EFFECT OF FINANCIAL RISK EXPSOSURE AND PERFORMANCE OF LISTED DEPOSIT MONEY BANKS IN NIGERIA

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Abstract
This study examined the effect of financial risk exposure on the performance of listed deposit money banks in Nigeria. The study's specific objective was to examine the effect of market risk*, and operating risk on the performance of listed deposit money banks in Nigeria. The study is carried out using an ex-post facto research design. The population consist of the fourteen (14) listed DMBs in the Nigerian Exchange Group (NGX). With the convenience sampling technique, the study used secondary panel data from the DMBs annual financial statements for 9 years (2014 – 2023). Descriptive statistics was used to define the data, measure the central tendencies and dispersions. The panel regression was used for data analysis. The results show that market risk positively and significantly influences the performance of listed DMBs in Nigeria, operating risk exerts negative and statistically significant effect on performance of listed DMBs in Nigeria. The study recommends that Deposit money banks should develop sophisticated systems that allow for proactive analysis and response to market changes. Utilizing derivatives and other financial instruments to hedge against adverse movements in interest rates and currency exchange rates can significantly enhance profitability and minimize risks during volatile periods. Government should support banks in strengthening internal controls and operational risk management. This can be achieved through regulatory frameworks that encourage best practices in internal controls, as well as providing training programs focused on risk management for bank staff.*
Keywords: Financial Risk Exposure, Market Risk, Operating Risk, Financial Performance, DMBs

INTRODUCTION

The performance of deposit money banks serves as a critical indicator of the financial sector's health and economic stability (Akhtar et al., 2021). In the Nigerian banking landscape, understanding the intricate relationships between financial risk exposure and bank performance has become increasingly important (Oladipo et al., 2022). Bank performance, typically measured through metrics such as Return on Assets (ROA) and Return on Equity (ROE), reflects the efficiency and strategic management of financial institutions (Ajibola et al., 2023). Market risk represents a fundamental challenge for contemporary banking operations, encompassing potential financial losses arising from market price fluctuations, interest rate volatility, and exchange rate dynamics (Basel Committee on Banking Supervision, 2019). The complex nature of market risk stems from the interconnectedness of global financial markets and the sensitivity of banking institutions to macroeconomic changes (Vodová, 2020).

Operating risk emerges as another critical dimension of financial risk exposure, addressing potential losses resulting from inadequate internal processes, system failures, human errors, and organizational inefficiencies (Khan & Srinivasan, 2021). The banking sector's increasing technological complexity and regulatory environment continue to reshape the landscape of operational risk management (Soliman, 2022). The Nigerian banking sector presents a unique context for exploring these risk dimensions, characterized by a dynamic economic environment, evolving regulatory frameworks, and ongoing structural transformations (Muhammad et al., 2023). Listed deposit money banks operate within a challenging ecosystem that demands sophisticated risk management strategies and adaptive financial approaches (Okonkwo & Nnadi, 2022).

Theoretical frameworks such as the risk management theory and financial intermediation theory provide foundational perspectives for understanding the relationship between financial risk exposure and bank performance (Saunders & Cornett, 2020). These theoretical lenses suggest that banks' ability to effectively manage and mitigate various risk dimensions directly influences their overall financial outcomes (Bessis, 2021). The significance of this research lies in its potential to provide insights into the mechanisms through which market risk and operating risk interact with bank performance, offering valuable implications for strategic management, regulatory policy, and financial decision-making in the Nigerian banking sector (Akinwande & Akinbode, 2023).

Despite significant investments in risk management infrastructure and sophisticated financial technologies, Nigerian listed deposit money banks continue to experience persistent financial vulnerabilities and performance challenges. Banks have implemented comprehensive risk management frameworks, invested in advanced technological solutions, and developed intricate internal control mechanisms. The persistent financial underperformance suggests that existing risk management strategies may be inadequate in effectively mitigating the complex risk dynamics inherent in the contemporary Nigerian banking environment.

Recent studies by Oladipo et al. (2022) examined financial risk in Nigerian banks but primarily focused on credit risk, leaving a notable gap in comprehensive market and operating risk analysis. Similarly, Muhammad et al. (2023) investigated banking sector dynamics, yet their research did not provide a holistic examination of how interconnected risk exposures specifically influence bank performance. In another study, Akinwande and Akinbode (2023) explored risk management strategies but failed to develop a comprehensive model that simultaneously addresses market and operating risks in the context of listed deposit money banks.

This study aims to examine the effect of financial risk on the performance of listed deposit money banks in Nigeria. Other specific objectives are to:

i. Establish the effect of market risk on the performance of listed deposit money banks in Nigeria.
ii. Ascertain the effect of operating risk on the performance of listed deposit money banks in Nigeria

To achieve the specific objectives of the study, the following hypotheses will be tested:

H_{01}: Market risk has no significant effect on the performance of listed deposit money banks in Nigeria.
H_{02}: Operating risk has no significant effect on the performance of listed deposit money banks in Nigeria.

LITERATURE REVIEW

Financial risk represents a multifaceted conceptual construct that encapsulates the potential vulnerability of financial institutions to economic uncertainties and potential losses. According to Khan and Srinivasan (2021), financial risk exposure can be conceptualized as the comprehensive measure of an organization's susceptibility to financial uncertainties, encompassing the probability and potential magnitude of adverse financial outcomes that may impact the institution's economic performance and strategic objectives. From an alternative perspective, Bessis (2022) defines financial risk as a dynamic and complex assessment of an organization's potential financial vulnerabilities, characterized by the aggregate of potential losses across various risk dimensions, including market fluctuations, operational inefficiencies, and systemic economic challenges. This conceptualization emphasizes the holistic nature of financial risk, highlighting its multidimensional character that extends beyond singular risk measurements to a comprehensive understanding of potential financial vulnerabilities.

According to Basel Committee on Banking Supervision (2019), market risk can be conceptualized as the risk of losses in on- and off-balance sheet positions resulting from movements in market prices, characterized by the adverse impact of changes in interest rates, foreign exchange rates, commodity prices, and equity prices on an organization's financial performance.

Alternatively, Vodová (2020) defines market risk as a comprehensive financial construct representing the potential variability of an institution's financial returns due to systematic market changes, encompassing the inherent uncertainties associated with market price fluctuations across various financial instruments and economic environments. This conceptualization emphasizes the dynamic nature of market risk, highlighting its multidimensional character that reflects the complex interactions between financial markets, economic conditions, and institutional financial strategies.

Operating risk represents a complex organizational construct that captures the potential for financial losses stemming from inadequate or failed internal processes, human interactions, systems, and external events. Khan and Srinivasan (2021) conceptualize operating risk as a comprehensive framework of potential vulnerabilities arising from ineffective internal controls, technological system failures, human errors, and organizational process breakdowns that can potentially generate unexpected financial and operational challenges for an institution.

From an alternative perspective, Soliman (2022) defines operating risk as a dynamic and multidimensional construct representing the potential financial and strategic losses resulting from suboptimal organizational processes, technological infrastructure limitations, regulatory non-compliance, and human capital management inefficiencies. This conceptualization emphasizes the holistic nature of operating risk, highlighting its intricate interconnections with organizational strategy, technological capabilities, and human performance mechanisms.

Saunders and Cornett (2020) conceptualize financial performance as a comprehensive metric that evaluates an organization's economic effectiveness, encompassing the organization's ability to generate value, utilize resources efficiently, and achieve strategic financial objectives through multidimensional indicators that reflect its overall economic health and operational success. This definition emphasizes the holistic nature of financial performance as a complex construct that extends beyond singular financial metrics. Ajibola et al. (2023) defines financial performance as a dynamic assessment of an organization's economic outcomes, characterized by its capacity to generate sustainable returns, maintain financial stability, and create value for stakeholders through quantitative measures such as profitability ratios, market valuation, and operational efficiency indicators. This conceptualization highlights the multifaceted nature of financial performance, positioning it as a critical reflection of an organization's strategic and operational capabilities.

Empirical Review

A study on the effect of market risk management among non-financial, non-listed Danish medium-size companies engaged in international activities was published by Hansen (2019). The study adopted the matrix of Pearson correlation and descriptive analysis of data estimation. The study showed that financial output was positively correlated with foreign exchange risk. A significant positive connection to success was the size of the company. The use of correlation analysis is not sufficient for a robust study such as this. The author could have adopted a more rigorous approach such as GMM. Also, the study failed to specify the scope of the study.

The relationship between market risk and the size of the bank was examined by Wong, et al. (2019). From 2005 to 2018, the study used a set of community data on the equity prices of 14 Chinese banks listed. Empirical results suggest that the renminbi's appreciation is likely to harm Chinese banks' production and, thus, on share prices, with a more pronounced impact on larger banks. The findings indicate that a decline in stock prices means a higher probability of default.

Kajola et al (2017) in their paper examined the impact of operating risk on firms' financial performance of thirty manufacturing firms listed on the Nigerian Stock Exchange for a seven-year period. Secondary source of data gathering was utilized. Data were specifically sourced from the annual reports of the sample firms and publications of the Nigerian Stock Exchange. The study made use of 30 non-financial

firms listed on the floor of the Nigerian Stock Exchange for the period 2004-2010. This represents 210 firm-year observations. Return on Asset (ROA) is viewed as a measure of management's efficiency and it is used as the dependent variable while Cash Conversion Cycle (CCC), Average Collection Period in days (AC), Inventory Turnover in days (IT) and Average Payment Period in days (AP) proxied working capital management. It is also pertinent to note that the CCC is the best proxy for working capital management because all other proxies are individual components of Cash Conversion Cycle. Panel data methodology was employed and pooled OLS was used to estimate the coefficients of the explanatory variables. Results reveal that Cash Conversion Cycle is negatively and significantly related with firm's financial performance (ROA). Thus, efficient management of working capital items would bring about increase in the profitability level of firms. The findings are consistent with prior empirical studies and finance theory. Meanwhile, the study was unable to find any relationship between inventory turnover and firm's profitability due to the insertion of dummy variables.

Financial Intermediation Theory

Financial Intermediation Theory, originally developed by Gurley and Shaw (1960) and subsequently refined by Diamond (1984), provides a comprehensive framework for understanding the role and performance of financial institutions. This theory explains how banks act as intermediaries between surplus and deficit units in the economic system, transforming and managing financial risks while creating value through their intermediation functions. The theory posits that financial institutions, particularly banks, play a crucial role in reducing information asymmetries, managing transaction costs, and mitigating financial risks. In the context of your study, Financial Intermediation Theory offers a robust theoretical lens to examine how market risk and operating risk impact the performance of deposit money banks. It suggests that a bank's ability to effectively manage and intermediate financial risks directly influences its overall performance and economic value creation.

Key proponents of this theory, such as Freixas and Rochet (2008), emphasize that financial intermediaries like banks must develop sophisticated risk management strategies to overcome information asymmetries, manage potential financial risks, and maintain optimal performance.

Financial Intermediation Theory provides a robust theoretical foundation for understanding the relationship between financial risk exposure and bank performance. Developed by Gurley and Shaw (1960) and refined by subsequent scholars like Diamond (1984), the theory explains banks' critical role in transforming and managing financial risks while creating economic value. The theory posits that financial institutions mediate between surplus and deficit economic units by reducing information asymmetries, managing transaction costs, and mitigating financial risks. In the context of this study, Financial Intermediation Theory offers a comprehensive lens to examine how market risk and operating risk influence bank performance, suggesting that a bank's ability to effectively intermediate and manage financial risks directly determines its economic value and operational success. By focusing on the mechanisms through which banks process, transform, and mitigate risks, the theory provides a structured framework for analyzing the complex relationships between financial risk exposure and the performance of listed deposit money banks in Nigeria.

METHODOLOGY

The study is carried out using an *ex-post facto* research design. The population consist of the fourteen (14) listed DMBs in the Nigerian Exchange Group (NGX) as of December 2023. These banks include: Access bank Plc, Ecobank Transnational, FBN Holdings, FCMB, Fidelity Bank Plc, Guaranty Trust bank Plc, Stanbic IBTC, Jaiz Bank Plc, Sterling Bank Plc, Union Bank Plc, United Bank for Africa, Unity Bank Plc, Wema bank Plc, Zenith Bank Plc. With the convenience sampling technique, the study used secondary panel data from the DMBs annual financial statements for 9 years (2014 – 2023). Data from the annual reports and accounts of the twelve (12) DMBs listed on Nigeria Exchange Group (NGX). Descriptive statistics is used to summarize the basic characteristics of the results. The statistics included average, median, minimum, and maximum. The study also used Correlation analysis for multicollinearity

and interaction between dependent and independent variables. Panel regression technique was also used for this study given its superiority over pure cross section or pure time series.
The panel regression model that captures the effect of financial risk on performance in Nigeria is state below:

$ROE_{it} = \beta_0 + \beta_1 CRR_{it} + \beta_2 LIR_{it} + \beta_3 CAR_{it} + \varepsilon_{it}$

Where,
ROE – Return on equity.
CRR – Credit risk
LIR – Liquidity risk
CAR- Capital adequacy risk
β_0 - constant term
$\beta_1, \beta_2, \beta_3$ - beta coefficients
ε - error term

Table 2: Variables Measurement

S/N	Variable	Nature	Measurement	Source
1	Return on Equity	Dependent Variable	Measured as the Net income divided by total amount of shareholder equity invested	Copel and Koller and Murnin, (2000)
2	Market risk	Independent variable	Interest expenses divided by interest income	Gatsi, Gadzo, & Akoto, (2017)
3	Operating Risk	Independent variable	Operating expenses divided by interest income	Adeleke and Ibrahim (2022).

Source: Authors Compilation (2024)

RESULT AND DISCUSSION

Data Presentation

Descriptive statistics, including measures such as the mean, median, maximum, minimum, skewness, kurtosis, and the Jarque-Bera test, were calculated to assess the statistical characteristics of the variables central to the study. The results are displayed in Table 4.1. On the other hand, the results of the correlation analysis are presented in Table 4.2.

Table 4.1: Summary Statistics of the Variables used in the Study.

Statistic	ROE	MAR	OPR
Mean	5.710858	59.18128	58.34287
Median	4.314950	59.01580	55.85025
Maximum	48.09140	83.67220	144.1581
Minimum	-57.29890	28.19310	21.19330
Std. Dev.	10.47336	11.09860	17.85725
Skewness	-1.739994	-0.058435	1.351861
Kurtosis	16.50074	2.510594	7.360083
Jarque-Bera	971.9010	1.265883	131.6022
Probability	0.000000	0.531028	0.000000

Source: Researcher's Computations from Eviews, 2024.

The results of the descriptive statistics presented in Table 4.1 show that the average Return on Equity (ROE) for the sample of banks is 5.71%, indicating a moderate level of profitability. However, the high standard deviation of 10.47% suggests significant variability in ROE across banks. This is further supported by the minimum value of -57.29%, indicating that some banks have experienced substantial

losses. The negative skewness (-1.739994) suggests that the distribution is skewed to the left, with more banks having lower ROE values.

Table 4.1 further show that the average Market Risk (MAR) is 59.18%, indicating a significant level of market risk exposure. The standard deviation of 11.09% suggests variability in market risk across banks. The minimum value of 28.19% indicates that all banks have significant market risk exposure. The negative skewness (-0.058435) suggests a slight left skew in the distribution. The results of the descriptive statistics presented in Table 4.1 further show that the average Operating Risk (OPR) is 58.34%, indicating a significant level of operating risk exposure. The standard deviation of 17.85% suggests variability in operating risk across banks. The minimum value of 21.19% indicates that all banks have significant operating risk exposure. The positive skewness (1.351861) suggests that the distribution is skewed to the right, with more banks having lower operating risk levels. The descriptive statistics provide a snapshot of the financial risk profile of the banks in the sample. The significant variability and non-normality of most variables suggest that caution should be exercised when applying statistical techniques that assume normality. Further analysis, such as correlation analysis and regression analysis, can provide deeper insights into the relationships between these variables and their impact on bank performance.

Table 4.2: Correlation Analysis Results

Variable	ROE	MAR	OPR
ROE	1	0.212143	-0.365126
CRR	-0.266059	0.249628	-0.048186
LIR	0.212205	0.019917	0.048392
MAR	0.212143	1	0.057694
CAR	0.136279	0.196078	0.119601
OPR	-0.365126	0.057694	1

Source: Researcher's Computations from Eviews, 2024.

The results of the correlation analysis results presented in Table 4.2 show the pairwise correlations between Return on Equity (ROE), Market Risk (MAR), and Operating Risk (OPR). The results revealed that there is a moderate negative correlation between ROE and OPR, with a coefficient of -0.365. This suggests that as the Return on Equity increases, the OPR tends to decrease, indicating an inverse relationship between these two variables. Overall, none of the correlation coefficients exceed ±0.5, which is a common threshold for identifying potential multicollinearity issues. This indicates that multicollinearity is not a significant concern among these variables, allowing for more reliable estimates in your panel regression analysis. However, multicollinearity of the explanatory variables was further tested, subsequently using VIF.

Panel Regression Model Selection

Two tests – the redundant fixed effects-likelihood ratio test and the correlated random effects-Hausman test – were conducted to evaluate the suitability of different panel data regression models for the dataset. The results of both tests are presented in Table 4.3.

Table 4.3: Summary of Panel Regression Model Selection Results

Redundant Fixed Effects Tests – Likelihood Ratio			
Effect test	**Statistic**	**d.f.**	**Prob.**
Cross-section F	2.508774	(11,103)	0.0077
Cross-section Chi-square	28.486925	11	0.0027
Correlated Random Effects – Hausman Test			
Test Summary	**Chi-Sq. Statistic**	**Chi-Sq. d.f.**	**Prob.**
Cross-section random	25.465090	5	0.0001

Source: Researcher's Computations from Eviews 12, 2024

The results of the redundant fixed effects test conducted in the study examining the effect of financial risk on the performance of listed deposit money banks in Nigeria provides crucial insights into the

appropriateness of the model. The results indicate that both the cross-section F statistic and the cross-section Chi-square statistic are statistically significant. The cross-section F statistic is 2.508774 with degrees of freedom (11, 103) and a probability value of 0.0077, while the Chi-square statistic is 28.486025 with 11 degrees of freedom and a probability value of 0.0027. These findings suggest that there are significant differences in performance among the banks, which are not captured by a simple pooled ordinary least squares (OLS) regression, thus validating the use of a fixed effects model for this analysis.

Following the validation of the fixed effect model, the Hausman test was used to choose between it and the random effect model. The Hausman test, tests the null hypothesis that the random effects model is consistent and efficient. In simpler terms, it helps us decide whether unobserved individual-specific effects are correlated with the independent variables. In this case, the Hausman test statistic is 25.465090 with a p-value of 0.0001. Since the p-value is less than the significance level of 0.05, we reject the null hypothesis, which states that the random effects model is appropriate. This implies that the random effects model is not consistent and efficient, and the fixed effects model is preferred. The fixed effects model controls for unobserved time-invariant heterogeneity across individuals (in this case, banks). This means that the model accounts for differences between banks that are not explicitly captured by the included variables. By doing so, it provides a more accurate and precise estimate of the relationship between the financial risk variables and ROE.

Table 4.4: Summary of Fixed Effect Regression Results

Variable	Coefficient	Std. Error	t-Statistic	Prob.*
MAR	0.276533	0.074149	3.729423	0.0003
OPR	-0.248826	0.044418	-5.601918	0.0000
C	3.562611	2.243130	1.588232	0.4982

Effect specification

Cross-section fixed (dummy variables)	
R-squared	0.642385
Adjusted R-squared	0.597629
F-statistic	6.320594
Prob(F-statistic)	0.000000
Durbin-Watson stat	2.007626

Note: Dependent variable is ROE.
* indicates significance at 5% level.
Source: Researcher's Computations from Eviews 12, 2024.

Table 4.4 presents the fixed effects model results. The results show that market risk (MAR) have a strong positive and statistically significant effect on ROE. With a coefficient of 0.2765 and a p-value of 0.0003, the analysis shows that as market risk increases, so does the return on equity. Since the p-value of 0.0003 is less than the 5% (0.05) level of significance, we reject the fourth null hypothesis and conclude that market risk has significant effect on the performance of listed deposit money banks in Nigeria. This result suggests that firms that are more exposed to market fluctuations and risks tend to perform better in terms of equity returns. The positive impact of market risk could be explained by the potential for higher returns in volatile markets, where institutions may capitalize on market opportunities despite the inherent risks. This finding highlights the dual nature of market risk, where exposure to market dynamics can be leveraged to enhance profitability.

The results in Table 4.4 further show that operating risk (OPR), has a coefficient of -0.2488. this implies that a one percentage increase in OPR leads to 0.2488% decrease in return on equity and vice versal. This result indicates that higher operating risk leads to lower returns on equity. Operating risk, which includes risks related to internal processes, systems, and human factors, is a key determinant of financial performance. The negative impact on ROE suggests that inefficiencies or failures in managing operating risk can substantially erode profitability. Institutions must therefore prioritize mitigating operating risks

through better internal controls and operational efficiency to safeguard their financial returns. The p-value of 0.0000, is less than 0.05 (5%) level of significance, hence the fifth and last null hypothesis is rejected and its alternative accepted. This means that operating risk has significant effect on the performance of listed deposit money banks in Nigeria.

Post-estimation Tests

Table 4.5: Residual Normality Test Results

Test	Statistic	Probability
Jarque-Bera Normality Test	3.306964	0.191382

Source: *Researcher's Computation using Eviews, 2024.*

Table 4.6: Multicollinearity Test Results

Variables	VIF
MAR	3.110
OPR	2.102

Source: Researcher's Computation from Eviews, 2024.

The study used the Variance Inflation Factor (VIF) to assess the presence of multicollinearity among the variables. A VIF value between one and five suggests only a modest correlation, while a VIF of one indicates no correlation between variables. Additionally, VIF values exceeding five signal potential collinearity issues among the predictor variables. The VIF results in Table 4.6 show that none of the values are close to 5, confirming that there are no indications of multicollinearity problems among the predictors in this study.

Table 4.7: Panel Cross-section Heteroscedastic LR Test Results

Test	Value	Probability
Likelihood Ratio	2.564230	0.2463

Null hypothesis: Residuals are homoscedastic

Source: *Researcher's Computation using Eviews, 2024.*

The results of the cross-section heteroscedastic LR test revealed a value of 2.564230, and the corresponding p-value is 0.2463. Since the p-value is greater than the conventional significance level of 0.05, we accept the null hypothesis that residuals are homoscedastic. This indicates that there is no evidence to suggest that the residuals are heteroscedastic. The absence of heteroskedasticity is a positive outcome for the regression model. It suggests that the standard errors of the regression coefficients are likely to be unbiased, and the t-tests and F-tests used for hypothesis testing are likely to be reliable.

Table 4.8: Residual Cross-Section Dependence Test Results

Test	Statistic	d.f.	Probability
Breusch-Pagan LM	1.280199	66	0.7613
Pesaran scaled LM	1.768008		0.2056
Pesaran CD	0.621258		0.1562

Note: null hypothesis: No cross-section dependence (correlation) in residual

Source: *Researcher's Computation using Eviews, 2024.*

The results of the Residual Cross-Section Dependence Test presented in Table 4.7 show that all three tests (Breusch-Pagan LM, Pesaran Scaled LM, and Pesaran CD) have high p-values, which are individually greater than 0.05 (5%) level of significance. This means that the null hypothesis of no cross-sectional dependence in the residuals is accepted, indicating that there is no evidence of cross-sectional dependence in the residuals of the model. This absence of cross-sectional dependence is a good sign for the validity of the econometric analysis.

Discussion of Findings

First, the study sought to establish the effect of market risk on the performance of listed deposit money banks in Nigeria. The results show that market risk positively and significantly influences the

performance of listed DMBs in Nigeria. That is to say that when market risk increase, the performance of these listed DMBs will rise quickly, and vice versa, other things being equal. This finding suggests that as exposure to market risk increases, these banks experience enhanced financial performance; signaling that Nigerian DMBs may be effectively leveraging market movements to their advantage, such as through higher yields on interest rate spreads or favorable currency exchange rate fluctuations that boost profitability. A key implication of this finding is that the banks' ability to manage and respond to market dynamics could translate into better returns, as they might be engaging in activities like foreign exchange trading, derivative positions, or adjusting their loan portfolios to benefit from favorable shifts in market conditions. The significant nature of the relationship also highlights that market risk can serve as a key driver of profitability in these banks, with a potential for quick returns when market conditions are favorable. This finding underscores the importance of risk management strategies, where market volatility is not only mitigated but also strategically embraced to enhance performance, positioning banks to capitalize on market opportunities while maintaining a stable growth trajectory.

The finding that market risk positively and significantly influences the performance of listed deposit money banks (DMBs) in Nigeria is consistent with that of Hansen (2019), who found a positive correlation between foreign exchange risk and financial output among non-listed Danish firms engaged in international activities. However, Wong, et al. (2019), in a contradictory manner, found that market risk, specifically the appreciation of the renminbi, negatively impacted the profitability of Chinese banks, particularly larger ones, indicating that market risk might have adverse effects in certain contexts.

The second objective of this study was to ascertain the effect of operating risk on the performance of listed deposit money banks in Nigeria. The results of the fixed effect panel regression model show that operating risk exerts negative and statistically significant effect on performance of listed DMBs in Nigeria, indicating that higher operational risks lead to a decline in bank performance. This negative relationship suggests that when operational risks increase, the banks experience reduced profitability and efficiency, as resources are often diverted to manage and mitigate the consequences of these risks. The statistical significance of this effect highlights the critical role that operational stability plays in sustaining financial performance. Poorly managed operating risks can result in substantial financial losses, reputational damage, and regulatory penalties, all of which hinder the banks' ability to maintain profitability. This finding underscores the importance of effective risk management frameworks and internal controls to mitigate operational risks and safeguard the financial health of DMBs in Nigeria.

The finding of this study that operating risk exerts a negative and statistically significant effect on the performance of listed deposit money banks (DMBs) in Nigeria aligns with the results of Kajola et al. (2017), who found that cash conversion cycle (CCC), a proxy for operational efficiency, had a negative and significant relationship with the financial performance (ROA) of manufacturing firms in Nigeria. However, the findings of Amaning and Larbi-Siaw (2017) contradict this result, as their study on Ghanaian pharmaceutical firms revealed that working capital components, such as the cash conversion cycle, had an insignificant effect on profitability, suggesting that operational factors may not always significantly influence financial outcomes in all sectors. This contrast could be attributed to differences in industry dynamics and the scale of operational risks faced by pharmaceutical versus banking and manufacturing firms.

CONCLUSION AND RECOMMENDATION

The study investigated the effect of financial risk, specifically market risk and operating risk, on the performance of listed deposit money banks in Nigeria. The findings reveal a detailed and complex relationship between these risk dimensions and bank performance. Market risk demonstrated a positive and significant influence on bank performance, suggesting that Nigerian deposit money banks effectively leverage market dynamics to enhance their financial outcomes. This indicates a strategic approach to risk management, where banks capitalize on market volatilities to generate higher returns through mechanisms such as foreign exchange trading, derivative positions, and adaptive loan portfolio strategies.

Conversely, operating risk exhibited a negative and statistically significant impact on bank performance. The results highlight the critical importance of robust operational risk management frameworks, as increased operational risks directly correlate with reduced profitability and efficiency. The study underscores the necessity for banks to develop comprehensive internal controls and risk mitigation strategies to minimize operational vulnerabilities that can lead to financial losses and reputational damage. The divergent effects of market and operating risks provide crucial insights for banking stakeholders, regulators, and policymakers. While market risk presents opportunities for strategic value creation, operating risk demands rigorous management and proactive risk mitigation approaches. These findings contribute to the existing body of knowledge on financial risk management in the Nigerian banking sector, emphasizing the need for sophisticated, context-specific risk management strategies that can simultaneously leverage market opportunities and minimize operational challenges.

i. Deposit money banks should develop sophisticated systems that allow for proactive analysis and response to market changes. Utilizing derivatives and other financial instruments to hedge against adverse movements in interest rates and currency exchange rates can significantly enhance profitability and minimize risks during volatile periods.
ii. Government should support banks in strengthening internal controls and operational risk management. This can be achieved through regulatory frameworks that encourage best practices in internal controls, as well as providing training programs focused on risk management for bank staff. By fostering an environment that promotes robust internal control systems and operational risk mitigation strategies, the government can help reduce financial losses and ensure consistent performance in the banking sector, ultimately contributing to a more resilient economy.

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