



EFFECT OF MANAGEMENT QUALITY, COVERAGE RATIO AND LOAN TO DEPOSIT RATIO ON FINANCIAL PERFORMANCE OF DEPOSIT MONEY BANKS IN NIGERIA

By

AWOGBEMI, Ebenezer Idowu¹, KOLO, Ibrahim², AHMED, Abdullahi Ibrahim³
^{1,2&3} Department of Business Administration Nasarawa State University Keffi, Nigeria
Correspondence author: eawogbemi@yahoo.com; 08177484162

Abstract

Deposit Money Banks in Nigeria play a vital role in the country's financial system, contributing to economic growth and stability. However, the financial performance of DMBs is influenced by various factors, including management quality, coverage ratio, and loan-to-deposit ratio. This study therefore examined the effect of management quality ratio, coverage ratio and loan to deposit ratio on financial performance (measured by return on assets) of selected deposit money banks in Nigeria. The study adopted a descriptive research design. The study covered Fourteen (14) listed DMBs in Nigeria and covered the period of 10 years 2012-2021. The study employed secondary data which was extracted from published annual reports and financial statements of the selected listed DMBs in Nigeria. Ordinary least square Regression analysis was used to test the hypotheses rose for the study. The study found that management quality ratio has positive but insignificant effect on ROA, coverage ratio has negative and significant effect on ROA, while loan to deposit ratio has positive and significant effect on ROA of deposit money banks in Nigeria. The study thus recommended among others that deposit money banks in Nigeria should focus on enhancing their risk management frameworks and credit assessment processes to minimize non-performing loans. By maintaining adequate provisions or reserves to cover potential losses, banks can improve their asset quality, reduce credit risk, and enhance profitability.

Key words: Management Quality Ratio, Coverage Ratio, Loan to Deposit Ratio, Financial performance, Return on Assets, Deposit Money Bank.

Introduction

The Nigerian banking sector plays a crucial role in driving the country's economic growth and development. Within this sector, Deposit Money Banks (DMBs) are pivotal in mobilizing savings, facilitating lending activities, and supporting various sectors of the economy. To ensure sustainable growth and stability, it is essential to understand the factors that influence the financial performance of DMBs. This study aims to examine the impact of three key

ratios, namely Management Quality Ratio (MQR), Coverage Ratio (CR), and Loan-to-Deposit Ratio (LDR), on the financial performance of DMBs in Nigeria.

Management quality is a critical determinant of a bank's success, as effective management practices can enhance operational efficiency, risk management, and overall performance. The MQR reflects the efficiency and effectiveness of a bank's management team in utilizing resources and making strategic decisions. By assessing key financial indicators, such as return on equity (ROE) and return on assets (ROA), the MQR provides insights into management's ability to generate profits and create value for shareholders. The CR is an important measure of a bank's ability to cover potential losses from loan defaults. It indicates the proportion of a bank's provisions or reserves compared to its non-performing loans (NPLs). A higher CR suggests a bank's readiness to absorb losses and manage credit risks, thereby contributing to financial stability. The LDR represents the proportion of a bank's loans relative to its deposits. It reflects the bank's lending activities and liquidity position. A balanced LDR indicates prudent lending practices and a healthy asset-liability management strategy (Bhattarai, 2019).

Financial performance refers to the act of performing financial activity. In broader sense, financial performance refers to the degree to which financial objectives is being achieve (Ali, 2015). It is the process of measuring the results of a firm's policies and operations in monetary terms. It is used to measure firm's overall financial health over a given period of time and can also be used to compare similar firms across the same industry or to compare industries or sectors in aggregation (Abubakar, et al., 2021).

Financial performance is a description of the company's financial condition in a certain period both regarding aspects of fund raising and fund distribution or fund usage, which is usually measured by return on assets, return on investment (invested capital) and return on equity. Return on assets (ROA) has to do with financial ratio that measures firm's profitability. It explains corporate earnings generated from the utilization of invested capital or assets. The ratio from return on assets gives the potential investors and creditors the impression of an effective management of a particular firm. Understanding the relationship between these ratios and the financial performance of DMBs in Nigeria is crucial for policymakers, regulators, and banking industry participants. It can provide insights into the effectiveness of management practices, risk management frameworks, and the impact of lending activities on profitability and stability (Al-Eitan&Bani-Khalid, 2019).

Deposit Money Banks (DMBs) in Nigeria play a vital role in the country's financial system, contributing to economic growth and stability. However, the financial performance of DMBs is influenced by various factors, including management quality, coverage ratio, and loan-to-deposit ratio. Therefore, it is essential to examine the effect of these ratios on the financial performance of DMBs in Nigeria. Management Quality Ratio (MQR): The MQR reflects the effectiveness and efficiency of a bank's management team in utilizing resources, making strategic decisions, and generating profits. However, it remains unclear how the MQR impacts the financial performance of DMBs in Nigeria.

The coverage ratio (CR) represents a bank's ability to cover potential losses from non-performing loans (NPLs) by maintaining adequate provisions or reserves. A higher CR indicates better risk management and financial stability. However, the relationship between CR and the financial performance of DMBs in Nigeria is not well understood. The loan-to-deposit ratio (LDR) reflects the proportion of a bank's loans relative to its deposits and indicates the bank's lending activities and liquidity position. An imbalanced LDR can affect both profitability and liquidity risk. However, the effect of LDR on the financial performance of DMBs in Nigeria requires further investigation (Rengasamy, 2014).

Although similar studies were carried out on credit risk management and financial performance, but some of the studies focused only on single variable of credit risk management while some combined two or more financial performance indicators. For instance, Sari and Septiano (2020) focused on the effects of intervening loan to deposit ratio on profitability in Indonesia; Kurotamunobaraomiet al. (2017) focused on Liquidity and performance of Nigerian Banks; Rengasamy (2014) focused on impact of loan deposit ratio (LDR) on profitability: Panel evidence from commercial banks in Malaysia; Sidhu et al. (2022) focused on impact of liquidity coverage ratio on performance of select Indian banks. It is in the view of the above stated problems and the above mentioned gaps that this study intends to fill the gaps highlighted above in order to provide empirical evidence on the impact of credit risk on profitability of listed deposit money banks in Nigeria.

The main objective of the study is to examine the effect of management quality ratio, coverage ratio and loan to deposit ratio on financial performance of the selected deposit money banks in Nigeria. Thus, the specific objectives are to determine the effect of management quality ratio, coverage ratio and loan to deposit ratio on financial performance (ROA) of the selected deposit money banks in Nigeria; the following null hypotheses were formulated in line with the above specific objectives.

- HO1:** Management quality ratio has no significant effect on financial performance (Return on Asset (ROA) of selected Deposit money Banks in Nigeria;
- HO2:** Coverage ratio has no significant effect on financial performance (Return on Asset (ROA) of selected Deposit money Banks in Nigeria; and
- HO3:** Loan to deposit ratio has no significant effect on financial performance (Return on Asset (ROA) of selected Deposit money Banks in Nigeria.

Literature Review

Management Quality Ratio

Management Quality Ratio is a financial metric used to assess the effectiveness and efficiency of a company's management team. It provides insight into how well a company's management is utilizing its resources and making strategic decisions to generate profits and create value for shareholders (Bhattarai, 2019). The ratio is calculated by comparing certain financial indicators to evaluate management's performance. Management quality is a qualitative variable that expresses the control of board of directors over the resources of the bank to protect shareholder's interest. It is measured by the ratio of total operating income to total assets. Management quality encompasses all aspects of an organization's operations, from design and development to production, distribution, and customer support (Gadzo et al., 2019).

Coverage Ratio

Coverage ratio is a financial metric used to assess a company's ability to meet its financial obligations, particularly interest and debt payments. It measures the extent to which a company's earnings or cash flows can cover its fixed charges or debt servicing obligations (Noghondari, et al., 2021). Lenders, investors, and analysts often evaluate coverage ratios to determine the creditworthiness and financial stability of a business. The coverage ratio includes interest coverage ratio, debt service coverage ratio, fixed charge coverage ratio and debt-to-income ratio. Coverage ratios provide insight into a company's financial health and its capacity to fulfill its financial obligations. Lenders and investors often refer to these ratios when making lending decisions or assessing investment opportunities. It is important to note that acceptable coverage ratios vary by industry, and it is crucial to compare them against industry benchmarks and analyze trends over time (Sidhu et al., 2022).

Loan to Deposit Ratio

Loan to deposit ratio (LDR) is a ratio that describes the comparison between a credit issued by a bank and the total third party funds collected by a bank (Sari & Septiano, 2020). This ratio will show the level of the bank's ability to channel third party funds raised by the relevant bank. The loan to deposit ratio (LDR) refers to the interaction between total loans and total deposits, expressed as a percentage. The LDR gives an insight into the proportion of assets a bank can create from its liabilities. It also indicates the amount of income/profit a bank can generate (Rengasamy, 2014). It is expected that the larger the deposits (liabilities), the larger the amount of assets (loans) it creates. This is, however, dependent on a few key financial variables and the economy. The LDR is a useful tool for assessing the funding profile of banks. It is used mainly to determine the level of liquidity of a bank and provides insight on banks' risk level, fund utilization, and intermediation activities, (Rengasamy, 2014). The LDR is the total value of loan facilities issued divided by the aggregate value of deposits mobilised, (Kurotamunobaraomi et. al., 2017). The loan-to-deposit ratio is a financial metric used to assess the lending capacity and liquidity of a financial institution, such as a bank. It measures the proportion of a bank's total loans to its total customer deposits. The ratio is calculated by dividing the total loans outstanding by the total deposits held by the bank. The loan-to-deposit ratio is an important indicator for evaluating a bank's balance sheet strength, liquidity management, and lending practices

Financial Performance

Twairesh (2014) argued that firm's financial performance is attributed to its profitability. He describes firm's profitability as the ability to generate revenue in excess of the cost of generating such revenue. Essentially, the term is relatively measurable in terms of profit and its relation with other elements that can directly influence the profit. Financial performance measures in monetary terms, the results of the policies and activities put in place to attain organizational objectives (Abu & Wafi, 2016). A number of measures have been used in the past to measure financial performance such as return on assets (ROA), return on equity (ROE), return on investment (ROI), Tobin Q, profit after tax, earnings per share (EPS), financial ratios and any market value ratio that is generally accepted (Chuke & Kenneth, 2018). However, this study used return on assets (ROA) as measurement of financial performance. Nwude and Okeke (2018) defined financial performance as a subjective measure of how well a firm can use assets from its primary mode of business and generate revenues. It is the measure of bank's achievement of its financial goals guided by its financial

objectives and benchmarks. According to Achieng et al. (2018), financial performance is the ability of a company to control its financial resources so as to achieve the desired results. They further stated that financial performance is measured by various indicators including capital adequacy, liquidity, solvency and profitability.

Return on Assets (ROA)

According to Akani and Swenem (2019), return on assets (ROA) is a financial performance indicator that measures a company's profitability in relation to its total assets. ROA can be used by corporate management, analysts, and investors to assess how effectively a company uses its resources to make a profit. The metric is frequently represented as a percentage using the net income and average assets of a corporation. A company's ability to manage its balance sheet to produce profits is more effective and efficient when its ROA is higher; on the other hand, a lower ROA suggests there is potential for improvement (Akani & Swenem, 2019).

Empirical Review

Management Quality Ratio and Financial Performance

Bhattarai (2019) investigated the effect of credit risk on the financial performance of commercial banks in Nepal. The balance panel data of ten commercial banks with 160 observations for the period of 2001 to 2016 have been used for the analysis. The regression results revealed that management quality ratio (MQR), capital adequacy ratio (CAR) and non-performing loan ratio (NPLR) have significant relationship with the financial performance (ROA) of the commercial banks in Nepal. Similarly, credit to deposit ratio (CDR) and risk sensitivity (RS) have no significant impact on the financial performance of the commercial banks in Nepal. The covered only six (6) years.

Lew and Lau (2022) examined the relationship between credit risk and the performance of commercial banks in the ASEAN (Association of Southeast Asian Nations) region. 113 commercial banks across Malaysia, Singapore, Thailand, Philippines, and Vietnam are covered for analysis purposes. The study used management quality ratio, capital adequacy ratio and loan to deposit ratio to measured credit risk, while, ROE & ROA were used to measure performance of commercial banks. Panel data analysis covering the years 2016-2020 for the above-mentioned bank sample was employed in examining the relationships. The study found that management quality ratio, capital adequacy ratio and loan to deposit ratio have a significant relationship with commercial bank performance, proxied by return on equity and return on assets.

Coverage Ratio and Financial Performance

Sidhu et al. (2022) examined the impact of the liquidity coverage ratio (LCR) on the profitability and non-performing assets (NPAs) of Indian banks using annual data from 2010 to 2019. By applying the dynamic panel data regression technique to analyze the data obtained. The study found that liquidity coverage ratio has negative and significant effect on the profitability and non-performing assets (NPAs) of Indian.

Qazi et al. (2022) investigated whether the credit risk management of Pakistan's commercial banks listed on the Pakistan Stock Exchange is linked to financial performance. For this purpose, the study analyzed the data trends of five major banks of Pakistan as a proxy representation of the entire banking sector of Pakistan. Five (5) years of panel data collected from the State Bank of Pakistan Annual publication and annual reports of respective banks was used to conduct the research. The study found that loan to deposit have impact on the financial achievement of Pakistani commercial banks as measured by return on equity (ROE) and return on assets. The result from the study failed to explain whether the impact is positive or negative.

Loan to Deposit Ratio and Financial Performance

Sari and Septiano (2020) examined the effects of intervening loan to deposit ratio on profitability in Indonesia. examine the factors that affect the ratio of Return on Assets and Non-Performing Loans to government banks. The study covered the six years period spanning from 2014-2019. The study used secondary data which was obtained from financial report data from each official website of BANK BRI, Bank BNI, Bank Mandiri, and Bank BTN. The result from multiple regression analysis found that the Loan to Deposit Ratio mediates the relationship between Net Interest Margin and Return on Asset. The study focused only four Banks and covered only six (6) year's period.

Hapsari (2018) examined the moderating role of size in the effect of loan to deposit ratio and non performing loan toward banking financial performance. The stud measured the effect of Loan to Deposit Ratio and Non-Performing Loans Ratio toward Financial performance proxied by Return on Assets (ROA) with Size as a moderating variable. The population in this research are commercial banking in Indonesia during 2012- 2016 periods. Samples were taken by purposive sampling method and obtained 65 data from 13 banks of Business Group Commercial Banking Bank (BUKU) 3 and 4. Moderating Regression Analysis with absolute difference method was used to examine the research. The result showed that Loan to Deposit Ratio has a positive effect toward financial performance, Non-Performing Loan has negative

effect toward financial performance, while Size is not moderating both the effect of Loan to Deposit and Non-Performing Loan toward financial performance.

Theoretical Framework

This study is hinged on the Credit Risk Theory (CRT)

The credit risk theory was first brought to life by Robert Merton in 1974. Merton's credit risk model assumes that a company has a certain level of zero-coupon debt instruments that will fall due at a future date, T. The value of the firm's assets is assumed to obey a lognormal diffusion process with a constant volatility. In this case, default occurs when the value of the company's assets falls short of the promised debt repayment at time T. Consequently, upon default, lenders receive a payment equal to the asset value, and the shareholders get nothing (Hull, 2012). Credit risk theory, therefore, sheds light on the concept of credit spreads, credit portfolio management and loss distribution generated. In order to minimize the lender's risk, the financier ought to perform regular credit checks on the potential borrowers to ensure that the borrowers have pegged enough collateral and insurance on their debt. The higher the default risk, the greater the interest rates charged on debt instruments (Owojori et al., 2011). This theory is relevant to this study as it emphasizes on credit risk and the capital structure of a firm.

Research Methodology

The study adopted a descriptive research design. This is because the study makes an enquiry into the possible influence of one variable on another using secondary data. The study covered deposit money banks in Nigeria. The study selected fourteen (14) deposit money banks in Nigeria and covered the period of 10 years (2012-2021). The deposit money banks in Nigeria covered are; Access Bank, Econ Bank, FCMB, Fidelity Bank, First Bank, Grantee Trust Bank, Jaiz Bank, Stanbic IBTC, Sterling Bank, United Bank for Africa, Union Bank, Unity Bank, Wema Bank and Zenith Bank. The justification for covering these fourteen (14) deposits money banks and the 10 years period was based on the availability of the data for the study. The secondary data used for the study was extracted from published annual reports and financial statements of the selected deposit money banks in Nigeria. Regression analysis was used to test the hypotheses raised for the study. The analysis was done using EVIEWS software.

The Regression Model Used

$$ROA = \beta_0 + \beta_1MQR_t + \beta_2COR_t + \beta_3LDR_t + \mu$$

Where:

ROA = Return on Assets

MQR = Management Quality Ratio

COR = Coverage Ratio

LDR = Loan to Deposit Ratio

β_0 = common y-intercept

$\beta_1 - \beta_2$ = coefficient of the relevant predictor variables

μ = stochastic error terms.

Measurement and description of the Variables

Dependent Variable: Financial Performance measured by Return on Assets (ROA).

Return on Assets (ROA): ROA is a measure that is commonly used to measure the profitability of a firm's operations. ROA is proxy for financial performance. It is expressed as:

$$\text{Return on Assets (ROA)} = \frac{\text{Earnings before Income Tax (EBIT)}}{\text{Total Assets (TASSET)}}$$

Independent Variables:

Management Quality Ratio (MQR): Management soundness is a qualitative variable that expresses the control of board of directors over the resources of the bank to protect shareholders interest. It is measured by the ratio of total operating income to total assets. i. i.

MQR = total operating income ratio

total assets

ii. Coverage Ratio

$$\text{CR} = \frac{\text{Interest income on loans}}{\text{Average gross loans}}$$

iii. Loan to Deposit Ratio(LDR)

$$\text{LDR} = \frac{\text{Total Loans}}{\text{Total Deposits}}$$

Results and Discussion

Table 1: Descriptive Statistics

	ROA	MANAGEMENT QUALITY	COVERAGE RATIO	LOAN TO DEPOSIT RATIO
Mean	0.04439	0.76203	0.13473	0.175225
Median	0.04689	0.17145	0.01665	0.155898
Maximum	0.21100	0.802234	0.094567	0.865981
Minimum	-0.01369	0.001123	0.002676	0.0019
Std. Dev.	0.02894	3.245401	0.644533	3.059200
Skewness	5.33627	0.676592	1.674229	2.041650
Kurtosis	24.5043	1.057453	19.35616	30.01567
Jarque-Bera	16867.22	23.12562	7423.7541	21045.15
Probability	0	0	0	0
Sum	13.84007	12567	103.1678	33.41103
Sum Sq. Dev.	17.75212	6037.157	116.1789	134.523
Observations	140	140	140	140

Source: Researcher's computation, 2023 via EVIEWS

The summary of the descriptive statistics for all variables used in the study is presented in Table 1. This shows that the measure of financial performance (ROA) of the selected Deposit money banks in Nigeria has a mean value of 0.04439, median value of 0.04689 with standard deviation value of 0.02894, and minimum and maximum values of -0.01369 and 0.21100 respectively. This implies that the average efficiency of the selected deposit money bank is between 20.21100 to -0.01369, and the deviation from both sides of the mean is 0.02894. The Skewness, Kurtosis and Jarque-Bera values for ROA are 5.33627, 24.5043 and 16867.22 respectively, these values are positive and higher than the mean value of ROA. This indicates that the data did not comply with the normal distribution assumption.

The table 1 also depicted the mean value of 0.76203, median value of 0.17145, with standard deviation value of 3.245401, Skewness value of 0.676592, Kurtosis value of 1.057453 and Jarque-Bera value of 23.12562 for management quality ratio. Although the Skewness is below the mean value while Kurtosis value and Jarque-Bera value is above the mean value which suggests that the data for the management quality ratio is not normally distributed.

The table above also shows the mean values of 0.13473, 0.175225 the median values of 0.01665, 0.155898 with standard deviation values of 0.644533 and 3.059200, the skewness values of 1.674229 and 2.041650, Kurtosis values of 19.35616 and 30.01567, the Jarque-Bera values of 7423.7541 and 21045.15 for coverage ratio and loan to deposit ratio respectively.

The skewness, Kurtosis and Jarque-Bera values for coverage ratio and loan to deposit ratios respectively are all higher than their respective mean values this also indicates that the data did not meet a normal distribution assumption. The probability values of 0.000 for all the respective variables indicate significant at 5% significant level. It is concluded that all the variables exhibit the same pattern.

Table 2: Correlation of the Variables Use

Covariance Analysis: Ordinary
Date: 10/06/23 Time: 11:18
Sample: 2012 2021
Included observations: 140

Correlation

Probability	ROA	Management Quality	Coverage Ratio	Loan to Deposit Ratio
ROA	1.000000			

Management Quality	0.02232	1.000000		
	0.0676	-----		
Coverage Ratio	-0.014502	-0.034023	1.000000	
	0.5422	0.21321	-----	
Loan to Deposit Ratio	0.754679	0.068414	-0.021243	1.000000
	0.0000	0.1534	0.4132	-----

Source: Researcher's computation, 2023 via EViews

Table 2 above shows the result of correlation analysis between the variables used in this study. The correlation matrix is used to show the relationship between the independent and dependent variables to ensure that there is no strong correlation between them. The Table 2 shows that the results of correlation matrix relationship between the dependent variable (ROA) and independent variables (management quality ratio, coverage ratio and loan to deposit ratio). The correlation analysis involves the measurement of the degree of strength of the relationship between the dependent variable and the independent variables. In an effort to analyze the nature of the correlation between the dependent and the independent variables, Pearson correlation analysis has been computed.

From the table 2 above the results indicate that deposit money banks financial performance (ROA) has insignificant and positive relationship with management quality ratio. The deposit money banks financial performance (ROA) has significant and negative relationship with coverage ratio. The result implies that as the value of coverage ratio increases, the financial

performance (ROA) of banks decreases, while the deposit money banks financial performance (ROA) has significant and positive relationship with loan to deposit ratio.

The result also shows the relationship among the independent variables (management quality ratio, coverage ratio and loan to deposit ratio). The result shows that management quality ratio has negative relationship with coverage ratio, while there exist a positive and significant relationship between management quality ratio and loan to deposit.

Regression Analysis

Table: 3 Regression Analyses

Dependent Variable: ROA

Method: Panel EGLS (Cross-section random effects)

Date: 10/06/23 Time: 12:16

Sample: 2012 2021

Periods included: 10

Total panel (unbalanced) observations: 140

Swamy and Arora estimator of component variances

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.014315	0.002024	2.761366	0.0023
Management Quality	0.0121E-13	0.0164E-13	0.5609	0.5316
Coverage Ratio	-0.0284	0.0250	-17.4785	0.0367
Loan to Deposit Ratio	0.0025	0.0138	11.5735	0.0000
Effects Specification				
			S.D.	Rho
Cross-section random			0.000000	0.0000
Idiosyncratic random			0.032464	1.0000
Weighted Statistics				
R-squared	0.7557	Mean dependent var		0.0323
Adjusted R-squared	0.7083	S.D. dependent var		0.3413
S.E. of regression	0.0322	Sum squared resid		0.4142
F-statistic	1121.145	Durbin-Watson stat		2.0641
Prob(F-statistic)	0.000000			

Unweighted Statistics

R-squared	0.7557	Mean dependent var	0.0323
Sum squared resid	0.4142	Durbin-Watson stat	1.9156

Correlated Random Effects - Hausman Test

Equation: Untitled

Test cross-section random effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	7.273593	3	0.272

** WARNING: estimated cross-section random effects variance is zero.
Cross-section random effects test comparisons:

Variable	Fixed	Random	Var(Diff.)	Prob.
Management Quality	0.000000	0.000000	0.000000	0.0676
Coverage Ratio	-0.002194	-0.000755	0.000003	0.0508
Loan to Deposit Ratio	0.32402	0.33498	0.000009	0.0254

Source: Researcher’s computation, 2023 via EVIEWS

Table 4: Regression Result

Cross-section random effects test equation:

Dependent Variable: ROA

Method: Panel Least Squares

Date: 13/06/23 Time: 12:16

Sample: 2012 2021

Periods included: 10

Total panel (unbalanced) observations: 140

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.469	1.165	0.398	0.691
Management Quality	0.024E-13	0184-13	1.300	0.200
Coverage Ratio	-0.290871	-0.120345	2.421	0.020
Loan to Deposit Ratio	0.1091	0.03476	3.1394	0.002

Effects Specification

Cross-section fixed (dummy variables)			
R-squared	0.876540	Mean dependent var	0.031123
Adjusted R-squared	0.856520	S.D. dependent var	0.238136
S.E. of regression	0.033585	Akaike info criterion	-2.535335
Sum squared resid	0.507041	Schwarz criterion	-1.895784
Log likelihood	233.1324	Hannan-Quinn criter.	-2.400521
F-statistic	76.94100	Durbin-Watson stat	1.7566
Prob(F-statistic)	0.000000		

Source: Researcher's computation, 2023 via EVIEWS

The static effects model, the random effects model, and the Hausman test were used. In order to take into account, the heterogeneity and self-association of error reduction, the Generalized Least Square method was used (Green, 2008). The Hausman test above shows the Chi-Square value of 7.273593 with probability value of 0.272. Based on the results of Hausman test, the random model is appropriate to test the effect of credit risk management on the financial performance (ROA) of deposit money banks in Nigeria.

From the regression result in the table above, it shows that management quality ratio has a coefficient value of 0.024E-13, t-value of 1.300 and a P-value of 0.200 which is not significant at 5% level. It is therefore found that management quality ratio has positive and insignificant effect on the Financial Performance (ROA) of deposit money banks in Nigeria. This implies that for every percentage increase in the management quality ratio, ROA of deposit money bank remain positive but not significant enough to improve ROA. This result contradict researcher's expectation and it may be as a result of the poor management. This statistical analysis has to provide the evidence to reject the null hypothesis one. Therefore, null hypothesis one which states that management quality ratio has no significant effect on financial Performance (ROA) of deposit money Banks in Nigeria. This finding contradicts the finding of Bhattarai (2019) who in his study found that management quality ratio (MQR) has significant relationship with the financial performance (ROA) of the commercial banks in Nepal.

From the regression result in the table above, it shows that coverage ratio has a coefficient value of -0.290871, t-value of 2.421 and a P-value of 0.020 which is significant at 5% level of significant. From this analysis it is found that coverage ratio has negative and significant effect on the Financial Performance (ROA) of deposit money banks in Nigeria. This therefore

implies that for every percentage increase in the coverage ratio, ROA of deposit money bank decrease significantly. This statistical analysis has failed to provide the evidence to reject the null hypothesis two. Therefore, the null hypothesis two which states that coverage ratio has no significant effect on financial Performance (ROA) in Nigeria is hereby accepted. The finding of this study is in line with the findings of Sidhu et al. (2022) who in their studies found that liquidity coverage ratio has negative and significant effect on the profitability and non-performing assets (NPAs) of Indian.

The regression result from the table shows that loan to deposit ratio has a coefficient value of 0.1091, t-value of 3.1394 and a P-value of 0.002 which is significant at 5% level of significant. From this analysis it is found that loan to deposit ratio has positive and significant effect on the Financial Performance (ROA) of deposit money banks in Nigeria. This therefore, implies that for every percentage increase in the loan to deposit ratio, ROA of deposit money bank increase significantly. Therefore, the null hypothesis three which states that loan to deposit ratio has no significant effect on financial Performance (ROA) in Nigeria is hereby rejected. This finding is in agreement with the finding of Hapsari (2018) who in his study found that Loan to Deposit Ratio has a positive effect toward financial performance.

Conclusion and Recommendations

The study examined the effect of management quality ratio, coverage ratio and loan to deposit ratio on financial performance of deposit money banks in Nigeria. Based on the findings from this study, it is concluded that management quality ratio positively but insignificantly affects the financial performance (ROA), while coverage ratio negatively and significantly affects the financial performance (ROA) of deposit money banks in Nigeria. The study also concludes that loan to deposit ratio positively and significantly influences the financial performance (ROA) of deposit money banks in Nigeria. This implied that management quality ratio and coverage ratio reduce the return on assets of deposit money banks in Nigeria. While loan to deposit ratio increases the return on assets of deposit money banks in Nigeria.

The study recommends that deposit money banks in Nigeria should focus on improving their management practices. This includes strengthening leadership capabilities, strategic decision-making, and operational efficiency. DMBs in Nigeria should invest in talent development, promote a positive work culture, and continuously evaluate and improve their management processes to maximize financial performance.

The study also revealed that the CR had a negative and significant effect on the ROA of DMBs in Nigeria. This implies that maintaining a higher coverage ratio is crucial for improving financial performance (ROA). DMBs in Nigeria should focus on enhancing their risk management frameworks and credit assessment processes to minimize non-performing loans (NPLs). By maintaining adequate provisions or reserves to cover potential losses, banks can improve their asset quality, reduce credit risk, and enhance profitability.

The study equally recommends that deposit money banks in Nigeria should carefully manage their loan portfolios and liquidity positions to avoid excessive risk-taking or liquidity constraints. Striking a balance between loan growth and deposit mobilization will help ensure sustainable lending activities and maintain a healthy asset-liability management strategy.

References

- Abu, J., & Wafi, A. (2016). The role of banks in Palestine enriching social responsibility and its impacts on financial performance. Master diss., Al-Azhar University, Gaza, Palestine.
- Abubakar, A. Sulaiman, I., & Haruna, U. (2021). Effect of firms characteristics on financial performance of listed insurance companies in Nigeria. *African Journal of History and Archaeology*, 3(1). 1-10. <https://www.researchgate.net/publication/353643376>
- Achieng, B.O., Muturi, W., & Wanjare, J. (2018). Effect of equity financing options on financial performance of non-financial firms listed at the Nairobi securities exchange, Kenya. *Applied Economics and Finance*, 5(4), 160-173.
- Akani, O., & Swenem, Y. (2019). Dividend policy and the profitability of selected Quoted manufacturing firms in Nigeria: An empirical analysis. *Journal of Finance and Accounting*. 4(4), 212-224
- Al-Eitan, G. N., & Bani-Khalid, T. O. (2019). Credit risk and financial performance of the Jordanian commercial banks: a panel data analysis. *Academy of Accounting and Financial Studies Journal*, 23(5), 1-13.
- Ali, S. A. (2015). The effect of credit risk management on financial performance of the Jordanian commercial banks. *Investment Management and Financial Innovations*, 12(1-2), 338-345
- Bhattacharai, B.P. (2019). Effect of credit risk management on financial performance of commercial banks in Nepal. *European Journal of Accounting, Auditing and Finance Research*, 7(5), 87-103

- Chuke, E. N., & Kenneth, C. A. (2018). Impact of capital structure on performance of commercial banks in Nigeria. *International Journal of Economics and Financial Issues*, 8(2), 298-303.
- Fabozzi, F. J., Modigliani, F., & Jones, F. J. (2010). *Foundations of financial markets and institutions* (4th ed.). Prentice-Hall.
- Gadzo, S.G., Kportorgbi, H.K., & Gatsi, J.G. (2019). Credit risk and operational risk on financial performance of universal banks in Ghana: A partial least squared structural equation model (PLS SEM) approach. *Cogent Economics & Finance*, 7, 1-16, 7:1589406. <https://doi.org/10.1080/23322039.2019.1589406>.
- Hapsari, I. (2018). Moderating role of size in the effect of loan to deposit ratio and non performing loan toward banking financial performance. *Advances in Social Science, Education and Humanities Research*, 231, 351-364. 5th International Conference on Community Development
- Hull, J. (2012). *Risk Management and Financial Institutions*, + Web Site, 3rd Edition. John Wiley & Sons.
- Kurotamunobaraomi, T., Giarni, I. B., & Obari, O. B. (2017). Liquidity and performance of Nigerian Banks. *Journal of Accounting and Financial Management*, 3(1), 2504 – 8856.
- Lew, B., & Lau, W. (2022). Credit risk and commercial bank performance: evidence from ASEAN. *International Journal of Academic Research economics and management sciences*, 11(3), 274 – 288.
- Mishkin, F. S., & Eakins, S. G. (2015). *Financial Markets and Institutions* (8th ed.). Pearson Education.
- Noghondari, A. T., Zeinali, H., & Beytollah, A. (2021). The Effect of company's interest coverage ratio on the structural and reduced-form models in predicting credit derivatives price. *Iranian Journal of Management Studies (IJMS)* 2022, 15(1): 169-188.
- Nwude, E.C., & Okeke, C. (2018). Impact of credit risk management on the performance of selected Nigerian Banks. *International Journal of Economics and Financial Issues*, 8(2), 287-297. <file:///C:/Users/user/Downloads/6001-15787-1-PB.pdf>
- Owojori, A. A., Akintoye, I. R., & Adidu, F. A. (2011). The challenge of risk management in Nigerian banks in the post consolidation era. *Journal of Accounting and Taxation*, 3(2), 23-31.

- Pyzdek, T., & Keller, P. A. (2014). *The handbook for quality management: a complete guide to operational excellence* (2nd ed.). McGraw-Hill Education.
- Qazi, U., Ahmad, A., Khan, M., & Aisha, R. (2022). Credit risk management practices and banks' performance in Pakistan. *Journal of Entrepreneurship, Management, and Innovation* 4(1), 136-148.
- Rengasamy, D. (2014). Impact of loan deposit ratio (LDR) on profitability: Panel evidence from commercial banks in Malaysia. Proceedings of the Third International Conference on Global Business, Economics, Finance and Social Sciences, Mumbai, India.
- Rose, P. S., & Hudgins, S. C. (2012). *Bank Management & Financial Services* (9th ed.). McGraw-Hill Education.
- Sari, L., & Septiano, R. (2020). Effects of intervening loan to deposit ratio on profitability in Indonesia. *Journal of Accounting and Financial Management (FAFM)*, 1(5), 228-241. DOI: <https://doi.org/10.38035/jafm.v1i5>
- Saunders, A., & Cornett, M. M. (2017). *Financial Institutions Management: A Risk Management Approach* (9th ed.). McGraw-Hill Education.
- Sidhu, A.V., Rastogi, S., Gupte, R. & Bhimavarapu, V. M. (2022). Impact of liquidity coverage ratio on performance of select Indian banks. *J. Risk Financial Management*, 15(5), 226; <https://doi.org/10.3390/jrfm15050226>
- Soyemi, K.A., Ogunleye, J.O., & Ashogbon, F.O. (2014), Risk management practices and financial performance: Evidence from the Nigerian deposit money banks (DMBs). *The Business and Management Review*, 4(4), 1-37.
- Twairesh, A.EM. (2014). The impact of capital structure on firm performance evidence from Saudi Arabia. *Journal of Applied Finance & Banking*, 4(2), 1-12.