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Original Research Article

Credit Risk and Financial Performance of Banks in Nigeria: Moderating Effect of Board Equity Ownership

Nuraddeen Shehu Aliyu, Mu'azu Saidu Badara, & Sanni Olawale Nurudeen

Department of Accounting, ABU Business School, Ahmadu Bello University, Nigeria

For correspondence, email: nsaliyu@abu.edu.ng, msbadara@abu.edu.ng, sanniolawale714@gmail.com

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Abstract

This study examined the moderating effect of board equity ownership on the relationship between credit risk and financial performance of listed deposit money banks in Nigeria for the period 2013-to 2020. The study used a correlational research design. Data were collected from the published annual financial reports of listed deposit money banks in Nigeria. The population of the study comprised the 14 listed deposit money banks. The adjusted population of twelve (13) listed deposit money banks in Nigeria was arrived at using three points filter. Integrated theory and financial distress theory were used to underpin the study. The data were analyzed with the aid of random effect multiple regression techniques, the result of the random effect regression shows that there is a positive and significant relationship between board equity ownership and financial performance of listed deposit money banks in Nigeria. However, a negative significant relationship was found between credit risk and financial performance. In addition, the study found that board equity ownership had a positive and significant moderating effect on the relationship between credit risk. It is recommended that listed deposit money bank management improve their credit analysis and loan administration capabilities. It is necessary to develop clear credit standards and lending criteria. Regulatory authorities should support board equity participation, according to the findings of the research, with a caveat to avoid interest concentration of power that might lead to abuse.

Keywords: board equity ownership, credit risk, financial performance, firm size, total assets

JEL Classification Code: G21, G32, L25

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1. INTRODUCTION

professionals Scholars and have reexamined the connection between risk exposure and organisational success as a result of corporate failure. Many financial institutions (FIs), particularly banks, failed to adequately analyse and manage their risk exposure, resulting in major failures on a worldwide scale (Basel Committee on Banking Supervision, 2015; Berger et al., 2016: Elamer, 2017). During commercial activities, banks are exposed to a wide range of systematic and unsystematic risks (Ishtiag, 2015). The performance of financial institutions, as well as their risktaking behaviour, has been scrutinised more closely (Aebi et al., 2012; Berger et al., 2016; BCBS, 2015; Hines & Peters, 2015). According to Chiejina (2016), financial crises in the banking sector have grown increasingly worrying for bank regulators and owners. Therefore, inefficient risk management has been recognised as one of the key drivers of Nigeria's poor financial sector performance (IMF, 2013; SEC, 2012). Financial risk assessment has been thrust into the spotlight as a result of these challenges (Awoyemi, 2010; Sommerville, Wong, & Lee, 2015; Kafidipe et al., 2021)

According to Fauzi and Idris (2013), performance refers to a company's market environment, policy, internal structure, and control system all working together. As a result, they often alter the circumstances decide performance. that Though. performance may be categorised financial and non-financial categories (Lau & Sholihin, 2005). Because of the nature of the problem and the data that will be necessary, this study will concentrate on financial performance, as a company's operational performance is stated in its report. Since the statements are created and made public. other clients have access to them.

Discoveries in the literature have been made in understanding the relationship between credit risk and bank performance (Adesina 2019; Aysan & Disli 2019, Bustamante et al., 2019; Dang, 2019, Jiang et al., 2020; Nguyen & Dang, 2020; Sobarsyah & Dang, 2020). Bank performance is impeded, according to Adesina (2019), by inadequate loan evaluation and asset portfolios. In the theoretical and empirical literature, there have been several attempts to investigate the credit risk and link between bank performance. Various research has recommended incorporating regulatory factors to reconcile some contradictions in the literature (Gordon, Loeb, & Tseng, 2009; Hafizuddin-Syah, Abdul-Hamid, Janor, &Yatim, 2014, Ahmad, 2016). To solve the agency problem, investors provide incentives to the board to act in the best investors' interest by allowing directors to own part of the firm (Nyamwanza *et al.*, 2017). However, board ownership may potentially incur some costs. Having control over a firm's decision may mean that some profitable projects are ignored because they are evaluated based on total risk rather than systematic risk (Alhaji, 2018).

Thus, the present study is set to fill the gaps identified in the credit risk and financial performance literature by extending its analysis to cover the moderating effect of board equity ownership. In a view of analyzing the credit risk, most of the previous studies failed to consider the riskiness of the chosen ratios. For instance. Annor and Obeng (2018), Iwedi and Onuegbu, (2014) and Ambrose (2017), tend to measure credit risk, by using nonperforming to total loan ratio, and loan loss provision to total loan. Some of these ratios can as well be used to measure performance. for instance, non-performing loan ratio, loan to deposit ratio and net interest margin and others such as loan loss provision to total loan may not automatically translate to risk (Cherkasova & Kurlyanova, 2019). According to Beyani et al., (1964),variability is the standard deviation measure of the risk involved. The standard deviation measures how far off the values in a given data collection are from the sample average (Altman & Bland, 2005; Rajesh, 2016; Fu, 2021). Hence, this study will therefore consider the riskiness of the implored credit ratio.

The remainder of the paper is organized as follows: section 2 presents relevant extant

studies. Section 3 discusses the methodology employed for the study. In section 4, the results of the data analysis are presented and discussed. Section 5 concludes the study by highlighting the finding policy implications.

2. LITERATURE REVIEW

This section reviews relevant studies on corporate governance, risk management and financial performance.

Concept of Financial Performance

The concept of financial performance is a controversial issue largely due to its multidimensional meanings. Performance is the result of activities of an organisation or investment over a given period. According Iswatia and Anshoria (2007),to performance is the function of the ability of an organisation to gain and manage its resources in several ways to develop a competitive advantage. Heng and San (2011)contend that productivity, profitability, growth and customer satisfaction are used in measuring firm performance as these tools are closely related. In measuring the financial performance of banks and other financial institutions, profitability measures such as Return on Asset (ROA), Return on Equity (ROE), Net Interest Margin (NIM) and Earnings Per Share (EPS) are mostly used. This study measures financial performance in line Shehu et al. (2017) as return on the use of assets of the companies (ROA)

Credit Risk and Financial Performance

Credit risk is measured as nonperforming loan to total loan as used. It arises when a borrower defaults and does not honour its obligation to service debt. It occurs when the borrower is unable to pay his debts as agreed or fails to make timely payments on his debt servicing (Iwedi & Onuegbu, 2014;

Ambrose, 2017). Empirical on credit risk and financial performance such as Isiaka et al. (2017), examined the effect of corporate board size, and risk management on the financial performance of listed deposit money banks in Nigeria for the period 2011-2016. The population of the study is fifteen (15) listed deposit money banks in Nigeria out of which a sample of fourteen (14) were used for the study due to the accessibility and availability of data. Corporate board size and risk management as the independent variable was proxy with numbers of board of directors, liquidity risk, credit risk and operating risk, while the return on equity (ROE) and earnings per share (EPS) were used to proxy financial performance. Data were collected from secondary sources through the annual report and account of the banks for the period under study and the data was analysed using multiple panel regression techniques. The findings reveal that board size, credit risk and operating risk are a significant negative effect on return on equity (ROE) and earnings per share (EPS) respectively. The study also shows that liquidity risk is negative and insignificant effect on ROE and EPS of the study banks in Nigeria.

Annor and Obeng (2018), examined the impact of credit risk management on the profitability of 6 selected deposit money banks listed on the Ghana stock exchange. Secondary data was gathered from the annual reports of the six selected banks and Ghana banking survey for the years under consideration. The study adopted the Random Effect Model within the panel estimation technique framework. The study used return on equity (ROE) to measure profitability of banks, non-performing loans, loan loss provisions ratio, loan to asset ratio and capital adequacy ratio as credit risk. The findings showed that indeed credit risk

management has a significant relationship with the profitability of banks. While capital adequacy ratio had a positive relationship with a bank's profitability; non-performing loans, loan loss provisions ratio and loan to asset ratio show statistically significant negative relationship with the profitability of a bank. The study recommends that banks should assess and manage credit risk indicators vigorously in order reduce their exposure to these risks.

Board Equity Ownership and Financial Performance

Arifur, Balachandran, & Paul, (2008) view board ownership as a percentage of common directors, stock owned by executive directors independent directors. and Empirical studies on board ownership and financial performance such as Buallay, Hamdan and Zureigat (2017), examined the impact of Corporate Governance on Firm performance of listed companies in the Saudi stock exchange. The study methodology was pooled data collected Saudi from the stock exchange (TADAUWL) for the period from 2012 to 2014. The study sample is 171 listed The study's independent companies. variable is Corporate Governance principals. The dependent variable is Firm performance which was measured using ROA, ROE and Tobin's Q. The study also utilized five control variables to help measure the relationship between Corporate Governance and Firm Performance. In conclusion, the study found that the governance level was 61.4% in Saudi stock which is considered exchange, compared to previous studies. The results of the study test indicate that there is no significant impact of corporate governance adoption on firm's operational and financial performance in the listed companies in Saudi stock exchange. By testing the Tobin's Q model, the study also concluded that there's no significant impact for ownership of the largest shareholder and independency of Board of Directors on firm's market performance. Significant impact was found for the ownership and the size of the Board of Directors on firm's performance.

Ogaluzor and Omesi (2019), investigated the relationship between share ownership structure and financial performance of listed consumer goods companies in Nigeria. using a cross-section of secondary data for 2016 fiscal year, which was obtained from the published annual reports of the firms. Share ownership structure was viewed from the dimensions of ownership concentration and managerial share ownership, while financial performance was measured with return on assets. Firm size was used to control for heterogeneity in firm-specific characteristics. A Generalized Least Square (GLS) regression technique was used, given the cross-sectional nature of the data to interference mitigate the heteroscedasticity in the results. In the final analysis, results obtained confirmed a significant negative relationship between ownership concentration and financial performance thereby upholding entrenchment effect hypothesis. On the other hand, though a positive relationship was confirmed regarding the relationship between managerial share ownership and financial performance, results obtained fell short of statistical significance at the conventional level.

3. METHODOLOGY

The study adopted the correlational research design. The design is informed by the research paradigm which is the positivism approach. The population of the study comprised of all the fourteen (14) listed

deposit money banks on Nigeria stock exchange (NSE) and the sample size is fifteen (13). The sampling technique is based on these criteria:

- i. The firm must be listed on the NSE one (1) year before 2013.
- ii. Firm must not be delisted during the period of study
- iii. Availability of data in the annual financial reports of the firms for the period under study i.e., 2013-2020.

The financial data used for the study is secondary in nature obtained from the annual reports. Panel regression analysis was employed since the study involves the use of both time series and cross-sectional data. The independent variable considered is, credit risk while the dependent variable is financial performance, with board equity ownership as the moderator.

Theoretical Framework and Model Specification

This section explains the related theories on which the study is based. There are several theoretical perspectives which are used in explaining corporate governance, risk management and financial performance. The agency and stakeholders' theories are used to underpin the study.

Integrated theory

The theory was developed by Stulz (1988) explaining the roof-shaped relationship between ownership and firm performance. In his seminal paper, he focused on the takeover market in a bid to discipline managers. His model incorporated both the takeover premium hypothesis and the enchantment hypothesis in a single theory. As the fraction of manager owned equity increases so does, the increase in premium a hostile bidder must part with to acquire control of a target firm. However, the

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probability of the success of the takeover consequently declines. When managers own a smaller fraction of firm's shares, it will be more likely that hostile takeover will succeed at a value below the maximum the investor willing to pay (Salehi & Baezegar, 2011). As managerial ownership in equity of a firm increases, the probability of hostile takeover is cancelled out. This rationale results in a curvilinear trend between the value of firm and insider's fraction of shares (Oscar, 2017). The more equity ownership by management in a firm the more positive effect of credit risk observed on the firm's performance since managers will more meticulous and competent to oppose takeover threat for corporate control (Salehi et al., 2011).

Finance Distress Theory

Corporate distress was first classified and modelled in 1996 by Beaver. He noted that financial distress is liquidation, bankruptcy, mergers absorption or major structural changes to a company. In this grey area where prediction of financial distress is difficult there is an overlap between non failed and failure. Baldwin and Scott (1983) purported that when a firm's business deteriorates to the point where it cannot meet its financial obligation, the firm is said to have entered a state of financial distress.

The first signals of financial distress are violations of debt payments and failure or reduction of dividends payouts. Whitaker (1999) defines entry in financial distress as the first year in which cash flows are less than current maturities' long-term debt. The firm has enough to pay its creditors as long as the cash flows exceed the current debt obligations. The key factor in identifying firms in financial distress is their inability to meet contractual debt obligations.

Model Specification

Flowing from the above framework, we expect a functional relationship between credit risk and financial performance expressed in econometric form as:

The model is stated below: $ROA_{it}=\beta_0+$ $\beta_1CRK_{it}+$ $\beta_2BEO_{it}+$ $\beta_3CRK_{it}*BEO_{it}+FSZ_{it}+e_i$

Where:

i= firms

= year

 β_0 = Intercept β_1 , β_2 and β_3 = the coefficients of the Variables.

e = Error Term.

ROA= Return on Asset

CRK = Credit risk

BEO = Board Equity Ownership

FSZ= Firm Size

Operationalisation of Variables

Table 1: Operationalisation of Variables

Variables	Proxies	Variable Type	Measurements
Financial	Return on	Dependent	profit after tax to total asset (Shehu, 2017)
Performance	Asset	Variable	
Credit Risk	Credit risk	Independent	non-performing loan to total loan ratio by firm minus the industry's average means divided by standard deviation of all firms in the same industry according to Ambrose (2017) and Paroush (1992).
Board equity ownership	Board equity ownership	Moderator	The number of shares owned by the board to total shares (Alhaji, 2018)
Firm size	Total assets	Control	Measured as the log of total assets. (Hashim & Abdul Rahman, 2011)

4. ESTIMATION RESULTS AND DISCUSSION OF FINDINGS

Table.2 Descriptive Statistics

	Mean	Std. Dev.	Min	max
Roa	.0156	.018	095	.062
Crk	-1.023	1.000079	-1.941	3.605
Beo	.043	.062	.00039	.257
Fsz (million)	2239042.8	1934842.8	156506.5	10384349

Source: summary of STATA OUTPUT

The descriptive statistics of financial performance evaluated by return on asset (ROA) show an average of N0.016 in Table 2 The ROA is a measure of the efficiency of the owners' invested capital; it reflects the contribution of net income per naira (local currency) invested by the businesses' shareholders. The lowest and highest ROA values are -0.095 and 0.062, respectively. That implies the most profitable deposit money banks made N0.062 in net revenue on a single N1 asset investment, while the deposit money banks' largest losses were about -N0.095 on each N1 asset investment. The standard deviation of ROA of N0.018 indicates that there is a wide variation of earnings across the sampled deposit banks.

On the other hand, the average value for credit risk across the sampled banks as seen in Table.2 is -1.023 indicating that on average credit risk exposure is not too high; nevertheless, the standard deviation of 1.000079 indicates wide dispersion as the value doesn't cluster around the mean. The minimum and maximum values are -1.941 and 3.605 respectively.

Director ownership had a minimum value of 0.00039 and a maximum value of 0.257, implying the lowest proportion of shares held by the directors was at 0.04%, while the highest percentage of shares held by the directors was 25.7%. On the whole, Director

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Ownership recorded a mean value of 0.037, implying that, on the average, the listed deposit money banks' directors had shares to the tune of 4.3%. The standard deviation recorded a value of 0.062 or 6.2% which implies high variability across the listed deposit money banks in Nigeria.

With respect to firm size, the size of the bank has minimum asset value of N156506.5millions in Nigerian Naira while

the maximum value owned by banks in terms of size is N10384349million. The mean of the size of the firm as presented in Table.2 indicates that on average listed deposit money banks in Nigeria have assets with worth N2239042.8millions value. The lower standard deviation with the value of N1934842.8millions as compared with the mean shows that there is low variation in total assets of the banks that constitutes the study sample.

Table. 3 Correlation Matrix

(1)	(2)	(3)	(4)	(5)
1.000				
-0.182	1.000			
0.038	-0.260	1.000		
-0.006	-0.030	0.355	1.000	
0.052	-0.255	0.482	0.324	1.000
	1.000 -0.182 0.038 -0.006	(1) (2) 1.000 -0.182 1.000 0.038 -0.260 -0.006 -0.030	(1) (2) (3) 1.000 -0.182 1.000 0.038 -0.260 1.000 -0.006 -0.030 0.355	(1) (2) (3) (4) 1.000 -0.182 1.000 0.038 -0.260 1.000 -0.006 -0.030 0.355 1.000

Source: Summary of STATA OUTPUT

From the correlation matrix table.3, it can be seen that board equity ownership (BEO) is positively correlated with the return on (ROA) of the listed deposit money banks in Nigeria, implying that the variable moves in the same direction as ROA. On the other hand, credit risk is negatively correlation with ROA. The implication is that the above variable moves in the opposite direction from the ROA. In addition, BEO negatively moderates the relationship between credit risk financial performance. and Nevertheless, the relationship among the explanatory variables is not strong to warrant the problem of multicollinearity.

Residual tests

The current research employed the Breuch Pagan/Cook-Weisberg test to see whether heteroskedasticity existed. The Chi2 of 0.14 with a p-value of 0.129 indicates that there

is no heteroskedasticity, and the null hypothesis that the residual variance is constant (homoscedastic) is not rejected.

The research used a multicollinearity test to determine the strength of the association between the explanatory factors, which might influence the study's outcome. The variance inflation factor (VIF) was calculated, and all of the variables had values less than 10 and tolerance values more than 0.10. (Rule of thumb). This demonstrates that there is no difficulty with multicollinearity.

To decide between the fixed and random effect models, the Hausman specification test was used. The Hausman test found that the value of chi2 is 0.00 and the prob>chi 1.0000 is negligible, indicating that the Hausman test favours the random effect

model. To select between the random effect, result and OLS regression, the Breusch and Pagan Lagrangian multiplier test for random effect was used. The test resulted in a chi2

of 2.21 and a p-value of 0.003. As a result, the random effect regression model is the most appropriate for interpreting the data in this research.

Table 4: Random Effect Regression Results

ROA	Coef.	St.Err.	t-value	p-value	[95% Conf	Interval]	Sig
CRK	-1.417	0.232	-6.11	0.000	0.963	1.872	***
BEO	0.062	0.055	1.13	0.261	-0.169	0.046	
CRK*BEO	001	.0003	-3.68	0.000	-1.754	-0.892	***
FSZ	.023	.0187	1.27	.204	0.018	0.162	**
Constant	-0.002	0.008	-0.29	0.770	-0.019	0.014	
Mean dependent var 0.01			013 SD de	ependent var		0.035	
Overall r-squared		0.	273				
Chi-square 41.837		837 Prob>	Prob> chi2		0.000		
R-squared within 0.259		259 R-squ	R-squared between		0.384		
VIF			1.18				

*** p<0.01, ** p<0.05, * p<0.1

Source: Summary of STATA OUTPUT

From table 4, it can be observed that the adjusted R² is 0.273 which means that 27.3% of variation in ROA of listed deposit banks in Nigeria was explained jointly by the independent variables captured in the model and p-value of 0.0000 shows that it is significant at 1%. This implies that the model is fit.

The relationship between credit risk (CRK) and financial performance of listed deposit money banks in Nigeria is found negative with the coefficient of -1.417 at 1% level of significance as indicated by the p-value of 0.000. Thus, an increase in credit risk will lead to a decrease in the financial performance of listed deposit money banks in Nigeria. This is because the increase in the amount of non-performing loans may have a more deteriorating effect on financial performance due to the likely hood of debtors failing to honour their obligation to the banks and more proportion of total loans and advances that turn out to be nonperforming dwindles and reduces banks financial performance. This provides a basis for rejecting the null hypothesis that says, credit risk has no significant impact on the financial performance of listed deposit money banks in Nigeria. This finding is in line with Isiaka *et al.* (2017), Annor *et al* (2018) and financial distress theory which states that credit risk is one of the components that financial distress emanates from, and the shareholders wealth may be affected by increase of returns on their equity at a decreasing rate.

The coefficient of board equity ownership (BEO) is 0.062, which means that equity ownership has a positive relationship with financial performance of listed deposit money banks in Nigeria. However, the relationship between them is not significant as indicated by p-value of 0.26. Therefore, we fail to reject the null hypothesis that says, managerial ownership has significant effect on financial performance of listed deposit money banks in Nigeria. This

finding is in tandem with that of Hamdan and Zureigat (2017).

The moderating effect of board equity ownership (measured by the proportion of shares owned by the board of directors) on the relationship between credit risk and financial performance (using ROA) is negatively significant, with a parameter of -0. 003, with the p-value of 0.000. By implication, board equity ownership has a moderating influence on the link between credit risk and financial performance. This because, as previously noted, past research found conflicting outcomes in the nexus between credit risk and financial performance. As a result, this research concluded that there is a mixed link between credit risk and financial performance, which prompted moderation

5. CONCLUSION AND RECOMMENDATIONS

The study investigated the moderate effect board equity ownership relationship between credit risk and financial performance of listed deposit money banks in Nigeria, 13 out of the 14 listed deposit money banks were used due to data availability. Data were sourced from annual financial reports of the banks. Using the multiple regressions to analyze the data. this study found that there is a positive and significant relationship between board equity ownership and financial performance of listed deposit money banks in Nigeria. However, negative significant relationship was found between credit risk and financial performance. In addition, the study found that board equity ownership had a positive and significant moderating effect on the relationship between credit risk. It is recommended that listed deposit money bank management improve their credit analysis and loan administration capabilities. It is necessary to develop clear credit standards and lending criteria. Management is also responsible ensuring that the terms and conditions of loan approval are followed. As a result, top management should establish standards and make them known to all employees. This will lower nonperforming loan losses and enhance asset quality management, which increases bank costs and, as a result, increases profitability.

Regulatory authorities should support board equity participation, according to the findings of the research, with a caveat to avoid interest concentration of power that might lead to abuse. As a result, this study contributes to the credit risk literature stream by providing theoretical evidence for the moderating ability of BEO between financial risk and financial performance of listed deposit money banks in Nigeria

REFERENCES

Ahmed, I., & Manab, N. A. (2016).
Influence of Enterprise Risk
Management Success Factors on Firm
Financial and Non-Financial
Performance: A Proposed Model.
International Journal of Economics and
Financial Issues, 6(3), 1-7.

Alhaji, S. (2018). Managerial Ownership and Financial Performance of Listed Manufacturing Firms in Nigeria Managerial Ownership and Financial Performance of Listed Manufacturing Firms in Nigeria. *International Journal of Academic Research in Business and Social Sciences*, 8(9), 1227–1243. https://doi.org/10.6007/IJARBSS/v8-i9/4693

Ambrose, N. (2017). The effect of credit risk management on the financial.

- Annor, E., & Obeng, F. (2018). Impact of Credit Risk Management on the Profitability of Selected Commercial Banks Listed on the Ghana Stock Exchange. Journal of Economics, Management and Trade, 20(2), 1–10. https://doi.org/10.9734/JEMT/2017/368 81
- Awoyemi, O. (2010) Repositioning Corporate Nigeria: Lessons in Corporate Reputation Management. *In Nigerian Institute of International Affairs*.
- Basel Committee on Bank Supervision (2015) Corporate Governance Principles for Banks.
- Berger, A. N. &DeYoung, R. (1997). Problem Loans and Cost Efficiency in Commercial Banks, *Journal of Banking and Finance*, 21(6), 849-870.
- Beyani, M., & Kasonde, R. (1964). Financial innovation and the importance of modern risk management systems a case of Zambia. 31, 283–293.
- Bustamante, J., Cuba, W., Nivin, R., (2019). Determinants of Credit Growth and the Bank- Lending Channel in Peru: A Loan Level Analysis.
- Cherkasova, V., & Kurlyanova, A. (2019).

 Borsa _ Istanbul Review Does corporate
 R & D investment support to decrease of
 default probability of Asian
 firms? Borsa Istanbul Review, 19(4),
 344–356.
 https://doi.org/10.1016/j.bir.2019.07.00
- Cherkasova, V., & Kurlyanova, A. (2019).

 Borsa _ Istanbul Review Does corporate
 R & D investment support to decrease of
 default probability of Asian
 firms?Borsa Istanbul Review, 19(4),
 344–356.
 https://doi.org/10.1016/j.bir.2019.07.009

- Chiejina, M. O. (2016). Credit Risk and Commercial Banks' Performance in Nigeria: A Panel Model Approach. Australian Journal of Business and Management Research, 2(2), 31–38.
- Elamer, A. A. &Benyazid, I. (2018). The Impact of Risk Committee on Performance of UK Financial Institutions. *International Journal of Accounting and Finance*, 8(2), 161-180
- Fauzi, H., &Idris, K. (2013). The Relationship of CSR and Financial Performance: New Evidence From Indonesian Companies. *The American Economic Review*, 2(1), 58–79.
- Fu, C. (2021). Time-Varying Risk and the Relation between Idiosyncratic Risk and Stock Return. *Journal of Risk and Financial Management*, 14(9), 432. https://doi.org/10.3390/jrfm14090432
- Hafizuddin-Syah, B., Abdul-Hamid, M., Janor, H., & Yatim, P. (2014). The Implementation of Enterprise Risk Management (ERM) and Firm Performance: Evidence from Malaysian Firms. In the 16th Technology Malaysian Finance Association Conference (MFA2014).
- Hashim, U. J. B., & Abdul-Rahman, R., B. (2011). Board independence, board diligence, board expertise and impact on audit report lag in Malaysian market. Finance and Corporate Governance Conference, 1–22. https://doi.org/10.2139/ssrn.1717479
- IMF (2013). Annual Report is a report of the IMF's Executive Board. Retrieved from https://www.imf.org/en/Publications/AR EB
- Ishtiaq, M., (2015) Risk Management in Banks: Determination of Practices and

- Relationship with Performance.Phd Thesis, University of Bedfordshire, Pakistan.
- Isiaka, L. O., Mustapha, L. O., &Irom, I. M. (2017). Corporate Board Size, Risk Management and Financial. December. *European American Journal*
- Iswatia, S., & Anshoria., M. (2007). "The Influence of Intellectual Capital to Financial Performance at Insurance Companies in Jakarta Stock Exchange (JSE)." In Proceedings of the 13th Asia Pacific Management Conference, Melbourne, Australia.,
- Iwedi, M., & Onuegbu, O. (2014). Credit Risk and Performance of Selected Deposit Money Banks in Nigeria: An Empirical Investigation". European Journal of Humanities and Social Sciences, 3(1).
- Jeno, S. K., Mohaptra, S., & Wong, W. K. (2017). Non-performing Loans in Banks in India- Are Managers only Responsible?; Department of Finance and Big Data Research Center, Asia University, 500, Lioufeng Road, Wufeng, Taiching, Taiwan.
- Kafidipe, A., Uwalomwa, U., Dahunsi, O., & Okeme, F. O. (2021). Corporate governance, risk management and financial performance of listed deposit money bank in Nigeria. Cogent Business & Management, 8(1). https://doi.org/10.1080/23311975.2021. 1888679
- Lau, C. M., & Sholihin., M. (2005). Financial and Non-financial Performance Measures: How do they affect Job Satisfaction? *British Accounting Review*, 37(4), 389–413. https://doi.org/10.1016/j.bar.2005.06.00

- Nguyen, H., D., H., Dang, V., .D. (2020). Bank-specific determinants of loan growth in Vietnam: evidence from the CAMELS approach. *J. Asian Fin. Econom. Business* 7 (9), 179–189
- Nyamwanza, L., Rudo, M., Samugwede, O., & Nyazenga, P. (2017). The Effects Of Strategic Risk Management On Performance Of Insurance Products: A Case Of First Mutual Life Insurance. *Journal O F Financial Services Research 22 (3), 203-24., 4(2), 1–16.*
- Ogaluzor, O. I., & Omesi., I. (2019).ownership structure and financial performance of listed consumer goods manufacturing companies in official Publication of Center for International Research Development. *Journal of Accounting Information and Innovation, February*.
- Oscar, L. (2017). Ownership Structure and Financial Performance of Firms Listed at the Nairobi Securities Exchange.
- Oscar., L. (2017). Ownership Structure and Financial Performance of Firms Listed at the Nairobi Securities Exchange.
- Paroush, J. (1992). Credit risk measurement.Lntemational Review of Economics and Finance, 1, 33–41.
- Paroush, J. (1992). CREDIT RISK MEASUREMENT.Lntemational Review of Economics and Finance, l, 33–41.
- Rajesh., K. (2016). Risk and return.

 Academic press, Science direct.

 Retrieved from:

 https://doi.org/10.1016/B978-0-12-802303-7.00002-4
- Rostami,, A., Sommerville, J., Wong, L. I., & Lee, C. (2015).Risk Management Implementation in Small and Medium

Aliyu, Badara & Nurudeen. Credit Risk and Financial Performance...

- Enterprises in the UK Construction Industry. *Engineering, Construction and Architectural Management*. 22(1), 91–107.
- Salehi, M., & Baezegar., G, (2011). "A Survey of Empirical Studies on Management Ownership." African Journal of Business Management, 5, 7188-7197.
- San, O.T., & Heng., B. (2011). "Capital Structure and Corporate Performance of Malaysian Construction Sector." *International Journal of Humanities and Social Science.* 1(2).
- Securities and Exchange Commission Annual Report (2012). Retrieved from: https://www.sec.gov.ng.

- Shehu., Z. (2017). Effect of audit committee characteristics and ownership structure on financial performance of listed oil and gas firms in nigeria."
- Sobarsyah, M., Soedarmono, W., Yudhi, W.S.A., Trinugroho, I., Warokka, A., Pramono, S.E., (2020). Loan growth, capitalization, and credit risk in Islamic banking. *Int. Econom.* 163, 155–162.
- Stulz, R. M. (1988). Managerial Ownership Dynamics and Firm Value. *Journal of Financial Economics*, 92(3), 342–361.