt.edu.my/>
- Ghenimi A, Chaibi H, Omri MA (2017). The effects of liquidity risk and credit risk on bank stability: Evidence from the MENA region. *Borsa Istanbul Review* 17(4):238-248.
- Hoseininassab E, Yavari K, Mehregan N, Khoshsima R (2018). Effect of risk parameters (credit, operational, liquidity and market risk) on banking system efficiency (studying 15 top banks in Iran). *Iranian Economic Review* 17(1):1-24.
- Imola DS (2017). Financial risk analysis for a commercial bank in the Romanian banking system. *Journales' Annales universitatis Apulensis Series Oeconomica* 14(1):20-47.
- John UA (2020). Financial Risks Management and Bank Profitability in Nigeria: Case of Access Bank of Nigeria Plc International Journal of Research and Innovation in Social Science (IJRISS) [Volume IV, Issue IX, September 2020]ISSN 2454-6186.
- Kambi RS, Ali AI (2016). Effect of Financial Risk Management Practices on Financial Performance of Listed Banks at the Nairobi Securities Exchange in Kenya. *The International Journal of Business and Management* 4(4):19-36.
- Kolapo TF, Jiménez JZ, Ayeni RK, Oke MO (2012). Credit risk and commercial banks' performance in Nigeria: a panel model approach. *Australian Journal of Business and Management Research* 2(2):31-38.
- Kumar NS (2018). Business Distress Prediction Using Bayesian Logistic Model for Indian Firms. *Risks* 6(1):113-128.
- Makokha PS, Mukanzi C, Maniagi M (2016). Influence of Financial risk on financial performance of deposit taking savings and credit co-operatives in Kakamega County. *International Journal of Management and Commerce Innovations* 4(2):509-518.
- Mamman A, Hashim Y (2014). Impact of Bank Lending on Economic Growth in Nigeria. *Research Journal of Finance and Accounting* 5(18):174-182.
- Mostafa SA, Mahmoud OS, Jalal KU, Elahe (2016). Financial risk management and the financial sector development: an overview. *International Journal of Economics, Commerce and Management* 3(3):2348.
- Muriithi JG, Muigai RG (2017). Quantitative analysis of financial risk and profitability of Kenyan Deposit Money Banks using Cost Income Ratio. *Journal of Economics and Finance* 8(3):76-83.
- Olalere OE, Aminu I, Yusoff WS, Shamsuddin ZA (2018). An investigation into financial risk in Deposit Money Banks: Empirical evidence from Nigeria. *International Journal of Accounting, Finance and Business* 3(12):49-62.
- Oldfield GS, Santomero AM (1997). Risk Management in Financial Institutions. *MIT Sloan Management Review*. 39:1.
- Oluwafemi S, Israel N, Simeon OS (2018). Risk Management and Financial Performance of Banks In. *IOSR. Journal of Business and Management* 14(6):52-56.
- Olamide O, Uwalomwa U, Ranti UO (2015). The Effect of Risk Management on Banks Financial Performance in Nigeria. *Journal of Accounting and Auditing* 15(8):1-7.
- Olteanu A (2015). Management of finance, Ed. New Delhi: Dareco Bucuresti publisher.
- Pandey RW (2014). Sensitivity of bank stock returns to market and interest rate risks: An empirical investigation. *NDIC, Quarterly Review* 11(2):57-77.
- Res IJ, Sa K, Gemechu DR (2016). Risk management techniques and financial performance of insurance companies. *International Journal of Accounting Research* 4(1):1-5.
- Shrivastava A, Kumar K, Kumar N (2018). Business Distress Prediction Using Bayesian Logistic Model for Indian Firms. *Risks*, 6(1):113-128.
- Soyemi KA (2019). Risk management practices and financial performance: evidence from the Nigerian Deposit Money Banks (DMBs). *The Business and Management Review* 4(4):345-354.
- Stephen N, Akele AO (2014). Risk management and financial performance of banks in Nigeria. *European Journal of Business and Management* 6(31):336-343.
- Thomas D, Ayodele AA, Raphael H, Oladele K, Alabi T (2014). Risk management in Nigeria Banking Industry. *Research Journal of*

- Finance and Accounting 5(7):45-56.
- Tsevisani M (2017). A Comparison of Financial Performance in the Banking Sector: Some Evidence from Omani Commercial Banks". International Research Journal of Finance and Economics 3:103-112.
- Vij S, Bedi HS (2016). Are subjective business performance measures justified? International Journal of Productivity and Performance Management 65(5):603-621.
- Yimka AS, Taofeek A, Abimbola C, Olusegun AS (2015). Management and Financial Performance of Selected Commercial Banks in Nigeria. Journal of Economic and Financial Studies 3(1):1-9.
- Yusuf IS (2019). Risk Management Practices and Financial Performance in Jordan: Empirical Evidence from Islamic Banks. International Shari'ah Research Academy for Islamic Finance 6(5):1-24.