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RISK AND FINANCIAL PERFORMANCE OF LISTED DEPOSIT MONEY BANKS IN NIGERIA

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Abstract

Risk is becoming a critical factor for every bank around the world. Banks play a predominant role in credit expansion and granting credit facilities. Banks are generally facing various kinds of risks. Among these, credit risk and capital adequacy risk makes a severe threat to financial performance. This study examined risk and financial performance of listed deposit money banks (DMBs) in Nigeria for the period of ten years from 2011-2020. The study adopted correlation research design, and a sample size of 13 listed deposit money banks listed on the floor of Nigerian Stock Exchange as at 31st December, 2020. Secondary data of the sampled banks was extracted from the annual audited financial reports of the banks. The data was analyzed using the multiple regression model where in the generalized least square result revealed a positive and significant impact between credit risk and capital adequacy risk on the financial performance of the deposit money banks in Nigeria for the period. The study concluded that risk significantly influences the financial performance of DMBs in Nigeria. Based on the findings, the study recommends that DMBs managers in Nigeria can minimize credit risk by ensuring that the credit worthiness of would be borrowers is assessed together with the collateral which should be wholly ensured.

Keywords: Capital Adequacy, Credit Risk, Financial Performance, Risk.

1. Introduction

Financial performance of deposits money banks globally is the hub and the pillars of every nation's economic and financial system, hence, the stability and underlying economic performance of deposit money banks is vital and paramount to the economic development of a nation (Mehmood, Hunjra & Chani, 2019). The stakeholders in the banking industry ranging from depositors, investors, shareholders and the policy makers have high agitation on the financial performance of the deposit money banks because of the risks inherent in not getting adequate returns on the investment. The lengthy history of corporate failure linked to poor banks financial performance and reporting failure are very worrisome as the cumulative impact of high these high profile cases had led to steady bank losses

in investments, credibility and confidence of stakeholders in the ability of banks handling of depositor's funds and the inherent banks credit risks. However,in the present day, economic activities are faced with unpredictable economic environment where most financial institutions are in front of hefty risks which includes credit risk, operational risk, liquidity risk, market risk, foreign exchange risk, and interest rate risk, along with other business risks (Khizer, Muhammad &Shama, 2011).

Therefore, credit risk as one of the most important risks faced by banks has impacted on financial performance (Isanzu, 2017). Li and Zou (2014) also asserted that credit risk is one of the most significant risks that banks face, considering that granting credit is one of the main sources

of income in deposit money banks. However, it was reported that the non-performing loans of banks in Nigeria raised by 5.3 percent an indication of how borrowers are unable to fulfil their repayment obligation (Premium Times, 2021). In the same vein, the non-performing loans of the big five banks in Nigeria within 2021 revealed a rise from 6.1 percent in 2020 to 6.3 percent in 2021 (Vanguard, 2021). Furthermore, bank with a high capital adequacy is considered safe and likely to meet its financial obligations. Bikker and Vervliet (2017) assert that capital risk influences bank performance through their profitability. These risks may threaten banks survive and success in the market therefore efficient risk management is absolutely required for all banks.

Given the pivotal intermediation role play by DMBs, it is obvious that a huge financial risk is involved as a result of sourcing from surplus and lending to deficit sector of the economy. There is the fear that these risks may negatively positively affect their financial performance. Consequently, the Central Bank of Nigeria (CBN)in its Economic Report provided evidence of a declining trend in the DMBs financial performance. Furthermore, Nigerian leading national daily, Vanguard in its bank financial performance analysis report observed weakness in bank financial performance in recent time (Vanguard, 2021). The analysis revealed a significant drop in financial performance of banks in Nigeria on industry wide scale while non-performing loans rise from 6.1 percent in 2020 to 6.3 percent in year 2021 as well as a decline in general bank profitability within the same period. This however, forms the practical gap that the study intends to examine.

Conclusion from the review of extant literature revealed various gaps which the current study intends to fill. For example, studies by Wijekoon and Jameel (2021); Safitri, Rahmati, Jayadi and Affandi (2021); Nguyen (2020); Sebayang (2020); Dao and Nguyen (2020) and others had geographical gap because they were not conducted in Nigeria. This implies that the results may be inapplicable in Nigeria since the social economic environment of Nigeria and other countries differ. The current study seeks to address this gap. Furthermore, on period gap, the studies of Wijekoon and Jameel (2021); Liyanage, Dewa and

Ismail (2021); Erhabor and Ofiafoh (2020) and Sebayang (2020 and others had different time scope with this study. The current study seeks to cover a period gap of up to 2020.

The rationale for conducting this study is premised on the fact that banks, who are in the fore front of financial intermediation role, and are highly involved in handling of large volume of cash majorly receiving from surplus economy and lending to deficit sector of the economy, are likely to face risk which can cause variability of profits with tendency of reducing banks earnings, causes insolvency and in some cases liquidation of business operations. It is premise on the aforementioned facts that this research aims to determine the impact of risk on the financial performance of deposit money banks in Nigeria which aims to provide managerial and policy implications and also to contribute to existing body of knowledge on the subject matter.

2. Literature Review

The relationship between risk and banks financial performance has been the concern of studies across the world. From the studies on this subject matter the researcher presented some of the recent studies in this subject. The section focuses mainly on conceptualization of variables, review of related empirical studies and existing theories that support risk and financial performance across the Globe. This is done with the aim of establishing research gaps and establishing a conceptual framework. Thus, this study adopts the financial distress theory as suitable in explaining the relationship between risk and financial performance since it proposes that credit risk and capital adequacy risk are predictors of financial distress.

2.1. Conceptual Issues

Concept of Financial Performance: Basically, the term financial performance is used as a general measure of a company's overall financial health over a given period of time and can also be used to compare similar companies in the same industry as well as to compare industries or sectors against each other. In the banking sector, financial performance indicates a bank's ability to use its assets to

generate revenue to sustain itself through its core business operations. Commercial banks use the terms financial performance and profitability interchangeably to estimate their successes or failures (Amin et al., 2018). Hidavat, Malik, Siregar and Munawaroh (2021) described financial performance is an analysis carried out to see the extent to which a company has implemented implementation rules properly. Company performance is a description of the financial condition of a company which is analyzed with financial analysis tools, so that it can be seen about the good and bad financial condition of a company that reflects the work performance in a certain period.

This study defines financial performance as a process of measuring the results of a company's overall assets, liabilities, equity, expenses, revenue and overall profitability in monetary terms, which are capable of generating revenues for the business, to ascertain its overall financial health over a given period of time and to be used in comparing similar firms across in the same industry or other sectors in aggregation.

Concept of Risk: Salaudeen, Salam and Mudashiru (2021) described risk to include unpredictability, adverse deviation, uncertainty and possibility of unfortunate occurrence which are all linked to economic losses. Erhabor and Eiya, (2020) posited that risks are the challenges banks face when they extend credit to the economy, and are usually used to define the losses of several distinct sources of uncertainty. Rafique, et al (2020) however, defined risk as the uncertainty of the future financial outcomes which can influence the profitability and targets of the institutions. Banking risks are the challenges banks face when they extend credit to the economy, and are usually used to define the losses of several distinct sources of uncertainty. Fali, Nyor and Mustapha (2020) sees risk as the probabilities of partaking an unexpected or adverse outcome. Thus, any act or action that leads to loss of any type can be labeled as risk. Cabedo and Tirado (2004) defined risk as the possible loss of company's wealth due to the interaction between challenges and threats that occur in business environment.

The term 'possible-loss' previously used to define risk shows that risk is a negative event.

In this study, risk is defined as any harm and threat or opportunity and prospect that occur as the result of changes in business environment, which might already, occurred or might have an impact on the company financial performance.

Concept of Credit Risk: Rao and Suresh (2021) defined credit risk as the probability that a bank borrower may default on a debt by failing to make required payment in as per the agreed terms and the lender may lose the principal of the loan or the interest. Rafique et al (2020) described credit risk as counterparty or default risk on loans/ advances by the banks, which is very critical for the banks' financial performance as it is dependent upon the advances-base of the banks which if the advances are not collected properly it can degenerate to a genuine danger to the operations of banks. Cheng, Nsiah, Charles and Ayisi (2020) defined credit risk as a liability that results from the inability of the clients to settle their debt or the funds they were expected to pay to the bank on time and in full. Credit risk is also seen by Adekunle, Alalade and Agbatogun (2015) as a risk resulting from the consumers' failure to pay back their loans or the funds they lent to the bank on time and in full.

This study defines credit risk as a loss resulting from a borrower's failure to repay a loan or meet contractual obligations of paying both the capital and interest borrowed at an agreed time which disrupt cash flows and increase cost of collection.

Concept of Capital Adequacy Risk: Oudat and Ali (2021) described capital adequacy risk as the absence of the capital needed as the last financial fund and storage facility. Sebayang (2020) defined capital adequacy risk as a capital comparative value that shows the ability of a bank to provide funds for the needs of the banking business development and to accommodate and anticipate if possible risk arising from bank. Ajayi, Enimola, Orugun and Ibidunni (2019) sees capital adequacy risk as capital to risk-weighted assets ratio which measures a bank's

financial strength by using its capital and assets. It is used to protect depositors and promote the stability and efficiency of financial systems around the world. Akinleye and Fajuyagbe (2019) posited that capital adequacy is the idea of re-arranging banks' existing capital structures in order to restructure the banking system against widespread distress. They maintained that if adequate capital is well managed by banking sector, its can creates an opportunity for better standards in banking industry and later lead to better performance.

Therefore, this study defines capital adequacy risk as a lack or shortage of capital requirement of a bank which is capable of enhancing the economic activities of banks in safeguarding depositors' funds, promoting bank stability and efficiency.

2.2. Empirical Review

Wijekoon and Jameel (2021) examined the impact of credit risk on the financial performance of commercial banks in Sri Lanka. Data of the study were collected through secondary source from a sample of ten banks spanning the period 2015-2019 and the pooled and panel multiple regression was used. Capital adequacy ratio revealed an insignificant relationship with financial performance. The study concluded that there is no significant relationship between credit risk and financial performance. The study was done in a different environment that share different economic attributes with that of Nigeria and so the findings cannot be use in the Nigerian context. Again, a period of five years is considered not adequate enough to gather the data necessary generalize the findings of the result.

Mushafiq, Sindhu and Sohail (2021) examined the relationship between credit risk and financial performance in non-financial firms of 69 non-financial companies listed in the Pakistan Stock Exchange for five years between 2012-2017. Least Square regression analysis was adopted. The findings of the study indicated that the credit risk impact to both non-financial and financial firms on profitability using accounting and market models, which would provide a clearer picture of where credit risk is most affected.

Liyanage, Dewa and Ismail (2021) study the impact of credit risk management and bank performance in Sri Lanka. The study was based on secondary data. The population of the study is six development banks in Sri Lanka. The study used multiple regression to analyze the data. The findings of the study revealed that credit risk and financial performance a significantly related. Again, capital adequacy and asset quality has a negative significant relationship between bank performances of ROE. The study concluded that there is a significant relationship between credit risk management by CAMEL Indicators and the financial performance of specialized banks in Sri Lanka. The scope of the study too short to allow for adequate data to generalized findings.

Samson (2021) investigated the effect of credit risk management on the financial performance of commercial banks in Nigeria from 2011-2017. Data was sourced through secondary means from the audited annual financial reports of a sample of ten quoted banks. The study used the multiple regression model to analyze the data. The study revealed a significant relationship between capital adequacy ratios and non-performing loans on financial performance while liquidity, bank size and gross domestic product growth were not significantly affecting financial performance of commercial banks in Nigeria. The study concluded that capital adequacy ratios, liquidity and bank size affect financial performance of commercial banks in Nigeria positively while non-performing loans and gross domestic product growth affect financial performance of commercial banks in Nigeria negatively. The study is limited by adopting an unbalance panel data of only ten banks whereas the present study used balance data of 13 listed banks in Nigeria.

Afolabi (2021) examined the effect of credit risk management on the performance of microfinance banks in south-west Nigeria. The population of the study consists of 180 sampled microfinance banks. Ordinal and panel data were used in the study. The source of data was through the responses to a research questionnaire by credit managers/officers in the sampled banks. The panel data were sourced secondarily for the periods 2012-2019. The results revealed a significant but negative effect between

non-performing loan and returns on assets. The study concluded that non-performing loan significantly predicted performances of microfinance banks in south-west Nigeria. Even though the study was conducted in Nigeria, it was limited by the fact that only microfinance banks were study and from a given location in Nigeria. The method of data collection could be hampering by biasness and that could invalidate the findings.

Safitri, Rahmati, Jayadi and Affandi (2021) assessed the role of liquidity and capital adequacy on Islamic bank's performance in Indonesia using financing risk as a mediator. Data were collected from 14 samples operating in Indonesia in the period 2013-2019. They were then analyzed using Partial Least Squares – Structural Equation Modelling (PLS-SEM) with Warp PLS 7.0 as a tool of analysis. The results show liquidity to be significantly influencing performance. Meanwhile, capital adequacy ratio shows insignificant influence on performance. The study focused only on Islamic banking companies operating in Indonesia without considering other conventional banks. Again the study was conducted in Indonesia and so the findings can't be used in another environment.

Chioma,Okoye, Chidume and Nnenna (2021) examined the effect of capital adequacy risk and liquidity risk on firm value of listed deposit banks in Nigeria. The population of the study consists of all the deposit money banks listed in Nigeria Stock Exchange. The study used secondary sources of data from Central Bank of Nigeria as well as from annual reports and financial statement of accounts of deposit money banks under investigation from 2010-2019. Partial Least Squares Structural Equation Modeling was used to analyze the data. The findings revealed that capital adequacy risk had a significant and positive effect on firm value of deposit money banks in Nigeria. Liquidity risk had a positive but no significant effect on firm value of deposit money banks in Nigeria. The study used only one each variables of credit risk and liquidity risk.

Nguyen (2020) explored the impact of capital adequacy on bank profitability under Basel II Accord: Evidence from Vietnam. The population of the study was the 22 commercial banks in Vietnam for the period 2010-2018. The findings revealed that bank capital adequacy, net interest margin, and non-interest income measures are positively correlated with profitability indicators while non-performing loan indicator and state ownership have a negative effect on bank profitability. The study was carried out in a different country and environment with different economic system and conditions whereas the present study will look at these credit risk factors as it applies to the Nigeria current economic system.

Sebayang (2020) investigate the impact of the capital adequacy risk, non-performing loan against return on equity: Case Study Private Bank in Indonesia. The study used multiple regression analysis techniques of 20 banks as the sample size for the study out of the 43 banks that form the population of the study. It was found from the tested result that capital adequacy ratio (CAR) has significant effect on return on equity (ROE) while non-performing loan (NPL) has insignificant effect on return on equity (ROE). The research was very interesting but it emphases only on private banks in Indonesia while this research will focus on banks own by private, government and foreign owners in Nigeria.

Dao and Nguyen (2020) investigate the determinants of bank capital adequacy ratio and bank performance in Vietnam: A simultaneous equations framework. The study used 16 Vietnamese commercial banks during the period from 2010-2017. Ordinary Least Squares (OLS) was used to analyze the data secondarily sourced. The results reveal that capital adequacy ratio and banks' performance have statistically significant relationship with FP. However, it should be borne in mind that, for different banking sectors in different nations, capital may vary and the applications cannot be consistently exercised for every bank in every nation, this implies that the level of capital requirement for Vietnamese banks as indicated in this study may not be the requirement in Nigeria and so the study's findings cannot be used to make decisions in Nigeria.

3. Methodology

The correlational research design was adopted for this research. This non-experimental descriptive design is

chosen as it provides how two or more variables are related to one another, what they share or have in common, while at the same time, predicting a particular outcome based on certain information provided (Salkind, 2012). A census sampling technique was adopted to select a population of fourteen (14) listed Deposit Money Banks on the floor of the Nigerian Stock Exchange as at 31st December, 2020 and thirteen (13) DMBs as sample size of the study. Secondary data was extracted from the audited financial reports of the sample banks on the Nigerian Stock Exchange (NSE) for the periods of ten years (2011-2020). The data was extracted based on the parameters of the variables and the respective ratios taken from the sampled banks in order to test the hypotheses of the study. In view of the panel nature of the data, the study employed Ordinary Least Square model, fixed effect model and Random Effect model. The Hausman specification test and Breusch Langragian Multiplier test were also applied in order to have a suitable model for the study. Additional tests for normality, heteroscedasticity and multicollinearity were carried out in order to comply with the classical assumption of regression analysis. The data was analyzed with the aid of STATA 13 software.

Table 1: Descriptive Statistics

Variables	Obs.	Min.	Max.	Mean	Std.Dev.
ROA	140	-0.1105	0.0615	0.0140	0.0217
CRR	140	0.0001	0.0618	0.0085	0.01
CAR	140	0.0074	0.2408	0.0917	0.2556

Source: Extracted from STATA 13 Output

The mean value of return of asset (net profit before interest and tax (NPBIT)) is \$\frac{N}{2}\text{0.01403}\$ million Naira for the entire sample 13 listed deposit money banks in Nigeria. The maximum value of the entire sampled banks' financial performance was about \$\frac{N}{2}\text{0.0615}\$ while the minimum value is -0.1105. With this result, more banks are seen to underperform within the periods, while others did not. This is why the minimum ROA (financial performance) value is less than -0.1105. There appeared to be quite a lot of variations in the financial performance of the sampled banks; the standard deviation value of 0.0217 is moderately high compared to the mean value of 0.01403. This simply suggests a moderate level of variability of the pattern of financial performance either across the banks or overtime within banks.

The following model was employed in testing the hypotheses formulated for the study and model is specified based on empirical framework using the variables to be studied as explained:

$$ROA_{it} = \beta_0 + \beta_1 CRR_{it} + \beta_2 CAR_{it} + \epsilon_{it} \dots (1)$$

ROA = Return on Asset, measured as the earnings before interest and tax divided by total assets, measure for financial performance (Iyinomen et al. 2019 and Ali & Oudat, 2020).CRR = Credit Risk, defines the proportion of non-performing loan amount in relation to total loan amount and measured as Non-Performing Loans divided by Total Loans and Advances (Hosna et al, 2009 and Tam, 2020).CAR = Capital Adequacy Risk, consists of financial capital most reliable, liquid and primarily shareholders' equity required for total risk and or absorption and measured in this study as Equity divided by Total Assets (Akomeah et al. 2020).

4. Results and Discussion

This section analyzes and presents the descriptive statistics, correlation matrix, diagnostic test and regression analysis.

The average value of credit risk is 0.01, i.e. debt that may arise from a borrower failing to make required payments from this study is approximately 1%, with the rate of variation the same to its mean, which is seen as 0.01. The standard deviation indicates a moderate spread of the data from the mean. The lowest and the highest values recorded are in range 0.0 to 0.0618 indicates that the maximum credit by the listed deposit money banks in Nigeria per annum is 6% within the period under review.

For capital adequacy risk, the table shows minimum and maximum values of 0.0074 and 0.2408 respectively. This implies that the smallest proportion of capital adequacy is 0.0074 and the largest proportion is 0.2408. Again, the

average coefficient of 0.0917 and standard deviation of mean. 0.2556 indicate that the data is narrowly dispersed from the

Table 2: Correlation Matrix

Variables	ROA	CRR	CAR
ROA	1.0000		
CRR	-0.3469	1.0000	
	0.0001		
CAR	0.5319	-0.0527	1.0000
	0.0000	0.5514	

Source: Extracted from STATA 13 Output

It can be observed from table above that a moderately negative but significant (at 1% level of significance) association exists between return on assets and credit risk of listed deposit money banks in Nigeria evident by the coefficient of -0.3469. However, a strong positive and

significant (at 1% level of significance) correlation exist between capital adequacy risk and return on assets of listed deposit money banks in Nigeria as gathered by the coefficient value of 0.5319 was observed.

Table 3: Diagnostic Test

Variables	VIF	Tolerance	
CR	1.00	0.997220	
CAR	1.00	0.997220	
Mean VIF			1.00
Hettest Sig			0.0022
Hausman			0.9732
Lagr. M. Test			0.0000

Source: Extracted from STATA 13 Output

The Multicollinearity test as indicated by variance inflation factor (VIF) indicated that there is the absence of extreme association as all the tolerance values are smaller than 1.0 and all the factors are below 10. The VIF mean stood at 1.00. More so, the test for heteroscedasticity was administered in order to assess whether or not the variability of error terms is constant. Findings from the test revealed an existence of heteroscedasticity and autocorrelation evidenced from the hettest chi² (1) of 9.42 with a probability of 0.0022 which is 5% significant

Furthermore, the Hausman test revealed a prob>chi² 0.9732 in favor of Random Effect Model result. A further test of Lagrangian Multiplier (LM Tests) revealed a significant value (p-value < 0.0000) signifying that panel effect exists, thus random effect regression model is appropriate for the model of the study. But because of the presence of heteroscedasticity, it therefore leads this work to run for generalized least squares regression (FGLS) which is considered suitable for this study.

Table 4: FGLS Regression Result

Variables	Coefficient	Z-Values	P-Values	Model Summary
Constant	0.0159	7.79	0.000	
CRR	-0.6958	-4.64	0.000	
CAR	0.0437	7.48	0.000	

\mathbb{R}^2		0.3848
Adj. R ²		0.3752
Wald Chi ²		81.33
Prob. Chi ²		0.0000

Source: Extracted from STATA 13 Output

In the above table, was reported that the estimates carried out by regressing the between return on assets (NPBIT) on risk variables shows a Wald-Chi² value of 81.33 and p-value of 0.0000 indicates that the model is statistically significant and fitted. Additionally, the R-squared of the regression model is 0.3752 implying that about 37.52 per cent of the risk variables are jointly explaining about 37.52 per cent of variations in return on assets of the listed deposit money banks in Nigeria while the remaining 62.48 are explain by other variables not capture in this model.

Furthermore, the estimated parameters; particularly credit risk as indicates in the table above is seen to be negative but statistically significant with financial performance of listed deposit money banks in Nigeria as indicated by a beta coefficient of -0.6958 and a p-value of 0.000 which is significant at 1% level. This means that a unit increase in CRR causes financial performance to fall by 0.6958. This signifies that credit risk contributes towards the financial performance of listed deposit money banks in Nigeria. The findings of the study are in agreement with the studies of (Liyanage et al, 2021; Samson, 2021 & Afolabi, 2021). While the studies of (Wijekoon, et al, (2021) share a contradicting findings with the current study.

Similarly, capital adequacy risk revealed a positive beta coefficient of 0.0437 and a p-value of 0.000 which is also significant at 1% level. This implies that capital adequacy risk is significantly and positively related to financial performance of listed deposit money banks in Nigeria. This signifies that every increase in the amount of capital adequacy, financial performance of listed deposit money banks in Nigeria will in the same vein increase by \$\frac{N}{2}\$ 0.0326. This indicates that capital adequacy risk may not be a reason for the reported losses in some banks. The findings are in line with the studies of (Samson, 2021; Chioma, et al, 2021; Nguyen, 2020 & Sebayang, 2020).

But disagree with the findings of (Wijekoon et al, 2021; Liyanage et al, 2021 & Safitri et al, 2021).

5. Conclusion and Recommendations

Several literatures were reviewed for the purpose of this study and their findings were contradictory. The financial distress theory was used to anchor this study. Correlational research design was also used. The population of the study consists of 14 deposit money banks in the Nigerian Stock Exchange as at 31st December, 2020. Data was extracted purely from the audited annual reports of the sampled listed deposit money banks in Nigeria from 2011-2020 given a ten-years periods. A multiple regression was employed to empirically investigate the relationship among the variables where the Generalized Least Square (FGLS) was considered suitable for the study. The result revealed that credit risk and capital adequacy has a significant positive relationship with financial performance of the deposit money banks. Therefore, the study concludes that credit risk as well as capital adequacy risk are strong determinant of financial performance of listed deposit money banks in Nigeria.

In line with the conclusion of the study, the study therefore recommended thus: Bank managers should adopt policies that ensure debtors figure does not increase at a high rate than total capital as this increases credit risk. The managers can minimize credit risk by ensuring that the credit worthiness of would be borrowers is assessed together with the collateral which should be wholly ensured. Again, banks should increase the amount of core capital since capital adequacy was noted to have a positive and significant effect on financial performance. Further the regulatory authority should ensure that banking reforms processes can be sustained through proper management of banks liquidity and investment. This will go a long way in helping the public to maintain confidence in the deposit money banks and also accommodate the credit needs of

customers. Management of banks in Nigeria should adhere strictly to the provisions of prudential guidelines in reviewing and reporting bank financial performance,

References

- Adekunle, O., Alalade, S.Y. & Agbatogun, T. (2015). Credit risk management and financial performance of selected commercial banks in Nigeria. *Journal of Economic & Financial Studies*, 3(01), 01-11.
- Afolabi, T. S. (2021). Credit risk management and the performance of microfinance banks in southwest Nigeria. APh.D. Thesis of the Federal University of Technology, Akure, Nigeria.
- Agbeja, O., Adelakun, O. J. &Olufemi, F. I. (2019).

 Capital adequacy ratio and bank profitability in Nigeria: A Linear Approach.

 International Journal of Novel Research in Marketing Management and Economics, 2(3), 91-99.
- Akinleye, G. T. &Fajuyagbe, S. B. (2019). Effect of Capital Adequacy on the Financial Performance of Deposit Money Bank. *International Journal of Economics & Business*, 5(1), 46-57.
- Akomeah, J., Agumeh, R. & Frimpong, S. (2020). Credit risk management and financial performance of listed banks in Ghana. *Research Journal of Accounting and Finance*, 11(6), 39-48.
- Ali, B. J. & Oudat, M. S. (2020). Financial risk and the financial performance in listed commercial and investment banks in Bahrain Bourse. *International Journal of Innovation, Creativity and Change*, 13(12), 160-180.
- Amin, M. A. M., Sanusi, N. A., Kusairi, S., & Abdallah, Z. M. (2018). Inverse relationship of financial risk and performance in commercial banks in Tanzania. *Innovations*, 11, 4-1.
- Baldwin, C. & Scott, M. (1983). The resolution of claims in financial distress: the case of Massey Ferguson. *Journal of Finance*, *38*(2), 505-516.
- Cabedo, J. D. & Tirado, J. M. (2004). The disclosure of risks in financial statements. *Accounting Forum* 28(1), 181-200.

- particularly in the areas of credit portfolio classification and disclosure and provision for non-performing loan facilities.
- Cahyaningrum, A., & Atahau, A. (2020). Intellectual Capital and Financial Performance: Banks risk as the Mediating Variable. *Jurnal Manajemen dan Kewirausahaan*, 22(1), 21-32.
- Chenga, L., Nsiah, T. K., Charles, O. & Ayisi, A. L. (2020). Credit risk, operational risk, liquidity risk on profitability. A study on South Africa commercial banks. Analysis. *Revista Argentina de Clínica Psicológica*, 29(5), 5-18.
- Chioma, A. V., Okoye, N. E., Chidume, A. J. & Nnenna, O. G. (2021). Assessing the effect of capital adequacy risk and liquidity risk management on firm value of deposit money banks in Nigeria. *African Journal of Accounting and Financial Research*, 4(1), 33-49.
- Dao, B. T. & Nguyen, K. A. (2020). Bank capital adequacy ratio and bank performance in Vietnam: A simultaneous equations framework. *Journal of Asian Finance, Economics and Business*, 7(6), 039-046.
- Erhabor, O. J. & Ofiafoh, E. (2020). Credit risk and the performance of deposit money banks in Nigeria. *Accounting and Taxation Review*, 4(1): 46-62.
- Fali, I. M., Nyor, T. & Mustapha, L. O. (2020). Insurance specific risk and profitability: Evidence from Nigerian Insurance Firms. *International Journal of Accounting, Finance and Risk Management*, 5(3), 141-148.
- Hidayat, T., Malik, A., Siregar, D. A. &Munawarohi, (2021). The effect of liquidity, net interest margin and good corporate governance risk on Sharia banking financial performance in Indonesia. *European Journal of Economic and Financial Research*, 4(4), 189-196.
- Hosna, A., Manzura, B., &Juanjuan, S. (2009). Credit risk management and profitability in commercial banks in Sweden. rapport nr.: Master Degree Project: 36.
- Isanzu, J. S. (2017). The impact of credit risk on the financial performance of Chinese Banks.

- Journal of *International Business Research and Marketing*, 2(3), 14-17.
- Iyinomen, O. D., Okoye, E. & Ifeoma, O. (2019). Financial risk and performance of deposit money bank: evidence from West African Countries.

 International Journal of Innovative Finance and Economics Research 7(4), 152-162.
- Khizer, A., Muhammad, F. &Shama, S. (2011). Financial and non-financial business risk perspectives empirical evidence from Pakistan commercial Banks. *Journal of finance and economics*, 2(6), 235-243.
- Li, F., &Zou, Y. (2014). The impact of credit risk management on profitability of commercial banks: A Study of Europe.
- Liyanage, N. H., Dewa, I. S. K., &Ismail, F. I. M. (2021).

 Credit risk management and bank performance: with special reference to specialized banks in Sri Lanka. *Asia-Pacific Journal of Management and Technology*, 2(1), 01-10.
- Mehmood, R., Hunjra, A. I., &Chani, M. I. (2019). The impact of corporate diversification and financial structure on firm performance: Evidence from South Asian countries. *Journal of Risk and Financial Management*, 1-17.
- Mushafiq, M., Sindhu, M. I. & Sohail, M. K. (2021). Financial performance under influence of credit risk in non-financial firms: evidence from Pakistan. *Journal of Economic and Administrative Sciences*, 4(6), 1026-4116.
- Nguyen, T. H. (2020). Impact of bank capital adequacy on bank profitability under Basel II Accord: Evidence from Vietnam. *Journal of Economic Development*, 45(1), 31-46.
- Noor, J. (2019). Effect of financial risk on performance of transport firms in Mombasa County. Doctoral dissertation, Jomo Kenyatta University of Agriculture and Technology.
- Oudat, M. S. & Ali, B. J. A. (2021). The underlying effect of risk management on banks' financial performance: an analytical study on commercial and investment banking in Bahrain.

 Elementary Education Online, 20(5), 404-414.

- Premium Times (October 18th, 2021). Half-Year Report:
 Nigeria's Top Five Banks Post Small Profit
 Rise as Key Income Dwindles.
 https://www.premiumtimesng.com
- Rafique, A., Quddoos, M. U., Akhtar, M. H. &Karm, A. (2020). Impact of financial risk on financial performance of banks in Pakistan; the mediating role of capital adequacy ratio. *Journal of Accounting and Finance in Emerging Economies*, 6(2), 607-613.
- Rao, V. S. & Suresh, V. (2021). A study on the impact of credit risk on the profitability of state bank of India. *International Journal of Techo-Engineering*, 13(3), 306-312.
- Safitri, J., Rahmati, A., Jayadi, J. & Affandi, M. A. (2021). Do liquidity and capital adequacy ratio matter for Islamic banks performance in Indonesia? An analysis using financing risk as mediator. *Jurnal Ekonomi dan Keuangan Islam*, 10(1), 138-154.
- Salaudeen, T. O., Salam, R. A. & Mudashiru, G. A. (2021). Impact of net claim ratio and net retention ratio on financial performance of insurance companies in Nigeria. *Global Journal of Education, Humanities and Management Sciences*, 3(1), 115-124.
- Samson, R. (2021). Effect of credit risk management on the financial performance of commercial banks in Nigeria. *European Scholar Journal*, 2(4), 416-421.
- Sebayang, P. (2020). The impact of the capital adequacy ratio, non-performing loan against to return on equity (case study private Bank in Indonesia). SHS Web of Conferences 76.
- Tam, D. N. (2020). The impact of credit risk and profitability. An Empirical Study in Vietnam.
- The Basel Committee (2016). Basel III what and why? Economic Review, 1, 16–93.
- Vanguard (May 3rd, 2021). Banks are still sound but...CBN.
- Wamalwa, M. F. & Mukanzi, C. (2018). Influence of financial risk management practices on financial performance of commercial banks in Kenya: a case of banks in Kakamega County. The strategic

- Journal of Business and Change Management, 5(4), 1040-1056.
- Whitaker, R. B. (1999). The early stages of financial distress. *Journal of Economic and Finance*, 23(2), 123-132.
- Wijekoon, K.R. M. & Jameel, A.L.M. (2021). Impact of credit risk on financial performance of
- commercial banks in Sri Lanka. *Asia-Pacific Journal of Management and Technology*, 2(1), 32-41.
- Yi, P. (2016). An empirical study of classification: algorithm evaluation for financial risk prediction. *Applied Soft Computing*, 11, 2906-2915.