Impact of Liquidity Management on Profitability of Listed Deposit Money Banks in Nigeria: The Moderating Effect of Leverage.

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DOI: 10.56201/ijbfr.vol.11.no4.2025.pg1.11

Abstract
This study investigates the effect of liquidity management on the profitability of listed Deposit Money Banks (DMBs) in Nigeria, with particular emphasis on the moderating role of leverage. The primary aim is to evaluate how key liquidity ratios—current ratio, acid test ratio, cash ratio, and operating cash flow ratio—influence profitability, and how leverage alters these relationships. The study employed an ex-post facto research design, drawing from a population of twenty-two (22) DMBs listed on the Nigerian Exchange Group (NEG) as of December 31, 2023. A stratified random sampling technique was used to select ten (10) banks. Secondary data were sourced from the audited annual reports of the selected banks over the study period. Data analysis was conducted using descriptive statistics, Pearson correlation, and multiple regression models. The study is anchored on three relevant theories: the Shiftability Theory (Nwankwo, 1991), which focuses on managing liabilities to enhance liquidity; the Liquidity Preference Theory (Bibow, 2005), which highlights the transactional and speculative demand for money; and the Liquidity Creation Theory (Berger & Bouwman, 2009), which underscores banks' role in transforming liabilities into productive credit. Findings reveal that the current ratio and cash ratio have significant positive effects on profitability, while the acid test ratio is negative and insignificant. The operating cash flow ratio negatively affects profitability but is statistically significant. Leverage significantly moderates these relationships. The study concludes that liquidity management substantially influences profitability, and leverage is a key moderating factor. It recommends effective liquidity strategies and cautious debt management to optimize financial performance.

Keywords: *Liquidity Management, Profitability, Deposit Money Banks, Leverage*

1. INTRODUCTION

Globally, bank profitability is pivotal to the sustainability and resilience of financial institutions. It fortifies capital foundations, enhances shock absorption capacity, reduces bankruptcy risk, and serves as a buffer during economic downturns (Molyneux & Shen, 2023). Profit-making banks are better positioned to expand their global footprint by adopting advanced technologies, opening new branches, or acquiring other financial entities. These institutions attract investors by offering higher returns on investment, which contributes to increased capital inflows and stronger market positions (Elyasiani & Rezvanian, 2021). Additionally, improved profitability allows for enhanced employee compensation and benefits, ultimately fostering job satisfaction and retention (Ahamed & Mallick, 2022; Molyneux & Shen, 2023).

Moreover, numerous internal and external factors influence bank profitability, including operational efficiency, liquidity management, asset quality, capital adequacy, and economic

stability (Kumar & Gupta, 2023; García & Zabalza, 2022). The 2024 Deloitte report identifies global challenges such as fluctuating interest rates, inflation, and geopolitical tensions as critical determinants of profitability. Although liquidity—defined as the ability to meet short-term obligations—is essential, it may reduce profitability due to the conservative nature of liquid assets (Moudud-Ul-Huq & Xu, 2023). Ratios such as the current, quick, and cash ratios provide insight into liquidity levels, each with implications for asset utilization and profit generation (Adesina et al., 2018; Olokoyo et al., 2019; Abeysinghe & Basnayake, 2016).

In both developed and developing economies, effective liquidity management is crucial. Particularly in countries like Nigeria, where regulatory and economic volatility prevails, this involves a strategic balance between maximizing returns and maintaining short-term solvency (García & Zabalza, 2022). Poor liquidity decisions can lead to higher borrowing costs, whereas prudent strategies reduce financial pressure and stabilize earnings (Poghosyan & Köhler, 2022). However, banks worldwide face a trade-off: excessive liquidity might signal financial prudence, yet limit profitability by constraining lending and investment opportunities (Elgari & Rahman, 2021; Li & Yang, 2023; Yorulmaz, 2022).

For Nigerian banks, this tension is even more pronounced. Studies confirm that although liquidity ensures stability, it may suppress returns if overemphasized (Nguyen & Nguyen, 2021; Ruiz & Rodríguez, 2023; García-Herrero & Martínez-Pería, 2022). Complications like high non-performing loans, forex fluctuations, and irregular deposit patterns exacerbate this challenge (Ezeani & Agba, 2022; Akinlo & Akinlo, 2023; Ogunleye & Folawewo, 2023). While Nigerian banks are generally less debt-reliant, the role of leverage remains vital in moderating the liquidity–profitability nexus (Ali & Gani, 2023; García & Zabalza, 2022).

Therefore, across global and local context such as Nigeria, the interplay between liquidity and profitability in banking is complex and dynamic. Sustainable financial performance requires not only robust liquidity and prudent leverage management but also adaptive strategies that align with changing economic realities.

STATEMENT OF THE PROBLEM

Despite the necessity for effective liquidity management to ensure financial stability and meet short-term obligations, Nigerian banks struggle to balance this with profitability due to regulatory constraints, economic instability, and operational inefficiencies. Conflicting findings on the impact of liquidity on profitability, coupled with varying levels of bank leverage, highlight a complex dynamic. High-leverage banks face amplified financial risks, making leverage a significant moderating factor. Therefore, the problem lies in identifying how leverage influences the relationship between liquidity management and bank profitability in Nigeria.

OBJECTIVES OF THE STUDY

The primary goal is to look into how liquidity management affects the profitability of Nigerian listed deposit money institutions, with an emphasis on how leverage affects this relationship. However, the following are the specific goals:

This study has the objective to determine:

i. How the current ratio affects Nigerian deposit money banks' profitability.
ii. How the acid test ratio affects Nigerian deposit money banks' profitability.
iii. How Nigerian deposit money banks' profitability is affected by their cash ratio.
iv. How Nigerian deposit money banks' profitability is affected by their operating cash flow ratio
v. How leverage affects Nigerian deposit money banks' profitability
vi. How leverage moderates the link between the current ratio and profitability across Nigerian deposit money institutions.

vii. How leverage affects the link between acid test ratio and profitability in Nigerian deposit money institutions.
viii. How leverage affects the link between cash ratio and profitability in Nigerian deposit money institutions.
ix. How leverage affects the link between operating cash flow and profitability in Nigerian deposit money institutions.

RESEARCH HYPOTHESES

i. H_{01}: Current ratio has no significant effect on the profitability of Nigerian deposit money banks.
ii. H_{02}: Acid test ratio has no significant effect on the profitability of Nigerian deposit money banks.
iii. H_{03}: Cash ratio has no significant effect on the profitability of Nigerian deposit money banks.
iv. H_{04}: Operating cash flow ratio has no significant effect on the profitability of Nigerian deposit money banks.
v. H_{05}: Leverage has no significant effect on the profitability of Nigerian deposit money banks.
vi. H_{06}: Leverage does not significantly moderate the relationship between current ratio and profitability of Nigerian deposit money banks.
vii. H_{07}: Leverage does not significantly moderate the relationship between acid test ratio and profitability of Nigerian deposit money banks.
viii. H_{08}: Leverage does not significantly moderate the relationship between cash ratio and profitability of Nigerian deposit money banks.
ix. H_{09}: Leverage does not significantly moderate the relationship between operating cash flow ratio and profitability of Nigerian deposit money banks.

2.1 THEORETICAL REVIEW

The theories that are pertinent to this investigation are listed below:

1. Shiftability Theory

The essence of liquidity management theory gravitates towards a meticulous examination of the liabilities segment within the bank's balance sheet. Central to this theory is the notion that a bank can bolster its liquidity by tapping into its liabilities. Advocates of this theory posit that since banks possess the ability to procure the necessary funds through various channels, maintaining high levels of liquidity assets on the asset side of the balance sheet is deemed unnecessary (Nwankwo, 1991).

2. Liquidity Preference Theories

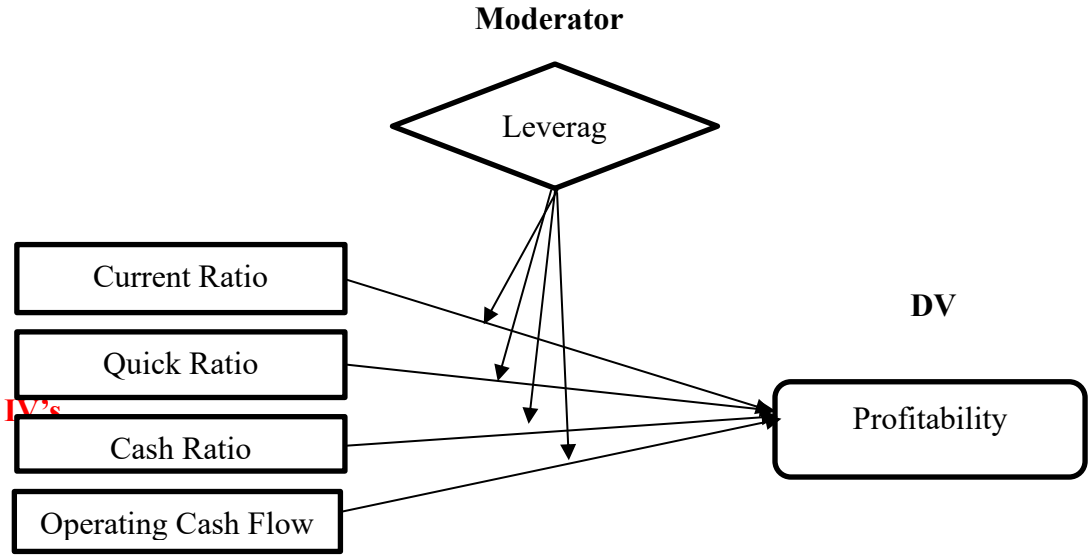
(2005) Bibow Keynes explains that individuals appreciate money for "the transaction of current business and its use as a store of wealth." Because of this, they will be unable to save for future necessities and receive interest on money they wish to spend immediately. In order to make money, they are less inclined to keep money on hand for these uses as interest rates rise.

3. Liquidity Creation Theories

According to the liquidity creation theory, banks support the financial system by converting liquid liabilities into less liquid assets, which promotes stability and economic progress. By leveraging short-term deposits to support long-term loans, banks play a critical role in creating liquidity, allowing individuals and businesses to obtain credit while guaranteeing depositors have instant access to their money (Berger and Bouwman, 2009).

2.2 CONCEPTUAL FRAMEWORK

The conceptual framework below shows liquidity management as independent variables and profitability of banks as a dependent variable, while leverage as a moderator. The framework is based on the hypothesis that liquidity management variables (current ratio, quick ratio, cash ratio, and operating cash flow) have no significant impact on profitability of DMBs in Nigeria.



Source: Researcher's Compilation

2.3 EMPIRICAL REVIEW

Alagbe et al. (2024) embarked on an exploration into how liquidity management strategies influenced the profitability trajectory of eight Nigerian Deposit Money Banks between 2018 and 2022. Leveraging Granger Causality Tests, multiple regression, and correlation analyses, the researchers unearthed a statistically significant positive relationship between enhanced profitability and adept liquidity management practices. Their findings underscored that proactive liquidity management methodologies typically culminate in superior financial outcomes for banks vis-à-vis their industry counterparts.

Ajayi and Lawal (2021) scrutinized the nexus between liquidity management and bank performance in Nigeria by examining data from five Deposit Money Banks over a decade-long period spanning from 2009 to 2018. Their research shed light on the intricate relationship between liquidity management strategies and the operational efficacy of banks, unveiling nuanced insights into how proactive liquidity management approaches can foster enhanced financial performance and competitive advantage within the Nigerian banking landscape.

Therefore, despite valuable insights from previous studies, notable gaps remain. Alagbe et al. (2024) and Ajayi and Lawal (2021) focused primarily on direct relationships between liquidity management and profitability, neglecting the moderating role of leverage. Additionally, their studies examined limited samples of five to eight banks, raising concerns about generalizability. They also did not incorporate newer liquidity metrics such as operating cash flow ratio. This study addresses these gaps by examining a broader sample of listed Deposit Money Banks, incorporating leverage as a moderating variable, and employing a more comprehensive set of liquidity indicators to better understand their impact on profitability.

3. METHOD AND MATERIALS

Research Design

An ex post facto research design is used in this study to assess how liquidity management affects Nigerian deposit money banks' profitability. Without the capacity to change variables, this design enables the researcher to investigate causal factors and interactions based on the data that is already available (Kaka & Ado, 2020).

Sample Size

This study will focus on ten Nigerian deposit money institutions that are listed on the Nigerian Stock Exchange (NSE) and span a ten-year period, from 2014 to 2023. The sample is intended to be representative of all Nigerian deposit money bank customers.

Method of Data Analysis

Because this study involves panel data, the primary data analytic techniques used will be the Fully Modified Ordinary Least Squares (FMOLS) regression methodology and the Pearson correlation test. Preliminary estimation will be performed using descriptive statistics, the Augmented Dickey-Fuller (ADF) unit root test, the Johansen cointegration test, and the Variance Inflation Factor (VIF) for multicollinearity.

To make sure the findings satisfy regression criteria, post-estimation testing will include the normality-histogram test, the ARCH heteroscedasticity test, the CUSUM model stability test, and a serial correlation test utilizing the Correlogram of residuals squared.
To determine whether the findings are consistent with economic a priori conditions, they will then be compared to the study's assumptions. Following the results' analysis and debate, conclusions and suggestions will be made.

MODEL SPECIFICATION

The relationship between liquidity management and profitability, moderated by leverage, can be expressed through the following regression model. The following model is specified to achieve the objectives of this study:

MODEL I

$$ROCE_{it} = \beta_0 + \beta_1 CRR_{it} + \beta_2 ATR_{it} + \beta_3 CAR_{it} + \beta_4 OPC_{it} + \beta_5 SZE_{it} + \epsilon_{it}$$

MODEL II

$$ROCE_{it} = \beta_0 + \beta_1 CRR_{it} + \beta_2 ATR_{it} + \beta_3 CAR_{it} + \beta_4 OPC_{it} + \beta_5 LEVR_{it} + \beta_6 SZE + \epsilon_i$$

MODEL III

$$ROCE_{it} = \beta_0 + \beta_1 CRR_{it} + \beta_2 ATR_{it} + \beta_3 CAR_{it} + \beta_4 OPC_{it} + \beta_5 LEVR_{it} + \beta_6 LEVR*CRR_{it} + \beta_7 LEVR*ATR_{it} + \beta_8 LEVR*CAR_{it} + \beta_9 LEVR*OPC_{it} + \beta_{10} SZE + \epsilon_{it}$$

Where:

ROCE = Return on capital employed
CRR= Current ratio
ATR= Acid Test ratio
CAR = Cash ratio
OPC = Operating cash flow ratio
LEVR = Leverage
SZE = Size
β0 = Constant term
β1 = Coefficient for liquidity management
β2 = Coefficient for leverage
β3 = Coefficient for the interaction term (moderating effect of leverage)

ϵi = Error term

4. RESULTS AND DISCUSION

Regression Results for Model 1

Variables	Coefficient	T	p>|t|	VIF/Tolerance
Constant	-0.2930	-2.59	0.011	
CRR	0.9849	61.57	0.000	1.05/0.9489
ATR	-0.0191	-0.96	0.338	1.01/0.9907
CAR	0.7290	10.83	0.000	1.02/0.9819
OPC	0.0017	0.02	0.985	1.22/0.8201
SZE	0.0093	1.34	0.185	1.25/0.8028
R^2		0.4769		
F-Stat.		96.60		
Prob>F		0.0000		

Source: Stata Output

The cumulative R2, also known as the multiple coefficient of determination, stands at 0.4769, denoting the proportion of total variance in the dependent variable that can be accounted for by the collective impact of the independent variables. This suggests that approximately 48% of the variations observed in the profitability of the listed deposit money banks can be elucidated by factors such as size, current ratio, acid test ratio, cash flow ratio, and operating cash flow ratio. Such a revelation indicates the adequacy of the model and the judicious selection, combination, and utilization of these variables. Moreover, as the F-Statistic of the model amounts to 96.60, signifying statistical significance at the 1% level, the model is deemed suitable for regression analysis.

In particular, Table above delineates that the current ratio (CRR) emerges as a substantial factor, with a coefficient value of 0.9849, a T-Statistics value of 61.57, and a P-value of 0.000, all indicative of significance at the 1% level. The coefficient value of 0.9849 underscores a positive correlation between the current ratio and the profitability of the listed deposit money institutions. Consequently, it is inferred that listed Deposit Money Banks (DMBs) in Nigeria could potentially enhance their profitability by nearly 99% with a mere 1% increment in the current ratio.

HYPOTHESIS TEST

The null hypothesis, according to which the current ratio has no discernible impact on the profitability of listed DMBs in Nigeria, is refuted by the aforementioned result. At all levels of significance, however, the acid test ratio (ATR), with a coefficient of -0.0191, T-Statistics of -0.96, and a P-value of 0.338, is not significant. According to the negative coefficient value of -0.0191 between the profitability of listed DMBs and the acid test ratio, listed DMB profitability will drop by about 2% for every 1% increase in ATR.

HYPOTHESIS TEST

This demonstrates the inability to reject the study's null hypothesis, which holds that ATR has no discernible effect on the profitability of Nigerian listed oil and gas businesses. With a coefficient of 0.7290, a T-statistic of 10.83, and a P-value of 0.000, the cash flow ratio (CAR) is significant at the 1% level of significance. According to the positive coefficient of value of 0.7290, there is a direct correlation between CAR and listed DMB profitability. This means that for every 1% increase in CAR, listed DMB profitability will rise by almost 73%.

HYPOTHESIS TEST

This shows that the study's null hypothesis that CAR has no discernible effect on the profitability of Nigerian listed DMBs is rejected. With a coefficient of 0.0017, T-Statistics of 0.02 and a P-value of 0.985, the operating cash flow ratio (OPC) is not significant at any level of significance. The positive coefficient of value of 0.0017 indicates a direct relationship between OPC and listed DMB profitability, meaning that for every 1% increase in OPC, listed DMB profitability will rise by around 0.17%.

HYPOTHESIS TEST

The study's null hypothesis, according to which OPC has no appreciable effect on the profitability of Nigerian listed DMBs, is not refuted by this evidence. With regard to the control variables, the table's results indicate that size (SZ) is not significant at any level of significance, with a coefficient value of 0.0093, a T-statistics value of 1.34, and a P-value of 0.185. SZ and profitability are positively correlated, as indicated by the coefficient's positive value of 0.0093. This means that for every 1% increase in SZ of listed DMBs, profitability will rise by roughly 1%.

Regression Results for Model 2

Variables	Coefficient	T	p>|t|
Constant	-0.2933	-2.58	0.012
CRR	0.9838	59.86	0.000
ATR	-0.0184	-0.92	0.361
CAR	0.7236	10.40	0.000
OPC	-112.82	-0.32	0.748
LEV	37.609	2.32	0.008
SZE	0.0095	1.35	0.180
R^2		0.5770	
F-Stat.		157.53	
Prob>F		0.0000	

Source: Stata Output

From the regression result of model 2 of this study, it can be seen that moderating variable (leverage) is positively and significantly related to the profitability of listed DMB's with a coefficient and p-values of 37.609 and 2.32 respectively. The positive coefficient value of 37.609 signifies that leverage and profitability of listed DMB's are directly related which implies that for every 1% increase in leverage, profitability of listed DMB's will increase to the tune of 3761% approximately.

HYPOTHESIS TEST

This demonstrates the study's inability to reject the null hypothesis, which holds that leverage has no discernible effect on the profitability of Nigerian listed DMBs.

Regression Result for Model 3

Variables	Coefficient	T	p>|t|	VIF/Tolerance
Constant	-0.6797	-5.15	0.000	
CRR*LEV	-0.1043	-4.54	0.000	1.05/0.9489
ATR*LEV	1.0820	32.34	0.000	1.01/0.9907
CAR*LEV	-0.0089	2.03	0.004	1.02/0.9819
OPC*LEV	0.1376	4.13	0.000	1.22/0.8201
SZE	0.0304	3.69	0.000	1.25/0.8028
R^2		0.6610		
F-Stat.		162.89		
Prob>F		0.0000		

Source: Stata Output

Under the un-moderated results, current ratio is positive and significant to the profitability of listed DMB's in Nigeria. But when moderated with leverage the variable changed to negative but significant to profitability of listed DMB's in Nigeria. Fairchild and MacKinnon (2009) suggest that a moderating variable influences the relationship between the dependent and independent variables, either making it stronger, weaker, or altering its direction. This implies that leverage can moderate the relationship between current ratio and profitability of listed DMB's in Nigeria.

However, acid test ratio was negative and insignificant to the profitability of listed DMB's in Nigeria without moderation and changed to positive and significant after moderation. This finding suggests that the variable acid test ratio has a moderating effect on the relationship between liquidity management and profitability of the listed DMB's in Nigeria in line with the opinion of Fairchild and Mackinnon (2009) that, a moderator is expected to strengthen, weaken or change the direction of the relationship between the dependent and independent variables.

Also, cash flow ratio was positive and significant to the profitability of listed DMB's in Nigeria on the direct result but the direction changed to negative but significant when moderated. This finding also signifies that cash flow ratio has a moderating effect on the relationship between liquidity management and profitability of listed DMB's in Nigeria going by the opinion of Fairchild and Mackinnon (2009) who opines that, a moderator is expected to strengthen, weaken or change the direction of the relationship between the dependent and independent variables.

Additionally, operating cash flow ratio was positive but insignificant to the value of listed DMB's in Nigeria on the direct result but the direction changed to positive and significant. This finding also signifies that operating cash flow has a moderating effect on the relationship between liquidity management and profitability of listed DMB's in Nigeria going by the opinion of Fairchild and Mackinnon (2009) who opines that, a moderator is expected to strengthen, weaken or change the direction of the relationship between the dependent and independent variables.

Furthermore, the table above shows that there is an improvement in the R^2 as well as in the F-statistics signifying that leverage can moderate the relationship between liquidity management and profitability. The R^2 have risen from 0.4769 to 0.6610 while the F-Stat also increased from 96.60 to 162.89 implying the moderating capability of leverage.

IMPLICATION OF FINDINGS

This study provided several practical and policy implications that show its contributions to the existing body of knowledge on the moderating effect of leverage on the nexus between liquidity management and profitability of listed DMB's in Nigeria, with an expectation that it will be of

an immense benefit to companies, shareholders, regulatory agencies, researchers and the academic community.

The study documented policy implications for current ratio. This study provides that current ratio has a positive and significant impact on profitability. This suggests that DMB's with higher current ratios tend to be more profitable as a higher current ratio is indicative that a bank has more current assets than current liabilities, which make it easier for the bank to meet its short-term obligations. Banks should strive to maintain a healthy current ratio in order to avoid financial distress and improve its profitability.

More so, the negative and insignificant impact of acid test ratio on profitability suggests that a bank with a low acid test ratio may be more likely to experience financial distress, such as defaulting on loans or even bankruptcy. This can have an adverse impact on the bank's profitability, as it may be forced to sell assets or take on additional debt at favourable terms. Also worthy of the note is the fact that investors may be hesitant to invest in a company with a low acid test ratio as it is an indication that the bank is not financially stable. This can make it more difficult for the company to raise capital, which can hinder its growth and profitability.

Additionally, the positive and significant effect of cash flow ratio on profitability suggests that banks with a high cash flow ratio are an indication of the health and stability of the banking sector. This suggests that banks have sufficient liquidity to meet their obligations and fund their operations, which can contribute to overall financial stability. The CBN can use this information to adjust monetary policy tools, such as the Cash Reserve Ratio (CRR) and the Monetary Policy Rate (MPR), to ensure adequate liquidity in the banking system and promote sustainable economic growth. A high cash flow ratio can be seen as a positive signal, indicating that a bank is generating cash from its operations and is likely to be profitable as this can attract investors and increase the flow of funds into the banking sector, which can support lending and economic growth and ultimately enhance profitability.

Furthermore, the positive but insignificant effect of operating cash flow ratio on profitability signals a bank's profitability and financial strength, attracting investors and boosting confidence in the banking sector. This can lead to increase capital inflows and further support the growth of DMB's. A strong operating cash flow ratio indicates a bank's ability to generate cash from its core operations, which is crucial for financial stability.

Finally, this study documented a positive and significant influence of leverage on profitability of listed DMB's as there is a need to monitor leverage levels within the financial system. This includes tracking aggregate leverage ratios, as well as the leverage of individual institutions. Early warning systems and stress tests should be employed to identify potential vulnerabilities and prevent excessive risk taking.

CONCLUSION

Based on the findings, the study concludes as follows:

By maintaining an adequate current ratio, banks can ensure their ability to meet immediate financial obligations while simultaneously optimizing the use of their assets to generate profit. This implies that DMB's should strategically balance liquidity and profitability as this underscores the importance of effective liquidity management for DMB's in Nigeria.

Maintaining a healthy acid-test ratio is crucial for banks to ensure short term liquidity, mitigate the risk of financial distress and safeguard their long-term profitability. This is because banks exhibiting low acid test ratios, indicative of a limited capacity to meet immediate obligations with their most liquid assets, face a heightened risk of financial difficulties.

Monitoring and maintaining a strong cash flow ratio are crucial for individual banks and for the stability and soundness of the banking system as a whole. This is because a healthy cash flow ratio acts as an indicator of a bank's resilience, signaling its ability to weather economic fluctuations and unexpected financial pressures.

The positive cycle of strong cash flow, enhanced profitability, increased investment, and boosted confidence contributes significantly to the sustainable growth and development of listed DMB's. This positive perception can attract increased capital inflow, strengthening the banks resources and fostering greater confidence in the overall banking sector.

There is a need to strike a balance between allowing DMB's to leverage for growth and preventing excessive risk taking that could jeopardize financial stability. This is because effective monitoring, coupled with appropriate regulatory measures, is paramount to ensuring the sustainable and healthy development of the banking sector.

RECOMMENDATIONS

In light of the findings and conclusions above, the study offers the following recommendations:

i. The need for banks to evaluate the specific contributions of different current asset and liability components to both liquidity and profitability. This also entails optimizing the balance sheet structure by strategically managing the mix of cash, marketable securities, loans, deposits and short-term borrowings.

ii. Banks should determine an appropriate target range for their acid test ratio, considering industry benchmarks, regulatory requirements and their specific risk appetite. This range should be regularly reviewed and adjusted based on changing economic conditions and the bank's business strategy.

iii. Banks should reduce reliance on any single funding source but rather diversify funding by attracting a mix of deposits, interbank borrowings, and other funding mechanisms. This diversification mitigates the risk of funding disruptions if one source becomes constrained. Also, the need to implement robust cash flow forecasting models that consider various scenarios, including both optimistic and pessimistic economic outlooks.

iv. Banks should focus on strategies that enhance operating cash flow. This includes efficient loan management, effective fee income generation, and controlling operating expenses. The need to actively manage non-performing loans to minimize their impact on cash flow. Also, DMB's should maintain transparent financial reporting and open communication with investors.

v. Regulators like CBN need to move beyond static capital ratios and implement dynamic capital requirements that adjust based on macroeconomic conditions, systemic risk assessments, and individual bank risk profiles. The need to enhance supervisory oversight of DMB's leverage practices, including off-balance sheet activities and complex financial instruments

REFERENCES

Abeysinghe, S., & Basnayake, S. (2016). Cash management and profitability in commercial banks. *International Journal of Economics, Commerce, and Management, 2* (1), 31-44

Adesina, A. A., Olokoyo, F. O., & Udeh, S. N. (2018). Financial ratios and profitability of banks in Nigeria. *International Journal of Economics and Financial Management, 4,* (2), 11-24.

Ahamed, M. M., & Mallick, S. (2022). Leverage and bank profitability: The role of liquidity and capital regulation. *Journal of Banking & Finance, 139*, 106909.

Ali, A., & Gani, A. (2023). Capital structure, liquidity, and profitability: Evidence from Nigerian commercial banks. *Finance Research Letters, 50*, 104295.

Akinlo, A. E., & Akinlo, A. O. (2022). The impact of liquidity management on the profitability of Nigerian commercial banks. *Journal of African Business, 23* (2), 295-312.

Deloitte. (2024). 2024 banking industry outlook. *Retrieved from https://www2.deloitte.com*

Elgari, M. A., & Rahman, A. A. (2021). The effect of liquidity on profitability in Islamic and conventional banks: A comparative study. *Journal of Islamic Accounting and Business Research, 12*(4), 543-558.

Elyasiani, E., & Rezvanian, R. (2021). Bank profitability and the business cycle: The case of U.S. banks. *Journal of Economics and Business, 119,* 106023.

García, C. A., & Zabalza, M. I. (2022). The impact of macroeconomic factors on bank profitability: Evidence from Spanish banks. *Journal of Banking and Finance, 146,* 106679. https://doi.org/10.1016/j.jbankfin.2022.106679

Li, H., & Yang, J. (2023). Liquidity management and bank profitability: Evidence from Chinese commercial banks. *China Economic Review, 74,* 101945.

Mollah, S., & Zaman, M. (2021). Corporate governance and bank profitability: The role of board structure. *International Review of Financial Analysis, 77*, 101818.

Molyneux, P., & Shen, C. H. (2023). The impact of profitability on bank risk-taking: Evidence from global banking sectors. *Journal of Banking & Finance, 146,* 106658.

Moudud-Ul-Huq, S., & Xu, Y. (2023). The impact of liquidity risk on bank profitability: Evidence from emerging economies. *Journal of International Financial Markets, Institutions & Money, 83*, 101596

Nguyen, T. P. T., & Nguyen, D. D. (2021). The impact of leverage on bank profitability: Evidence from Vietnam. *Cogent Economics & Finance, 9* (1), 1918893.

Ogunleye, E. A., & Folawewo, A. O. (2023). Liquidity management challenges and their impact on bank profitability in Nigeria. *International Journal of Finance & Economics, 28* (1), 94-108.

Poghosyan, T., & Köhler, M. (2022). Liquidity and bank profitability: Evidence from Eurozone banks. *Journal of Financial Stability, 61,* 101012.

Ruiz, F., & Rodríguez, S. (2023). The influence of macroeconomic variables on bank profitability in Latin America. *Economic Modelling, 120*, 106069.

Siddique, A., & Malik, H. M. (2022). Impact of management efficiency on bank profitability: A study of Islamic and conventional banks. *Journal of Islamic Accounting and Business Research, 13* (4), 524-546.

Yorulmaz, R. (2022). How does liquidity affect the profitability of Turkish banks? A panel data analysis. *Borsa Istanbul Review, 23* (1), 12-21.