RISK MANAGEMENT AND FINANCIAL PERFORMANCE OF QUOTED DEPOSIT MONEY BANKS IN NIGERIA

[1]Kadiri Ismaila
(princeismaik11@gmail.com)
+2348060971922

[2]Alexander Onyebuchi Ude
(Onyebuchialexude@gmail.com)
+2348035727742

[3]Sunday Simon
(simonsunday016@gmail.com)
+2348033489450

[1,2 and 3] Department of Accounting, Prince Abubakar Audu University, Anyigba, Kogi State, Nigeria

ABSTRACT

The financial performance of banks is critical to the stability of the broader economy, especially in developing countries like Nigeria, where banks play a central role in financial intermediation, but the performance of banks is increasingly threatened by various risks. This study examined the risk management and financial performance of quoted deposit money banks in Nigeria, from 2012 to 2023. The population comprises all the ten quoted deposit money banks in Nigeria while filtering criteria was used to arrive at a sample size of nine (9) deposit money banks. The hypotheses were tested using random effect regression model after conducting some diagnostics tests. The results showed that interest rate risk (IRR) has a significant positive effect on financial performance of quoted deposits money banks in Nigeria. However, exchange rate risk (ERR) has an insignificant positive effect on financial performance of quoted deposits money banks in Nigeria while credit risk (CR) has an insignificant negative effect on financial performance of quoted deposits money banks in Nigeria. The study recommends among others, that the banks should implement regular monitoring systems to detect early signs of loan default. Proactive measures, such as restructuring loan terms for distressed borrowers and improving loan recovery strategies, should be in place to minimize the risk of defaults. Also, the banks should continue to refine their risk management frameworks to capitalize on favorable interest rate movements. This includes maintaining a balanced asset-liability structure and regularly assessing the interest rate sensitivity of their portfolios to ensure they can profit from interest rate fluctuations.

Keywords: Credit Risk, Exchange Rate Risk, Financial Performance, Interest Rate Risk, Risk Management

INTRODUCTION

The banking sector plays a critical role in the stability and growth of any economy by facilitating financial transactions, providing credit, and fostering economic development. However, banks are inherently exposed to various risks that can significantly impact their financial performance. Globally, the importance of effective risk management has gained prominence, particularly in the aftermath of the 2007-2008 global financial crisis. The crisis highlighted the consequences of poor risk management practices, leading to a more stringent regulatory environment and increased focus on understanding the relationship between risk management and financial performance (Gatzert & Martin, 2015).

In Africa, the banking sector has seen significant growth over the past decades, with many countries experiencing increased financial inclusion and economic expansion. However, this growth has also been accompanied by heightened risks, such as credit risk, exchange rate risk, and interest rate risk, which have the potential to adversely affect the financial performance of banks. The volatility in African economies, driven by political instability, fluctuating commodity prices, and exchange rate instability, has made risk management a critical issue for banks across the continent (Muriithi *et al*., 2016). The need for effective risk management in the banking sector is further emphasized by the region's reliance on foreign investments, which are sensitive to perceived financial stability and risk management practices.

In Nigeria, the banking sector has undergone significant reforms aimed at enhancing stability and performance. Despite these efforts, Nigerian banks continue to face substantial risks, particularly in the areas of credit, exchange rates, and interest rates. The Nigerian economy is heavily dependent on oil exports, making it vulnerable to fluctuations in global oil prices, which, in turn, affect exchange rates and interest rates. Additionally, the challenging macroeconomic environment, characterized by high inflation rates, exchange rate volatility, and fluctuating interest rates, has placed further strain on the financial performance of banks (Obamuyi, 2013).

The motivation for this study stems from the critical role that risk management plays in ensuring the financial stability and performance of banks. Understanding the specific impact of credit risk, exchange rate risk, and interest rate risk on the financial performance of Nigerian banks is essential for developing effective risk management strategies that can enhance their resilience and profitability. Moreover, this study is particularly relevant in the context of Nigeria's ongoing economic challenges and the need for robust financial systems to support sustainable economic growth. By investigating these relationships, the study aims to provide valuable insights that can inform policy decisions, enhance banking practices, and ultimately contribute to the stability of the Nigerian financial system.

The financial performance of banks is critical to the stability of the broader economy, especially in developing countries like Nigeria, where banks play a central role in financial intermediation. However, the performance of banks is increasingly threatened by various risks, particularly credit risk, exchange rate risk, and interest rate risk. Credit risk, arising from borrowers' inability to meet their obligations, has been a persistent challenge for Nigerian banks, leading to significant loan defaults and impairments. Despite various measures to mitigate this risk, the continued rise in non-performing loans suggests that existing risk management strategies may be inadequate (Adebayo *et al*., 2021).

Similarly, the volatility of the Nigerian currency, exacerbated by fluctuations in global oil prices and macroeconomic instability, has exposed banks to exchange rate risk. This risk can erode the profitability of banks, particularly those with significant foreign currency exposures, as adverse currency movements can lead to substantial financial losses (Ekwueme & Iyidiobi, 2020). Moreover, interest rate risk, driven by the unpredictable nature of the Nigerian monetary policy and inflationary pressures, further complicates the financial landscape for banks. Fluctuations in interest rates affect the cost of funds and the returns on assets, thereby impacting banks' margins and overall financial performance (Agu *et al*., 2023).

Despite the recognition of these risks, there remains a gap in the empirical understanding of how credit risk, exchange rate risk, and interest rate risk collectively influence the financial performance of Nigerian banks. Existing studies have often focused on these risks in isolation, without providing a comprehensive analysis of their combined effects on bank performance. Furthermore, the evolving nature of the Nigerian financial landscape, marked by economic uncertainties and regulatory changes, necessitates a fresh examination of these risks and their impact on banks. Therefore, this study seeks to address this gap by investigating the effect of credit risk, exchange rate risk, and interest rate risk on the financial performance of quoted deposit money banks in Nigeria, with a view to providing insights that could enhance risk management practices and improve financial outcomes for banks in the country.

Some of the studies reviewed for example Adegbie and Otitolaiye (2020), Alagbe *et al.* (2021), Kolapo and Naheem (2020), Natufe and Esther (2023) carried out in Nigeria combined the data for both pre and post International Financial Reporting Standards (IFRS) implementation in Nigeria. This, therefore, affects the reliability of the results of these previous works as a result of the changes made to financial reporting in Nigeria by IFRS. The identified gap in literature calls for further study in this area which necessitated this study the risk management and financial performance of quoted deposit money banks in Nigeria, to update the data up to 2023, use appropriate panel regression technique and cover only the periods of IFRS implementation in Nigeria.

The main objective of this study is to investigate risk management and financial performance of quoted deposit money banks in Nigeria. The specific objectives are to: (i) determine the effect of credit risk on financial performance of quoted deposit money banks in Nigeria; (ii) assess the effect of exchange rate risk on financial performance of quoted deposit money banks in Nigeria; and (iii) evaluate the effect of interest rate risk on financial performance of quoted deposit money banks in Nigeria. Based on the above stated specific objectives, the following null hypotheses are formulated thus: Ho_1: Credit risk has no significant effect on financial performance of quoted deposit money banks in Nigeria. Ho_2: Exchange rate risk has no significant effect on financial performance of quoted deposit money banks in Nigeria. Ho_3: Interest rate risk has no significant effect on financial performance of quoted deposit money banks in Nigeria.

REVIEW OF RELATED LITERATURE

Financial Performance

Financial performance refers to a firm's ability to generate profit, utilize its assets efficiently, and maintain overall financial health, often measured using indicators such as return on assets, return on equity, and revenue growth (Nguyen, 2021). It also reflects an organization's financial efficiency in managing costs and achieving long-term sustainability (Adusei & Awunyo-Vitor, 2022). Furthermore, financial performance encompasses a firm's capacity to create value for shareholders through profitability, earnings

growth, and market value (Muli & Rotich, 2023), as well as its strategic effectiveness, as seen in metrics like return on investment and economic value added (Moussa & Hassan, 2020). Overall, it represents the firm's ability to sustain profitability, maintain positive cash flows, and meet its financial obligations over time (Adeyemi & Abiodun, 2023).

Risk Management

Risk management is generally defined as a systematic and structured process through which organizations identify, assess, and control risks to minimize their impact on objectives (Gatzert & Schmit, 2021). It is considered an integral part of strategic management, involving continuous monitoring and the implementation of measures to mitigate financial, operational, and market risks (Kaplan & Mikes, 2022; Kalyvas et al., 2023). Risk management is also viewed as a dynamic and integrated process that adapts to changing internal and external environments while aligning with organizational strategies and processes (Thomé et al., 2020; Verbano & Venturini, 2021). Within the enterprise risk management (ERM) framework, it involves identifying, measuring, and managing risks across the entire organization to enhance value and support decision-making (Beasley et al., 2022). Overall, it emphasizes a proactive and governance-driven approach that anticipates risks, ensures regulatory compliance, and minimizes operational losses (Brigo et al., 2020; Paape & Speklé, 2020; Sharma et al., 2023).

Credit Risk

Credit risk refers to the possibility of financial loss arising when a borrower fails to meet contractual debt obligations, particularly loan repayments (Kozak, 2021). It represents the uncertainty associated with receiving expected future cash flows and is a key consideration in managing credit portfolios (Banik & Bhattacharyya, 2022). Credit risk is also viewed as the probability of borrower default, which can result in partial or total loss to lenders, especially in financial institutions that rely on effective credit assessment (Zhang & Fang, 2023). Consequently, it is managed through measures such as credit evaluation, portfolio diversification, and the use of collateral to reduce the likelihood of default (Chen & Wang, 2024).

Exchange Rate Risk

Exchange rate risk refers to the potential for financial loss resulting from fluctuations in currency values, particularly for firms engaged in international transactions (Park & Lee, 2021). It affects the value of assets, liabilities, and cash flows denominated in foreign currencies, thereby influencing a firm's profitability and financial stability (Chowdhury & Rahman, 2022). This risk represents the exposure to adverse movements in exchange rates that can impact foreign currency transactions and financial instruments (Silva & Martins, 2023). Consequently, it is a major concern for multinational firms and investors and is often managed through hedging and the use of financial derivatives to minimize unexpected losses (Gómez & Fernández, 2024).

Interest Rate Risk

Interest rate risk refers to the potential for financial loss arising from changes in interest rates, which can affect the value of financial instruments such as loans, bonds, and other interest-bearing assets (Smith & Zhang, 2021). It reflects a firm's exposure to adverse rate movements, particularly when there is a mismatch between the interest rates on its assets and liabilities, leading to fluctuations in income and profitability (Kumar & Patel, 2022). This risk also involves the uncertainty of future interest rate changes and their impact on borrowing costs, investment returns, and portfolio values (Brown & Green, 2023; Lopez & Garcia, 2024). Consequently, managing interest rate risk is essential for maintaining financial stability and performance in a volatile interest rate environment.

Theory Underpinning the Study

Contingency theory was postulated by Fred Edward Fiedler in 1964. Fiedler's theory suggests that the effectiveness of a leader is contingent upon how well the leader's style matches the situation. Contingency Theory posits that there is no one-size-fits-all approach to management or decision-making. Instead, the effectiveness of an organization's strategies and processes depends on the specific circumstances or contingencies it faces. This theory suggests that organizations must adapt their strategies based on external and internal factors, such as the environment, technology, and the risks they encounter.

Under Contingency Theory, the impact of credit risk on financial performance is contingent upon how effectively the banks manage and mitigate this risk. Banks that adapt their credit risk management practices to the prevailing economic conditions and borrower profiles are more likely to maintain or enhance their financial performance. The theory suggests that the influence of exchange rate risk on financial performance depends on how well banks can align their risk management strategies with fluctuations in currency values. Banks that are flexible and responsive to currency market conditions are better positioned to protect their financial performance from adverse exchange rate movements.

Contingency Theory highlights that the effect of interest rate risk on financial performance is dependent on the bank's ability to manage this risk in the context of current and expected interest rate environments. Banks that dynamically adjust their interest rate risk management strategies in response to changing market conditions are more likely to sustain their financial performance.

Contingency Theory is particularly relevant to this study because it emphasizes the need for adaptive risk management practices that are tailored to the specific risks faced by banks, such as credit, exchange rate, and interest rate risks. This approach aligns with the objectives of this study, as it allows for an investigation into how different risk management strategies impact financial performance in varying contexts. By applying Contingency Theory, this study can explore how quoted deposit money banks in Nigeria modify their risk management practices in response to different types of risks, and how these modifications influence their financial outcomes.

Empirical Review

Empirical studies provide mixed evidence on the relationship between risk factors and financial performance. Retno and Zulfa (2024) found that interest rate risk significantly influences the performance of Indonesian banks, though their model was limited by a small sample and single-risk focus. Similarly, Zaher (2022) reported that banking security partially moderates the relationship between interest rate risk and performance in Jordan. In Nigeria, Natufe and Esther (2023) identified capital adequacy, risk assets, non-performing loans, and bank size as key determinants of return on equity, while Nuraddeen et al. (2022) found that credit risk negatively affects performance, although board equity ownership strengthens this relationship. Adegbie and Otitolaiye (2020) also reported a significant positive effect of credit risk management on bank performance, whereas Deng et al. (2020) found weak or insignificant effects in South Sudan. Overall, these studies highlight the importance of effective risk management practices but suggest the need for broader models incorporating macroeconomic variables.

Evidence on exchange rate and liquidity-related risks also shows inconsistent outcomes. Kolawole (2023) documented a significant negative effect of exchange rate volatility on oil and gas firms' performance in Nigeria, while Kolapo and Naheem (2020) found a similar negative effect on financial sector performance. In contrast, Alagbe et al. (2021) reported no significant relationship between exchange rate changes and firm performance. Eno and Iniabasi (2022) observed that liquidity significantly influences performance, while exchange rate and interest rate risks were insignificant. Studies outside Nigeria, such as Nawal and Osama (2019), also reported weak negative effects of exchange rate fluctuations. Despite the use of robust methodologies, many studies rely on outdated data, combine pre- and post-IFRS periods, or are conducted in different institutional environments, limiting their generalizability and highlighting the need for updated, Nigeria-specific evidence.

METHODOLOGY

This study adopts an ex post facto research design, which is suitable for examining relationships among variables using historical data. The population comprises ten (10) quoted deposit money banks listed on the Nigerian Exchange Group as at 31st December 2023, while a filtered sample of nine (9) banks covering the period 2012–2023 was selected. The selection criteria required that banks be listed at least one year before IFRS implementation in 2012 and have complete financial statements for the study period. Secondary panel data were sourced from the annual reports of the sampled banks and the Central Bank of Nigeria Statistical Bulletin (2023). Data were analyzed using a random effects regression model with the aid of STATA 13 to examine the effect of credit risk, exchange rate risk, and interest rate risk on return on assets. Diagnostic tests, including Pearson correlation, heteroskedasticity test, Breusch–Pagan Lagrangian Multiplier test, and Hausman specification test, were also conducted to ensure the reliability of the results.

Model Specification

Financial performance is proxied by return on assets (ROA) which is measure through profit after tax divided by total assets and is a function of three explanatory variables such as credit risk (CR), Exchange Rate Risk (ERR) and Interest Rate Risk (IRR).
Therefore;

$ROA = f(CR + ERR + IRR)$

The expression in equation one is express econometrically as follows:

$ROA_{it} = \alpha + \beta_1 CR_{it} + \beta_2 ERR_{it} + \beta_3 IRR_{it} + e_{it}$…… Model

Where:

β1, β2 and β3 are parameters to be estimated with a priori expectations.
ROA= Return on Assets
CR = Credit Risk
ERR = Exchange Rate Risk
IRR = Interest Rate Risk
α = Constant
e = Error term
i = Firms
t = Periods

Table 1 below explains the variables under study.

Variable	Acronym	Type of variable	Measurement	Justification
Returned on Assets	ROA	Dependent	Profit after Tax/Total Assets	Kolawole (2023), Retno and Zulfa (2024) and Zaher (2022).
Credit Risk	CR	Independent	Non-performing loan divided by total loan multiply by 100%.	Adegbie and Otitolaiye (2020), Natufe and Esther (2023) and Nuraddeen *et al.* (2022).
Exchange Rate Risk	ERR	Independent	This is yearly average exchange rate of naira to US dollar.	Alagbe *et al.* (2021), Eno and Iniabasi (2022) and Kolapo and Naheem (2020).
Interest Rate Risk	IRR	Independent	This is the prime lending rate obtainable in deposit money banks in Nigeria.	Eno and Iniabasi (2022) and Retno and Zulfa (2024).

Source: Researcher's compilation, 2024.

DATA PRESENTATION AND ANALYSIS

The data were used in assessing risk management and financial performance of quoted deposit money banks in Nigeria for twelve continuous years, 2012-2023. Descriptive statistics, Shapiro-Wilk normality test, Pearson correlation, Heteroskadasticity test, Pagan Lagrangian multiplier test, Hausman specification test, and Breusch and robust Random effect regression model were employed in analyzing data.

Descriptive Statistics

Table 2 below is the descriptive statistics that summarises the entire data sets.

Table 2: Descriptive Statistics

Variable	Obs	Mean	Std.Dev.	Min	Max
ROA	108	0.008	0.046	-0.344	0.075
CR	108	6.958	4.103	3.03	14.8
ERR	108	316.139	164.430	157.31	770
IRR	108	27.64	2.037	23.79	30.6

Source: Researcher's Computation (2023) Using Stata 15

In the table above, the minimum ROA has a negative value of -0.344 and a high of 0.075 with its mean value of 0.008 falling between the minimum and maximum. This thus shows that it has a good spread within the period studied. The Table also showed that ROA has a standard deviation of 0.046 more than the mean, hence it is widely spread away from the mean. Table 2 above also showed that credit risk (CR) had a minimum value of 3.03 and a maximum value of 14.8, with a mean value of 6.958 lying between the minimum and the maximum, therefore indicating good spread within the period studied. The Table also showed that the standard deviation of CR is 4.103, which is less than the mean, meaning it is spread around the mean slowly. The above Table 2 equally shows that the exchange rate risk (ERR) has a minimum value of 157.31, maximum value of 770, and a mean value of 316.139 within the minimum and maximum values, indicating a good spread within the period studied.

Also, the Table showed that the standard deviation for ERR is 164.430 less than the mean, thus showing a slow spread around the mean. From Table 2 above, it can be seen that IRR ranges between a minimum value of 23.79 and a maximum value of 30.6 with a mean value of 27.64 between the minimum and maximum values, showing a good spread within the period studied. The table also suggests that the IRR standard deviation is 2.037, less than the mean, meaning that it is slowly spread around the mean.

Shapiro-Wilk Normality Test

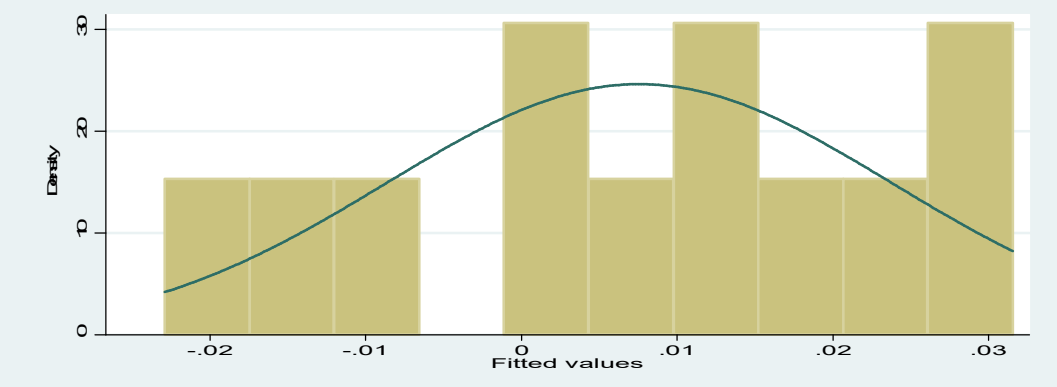
The result of the normality test conducted with the use of Shapiro-Wilk normality test and normal distribution curve are presented in table 3 and figure 2 below. The decision rule is if P-Value > 0.05, the residual is normally distributed but if P-Value is equal to or < 0.05, the residual is not normally distributed.

Table 3: Shapiro-Wilk Normality Test

Variable	Obs	W	V	Z	Prob>Z
Residual	108	0.97263	2.410	1.960	0.02502

Source: Researcher's Computation using STATA 15 software

Figure 1: Normal Distribution Curve



From the above table 3, it can be analyzed that the Z-value of its residual and its probability value is 1.960 and 0.025, respectively, that is less than 0.05. It indicates that the residual are normally distributed around their mean. This result has been further collaborated from the normal distribution curve presented in figure 2 above. Therefore, this means that one of the basic assumptions of linear regression technique of having only normally distributed residual has not been satisfied.

Correlation Matrix

Table 4 below is the Pearson correlation matrix for the data set to show the extent of interdependent variables. The decision rule of Pearson Correlation is that if a pair or more of the independent variables is equal to or above 0.85, there is a presence of multicollinearity in the model but if the independent variables is less than 0.85, there is no presence of multicollinearity in the model.

Table 4: Correlation Matrix

Variable	ROA	CR	ERR	IRR
ROA	1			
CR	0.1349	1		
ERR	0.2175	0.0281	1	
IRR	0.3458	0.4983	0.5605	1

Source: Researcher's Computation (2023) Using Stata 13

The above table shows the correlation matrix of the study's variables. The correlation matrix indicates the relationship between the proxies of independent variables amongst themselves and their relationship with the dependent variable ROA. From the correlation matrix table above, the outcomes show that there is a positive association between credit risk (CR) of 0.1349 with return on assets (ROA). The implication is that credit risk is positively associated with a positive return on assets.

Again, exchange rate risk is positively related to ROA, 0.2175. It therefore, means that the positive effect the exchange rate risk has on the return on assets. While exchange rate risk is positively associated with 0.2175, interest rate risk has a positive effect on the return on assets. Above Table 4 shows that the model does not have a multicollinearity problem because its correlational coefficients of proxies of an independent variable are less than (85%), and according to Hair *et al*. (2005), such results indicate that there is no problem in the model for multicollinearity. The Variance Inflation Factor (VIF) in table 5 below is used to further

test for the absent of multicollinearity problem in the model.

Variance Inflation Factor (VIF)
Table 5 below is the variance inflation factor for the data set.
Table 5: Variance Inflation Factor (VIF)

Variable	VIF	1/VIF
IRR	2.21	0.452825
ERR	1.66	0.601934
CR	1.52	0.659709
Mean VIF	1.80	

Table 5 above shows the results of Variance Inflation Factor (VIF) values of less than 10 which indicates that there is no multicollinearity problem in the model.

Heteroskedasticity Breusch-Pagan Test
Heteroskedasticity Breusch-Pagan test which tests whether the estimated variance of the residuals from regression is dependent on the values of the independent variables. Table 6 below shows the diagnostic test results using Heteroskedasticity Breusch-Pagan. The decision rule of heteroscedasticity is that if the P-value ≤ 0.05, there is a problem of heteroscedasticity but if the P-value > 0.05, there is no problem of heteroscedasticity.

Table 6: Heteroskedasticity Breusch-Pagan Test

Type of test	F-Test	P-Value
Heteroskedasticity Breusch-Pagan	79.50	0.00

Source: Researcher's Computation (2023) Using Stata 15

The Breusch-Pagan Heteroskedasticity is a statistical test which identifies if the residual variance of a variable in a regression model is constant-i.e., heteroscedastic-or not constant (homoskedastic)-over time. Table 6 showed that one fails to reject the null hypothesis of no constant variance, or homoskedasticity, within the model. Since the F-statistic of 79.50 and the probability value for the model is 0.00, it is statistically significant at the 1% level. Therefore, in the model there is heteroscedasticity. So, to rectify this problem of heteroscedasticity, the estimation of the model used the robust random effect regression technique.

Breusch and Pagan Lagrangian Multiplier Test
In view of the outcome of the REM regression, it would be proper to shed light on the actual test being conducted between the Random Effect Model and the Pooled Ordinary Least Square Regression. The decision rule of Breusch-Pagan Lagrangian Multiplier Test is that if the P-value is equal to and less than 0.05, the random effect model is appropriate if otherwise, the pooled ordinary least square regression is appropriate.

Table 7: Breusch and Pagan Lagrangian Multiplier Test

Variable	Chibar2	P-Value
ROA	20.02	0.00

Source: Researcher's Computation (2023) using STATA 15 software

From the results of the Breusch and Pagan Lagrangian Multiplier test, with a chibar2 value of 20.02 and a probability of 0.00, as indicated in table 7 below, REM is preferred instead of Pooled Ordinary Least Square Regression. The result of Breusch and Pagan Lagrangian Multiplier test conducted is presented in table 7 above.

Hausman Specification Test

Table 8 below is the result of a Hausman specification test conducted to determine which of the model, Fixed effect or Random effect would be used for estimation.

Table 8: Hausman Specification Test

Type of test	Chi2	P-Chi2
Hausman Test	1.23	0.57

Source: Researcher's Computation (2023) Using Stata 15

The result from Table 8 depicts a probability > chi2 of 1.23 a value that is more than 0.05. This result implies that the null hypothesis which states that difference in coefficient not systematic is accepted and so the random effect estimation is the most appropriate model for this study.

Estimation Based on Robust Random Effect Regression Model

Table 9 below is the robust random effect regression model conducted which was used for the estimation of this model.

Table 9: Robust Random Effect Regression Results

Variable	Coefficients	z-value	Prob.
Cons.	-0.2156	-3.17	0.002
CR	-0.0005	-0.43	0.670
ERR	5.2731	0.18	0.861
IRR	0.0081	2.90	0.004
Overall R-squared	0.5416		
Ward Chi2	117.76		
Prob. >Chi2	0.0005		

Source: Researcher's Computation (2023) using STATA 13 software

Table 9 above indicated that 54% variation of return on assets is predicted by the joint effect of credit risk, exchange rate risk and interest rate risk (R-square = (0.5416). This indicates that the model of the study is fit and the independent variables are properly selected, combined and used. The Ward Chi2 value of 117.76. with a P-value of 0.00 signified that the model is fit for the study.

Test of Hypotheses

To examine risk management and financial performance of quoted deposit money banks in Nigeria, the formulated null hypotheses were tested using a random effect regression model.

H_{O1}: Credit risk has no significant effect on financial performance of quoted deposits money banks in Nigeria

The results in Table 9 above shows the z-value of -0.43 and the corresponding probability value of 0.670 indicating that credit risk (CR) has an insignificant negative effect on financial performance of quoted deposits money banks in Nigeria. Based on this, the null hypothesis one which states that credit risk has no significant effect on financial performance of quoted deposits money banks in Nigeria is accepted.

H_{O2}: Exchange rate risk has no significant effect on financial performance of quoted deposits money banks in Nigeria.

The results in Table 9 above shows the z-value of 0.18 and the corresponding probability value of 0.861 indicating that exchange rate risk (ERR) has an insignificant positive effect on financial performance of quoted deposits money banks in Nigeria. Based on this, the null hypothesis two which states that exchange rate risk has no significant effect on financial performance of quoted deposits money banks in Nigeria is accepted.

H_{03}: Interest rate risk has no significant effect on financial performance of quoted deposits money banks in Nigeria.
The results in Table 9 above shows the z-value of 2.90 and the corresponding probability value of 0.004 indicating that interest rate risk (IRR) has a significant positive effect on financial performance of quoted deposits money banks in Nigeria. Based on this, the null hypothesis three which states that interest rate risk has no significant effect on financial performance of quoted deposits money banks in Nigeria is rejected.

Discussion of Findings

This study revealed that credit risk (CR) has an insignificant negative effect on financial performance of quoted deposits money banks in Nigeria. This means that an increase in credit risk will reduce financial performance of quoted deposit money banks in Nigeria, by -0.0005. This finding is in line with the a-priori expectation of the researcher. The finding is in line with the contingency theory because the theory emphasized that the impact of credit risk on financial performance is contingent upon how effectively the banks manage and mitigate this risk. Banks that adapt their credit risk management practices to the prevailing economic conditions and borrower profiles are more likely to maintain or enhance their financial performance. This finding is in line with the finding of Deng *et al.* (2020). However, the finding is not in line with the findings of Adegbie and Otitolaiye (2020), Natufe and Esther (2023) and Nuraddeen *et al.* (2022).

The study also revealed that exchange rate risk (ERR) has an insignificant positive effect on financial performance of quoted deposits money banks in Nigeria. This means that an increase in exchange rate risk will increase financial performance of quoted deposit money banks in Nigeria, by 5.2731. This finding is in line with the a-priori expectation of the researcher. Also, the finding is in line with the contingency theory because the theory asserted that the influence of exchange rate risk on financial performance depends on how well banks can align their risk management strategies with fluctuations in currency values. Banks that are flexible and responsive to currency market conditions are better positioned to protect their financial performance from adverse exchange rate movements. This finding is in agreement with the findings of Alagbe *et al.* (2021), Eno and Iniabasi (2022) and Kolawole (2023). However, the finding is not in agreement with the finding of Kolapo and Naheem (2020).

The study finally revealed that interest rate risk (IRR) has a significant positive effect on financial performance of quoted deposits money banks in Nigeria. This means that an increase in interest rate risk will increase financial performance of quoted deposit money banks in Nigeria, by 0.0081. This finding is in line with the a-priori expectation of the researcher. The finding is in line with the contingency theory because the theory emphasized that the effect of interest rate risk on financial performance is dependent on the bank's ability to manage this risk in the context of current and expected interest rate environments. Banks that dynamically adjust their interest rate risk management strategies in response to changing market conditions are more likely to sustain their financial performance. This finding is in consonance with the finding of Retno and Zulfa (2024). However, the finding is not in line with the findings of Eno and Iniabasi (2022) and Zaher (2022).

CONCLUSION AND RECOMMENDATIONS

The higher credit risk, characterized by factors such as non-performing loans, poor loan underwriting standards, and inadequate risk assessment, can erode the revenue base of deposit money banks. The increased provision for bad debts and potential loan defaults result in reduced profitability and can jeopardize the financial stability of the banks. Consequently, effectively managing credit risk is crucial for enhancing the financial performance of quoted deposit money banks in Nigeria.

In the context of Nigeria's economy, banks that manage exchange rate volatility effectively—particularly those involved in foreign exchange trading or holding assets and liabilities in foreign currencies—are able to generate higher returns. These banks capitalize on currency movements to increase profits, whether through foreign exchange transactions, arbitrage opportunities, or favorable revaluation of foreign currency assets. As such, the ability of deposit money banks to navigate and strategically manage exchange rate risks contributes positively to their financial performance.

The deposit money banks that effectively manage fluctuations in interest rates can leverage these changes to their advantage. For example, rising interest rates can lead to higher interest income from loans, fixed-income securities, and other interest-bearing assets, thereby boosting profitability. Thus, the ability to handle and capitalize on interest rate risk is crucial for enhancing the overall financial performance of deposit money banks in Nigeria.
Based on the above conclusion, the following recommendations are made:

i. Banks should implement regular monitoring systems to detect early signs of loan default. Proactive measures, such as restructuring loan terms for distressed borrowers and improving loan recovery strategies, should be in place to minimize the risk of defaults.

ii. Banks should explore opportunities to increase their involvement in foreign exchange markets, particularly through expanding their foreign currency-denominated loan portfolios and investments. This will provide additional avenues for profit generation as exchange rates fluctuate.

iii. Banks should continue to refine their risk management frameworks to capitalize on favorable interest rate movements. This includes maintaining a balanced asset-liability structure and regularly assessing the interest rate sensitivity of their portfolios to ensure they can profit from interest rate fluctuations.

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