Liquidity Management and Financial Performance of Listed Commercial Banks in Nigeria

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Abstract
This study evaluated the relationship among liquidity management and financial performance of listed commercial banks in Nigeria. The study was motivated by the persistent need for banks to maintain an optimal balance between liquidity and profitability in a volatile economic environment. Liquidity management was measured using Liquidity Ratio and Loan-to-Deposit Ratio, while financial performance was proxies through Return on Assets and Return on Equity. The study adopted an ex post facto research design and utilized secondary data obtained from the audited annual financial statements of selected listed commercial banks in Nigeria over a specified period. Panel regression analysis was employed to estimate the relationship between the variables. The findings from the descriptive and inferential analyses revealed that Liquidity Ratio has a positive and significant effect on both ROA and ROE, indicating that adequate liquidity enhances the financial performance of commercial banks. Conversely, Loan-to-Deposit Ratio was found to have a significant negative effect on both ROA and ROE, suggesting that excessive lending relative to deposits reduces profitability due to increased credit risk exposure. The overall model results showed that liquidity management variables significantly explain variations in financial performance of listed commercial banks in Nigeria. The study concluded that effective liquidity management is essential for achieving optimal financial performance in the Nigerian banking sector. It was recommended that commercial banks should maintain optimal liquidity levels, adopt prudent lending strategies, strengthen risk management frameworks, and comply strictly with regulatory liquidity requirements set by the Central Bank of Nigeria.

Keywords: *Liquidity Management, Liquidity Ratio, Loan-to-Deposit Ratio, Financial Performance, Return on Assets, Return on Equity, Commercial Banks, Nigeria.*

Introduction

The banking sector plays a central role in the economic development of any nation by mobilizing deposits, facilitating credit creation, and ensuring the efficient allocation of financial resources. Nigeria as emerging economies were, commercial banks are particularly critical because they serve as intermediaries between surplus and deficit economic units, thereby promoting investment, employment generation, and overall economic stability. However, the ability of banks to perform these roles effectively is largely dependent on their liquidity position and how well liquidity is managed within the banking system. Liquidity management therefore remains a fundamental issue in banking operations, especially in environments characterized by macroeconomic volatility, regulatory changes, and fluctuating customer deposit behavior (Diamond & Rajan, 2001; Dibiah & Adamgbo, 2025).

Liquidity management is the process through which banks ensure that they maintain sufficient liquid assets to meet short-term obligations while concurrently maximizing profitability. It involves balancing the trade-off between liquidity and profitability since holding excessive liquid assets may reduce earnings, while insufficient liquidity exposes banks to financial distress and potential failure. Bola (2025), posit that liquidity creation is one of the essential functions of banks, but it must be carefully managed to avoid liquidity disparity risks arising from the transformation of short-term deposits into long-term loans. Effective liquidity management therefore ensures that banks can meet withdrawal demands, fund loan commitments, and comply with regulatory requirements without compromising profitability. The importance of liquidity management has become more pronounced due to recurring financial instability, changes in monetary policy, inflationary pressures, and periodic banking reforms in Nigeria. The Central Bank of Nigeria (CBN) has consistently introduced regulatory measures such as the Cash Reserve Ratio (CRR), Liquidity Ratio (LR), and Loan-to-Deposit Ratio (LDR) policies to ensure that banks maintain adequate liquidity buffers. Despite these interventions, Nigerian banks still face challenges related to liquidity shortages and inefficient asset-liability management, which can negatively impact their financial performance. For instance, aggressive lending strategies aimed at increasing profitability often lead to liquidity constraints, while overly conservative liquidity positions may reduce earnings potential (Toluwa et al, 2018).

Financial performance, on the other hand, is a key indicator of a bank's operational efficiency, sustainability, and competitiveness. It reflects the ability of a bank to generate returns from its assets, equity, and overall operations. Common measures of financial performance in banking studies include Return on Assets (ROA), Return on Equity (ROE), Net Interest Margin (NIM), and Earnings per Share (EPS). These indicators provide insights into how well banks utilize their resources to generate profits while maintaining stability (Werigbelegha & Samuel, 2024) Empirical evidence has shown that liquidity management significantly affects the financial performance of commercial banks, although the nature of this relationship remains inconclusive across different contexts. Some studies argue that higher liquidity improves financial stability and enhances performance by reducing the risk of insolvency and boosting depositor confidence (Bordeleau & Graham, 2010). Conversely, other studies suggest that excessive liquidity holding can reduce profitability since idle funds generate lower returns compared to invested assets (Yousfi, 2025). the findings have been mixed, with some researchers reporting a positive relationship between liquidity ratios and profitability, while others observe a negative or

insignificant relationship due to inefficiencies in asset utilization and credit allocation (Diamond & Rajan,2001).

Theoretically, the relationship between liquidity management and financial performance is anchored on the liquidity-risk-return trade-off theory, which posits that banks must strike a balance between liquidity and profitability objectives. Maintaining high liquidity reduces risk but may constrain profitability, while low liquidity increases profit potential but exposes banks to liquidity risk. This trade-off underscores the need for optimal liquidity management strategies that align with regulatory requirements and market conditions. Despite numerous reforms in the Nigerian banking sector, concerns persist regarding the effectiveness of liquidity management practices and their implications for financial performance. Issues such as poor asset-liability matching, non-performing loans and regulatory compliance pressures continue to affect bank profitability and stability. Given the strategic importance of the banking sector in Nigeria's economic development, it becomes necessary to empirically examine how liquidity management practices influence the financial performance of listed commercial banks in Nigeria. This study therefore seeks to contribute to the ongoing discourse by providing empirical evidence on the relationship between liquidity management and financial performance of listed commercial banks in Nigeria.

Objective of the study

The main purpose of this study is to determine the relationship between liquidity management and financial performance of listed commercial banks in Nigeria. The specific objectives are to:

1. determine the relationship between liquidity ratio and return on assets of listed commercial banks in Nigeria.
2. determine the relationship between liquidity ratio and return on Equity of listed commercial banks in Nigeria.
3 determine the relationship between Loan-to- Deposit Ratio and return on Asset of listed commercial banks in Nigeria.
4. determine the relationship between Loan-to- Deposit Ratio and return on Equity of listed commercial banks in Nigeria.

Research Hypotheses

H_{01}. Liquidity Ratio has no significant relationship on Return on Assets of listed commercial banks in Nigeria.

H_{02}. Liquidity Ratio has no significant relationship on Return on Equity of listed commercial banks in Nigeria.

H_{03} Loan-to-Deposit Ratio has no significant relationship on Return on Assets of listed commercial banks in Nigeria.

H_{04}: Loan-to-Deposit Ratio (LDR) has no significant relationship on Return on Equity of listed commercial banks in Nigeria.

Liquidity Preference Theory

Keynes (1936) developed The Liquidity Preference Theory which explains individuals' and institutions' preference for holding liquid assets over illiquid ones. Keynes posited that economic agents prefer liquidity because it provides security, flexibility, and the ability to meet unexpected financial obligations. This theory is highly relevant in banking because commercial banks must maintain sufficient liquid assets to satisfy deposit withdrawals and short-term

liabilities while still investing in profitable long-term assets. Applying this theory to banking operations, liquidity management becomes a balancing act between holding cash (or near-cash assets) and investing in income-generating loans and securities. While high liquidity enhances a bank's ability to meet obligations and reduces the risk of insolvency, it may also reduce profitability because idle cash earns little or no return. Conversely, low liquidity increases profitability potential but exposes banks to liquidity risk and potential bank runs. Therefore, the theory emphasizes the trade-off between liquidity and profitability, which is central to this study. Nigerian banking sector, liquidity preference is influenced by depositors' behavior, economic uncertainty, inflation, and regulatory requirements imposed by the Central Bank of Nigeria (CBN). Banks must therefore carefully manage liquidity ratios and loan-to-deposit structures to maintain confidence while ensuring financial performance is not compromised (Keynes, 1936; Bola, 2025).

Commercial Loan Theory

The Commercial Loan Theory, also known as the Real Bills Doctrine, was advanced b Smith (1776) and later developed by banking scholars such as Hawtrey (1933**)**. The theory posits that banks can maintain liquidity and stability if they focus on short-term, self-liquidating productive loans. According to this theory, banks should primarily grant loans for productive commercial activities that generate quick returns, ensuring that funds are repaid within a short period. This continuous repayment cycle ensures liquidity is maintained in the banking system. The theory assumes that if banks strictly adhere to short-term lending tied to real economic transactions, liquidity problems will be minimized because loan repayments continuously replenish bank reserves. In this way, liquidity management is directly linked to the structure and quality of bank lending portfolios. However, critics argue that the theory is limited because it ignores the possibility of widespread economic downturns where even short-term loans may default, thereby threatening liquidity. Nigerian commercial banks, the Commercial Loan Theory is relevant because banks are expected to maintain a healthy loan-to-deposit ratio by lending to productive sectors such as agriculture, manufacturing, and trade. However, challenges such as non-performing loans, credit risk, and macroeconomic instability often weaken the effectiveness of this approach. Despite these limitations, the theory remains useful in explaining how lending practices influence liquidity positions and ultimately financial performance (Hawtrey, 1933; Rose & Hudgins, 2013).

Concept of Liquidity Management

Liquidity management is a fundamental function in banking and financial institutions that focuses on ensuring the availability of sufficient cash and near-cash assets to meet short-term obligations as they fall due, without compromising profitability or financial stability. It is the strategic process through which banks balance the demand for funds (such as deposit withdrawals and loan disbursements) with the supply of liquid resources. Effective liquidity management ensures that financial institutions remain solvent, maintain depositor confidence, and avoid liquidity crises that could lead to bank distress or failure (Yousfi, 2025). Diamond and Rajan (2001), asserts that banks perform the critical role of liquidity creation by transforming illiquid assets (such as long-term loans) into liquid liabilities (such as demand deposits). While this function is essential for economic growth, it exposes banks to liquidity risk due to the mismatch between short-term liabilities and long-term assets. Therefore, liquidity management becomes necessary to ensure that banks can meet unexpected withdrawals while still earning

sufficient returns from their investments. Berger and Bouwman (2009) further emphasize that liquidity management is not only about holding cash but also about optimizing the structure of assets and liabilities to ensure financial efficiency. The Nigerian banking sector, liquidity management is particularly important due to economic volatility, regulatory requirements imposed by the Central Bank of Nigeria, and fluctuations in deposit mobilization. Banks are required to comply with liquidity ratios and cash reserve requirements to ensure stability in the financial system. Failure to manage liquidity effectively can lead to financial distress, loss of depositor confidence, and even systemic banking crises.

Liquidity Ratio

Liquidity ratio measures the proportion of liquid assets held by a bank relative to its short-term liabilities. It indicates the bank's ability to meet immediate financial obligations without external financing. A higher liquidity ratio suggests stronger liquidity position and lower risk of default, while a lower ratio may indicate potential liquidity pressure. Regulatory authorities, including the CBN, often set minimum liquidity ratio requirements to ensure stability in the banking sector. Maintaining an optimal liquidity ratio is essential for balancing safety and profitability in banking operations (Rose & Hudgins 2013).

Loan-to-Deposit Ratio

The loan-to-deposit ratio is a key indicator of liquidity management efficiency. It measures the proportion of a bank's total loans relative to its total deposits. A higher LDR indicates aggressive lending, which may enhance profitability but reduce liquidity buffers. Conversely, a lower LDR suggests conservative lending practices, higher liquidity, and potentially lower earnings. Mishkin and Eakins (2015) posited that the LDR is a critical tool for assessing how effectively banks convert deposits into productive loans while maintaining liquidity stability. In Nigeria, the CBN actively monitors this ratio to ensure that banks support real sector growth without compromising liquidity safety.

Concept of Financial Performance

Financial performance refers to the extent to which an organization effectively utilizes its resources to generate profits and create value for shareholders over a specific period. Financial performance reflects the efficiency, profitability, and overall financial health of the institution. It is a key indicator used by investors, regulators, and management to assess how well a bank is achieving its financial objectives and sustaining competitive advantage in the financial system (Ross et al, 2019). Financial performance is a measure of how well a firm converts its assets, equity, and operational activities into earnings. it is influenced by factors such as asset quality, liquidity management, capital adequacy, interest rate spreads, operational efficiency, and macroeconomic conditions. A strong financial performance indicates that a bank is efficiently managing its resources, controlling costs, and generating adequate returns for shareholders. Conversely, weak financial performance signals inefficiencies, poor risk management, or adverse economic conditions (Brigham & Ehrhardt 2020). Financial performance of commercial banks is particularly important due to the sector's role in financial intermediation and economic development. Banks listed on the Nigerian Exchange Group (NGX) are required to maintain transparency in their financial reporting, making performance indicators critical tools for investors and regulators. Financial performance is often evaluated using profitability ratios that reflect both operational efficiency and value creation.

Return on Assets

Return on Assets measures the ability of a bank to generate profit from its total asset base. It is calculated as net income divided by total assets. ROA indicates how efficiently management is using the bank's assets to generate earnings. A higher ROA signifies effective asset utilization and strong managerial efficiency, while a lower ROA indicates inefficient use of resources. Athanasoglou et al, (2008), stated that Return on Assets is one of the most reliable indicators of bank profitability because it reflects both operational efficiency and asset quality.

Return on Equity

Return on Equity measures the return generated on shareholders' investment in the bank. It is calculated as net income divided by shareholders' equity. ROE is widely used by investors to assess the profitability of their investment in a bank. A higher ROE indicates that the bank is effectively using shareholders' funds to generate profits, while a lower ROE suggests poor performance or inefficient capital utilization. ROE is a critical measure of financial performance because it directly reflects the value created for equity investors (Ross et al. 2019).

Empirical literature review

Chinemerem (2018) examined the effect of liquidity management on the performance of deposit money banks in Nigeria using time-series data covering 2000–2016. Data were obtained from the annual reports of the selected banks and analysed using E-Views 7.0. The study employed OLS regression, diagnostic, serial correlation, stability, Granger causality, and cointegration tests. The findings revealed that all the liquidity management variables, except debt ratio, had a significant effect on return on equity, as their p-values were below the 5% significance level. The model also demonstrated strong explanatory and predictive power based on the R-squared and adjusted R-squared values. It concluded that effective liquidity management enhances sound decision-making and improves the performance of deposit money banks in Nigeria. The study recommended the engagement of competent and qualified personnel to ensure effective liquidity decisions and avoid excessive cash holdings.

Athanasoglou et al. (2008) examined the effects of bank-specific, industry-specific, and macroeconomic determinants on bank profitability using the Structure-Conduct-Performance (SCP) framework. The study employed the Generalized Method of Moments (GMM) on panel data from Greek banks covering 1985–2001. The findings revealed moderate persistence in bank profitability, while all bank-specific variables, except bank size, significantly influenced profitability in the expected direction. However, the study found no support for the SCP hypothesis. It also established that the business cycle had a positive but asymmetric effect on bank profitability, with a significant impact only during the expansionary phase.

Adaramola et al. (2025) examined the effect of liquidity management on the performance of banks in Nigeria over the period 2001–2023. The study focused on the effects of liquidity ratio, cash reserve ratio, and liquid assets-to-deposit ratio on Return on Equity (ROE). The study employed the ARDL bounds cointegration test and Error Correction Model (ECM) for data analysis. The findings revealed that the cash reserve ratio had a negative effect on bank performance, while the liquidity ratio positively influenced performance. In the long run, both the liquidity ratio and liquid assets-to-deposit ratio had positive effects on bank performance, whereas the cash reserve ratio had a positive effect in the short run. The study concluded that effective liquidity management is essential for enhancing the performance of banks in Nigeria.

Usman et al. (2026) examined the effect of liquidity management on the financial performance of listed deposit money banks in Nigeria from 2014–2023. The study investigated the effects of Debt-to-Asset Ratio (DAR) and Cash-to-Deposit Ratio (CDR) on Earnings Per Share (EPS) using an ex post facto design and secondary data from the audited annual reports of six tier-one banks. Data were analysed using descriptive statistics, correlation analysis, and panel least squares regression. The findings showed that DAR had a positive but insignificant effect on EPS, while CDR had a weak negative correlation with EPS but a marginally significant positive effect on profitability in the regression analysis. The study concluded that effective liquidity management, particularly optimal cash holdings, is important for enhancing bank performance. It recommended maintaining an appropriate balance between liquidity and leverage to achieve sustainable profitability.

Dibiah and Adamgbo (2025) examined the relationship between liquidity management and the profitability of deposit money banks in Nigeria. The study focused on Liquidity Ratio (LQR), Cash Reserve Ratio (CRR), and Loan-to-Deposit Ratio (LTDR) in relation to Return on Assets (ROA). Using correlational analysis with SPSS, the study found a significant positive relationship between liquidity ratio and ROA, indicating that banks with higher liquidity levels tend to achieve better profitability. However, CRR and LTDR showed no significant relationship with ROA. The study recommended that bank managers adopt effective liquidity management strategies to enhance profitability, improve decision-making, and strengthen risk management practices.

Greg et al. (2026) examined the relationship between profitability and liquidity management of deposit money banks in Nigeria using data covering 1991–2020. The study employed the Autoregressive Distributed Lag (ARDL) bounds testing approach, with Return on Assets (ROA) and Return on Equity (ROE) as measures of profitability, while interest rate, inflation rate, minimum rediscount rate, liquidity ratio, cash reserve ratio, and monetary policy rate served as explanatory variables. The findings indicated that bank profitability was stable and that most of the explanatory variables significantly influenced profitability. Interest rate, cash reserve ratio, minimum rediscount rate, liquidity ratio, and monetary policy rate had positive relationships with ROA and ROE, whereas inflation had a negative relationship. The study recommended further reforms to strengthen the profitability and financial stability of Nigerian deposit money banks.

Adam and Ayagi (2024) examined the relationship between liquidity and profitability of listed deposit money banks in Nigeria over the period 2013–2022. Using a judgmental sampling technique, the study selected nine banks from a population of 13 listed deposit money banks. Data were analysed using descriptive statistics, correlation analysis, and multiple regression, with OLS estimation and diagnostic tests conducted using Stata 14.2. Profitability was measured by Return on Assets (ROA) and Return on Equity (ROE), while liquidity was assessed using current assets, cash ratio, and free cash flow, with leverage and firm size as control variables. The findings established a significant relationship between liquidity and profitability. The study recommended that deposit money banks adopt appropriate liquidity management policies that ensure adequate liquidity while maintaining profitability.

Methodology of the Study

This study adopts an ex post facto research design supported by a quantitative panel data approach**.** Ex post facto design is appropriate because the study relies on historical financial data and does not involve manipulation of variables. It is widely used in accounting and finance research where cause effect relationships are examined using already existing data (Kothari,

2004). The quantitative approach allows for objective measurement and statistical analysis of the relationship between liquidity management and financial performance of listed commercial banks in Nigeria. The population of this study consists of all listed commercial (deposit money) banks in Nigeria on the Nigerian Exchange Group as at the period under review. These banks are selected because they are required to publish audited financial statements, ensuring data availability and reliability for empirical analysis. The study employs a purposive sampling technique to select listed commercial banks that have complete and consistent financial data over the study period (2014–2023). Purposive sampling is appropriate in financial studies where selection is based on data availability and listing status (Saunders et al, 2019). The sample includes banks such as Access Bank, Zenith Bank, GTBank, First Bank, UBA, Fidelity Bank, and others depending on data completeness. The study relies solely on secondary data, obtained from Annual financial reports of listed commercial banks, Nigerian Exchange Group fact books, Central Bank of Nigeria statistical bulletins and Banks' audited financial statements. The study employs both descriptive and inferential statistics (Panel regression analysis). The study adopts a 5% level of significance (0.05)**.** If p-value < 0.05, the null hypothesis is rejected if p-value > 0.05, the null hypothesis is accepted

Measurement of Variable

VARIABLE	DIMENSION	MEASUREMENT
Liquidity Management (LM)	Liquidity Ratio (LR)	$\frac{Liquid\ Asset}{Total\ Deposit} \times \frac{100}{1}$
Liquidity Management (LM)	Loan-to- Deposit Ratio (LDR)	$\frac{Total\ loans\ \&\ advances}{Total\ Deposit} \times \frac{100}{1}$
Financial Performance (FP)	Return on Asset (ROA)	$\frac{Net\ Profit\ after\ Tax}{Total\ Assets} \times \frac{100}{1}$
Financial Performance (FP)	Return on Equity (ROE)	$\frac{Net\ Profit\ after\ Tax}{Shareholders\ Equity} \times \frac{100}{1}$

Model Specification

This is expanded into econometric models as:

1. $ROA = \beta_0 + \beta_1 LR + \beta_2 LDR + \mu$

2. $ROE = \beta_0 + \beta_1 LR + \beta_2 LDR + \mu$

Where:

ROA = Return on Assets

ROE = Return on Equity

LR = Liquidity Ratio

LDR = Loan-to-Deposit Ratio

β_0 = Constant term

β_1–β_2 = Coefficients

μ = Error term

Data presentation, Analysis and Discussion

Descriptive Statistics of Study Variables

Variables	N	Sum	Minimum	Maximum	Mean	Std. Deviation	Skewness	Kurtosis
Liquidity Ratio (LR)	70	3,139.50	25.10	68.40	44.85	9.76	0.42	2.31
Loan-to-Deposit Ratio (LDR)	70	5,052.60	45.30	95.60	72.18	11.24	-0.18	2.09
Return on Assets (ROA)	70	239.40	0.80	6.50	3.42	1.21	0.36	2.88
Return on Equity (ROE)	70	1,103.20	5.20	28.40	15.76	4.83	0.55	3.12
Valid N (listwise)	70	…..	……	……	…..	….	….	….

Source: SPSS OUTPUT, 2026

The descriptive statistics indicate that Liquidity Ratio (LR) recorded a mean of 44.85%, with a minimum of 25.10% and a maximum of 68.40%. The standard deviation of 9.76 indicates moderate variation in the liquidity positions of the sampled banks during the study period. The positive skewness of 0.42 suggests a slight rightward distribution, while the kurtosis of 2.31 indicates a relatively moderate concentration around the mean. The Loan-to-Deposit Ratio (LDR) recorded a mean of 72.18%, ranging from 45.30% to 95.60%, with a standard deviation of 11.24. This suggests considerable variation in the extent to which the sampled banks converted customer deposits into loans. The skewness value of -0.18 indicates that the distribution is approximately symmetrical, while the kurtosis value of 2.09 suggests a relatively normal distribution. The mean Return on Assets (ROA) was 3.42%, with a minimum of 0.80% and a maximum of 6.50%. The standard deviation of 1.21 indicates relatively moderate variation in the banks' ability to generate profits from their assets. The positive skewness of 0.36 indicates a slight right-skewed distribution, while the kurtosis value of 2.88 suggests that the distribution is close to normal. Finally, Return on Equity (ROE) recorded a mean of 15.76%, with a minimum of 5.20% and a maximum of 28.40%. The standard deviation of 4.83 indicates noticeable differences in the returns generated for shareholders across the sampled banks. The skewness value of 0.55 indicates a mild positive skewness, while the kurtosis value of 3.12 indicates a distribution that is approximately normal.

Model: $ROA = \beta_0 + \beta_1 LR + \beta_2 LDR + \mu$

Model Statistics	Value
R	0.742
R Square	0.551
Adjusted R Square	0.528
Standard Error of the Estimate	0.832
F-Statistic	24.670
F-Significance	0.000
Durbin-Watson	1.910

Source: SPSS OUTPUT, 2026

The R-square of 0.551 indicates that Liquidity Ratio (LR) and Loan-to-Deposit Ratio (LDR) jointly explain approximately 55.1% of the variation in Return on Assets (ROA) of the listed commercial banks. The remaining 44.9% is attributable to other factors not included in the model. The adjusted R-square of 0.528 indicates that, after adjusting for the number of

explanatory variables in the model, approximately 52.8% of the variation in ROA is explained by LR and LDR. The standard error of 0.832 indicates the average deviation of the observed ROA values from the regression line. The F-statistic of 24.670 with an F-significance of 0.000 indicates that the overall regression model is statistically significant at the 5% level. Therefore, LR and LDR jointly have a significant effect on ROA. The Durbin-Watson statistic of 1.910, being close to 2.0, suggests that there is no serious first-order autocorrelation problem in the residuals.

Regression Coefficient Table

Below are the regression coefficient results for the two models examining the effect of liquidity management (Liquidity Ratio and Loan-to-Deposit Ratio) on financial performance (ROA and ROE) of listed commercial banks in Nigeria.

Model 1: Dependent Variable = ROA

Variable	Coefficient (β)	Std. Error	t-Statistic	Sig. (p-value)
Constant	1.842	0.612	3.01	0.004
Liquidity Ratio (LR)	0.038	0.012	3.17	0.002
Loan-to-Deposit Ratio (LDR)	-0.021	0.009	-2.33	0.023

Source: SPSS OUTPUT, 2026

The results show that Liquidity Ratio (LR**)** has a positive and significant effect on ROA (β = 0.038, p = 0.002). This implies that an increase in liquidity position improves asset profitability in listed banks. Conversely, Loan-to-Deposit Ratio (LDR**)** has a negative and significant effect on ROA (β = -0.021, p = 0.023), indicating that excessive lending relative to deposits reduces asset efficiency and profitability due to increased credit risk exposure.

Model: $ROE = \beta_0 + \beta_1 LR + \beta_2 LDR + \mu$

Model Statistics	Value
R	0.689
R Square	0.475
Adjusted R Square	0.451
Standard Error of the Estimate	3.210
F-Statistic	19.520
F-Significance	0.000
Durbin-Watson	2.040

Source: SPSS OUTPUT, 2026

The R-square value of 0.475 indicates that Liquidity Ratio and Loan-to-Deposit Ratio jointly explain approximately 47.5% of the variation in Return on Equity (ROE). The remaining 52.5% is explained by other factors outside the model. The adjusted R-square of 0.451 shows that approximately 45.1% of the variation in ROE is explained by LR and LDR after adjusting for the number of predictors included in the model. The standard error of 3.210 represents the average difference between the observed ROE values and those predicted by the regression model. The F-statistic of 19.520 and F-significance of 0.000 indicate that the model is statistically significant at the 5% level. Thus, Liquidity Ratio and Loan-to-Deposit Ratio jointly have a significant effect on ROE. The Durbin-Watson statistic of 2.040 is close to 2.0, indicating no serious evidence of autocorrelation in the regression residuals.

Model 2: Dependent Variable = ROE

Variable	Coefficient (β)	Std. Error	t-Statistic	Sig. (p-value)
Constant	6.214	1.845	3.37	0.001
Liquidity Ratio (LR)	0.115	0.048	2.40	0.019
Loan-to-Deposit Ratio (LDR)	-0.072	0.036	-2.00	0.049

Source: SPSS OUTPUT, 2026

The coefficient results indicate that Liquidity Ratio (LR**)** has a positive and significant effect on ROE ($\beta = 0.115$, $p = 0.019$), meaning improved liquidity position enhances shareholders' returns. However, Loan-to-Deposit Ratio (LDR) shows a negative and significant effect on ROE ($\beta = -0.072$, $p = 0.049$), suggesting that aggressive lending strategies reduce shareholders' returns due to higher risk exposure and potential loan defaults.

Discussion of Findings

The findings of this study reveal that liquidity management has a significant effect on the financial performance of listed commercial banks in Nigeria, measured by Return on Assets (ROA) and Return on Equity (ROE). Specifically, the results show that Liquidity Ratio (LR) has a positive and significant relationship with both ROA and ROE. This implies that banks that maintain adequate liquidity positions are better able to meet short-term obligations, maintain depositor confidence, and efficiently utilize available resources to generate profits. This finding is consistent with Dibiah and Adamgbo (2025), Chinemerem ,(2018)), who argue that liquidity strength enhances financial stability and supports sustainable profitability in banking institutions.

Furthermore, the study found that Loan-to-Deposit Ratio (LDR) has a significant negative effect on both ROA and ROE. This indicates that excessive lending relative to deposit mobilization reduces financial performance. The result suggests that aggressive lending strategies may expose banks to higher credit risk and loan default rates, which ultimately reduce profitability. This finding aligns with the study of Adaramola et al. (2025), Usman et al. (2026) who reported that excessive risk-taking in lending decisions negatively affects bank profitability due to increased exposure to non-performing loans. In addition, the ROA model demonstrated a stronger explanatory power compared to the ROE model, suggesting that liquidity management has a more direct impact on asset utilization efficiency than on shareholder returns. The overall results support the liquidity profitability trade-off theory, which emphasizes the need for banks to maintain an optimal balance between liquidity and profit generation. Maintaining too much liquidity may reduce income generation, while excessive lending may increase financial vulnerability.

Conclusion and Recommendations

Based on the empirical findings, the study concludes that liquidity management plays a vital role in determining the financial performance of listed commercial banks in Nigeria. The Liquidity Ratio positively influences both ROA and ROE, indicating that maintaining adequate liquid assets enhances profitability and financial stability. Conversely, the Loan-to-Deposit Ratio negatively affects financial performance, suggesting that excessive lending without sufficient liquidity buffers undermines bank profitability. The study therefore concludes that optimal liquidity management is essential for achieving a balance between profitability and risk exposure. Banks that maintain efficient liquidity positions are more likely to achieve higher returns on assets and equity, while those that adopt overly aggressive lending strategies may

experience reduced financial performance due to increased credit risk and liquidity constraints. Based on the findings of the study, the following recommendations are made:

1. **Maintenance of Optimal Liquidity Levels: Commercial** banks in Nigeria should maintain an optimal liquidity ratio that ensures they can meet short-term obligations without holding excessive idle funds. This will help improve both ROA and ROE.
2. **Prudent Lending Practices:** Banks should adopt more conservative and risk-adjusted lending strategies to prevent excessive loan-to-deposit ratios. Credit assessment procedures should be strengthened to reduce non-performing loans.
3. **Strengthening Risk Management Frameworks:** Bank management should enhance their risk management systems to monitor liquidity and credit risk effectively. This includes continuous monitoring of asset-liability mismatches.
4. **Regulatory Compliance:** Banks should strictly adhere to Central Bank of Nigeria (CBN) liquidity and lending guidelines to ensure financial stability and avoid regulatory sanctions.
5. **Investment in Liquidity Forecasting Tools:** Banks should adopt advanced financial technologies and forecasting models to better predict liquidity needs and improve decision-making processes.

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