



UNSYSTEMATIC RISK AND FINANCIAL PERFORMANCE OF LISTED DEPOSIT MONEY BANKS IN NIGERIA

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Abstract: The study investigated the effect of unsystematic risk on financial performance of listed deposit money banks in Nigeria for the period 2012 to 2024. Secondary data was extracted from the financial statements of the thirteen banks that make up the population of the study. Unsystematic risk as an independent variable of the study was proxied by deposit risk, liquidity risk and capital adequacy risk, while return on equity was used to represent financial performance as dependent variable of this study. This study adopted generalized least square random effect multiple regression technique in analyzing the data. The findings of the study show liquidity risk and capital adequacy risk has positive significant influence on financial performance. This study recommended that banks' management should continue to manage their liquidity risk and capital adequacy risk in their banks efficiently and effectively in line with the directive of regulatory authorities, since the findings of the study show liquidity risk and capital adequacy risk has positive significant impact on banks' financial performance.

Keywords: *Deposit Risk, Liquidity Risk, Capital Adequacy Risk, Financial Performance and Portfolio Theory.*

1. Introduction

Measuring firms' financial performance is one of the management strategic functions aimed at satisfying the interest of shareholders and other stakeholders in a company. Firm's financial performance appraisal is an evaluation which is done periodically and systematically in determining the achievements of the company's objectives (Amelia, 2012 and Olasehinde et al., 2025). Specific risks are risk that are internal to the bank and can be controlled internally within the bank.

Deposits represent the total amount of funds that the bank mobilized from its customers in form of savings. The bank used deposits to issues loans to their customers who are in the need of cash upon the fulfillment of the entire requirements for guarantying loan to the borrowers in the banks (Moteti, 2014 and Nyor et al., 2024). Deposit risk involves the uncertainty about the



customers' ability to pay back the principal amount collected in form of loan and the interest attached to it as at when due to the banks. Liquidity risk consists of the banks' inability to convert its current assets into cash in order to meet its obligations as at when due for better financial performance (Tatahi & Heshmati, 2009 and David & Sola, 2023). Bank as financial institution required more liquidity for them to be able to provide loans and advances to the needed parties in order to generate more interest income for better financial performance. Capital adequacy risk help banks to absorb losses without a bank being required to cease operations as well as protecting the depositors from losing their deposits in the event of winding up of the business (Poudel, 2012).

Nigerian listed Deposit Money Banks are losing their deposits as a result of implementing Treasury Single Account by the Nigerian government in September, 2015. The federal government directed all the listed deposit money banks to transfer all the funds under their custody that belongs to the government ministries, departments and agencies to the Treasury Single Account in Central Bank of Nigeria. This policy affected the level of banks' deposit and liquidity position which led to the fluctuation of profit of thirteen banks within the period of implementation of this policy as evidenced from the analyzed financial statements of these banks. Also, a review of the quarterly performance of banking index in Nigeria for 2016 financial year showed that, apart from the first quarter when the banking sector gained 1.84% increase in liquidity position, in second and third quarter, it declined by 0.93% and 8.05% respectively (CBN, 2017). The Central Bank of Nigeria had said few undisclosed deposit money banks in Nigeria did not meet the minimum Capital Adequacy Ratio of 10% and 15% for regional/national and international banks, under Basel II. Also, most of the previous studies on risk and financial performance in Nigeria such as the work of Charles and Kenneth (2013), Samuel and Peter (2014), Uwalomwa et al., (2015), Olaye and Olarewaju (2015), Muhammed (2017) and Olasehinde et al., (2025) among others stop at 2022 financial year, without extending it to 2024 financial year, this creates a gap for further study. Therefore, the study seeks to examine effect of unsystematic risk on financial performance of listed banks in Nigeria.



2. Review of Empirical Studies and Theoretical Framework

Deposit Risk and Financial Performance

The study reviewed previous empirical studies such as the work of Olasehinde et al., (2025) who examined the relationship between deposit risk and financial performance of firms. The result shows a positive insignificant relationship among the variables of the study. Similarly, Shola et al., (2024) studied the impact of deposit risk on financial performance of the banks in Nigeria and the result reveals evidence of positive significant relationship between deposit risk and financial performance of the banks. Also, Natufe and Ikavbo (2023) explored the influence of deposit risk on financial performance of the banks in Nigeria, the findings show a negative insignificant relationship between deposit risk and financial performance of banks.

The work of Duraj and Moci (2015) examined the effect of deposit risk on profitability of banks in Albania commercial banks and found evidence of positive significant relationship between deposit risk and financial performance. Likewise, Moteti (2014) studied the relationship between financial risk management and financial performance of commercial banks in Kenya for the period of 2009 to 2013 using 43 commercial banks as the sample size of the study. The study found positive significant correlation between deposit risk and financial performance. Also, Olaye and Olarewaju (2015) examine the effect of deposits risk on financial performance of listed deposit money banks in Nigeria for the period of 2004 to 2012 using 15 banks as sample size and found positive insignificant association between deposit risk and financial performance.

In addition, Aebi et al., (2011) studied the relationship between deposit risk and financial performance of banks in United State for the period of 2007 to 2008 using the sample size of 372 banks out of the total population of 380 banks. The result of the analysis reveals a positive insignificant relationship between deposit risk and financial performance of the banks. Also, Okun (2012) investigated the effect of the level of deposits risk on financial performance of commercial banks in Kenya using causal research design. The population of the study was all 44 commercial banks. The study used secondary data from 2004 to 2011 from the banking supervision department of central bank. The result of the analysis indicates that there is a positive significant relationship between deposits risk and financial performance of the banks.



Moreover, Samuel and Peter (2014) Studies the effect of deposit risk on financial performance of banks in Nigeria for a period 1999 and 2012 using the entire listed banks in Nigeria as sample size for the study and found evidence of negative significant correlation between deposit risk and financial performance of bank. In addition, Uwalomwa et al., (2015) assessed the relationship between deposit risk and financial performance of banks in Nigeria for period 2007 to 2011 and found evidence of negative insignificant relationship on deposit risk and banks' financial performance. Also, Wambari and Mwangi (2017) studied the relationship between deposit risk and financial performance of banks in Kenya for period 2002 to 2014 and found evidence that deposit risk is negatively associated with financial performance of banks.

Also, Tariq et al., (2014) examined the effect of deposit risk on financial performance of commercial banks in Pakistan over the time period from 2004 to 2010, and found evidence of negative significant relationship between deposits risk and financial performance of the bank. Finally, Nazir et al., (2012) studied the various determinants of the banks' financial performance in Pakistan for the period of 2006 to 2011. The study found that deposits risk has negative significant impact on return on assets.

Liquidity Risk and Financial Performance

The work of Onyegin et al., (2024) who examined the relationship between liquidity risk and financial performance of firms. The result shows a negative insignificant relationship liquidity risk and financial performance of the banks. Similarly, Shola et al., (2024) studied the impact of liquidity risk on financial performance of the banks in Nigeria and the result reveals evidence of positive significant relationship between liquidity risk and financial performance of the banks.

The study of Museiga et al., (2017) explored impact of liquidity risk on financial performance of banks in Kenya for period 2006 - 2015 and result reveals positive significant relationship between liquidity risk and financial performance of banks. Also, Olarewaju and Adeyemi (2015) studied the influence of liquidity upon financial performance of listed deposit money banks in Nigeria for the period of 2004 to 2013 and the result of the analysis shows evidence of positive insignificant relationship on liquidity risk and financial performance of banks. Likewise, Charles and Kenneth (2013) studied the impact of credit risk on financial performance of banks in Nigeria for period 2004 to 2009 using sample size of 6 banks. The



finding reveals positive insignificant relationship on liquidity risk and banks' financial performance. Also, Soyemi et al., (2014) investigated the effect of liquidity risk on banks' performance in Nigeria for 2012 financial year only using the sample size of 9 banks. The finding reveals positive significant impact of liquidity risk on financial performance of banks.

However, Tesfaye (2012) studied the impact of liquidity risk on financial performance of commercial banks in Ethiopia for the period of 2000 to 2011 using the sample size of 8 commercial banks and liquidity theory is adopted to underpin the result of the study. The result of the analysis reveals evidence of positive significant relationship between liquidity risk and financial performance of the banks. Also, Nguyen and Leander (2014) examined the impact of liquidity risk on financial performance of listed banks in United States and European Union for the period of 2005 to 2012, the result of the analysis shows a positive significant relationship between liquidity risk and financial performance of the banks. In addition, Maaka (2013) investigated the relationship between liquidity risk and financial performance of commercial banks in Kenya for the period of 2008 to 2012 using the sample size of 33 banks. The result of the analysis reveals a negative significant relationship between liquidity risk and financial performance of the banks. Also, Muhammed (2017) examined the effect of risk on financial performance of listed deposit money banks in for the period of 2005 to 2014 using the entire population of 15 deposit money banks listed on the Nigeria Stock Exchange as the sample size of the study. The result of the analysis reveals an evidence of positive significant relationship between liquidity risk and financial performance of the banks.

Furthermore, Imane (2014) studied the effects of risk management practice on performance of Islamic banks in Jordan for period of 15 years from 1998 to 2012 and the results reveals evidence of negative significant relationship on liquidity risk and financial performance of banks. In the same vein, Olamide et al., (2014) explored the effect of risk on financial performance of listed deposit money banks in Nigeria for period of 2006 - 2012 using fourteen banks as sample size and found negative insignificant relationship between liquidity risk and financial performance. Also, Gizaw et al., (2015) examined the influence of credit risk on financial performance of banks in Ethiopia for period 2003 to 2004 using the sample size of 8 banks and found negative insignificant correlation between liquidity risk and financial performance.



Moreover, Ebrahim et al., (2013) studied the effect of liquidity risk on financial performance of banks in Iran for the period of 2005 to 2011 using the sample size of 15 banks and efficiency theory was adopted to support the finding of the study. The study found evidence of negative significant relationship between liquidity risk and financial performance of the banks. Also, Terraza (2013) explored the effect of liquidity risk on financial performance of banks in Europe; the sample size of 1270 European banks was used for the period of 2005-2012. The result of the analysis shows a negative significant relationship between liquidity risk and financial performance of the banks.

The work of Chulia et al., (2021) examine the influence of liquidity risk on financial performance of banks using panel regression as technique of analysing the secondary data collected for the study. The result of the analysis reveals a negative insignificant relationship between liquidity risk and financial performance of the banks. Adebayo et al., (2020) study relationship between liquidity risk and financial performance of 19 banks in Nigeria for the period of 2007 to 2018 using panel regression as statistical tool of analysis of the secondary data collected for the study. The findings of the study show negative significant relationship between liquidity risk and financial performance of the banks.

Capital Adequacy Risk and Financial Performance

In the study of Olasehinde et al., (2025) who examined the relationship between capital adequacy risk and financial performance of firms. The result shows a positive insignificant relationship between capital adequacy risk and financial performance of the firms. Similarly, Godwin and Ogbada (2025) studied the impact of capital adequacy risk on financial performance of the banks in Nigeria and the result reveals an evidence of positive significant relationship between capital adequacy risk and financial performance of the banks. Also, Natufe and Ikavbo (2023) explored the influence of capital adequacy risk on financial performance of the banks in Nigeria, the findings show a positive significant relationship between capital adequacy risk and financial performance of banks. In addition, David and Sola (2023) studied the effect of capital adequacy risk on financial performance of the bank, and found evidence of positive significant relationship between capital adequacy risk and financial performance of the banks.



Another study was conducted by Kirui (2015) on the effect of capital adequacy risk and financial performance of credit cooperative in Kenya using population of 180 banks while purposive sampling technique was used to arrive at the sample size of 18 banks and found positive significant impact of capital adequacy risk on financial performance. Also, Soyemi et al., (2014) investigated the effect of capital adequacy risk on banks' financial performance in Nigeria for 2012 financial year only using the sample size of 9 banks. The study found positive significant association of capital adequacy risk and financial performance of banks.

In addition, Rundassa and Batra (2016) studied the impact of credit risk management on financial performance of Ethiopian commercial banks for the period of 2010 to 2014 and found evidence of significant positive relationship of capital adequacy risk and banks' performance. Also, Ejoh and Iwara (2014) on the relationship between capital adequacy risk and financial performance of banks in Nigeria using sample size of 5 banks for period of 1981 - 2011 and found evidence of positive significant influence of capital adequacy risk on financial performance of banks. Once again, Odunga (2016) studied the effect of risk management on financial performance of listed commercial banks in Kenya and found evidence of positive significant relationship between capital adequacy and financial performance of the banks. Again, Binh and Thomas (2015) investigated the influence of capital adequacy risk on performance of banks in Vietnam for period 2008 – 2013, sample size of 11 banks were used and found evidence of significant positive relationship between capital adequacy risk and banks' financial performance.

In addition, Haque and Wani (2015) evaluated the relevance of capital adequacy risk on financial performance of 10 banks in India for period 2008 - 2013, the finding reveals positive significant relationship between capital adequacy risk and financial performance. Also, Odunga et al., (2013) studied the effect of capital adequacy risk on financial performance of listed commercial banks in Kenya for the period of 2005 to 2011, and found evidence of positive significant relationship between capital adequacy and financial performance of the banks. In addition, Olalekan and Adeyinka (2013) examined the influence of capital adequacy on financial performance of listed deposit money banks in Nigeria for the period of 2006 to 2010, and found evidence of positive significant relationship between capital adequacy risk and financial performance of the banks.



The work of Imane (2014) examined the impact of risk management practice on financial performance of Islamic banks in Jordan for the period of 15 years from 1998 to 2012. The result reveals evidence of negative significant effect of capital adequacy risk on financial performance of banks. Also, Poudel (2012) studied the impact of capital adequacy risk on financial performance of commercial banks in Nepal for the period of 2001 to 2011 using 31 banks as population of the study. The result of the study shows negative significant relationship of capital adequacy risk and financial performance. Moreover, Djan et al., (2015) investigated the impact of capital adequacy risk on financial performance of listed banks on Ghana Stock Exchange for the period of 2005 to 2014, and found evidence of negative significant relationship between capital adequacy ratio and banks' financial performance.

Moreover, Ochei (2013) examined the impact of capital adequacy risk on financial performance of deposit money banks in Nigeria for the period of 1986 to 2006 using the sample size of 14 banks out of the population of 24 banks, and found evidence of negative significant relationship between capital adequacy risk and banks' financial performance. However, Ezike and Oke (2013) explored the influence of capital adequacy standards on financial performance of listed deposit money banks in Nigeria for the period of 2003 to 2007 using the sample size of 6 banks from the population of 15 deposit money banks listed on the Nigerian Stock Exchange. The study found evidence of negative significant relationship between capital adequacy risk and financial performance of the banks. Another study was conducted by Almazari (2013) investigated the impact of capital adequacy risk on financial performance of listed deposit money banks in Saudi Arabia using the sample size of 9 banks for the period of 2007 to 2011, and the result of the analysis exhibited evidence of negative significant relationship between capital adequacy risk and financial performance of banks.

Ndyagyenda (2020) studies the influence of capital adequacy risk on financial performance of bank of Africa limited in Uganda using 14 branches of the bank as sample size of the study. The data collected for the study is analysed using regression and found positive significant relationship between capital adequacy risk and financial performance of the bank. Also, Orichom and Omeke (2021) examine the relationship between capital adequacy risk and financial performance of 64 banks in Uganda using multiple regression as technique of analyzing the secondary data collected for the study. The result of the analysis shows a positive significant relationship between capital adequacy risk and financial performance of the banks.



Portfolio Theory

This is a theory of finance developed by Markowitz in 1952 that tried to maximize investment future return for an amount of portfolio risk as well as minimizing the risk for an expected return by carefully selecting the proportions of various investments. The theory combined the process of efficient portfolio formation as well as pricing of individual assets. The theory explains various types of risk associated with individuals' assets which can be controlled by means of diversification for better expected returns on individual's assets. The portfolio theory is of the assumptions that risk can be manage through diversification from all types of risk associated with a particular investment for better returns from that investment. The theory was used by Wambari and Mwangi (2017) in their study. Therefore, portfolio theory was adopted to support the findings of this research.

Methodology

Correlation research design was adopted for this study, in order to measure the relationship between specific risk and financial performance of listed Deposit Money Banks in Nigeria for period 2012 to 2024. Population of this research consists of only 13 listed Deposit Money Banks on Nigerian Exchange Group that has complete financial report within the period of the study. In view of the availability of data for 13 banks, the study adopted census sampling technique by studying all the 13 banks as a sample size. The study used secondary data which is extracted from annual reports of thirteen banks quoted in Nigerian Exchange Group within the period of the study. Generalized least square random effect multiple regression is adopted for the panel data analysis in an effort to establish relationship among variables of this study. Regression was considered appropriate in view of the fact that it helps in not only establishing relationship between dependent and independent variables, but also depicts causes and effect of their relationship. The (13) listed deposit money banks used as sample size of the study is given in table 3.1 below:

Table 3.1 Population and Sample Size of the Banks

S/N	Name of Banks	Years Listed on NGX
1	Access Bank Plc	1998
2	Ecobank Plc	2006
3	Fidelity Bank Plc	2005
4	First Bank Plc	1971
5	First City Monument Bank Plc	2004



6	Guaranty Trust Bank Plc	1996
7	Stanbic IBTC Bank Plc	2005
8	Sterling Bank Plc	1993
9	Union Bank Plc	1970
10	United Bank For Africa Plc	1970
11	Unity Bank Plc	2005
12	Wema Bank Plc	1991
13	Zenith Bank Plc	2004

Sources: Nigerian Exchange Group Portal, 2025

Variable Definition and Measurement

Table 3.2: Variable Definition and Measurement

Variables	Variables Measurement	APriori Expectation
Return on Equity	Measured as profit after tax divided by the bank's total equity (Ekinci, 2016).	
Deposit Risk	Measured as percentage of banks' deposit to its total assets (Moteti, 2014).	-
Liquidity Risk	Estimated as ratio of banks' loans and advances to its total deposit (Gizaw et al., 2015).	+
Capital Adequacy Risk	Measured as banks' total equity divided by its total assets (Haque & Wani, 2015).	+

Sources: Compiled by the Author from Various Literatures, 2025

Model Specification

The model of the study is given below:

$$ROE_{it} = \beta_{0it} + \beta_1 DPR_{it} + \beta_2 LQR_{it} + \beta_3 CPA_{it} + \varepsilon_{it}$$

Where:

ROE_{it} = Return on Equity of bank i at time t

DPR_{it} = Deposit Risk of bank i at time t

LQR_{it} = Liquidity Risk of bank i at time t

CPA_{it} = Capital Adequacy Risk of bank i at time t



β = Constant

i_t = Firm i at Time t

ε = Error Term

3. Results and Discussion

Table 4.1 Descriptive Statistics

Variables	Min.	Max.	Mean	Std. Dev.
ROE	-0.919	0.308	0.073	0.205
DPR	0.003	0.725	0.174	0.140
LQR	0.020	0.400	0.164	0.087
CPA	0.005	0.282	0.141	0.048

Source: Stata Output, 2025

From Table 4.1, the minimum and maximum values of return on equity are -0.919 and 0.308. The average value of return on equity is 0.073 while the standard deviation is 0.205; this signifies a high level of dispersion of the data of the study. Minimum and maximum values of deposit risk of listed banks in Nigeria are 0.003 and 0.725 respectively. Mean value of deposit risk is 0.174 with a standard deviation of 0.140 which shows the data deviated from the average with lower dispersion. The banks' liquidity risk shows minimum and maximum values of 0.020 and 0.400, average liquidity risk of deposit money banks in Nigeria shows an average value of 0.164 and standard deviation of 0.087 signifying the data level of deviation from the mean is 0.087 which is relatively low to the average value. Capital adequacy risk shows minimum and maximum values of 0.005 and 0.282. Average capital adequacy risk stood at 0.141 while the standard deviation is 0.048, an indication that capital adequacy risk is dispersed from the mean at a low level of dispersion.

Correlation Matrix

Table 4.2: Correlation Matrix

Variables	ROE	DPR	LQR	CPA
ROE	1			
DPR	-0.158 (0.150)	1		
LQR	0.293 (0.006)	-0.216 (0.047)	1	
CPA	0.243	-0.077	-0.204	1



(0.025) (0.511) (0.061)

Sources: Stata Output, 2025

Table 4.2 shows that deposit risk of the banks is negatively associated with financial performance with the coefficient of -0.158 and p-value of 0.150 which is insignificant at any level of significance. Also, liquidity risk is positively correlated with the financial performance with a coefficient of 0.293 and p-value of 0.006 which is significant at 1% level of significant. Capital adequacy has positive relationship with financial performance coefficient of 0.243 with p-value of 0.025 which is significant at 5% level of significant.

The relationship of the independent variables among themselves shows that liquidity risk and deposit risk, capital adequacy and deposit risk; and capital adequacy and liquidity risk are negatively correlated among themselves.

Regression Results

Multicollinearity and hetroskedasticity tests were conducted for the study in order to see their existence or otherwise. The multicollinearity test shows a variance inflation factor and tolerance values of less than 10 and 1 respectively, this signifies the absent of multicollinearity problems in the study. The hetroskedasticity test shows a Chi² value of 40.12 with a p-value of 0.000 which is significant at 1%. This implies the existence of hetroskedasticity problem associated with the data of the study. Because of the existence of hetroskedasticity problem associated with the data of the study, fixed and random effect models were tested and hausman test was used to decide which model to be adopted for the study between fixed effect and random effect models. Hausman test reveals a Chi² value of 1.59 with p-value of 0.6628 which is statistically insignificant at any level of significant; this means random effect model should be selected. In order to decide between random effect model and ordinary least square model, langrangian multiplier test was conducted and the result reveals a Chi² value of 14.73 with p-value of 0.000 which is significant at 1% level of significant, this signifies that generalized least square random effect regression model is adopted for the study.

Table 4.3: Regression Results

Variables	Coefficient	T-Values	P-Values	Tolerance	VIF
Constant	-0.354	-3.48	0.001		
DPR	-0.125	-0.93	0.352	0.945	1.06
LQR	0.878	3.76	0.000	0.909	1.10



CPAR	2.151	4.44	0.000	0.942	1.06
R²	0.176				
Wald Chi²	30.34		0.000		
Hetttest	40.12		0.000		
Hausman	1.59		0.662		
LM Test	14.73		0.000		

Source: Stata Output, 2025

Table 4.3 shows that deposit risk has insignificant negative relationship with the banks' financial performance in Nigeria which can be shown from the computed value of beta coefficient of -0.125 with p-value of 0.352 which is not significant at any level of significance. This signifies that banks' deposit is affecting their financial performance negatively, this result is in line with the finding of Uwalomwa et al (2015), but contradicted the findings of Duraj and Moci (2015).

Also, the result shows that liquidity risk is significantly and positively associated with banks' financial performance in Nigeria. This can be shown from the beta coefficient of the variable of 0.878 with p-value of 0.000 that is significant at 1%. This implies liquidity is influencing financial performance of listed banks in Nigeria positively. The finding is in consistent with study of Soyemi et al (2014), but not in consistent with the findings of Imane (2014). This implies that the recent closure and collapse of Skye bank and Diamond bank is due to the liquidity crisis among other issues in the banks.

Furthermore, capital adequacy risk is significantly and positively impacting on financial performance of Nigerian deposit money banks. The result shows a beta value of 2.151 with p-value of 0.000 that is significant at 1%. This shows that capital adequacy risk is increasing the financial performance of banks in Nigeria. The result is in consistent with findings of Kirui (2015), but contradicts Poudel (2012). This implies that the recent closure and collapse of Skye bank and Diamond bank is due to the capital adequacy crisis among other issues in the banks.

The Wald Chi² value of 30.34 with probability value of 0.000 which is significant at 1%, this means the model is fitted with variables of this study. Also, coefficient of determination of R² which is at 17% indicates the percentage of total variations of dependent variable that is explained by independent variables. This signifies that 17% of the total variation in financial performance of listed deposit money banks in Nigeria is caused by the combined effect of



deposit risk, liquidity risk and capital adequacy risk; while the remaining 83% is caused by other factors outside the model of this study.

4. Conclusion and Recommendations

The research investigated effect of specific risk on financial performance of listed Deposit Money Banks in Nigeria. The study concluded that liquidity risk and capital adequacy risks are positively and significantly effecting financial performance of banks in Nigeria, while deposit risk is negatively and insignificantly affecting financial performance of listed banks in Nigeria. The research recommended that the listed deposit money banks in Nigeria should continue to manage their liquidity risk and capital adequacy risk in their banks efficiently and effectively as well as full compliance with the regulatory authorities' directives on risk management within their bank, since the findings indicates that liquidity risk and capital adequacy risk have positive significant relationship with banks' financial performance.

References

- Adebayo, O.S., Ifeanyi, O. P & Abiodun, O. Y (2020). Financial risk and financial performance of deposit money banks in Nigeria. *International Journal of Business and Management Review*, 8(4), 78-100.
- Aebi, V., Sabato, G & Schmid, M (2011). Risk management, corporate governance, and bank performance in the financial crisis. *Journal of Banking and Finance*, 3, 12-26.
- Almazari, A. A (2013). Capital adequacy, cost income ratio and the performance of Saudi banks. *International Journal of Academic Research in Accounting, Finance and Management Sciences*, 3(4), 284-293.
- Amelia, M. R. (2012). Effect of firm characteristics, financial performance and environmental performance on corporate social responsibility disclosure intensity on manufacturing firm listed in the Indonesia Stock Exchange. *Faculty of Economy, Gunadarma University*.
- Binh, D. T & Thomas, A (2015). Capital adequacy and banking risk – An empirical study on Vietnamese banks. *Working paper*, 1-18.
- C. B. N (2017). Supervisory report for financial institutions in Nigeria.
- Charles, O & Kenneth, U. O (2013). Impact of credit risk management and capital adequacy on the financial performance of commercial banks in Nigeria. *Journal of Emerging Issues in Economics, Finance and Banking*, 2(3), 703-717.
- Chulia, H., Koser, C & Uribes, J. M (2021). Analysing the nonlinear pricing of liquidity risk according to the market state. *Finance Research Letters*, 38(1), 125-162.



- David, O. T. & Sola, A. T. (2023). Impact of capital adequacy risk on the financial performance of microfinance banks in Nigeria. *International Journal of Research Publication and Reviews*, 4(9), 1942 – 1951.
- Djan, G. O., Stephen, F., Bawuah, J., Halidu, O. B & Kuutol, P. K (2015). Credit risk management and its impact on financial performance of listed banks in Ghana. *International Journal of Financial Markets*, 2(2), 24-32.
- Duraj, B & Moci, E (2015). Factors influencing the bank profitability- Empirical evidence from Albania. *Asian Economic and Financial Review*, 5(3), 483-494.
- Ebrahim, H., Yavari, K., Mehregan, N & Khoshshima, R (2013). Effect of risk parameters on banking system efficiency (Studying 15 top banks in Iran). *IranianEconomic Review*, 17(1), 1 – 24.
- Ejoh, N. O & Iwara, U. U (2014). The impact of capital adequacy on deposit money banks' profitability in Nigeria. *Research Journal of Finance and Accounting*, 5(12), 7-15.
- Ekinci, A (2016). The effect of credit and market risk on bank performance: Evidence from Turkey. *International Journal of Economics and Financial Issues*, 6(2), 427-434.
- Ezike, J. E & Oke, M. O (2013). Capital adequacy standards, basel accord and bank performance: The Nigerian experience (A case study of selected banks in Nigeria). *Asian Economic and Financial Review*, 3(2), 146-159.
- Gizaw, M., Kebede, M & Selvaraj, S (2015). The impact of credit risk on profitability performance of commercial banks in Ethiopia. *African Journal of Business Management*, 9(2), 59-66.
- Godwin, A. K. & Ogbada, E. I. (2025). Capital adequacy and financial performance of listed deposit money banks in Nigeria. *IIARD International Journal of Banking and Finance Research*, 11(8), 100 – 116.
- Haque, S. M. I & Wani, A. A (2015). Relevance of financial risk with financial performance: An insight of Indian banking sector. *Pacific Business Review International*, 8(5), 54-64.
- Imane, Y (2014). Risk management practices and financial performance in Jordan: Evidence from Islamic Banks. *International Shari'ah Research Academy for Islamic Finance*, 1-24.
- Kirui, K. S (2015). Effect of credit risk management on financial performance of savings and credit co-operative society in Kenya. *Journal of Management*, 2(4), 901-915.
- Maaka, Z. A (2013). The relationship between liquidity risk and financial performance of commercial banks in Kenya. *Unpublished Master Thesis, University of Nairobi, Kenya*.
- Markowitz, H (1952). Portfolio selection. *Journal of Finance*, 39, 77 – 97.



- Moteti, S. R (2014). Relationship between financial risk management and financial performance of commercial banks in Kenya. *Unpublished Master Thesis, University of Nairobi, Kenya.*
- Muhammed, T. D (2017). Effect of risk on financial performance of listed deposit money banks in Nigeria. *Unpublished PhD Thesis, Ahmadu Bello University, Zaria.*
- Museiga, M., Olweny, T., Mukanzi, C & Mutua, M (2017). Influence of liquidity risk on performance of commercial banks in Kenya. *Journal of Economics and Finance*, 8(3), 67-75.
- Natufe, O. K. & Ikavbo, E. E. (2023). Credit risk management and the financial performance of deposit money banks: Some new evidence. *Journal of Risk and Financial Management*, 16, 302.
- Nazir, M. S., Safdar, R & Akram, M. I (2012). Impact of global financial crisis on banks' financial performance in Pakistan. *American Journal of Scientific Research*, 78, 101-110.
- Ndyagyenda, C (2020). Credit risk management and financial performance: A case of bank of Africa limited. *Open Journal of Business and Management*, 8, 30 - 38.
- Nguyen, T. H & Leander, C (2014). The information content of bank liquidity: An evaluation of links between banks' liquidity ratios and financial performance. *Unpublished Master Degree Project in Accounting, University of Gothenburg.*
- Ochei, I. A (2013). Capital adequacy, management and performance in the Nigerian commercial banks. *African Journal of Business Management*, 7(30), 2938-2950.
- Odunga, R. M (2016). Specific performance indicators, market shares and operating efficiency for commercial banks in Kenya. *International Journal of Finance and Accounting*, 5(3), 135-145.
- Odunga, R. M., Nyangueso, P. M., Carter, D. A & Mwarumba, M (2013). Credit risk, capital adequacy and operating efficiency of commercial banks in Kenya. *International Journal of Business and Management Invention*, 2(9), 6-12.
- Okun, D. M (2012). The effect of level of deposits on financial performance of commercial banks in Kenya. *Master's Thesis, University of Nairobi Kenya.*
- Olalekan, A & Adeyinka, S (2013). Capital adequacy and banks' profitability: An empirical evidence from Nigeria. *American International Journal of Contemporary Research*, 3(10), 87-93.
- Olamide, O., Uwalomwa, U & Ranti, U. O (2014). The affect of risk management on banks financial performance in Nigeria. *Journal of Accounting and Auditing: Research and Practice*, 1-7.



- Olarewaju, O. M & Adeyemi, O. K (2015). Causal relationship between liquidity and profitability of Nigerian deposit money banks. *International Journal of Academic Research in Accounting, Finance and Management Sciences*, 5(2), 165-171.
- Olasehinde, S., A., Aribaba, F., O. & Afolabi, B. (2025). Capital adequacy ratio and financial performance of fast moving consumer goods companies in Nigeria. *African Banking and Finance Review Journal*, 20(4), 82 – 93.
- Olaye, F & Olarewaju, M (2015). Determinants of deposit money banks' profitability in Nigeria. *Arabian Journal of Business and Management Review*, 4(2), 11-16.
- Onyegin, P. K., Ibenta, S. N. & Okaro, C. S. (2024). Risk management and financial performance of deposit money banks in Nigeria. *African Banking and Finance Review Journal*, 9(9), 114 – 129.
- Orichom, G & Omeke, M (2021). Capital structure, credit risk management and financial performance of microfinance institutions in Uganda. *Journal of Economics and International Finance*, 13(1), 24-31.
- Poudel, R. P. S (2012). The impact of credit risk management on financial performance of commercial banks in Nepal. *International Journal of Arts and Commerce*, 1(5), 9-15
- Rundassa, S. G & Batra, G. S (2016). The impact of credit risk management on the financial performance of Ethiopian commercial banks. *Journal of Economics and Finance*, 7(6), 108-116.
- Samuel .S. O & Peters O. I (2014). Interest rate and deposit money banks' profitability nexus: The Nigerian Experience. *Arabian Journal of Business and Management Review*, 3(11), 23 - 34.
- Shola, F. S., Nyor, T., Onipe, Y. A. & Eniola, A. S. (2024). Risk management and financial performance of deposit money banks in Nigeria. *International Journal of Advanced Multidisciplinary Research and Studies*, 4(6), 1018 – 1027.
- Soyemi, K. A, Ogunleye, J. O & Ashogbon, F. O (2014). Risk management practices and financial performance: Evidence from the Nigerian deposit money banks. *The Business and Management Review*, 4(4), 345-354.
- Tariq, W., Usman, M., Zahid, H. M., Aman, I & Ali, I (2014). Determinants of commercial banks profitability: Empirical evidence from Pakistan. *International Journal of Accounting and Financial Reporting*, 4(2), 1-22.
- Tatahi, M, & Heshmati, A. (2009). The financial and operating performance of private firms in Sweden. *Discussion Paper No. 3953*.
- Terraza, V (2013). The effect of bank size on risk ratios: Implications of banks performance. *Centre for Research in Economics and Management, University of Luxembourg*.



- Tesfaye, T (2012). Determinants of banks liquidity and their impact on financial performance: Empirical study on commercial banks in Ethiopia. *Unpublished M.Sc. Thesis, Addis Ababa University, Ethiopia.*
- Usman, M., Zahid, H. M., Aman, I & Ali, I (2014). Determinants of commercial banks profitability: Empirical evidence from Pakistan. *International Journal of Accounting and Financial Reporting*, 4(2), 1-22.
- Uwalomawa U. U, Uwanigbe, R. O & Oyew, B, (2015). Credit management and bank performance of listed deposit money banks in Nigeria. *Journal of Economics and Sustainable Development*, 6(2), 20 - 29.
- Wambari, K. D & Mwangi, M (2017). Effect of interest rates on the financial performance of commercial banks in Kenya. *International Journal of Financial and Accounting*, 2(4), 19-35.