

EFFECT OF CORPORATE LIQUIDITY MANAGEMENT ON FINANCIAL PERFORMANCE OF LISTED DEPOSIT MONEY BANKS IN NIGERIA

Sani Saminu¹

sanisaminu4u@gmail.com +2348069254272

Ripiyee, Waetsi Bitrus², Hashim Usman Muhammad³, Murna Sam-Aleng⁴, Masud Haruna Aminu⁵, Christiana Joshua Samari⁶, Kubuza Ajiduku⁷, Ibrahim Baba Musa⁸ & Dauda Ibrahim Dan'asabe⁹

Department of Accounting^{1, 2, 4, 6 & 7}

Faculty of Management Sciences, Federal University Wukari, Taraba State

Department of Banking and Finance^{3 & 5}

Faculty of Management Sciences, Federal University Wukari, Taraba State

Department of Economics⁹

Faculty of Management Sciences, Federal University Wukari, Taraba State

Department of Accounting⁸

Ahmadu Bello University Zaria

Abstract

: Financial survivability is threatened in the Nigerian banking sector largely as a result of liquidity mismanagement, which adversely impact on the performance of the banking industry and the economy. This prompted investigation into liquidity management and performance of listed Deposit Money Banks in Nigeria. Secondary data were extracted from the financial report and filters were used to arrive at adjusted population. Longitudinal research design was used using panel regression to analyses twelve (12) sampled listed Deposit Money Banks from the population of fourteen (14) from 2015 to 2023. The correlation result showed that Capital Adequacy Ratio and Loan and Advance Ratio had positive and significant relationship with Return on Asset while Current Ratio had negative but insignificant relationship with Return on Asset. The random effect regression result showed that, Capital Adequacy Ratio had positive and significant effect on Return on Asset of listed Deposit Money Banks in Nigeria. However, Loan Advance Ratio and Current Ratio had negative but insignificant effect on Return on Asset of listed Deposit Money Banks in Nigeria. The study found out that, liquidity management is poor in the above-named firms and it is therefore imperative for the board of directors to constitute a board that will ensure proper utilization of liquidity to achieve the desired profitability.

Keywords: Capital adequacy ratio, loans and advance ratio and current ratio.

1. Introduction

The banking industry is considered an integral constituent of the economy, given its pivotal role in financial intermediation. Banks mobilise funds from surplus economic units and channel them to deficit units, thereby facilitating investment, production, and economic growth. Funds intermediated by banks globally between 2019 and 2024 grew by approximately US\$122 trillion, driven largely by increased wealth accumulation among institutions and households worldwide (McKinsey & Company, 2025).

The report further noted that, after accounting for risk costs, banks' revenues reached about US\$5.5 trillion in 2024, representing the highest level ever achieved by any industry. This significant milestone further re-echoes the importance of banks to the global economy. In Nigeria, the financial sector, of which the banking industry forms a core component, contributed about 26.5% to Gross Domestic Product (GDP) growth in the 2023 financial year, representing an increase of approximately ₦790 billion, from ₦3.01 trillion to ₦3.8 trillion (National Bureau of Statistics, 2024). Consequently, the banking sector is widely regarded as a catalyst for other sectors of the economy by ensuring the timely and efficient flow of financial resources. Effective liquidity management is therefore imperative in the banking sector, as liquidity reflects the ability of financial institutions to meet obligations

as they fall due and sustain operational viability (Serrasqueiro, Nunes, & Armada, 2016). Adequate liquidity enables banks to honour short-term liabilities, maintain depositor confidence, and support financial performance, which is critical to competitiveness, profitability, and long-term stability (Hameed, Kurfi, & Bello, 2020).

Financial crises have historically led to the distress and eventual collapse of several banks in Nigeria, including Afri Bank, African International Bank, Diamond Bank, and Skye Bank, among others (Wachukwu & Okey-Nwala, 2025; Adenuga et al., 2021). These failures were largely occasioned by banks' inability to prudently manage their liquid assets, as credit facilities were often extended without adequate collateral and sound risk assessment frameworks. Given that banks' financial performance is shaped by the interaction of internal and external operating environments, weaknesses in credit administration and adverse macroeconomic conditions significantly heighten the risk of loan default and deterioration in asset quality (Bello & Umar, 2019). From the relatively small capital base of some banks, unrecovered loans eroded shareholders' funds through accumulated loan losses, ultimately leading to insolvency and bank failure. This aligns with extant evidence that poor cash flow planning, ineffective internal controls, high debt burdens, and unfavourable economic conditions expose firms, particularly smaller and weaker

institutions to financial distress and insolvency (Bello, Bala, & Falola, 2016). In response to the fragile financial condition of banks, the Nigerian government introduced the recapitalisation policy for commercial banks in 2005, which increased the minimum capital base from ₦2 billion to ₦25 billion, intending to strengthen banks' capital adequacy and liquidity positions (Adenuga et al., 2021; Adebayo et al., 2011). The recapitalisation exercise restored a measure of public confidence in the previously ailing banking sector; however, its gains have continued to be challenged by global financial crises, recurrent economic recessions, and persistent inflationary pressures within the Nigerian economy.

Survival and efficient flow of operations within corporate settings is dependent on sound liquidity management. Just like the human body functions with effective blood circulation, so is effective liquidity management an integral element in corporate growth and sustainability. The ability of firms to be able to discharge its obligations as at when due or a firm having just about the right amount of liquidity required to perfect its activities rather than having excessive liquidity shows an effective liquidity management (Wachukwu & Okey-Nwala, 2025). The Deposit Money Banks in Nigeria are financial institutions whose major stock in trade is liquidity. Therefore, financial performance of Listed Deposit Money Banks (DMBs) in Nigeria is tied to effective liquidity management because of

the nature of services they render (financial intermediation from area of surpluses to area of deficits). Performances of DMBs in Nigeria has been somewhat epileptic; with gains and losses (CBN, 2022). This has generated serious attention and interest among; financial economists, investors, and financial analysts, considering the role of listed DMBs in mediating between areas of surpluses and areas of deficits in optimizing sound liquidity. Enhance liquidity management in financial institutions creates an optimized system of liquidity that ensures firms are liquid enough to meet its obligations as at when due, thereby creating ripple effects for economic growth.

Performance of DMBs in Nigeria is significantly connected with financial mediation from area of surpluses to area of needs. By accomplishing this function, funds are collected from the surplus units which can be withdrawn on demand and channeled to the investment units. A bank that is able to meet these obligations will prosper and make profit compared to a bank that is in cash crunch. Otekunrin, et al., (2018) asserted that, bank's ability to meeting customers' withdrawal needs and other cash flows is an indication of her liquidity management and that will go a long way in sustaining the bank as a result of the profit it will make from such commitment. However, when a bank is deficient in liquidity, the business environment in which it operates becomes toxic and performance indicators will plummet (Emmanuel & Stephen, 2020).

Bhattacharyya and Sahoo (2011), noted that, liquidity management encompasses maintenance of adequate balances of cash and its equivalent balances so as to meet the needs of the customers as at when due and to also ensure enough cash balance.

Nwokoji (2017) documented that, for effective liquidity management, capital adequacy ratio (CAR) of banks should be within the statutory percentage (8% under Basel II and 10.5% which includes a 2.5% conservation buffer under Basel III). Capital adequacy connotes the bank's ability to maintain equity capital sufficient to pay depositors whenever they demand their money and still have enough funds to increase the bank's assets through additional lending. When a bank has poor CAR, it has strong liquidity challenge and that will affect the performance. Wachukwu & Okey-Nwala, (2025) noted that minimum capital adequacy ratio is essential for banks to have enough cash base to absorb unforeseen losses in case of any eventuality. It is considered critical because they reveal whether banks have enough financial power to absorb a reasonable amount of loss so that they don't become insolvent. This ratio helps in ensuring effectiveness, efficiency and economy by lowering the risk of banks collapsing. A bank with high capital adequacy ratio is considered safe and likely to meet its financial obligations as at when due

Loan and advance to deposit ratio reflects a proportion of customers' deposits given out in form of loans (Emmanuel &

Stephen, 2020). It is imperative for banks not to loan out the entire deposits and remain cash crunched. Adenuga et al., (2021) documented that "...Central Bank of Nigeria (CBN), on July 3, 2019, mandated banks to keep a minimum loan-to-deposit ratio (LDR) (defined as loan to funding ratio) of 60.0 per cent and was later reviewed upward to 65.0 per cent on September 30, 2019 to encourage banks increase consumer, mortgage, and corporate credits ...". The ratio serves as a useful planning and control mechanism in liquidity management since commercial banks use it as a guide in lending and investment, and to make a total evaluation of their expansion program. CBN (2023) asserted that, when the ratio is low, banks are encouraged to lend and invest and vice versa, so as to take some benefit in the form of profitability. Otherwise, too much fund will be idle and banks will lose the benefits associated with investment of the excess funds. In giving out loans and advance, banks must ensure that, a reasonable balance is reached so as not be liquidity deficient or to have excess liquidity that are unproductive.

A readily amount of cash available for discharging statutory duties of banks indicate its liquidity strength. A Q4 Economic report by the Central Bank of Nigeria (2023) documented that, liquidity fell from \$123 million to \$94.2 million, a slip of 23%, raising concerns about the likely stress experienced in the banking sector. The report noted that, excess liquidity comes at a cost to the banks (tying down excess cash instead of

investing) and insufficient liquidity can cause unimaginable disruption to a financial institution's operations and customer's relationship. Prior to the general elections in Nigeria in 2023, Deposit Money Banks in Nigeria experienced acute liquidity problems that almost paralyzed the nation's economic activities beyond a month (Daily Trust News, 2023). Cash crunch almost held the economy to a stand-still as most businesses were grounded which led to reputational damages for banks on social media platforms because of the perceptions citizens have about their supposed unfriendly roles in the currency redesign era. Many businesses went to extinction and some experienced economic downturn as a result of poor liquidity management by banks (CBN Report, 2023). Banks were complicit by taking advantage of a good policy at the expense of the citizenry for personal advantage which led to poor liquidity management that impact the banks adversely (Daily Trust News, 2023).

Listed Deposit Money Bank in Nigeria were bedeviled with; inadequate liquidity reserves, high loan-to deposit ratio, dependence on short-term wholesale funding, ineffective cash management, insufficient bank network for cash distribution, high cash reserve requirement, limited access to Central Bank liquidity facility, risk concentration, inefficient asset-liability management and lack of effective risk management framework (CBN Report, 2023). These arrays of liquidity management problems

have adverse consequences resulting to; loss of confidence, increase in the cost of funding, reduction in the banks' ability to lend and often leads to regulatory sanctions. These issues raised have led to corporate decline, failure and collapse that are evident in the banking industry (Afri Bank, African International Bank, Diamond Bank, Skye bank etc.). Diamond banks struggled and eventually was absorbed by Access bank in 2019 as a result of poor liquidity management that proved fatal (CBN, 2022). Inability of risk committee to objectively scrutinize risk factors and make appropriate recommendations to mitigating liquidity risks has dealt a significant blow to liquidity management in listed DMBs in Nigeria and it came at a huge cost to the banks and depositors. For these reasons, this study examined liquidity management in listed DMBs in Nigeria and firm size was used as a control variable to cushion the effect of variation amongst the banks in terms of their capital bases.

The following questions were asked based on the problems raised.

- i. Does Capital Adequacy ratio have significant effect on the financial performance of listed Deposit Money Banks in Nigeria?
- ii. does Loans and Advances ratio have significant effect on the financial performance of listed Deposit Money Banks in Nigeria?
- iii. does Current ratio have significant effect on the financial performance of listed Deposit Money Banks in Nigeria?

The study seeks to examine the effect of liquidity management on the performance of listed Deposit Money Banks in Nigeria. Specifically, the study seeks to;

- i. To determine the effect of Capital Adequacy ratio on financial performance of listed Deposit Money Banks in Nigeria.
- ii. To determine the effect of Loans and Advances ratio on financial performance of listed Deposit Money Banks in Nigeria.
- iii. To examine the effect of Current ratio on the financial performance of listed Deposit Money Banks in Nigeria.

From the objectives stated, the following hypotheses were formulated in the null form:

- H0₁: Capital Adequacy ratio has no significant effect on financial performance of listed deposit money banks in Nigeria.
- H0₂: Loans and Advances ratio has no significant effect on financial performance of listed deposit money banks in Nigeria.
- H0₃: Current ratio has no significant effect on financial performance of listed deposit money banks in Nigeria.

2. Literature Review

2.1 Financial Performance

Financial Performance, measured by the firm's ability to generate returns, maintain stability and manage risks, generally connotes the financial success and health of a firm. In the banking industry, it can be conceptualized as multidimensional

construct, comprising financial indicators which include; efficiency, profitability and stability (Wachukwu & Okey-Nwala (2025)). For accounting research purposes, the metrics for financial performance measures include; Return on Assets (ROA), Return on Equity (ROE), Net Interest Margin (NIM), Operating Efficiency Ratio, Profitability ratios (e.g., Gross Profit Margin, Net Profit Margin) among others. For the purpose of this study, financial performance is operationalized with Return on Asset (ROA because, it generally views performance of firms (returns) in terms of its total asset (Sani & Abdulkarim, 2021). This gives an encompassing reach without excluding key areas in quantification of firms progress or otherwise.

2.2 Capital Adequacy Ratio

Banks as financial institution that mediate the flow of funds from surplus units to deficits units should ensure a sound Capital Adequacy Ratio (CAR) (Waswa, et al., 2018). This ratio measures the capital adequacy level needed to function effectively. It reflects firms' ability to absorb potential losses and maintain financial stability in the event of problem. It forms the components of bank's risk management and financial stability. Otekunrin et al., (2019) asserted that, high CAR is an indication of a bank's ability to withstand potential losses and maintain financial health. If the CAR in banks is high, they stand s chances of less risk be ensuring enough liquidity base to function optimally. On the other hand, lower CAR indicates serious dangers and risks in

banks which is explained by lower liquidity base that adversely affects banks operation.

2.3 Loans and Advance Ratio

Part of the function of banks is to offer loans and advances to those in need so as to stimulate economic activities. Wachukwu and Okey-Nwala (2025) asserted that, the Loan and Advance Ratio (LAR) is a measure of the ratio of a bank's aggregate loans and advances compared to its total deposits. The aggregate loans and advances are put side by side to the total deposits so as to ascertain the banks liquidity position in order to minimize risk and manage its asset. The loans and advances ratio is conceptualized as a measure of a bank's credit risk and liquidity. Poroye and Okolie (2024) documented that, when a firm has a higher LAR, it indicates greater exposure to credit risk and potential liquidity problems which may result in liquidity crunch that can halt the progress of firms. Sathyamoorthi, et al., (2020) noted that, Lower LAR on the other hand creates excess liquidity in firms that are idle, which can lead to significant loss. For effective LAR, firms must ensure it is at optimum point.

2.4 Current Ratio

Firms are always surrounded by obligations. The long-term obligations are systematic because of the period of maturity. The short-term obligation on the other hand is unsystematic because of the short notice required to meet them (Alim et al., 2021). Therefore, firms must ensure

significant Current Ratio (CR). This ratio, measures bank's short-term liquidity and its ability to meet its short-term obligations. Wofuru-Nyenke and Iwedi (2023) viewed the current ratio as a measure of a bank's liquidity and its ability to manage its short-term obligations. It is a side-by-side comparison of the firm's current asset and its current liabilities. High current ratio is an indication of a bank's ability to meet its short-term obligations and maintain its financial stability. A lower current ratio signifies risks that can truncate the progress of firms.

2.5 Empirical Review

Literature review is the building block to effective research because it develops the framework to be followed based on previous research. It helps in bringing in the perspective of previous researches in the field by guiding researchers about what went on previously, so as to be able to shape the thought process on the future cause of action. Therefore, relevant literature with respect to liquidity management and financial performance were reviewed systematically.

Wachukwu and Okey-Nwala (2025) examined liquidity management and profitability of the banking firms in Nigeria for a period of fifteen years, from 2007 to 2021 using secondary data. The liquidity management proxies were measured against three profitability proxies (ROA, ROE and EPS). The result of the least square regression showed that, cash reserve ratio had significant effect on

return on asset. This connotes that, for the period of the study, banking industries in Nigerian had good cash research ratio and thus, it helped in achieving profitability. While, loan to deposit ratio had insignificant effect on return on asset. Furthermore, cash reserve ratio and loan to deposit ratio both had significant positive effect on return on equity. This connotes that, equity value is enhances for the period under review. Finally, cash reserve ratio and loan to deposit ratio had no significant effect on earnings per share of the sampled commercial banks in Nigeria. Even though, the study is comprehensive, the period of study and the time for reporting is significant to ignore and capital adequacy ratio was not looked into.

Poroye and Okolie (2024) examined liquidity risk management and financial performance of listed commercial banks in Nigeria for a period of ten (10) years, from 2012 to 2021. Secondary data were used and the regression result showed that, deposit-to-total asset ratio has an insignificant effect on financial performance of banks in Nigeria. Loan-to-deposit ratio has a significant negative effect on financial performance of banks in Nigeria. This implies that a ratio increase in loan-to-deposit will significantly decrease financial performance for the period under study. Liquidity to-total asset ratio had a negative and statistically significant effect on financial performance of banks in Nigeria. This connotes that, a ratio increase in the liquidity to total asset ratio

will significantly decrease financial performance (return on total asset) during the period under as it will amount to keeping idle liquidity level relative to the asset of the banks.

Wofuru-Nyenke and Iwedi (2023) explored the impact of liquidity risk management practices on the profitability of Nigerian banking institutions from 1960 to 2021 using panel data. The study used augmented Dickey-Fuller unit root tests for stationarity, and the Johansen co-integration test to examine the long-run relationship between liquidity risk management and bank profitability. The descriptive statistics revealed that for the period of the study, banks maintained current ratio between the range of 1.74 and 2.49, implying that, most banks-maintained liquidity within a desirable range. Result of the ordinary least squares (OLS) regression showed that, current and cash ratios were negatively and statistically insignificant in relation to net profits, indicating a limited impact of these liquidity measures on profitability.

Alim et al (2021) examined the effect of liquidity risk to management on the financial performance of commercial banks in Pakistan from 2006 to 2019 using panel data and data for the study were obtained from secondary sources. Regression result indicated statistically positive effect of capital adequacy ratio and current ratio on financial performance of banks in Pakistan. This connotes that, banks in Pakistan maintain sound capital adequacy and current ratio which gives it competitive edge in financial success.

This is also in line with the findings of; Dzapasi, 2020 and Alshatti 2015.

Sathyamoorthi, et al., (2020) examined the impact of liquidity management on financial performance of commercial banks in Botswana for 9 years, covering from 2011 to 2017. The regression result showed that, loans to deposits ratio and liquid assets to deposits ratio had statistically significant negative effect on return on assets and return on equity. Cash and cash equivalents to total assets ratio had statistically insignificant positive relationship with return on assets and return on equity while cash to deposits ratio had statistically insignificant negative relationship with return on assets and return on equity. These results showed that, Banks in Botswana for the period had liquidity challenge and if effective management is not constituted, some of the banks may become distress.

Adhikari (2020) examined the impact of liquidity on profitability in Nepalese commercial banks. The study made use of adjusted population of 27 out of 28 commercial banks in Nepal and data were drawn from secondary sources. The panel data regression showed that, there is statically and positive effect of capital adequacy ratio on profitability of commercial banks in Nepal. This connotes that, commercial banks with good liquidity base inspire performance which leads to productivity. This finding is only restricted to Nepal and may not be applicable to Nigeria because of cultural or national laws differences.

Terseer et al., (2020) examined 5 listed deposit money banks in Nigeria for a period of 9 years (2010-2018) but found out that, current ratio had insignificant positive effect on profitability of deposit money banks. The sample size was small; hence, data sets are not robust for the findings to be generalized the Deposit Money Banks in Nigeria. On the contrary, Dadebo and Afolabi (2020) examined ten (10) manufacturing companies from 2012 to 2016. Finding showed that, current ratio as a proxy for liquidity because it had negative and significant effect on profitability of manufacturing firms. The current ratio for these firms were lower than the acceptable ratio of 2:1 and such has adverse effect on performance of the firms. Emmanuel and Stephen (2020) explored 6 banks that are part of an international association in Nigeria for 7 year and found positive and significant effect of capital adequacy and performance. This connotes that, the high CAR ensure banks have the required safety nets of liquidity to enable banks meets its obligations.

Chinweoda et al., (2020) examined listed DMBs in Nigeria for 7 years (2011 to 2017). The result documented that, current ratio had a positive and significant impact on profitability of banks. This implies that, banks in Nigeria have the required liquidity to meets its short-term obligations as they fall due. Banks by their nature of work needs significant amount of cash so as to meets up with customers obligations as at when due. Similarly, Anandasayanan and

Subramaniam (2020) assessed 26 commercial banks in Sri Lanka from 1998 to 2017. The regression result showed positive effect of capitalization ratio on return on asset, whilst a negative and significant effect was found between capital adequacy ratio and return on asset. This connoted that, the firm under discussion had a poor capital adequacy ratio which is reducing its financial performance. The company maintained weak capital adequacy ratio and thus, its activities for the year became more risky which result in poor returns to the company.

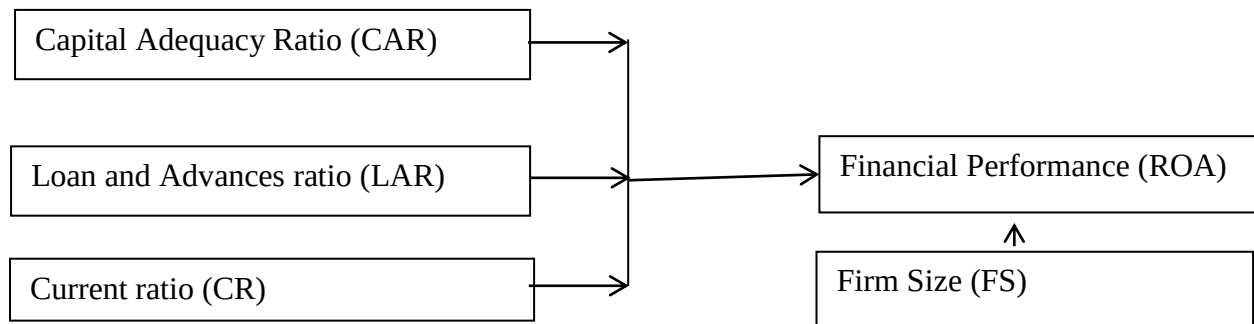
Mwambui and Koori (2019) assessed microfinance banks in Nairobi City County for the period 2011 to 2017 and found positive but insignificant effect of capital adequacy and financial performance. Satyakama and Bhusan (2019) analyze liquidity management and profitability of private sector banks in India for ten (10) banks privately owned by individuals from 2013 to 2017. Regression result showed significant negative effect of cash to deposit ratio and investment to deposit ratio on return on assets, while the relationship between capital adequacy and profitability of the variables under study was significant in the case of return on equity. Otekunrin et al., (2019) examined liquidity management and performance of selected banks in Nigeria for 6 years (2012 to 2017) and found that, liquidity management measured with capital adequacy ratio, and current ratio and cash ratio had positive and significant effect on

performance. Similarly, Kajola, et al., (2019) examined ten (10) Deposit Money Banks in Nigerian from 2008 to 2017. Regression result showed positive and statistically significant effect of current ratio and capital adequacy ratio on return on asset

Waswa, et al., (2018) examined 5 sugar companies in Kenya from 2005 – 2016. The result from the random effect regression showed there is negative but insignificant effect of capital adequacy ratio on financial performance. However, Daniel (2017), examined liquidity and its impact on the efficiency of banks for 25 years (1986–2011). The results of this study indicated that capital adequacy positively influences the operations of deposit money banks. The regression result showed liquidity reserve ratio are positively impacting on returns on equity, while deposit loan ratio are negatively but insignificantly impacting on performance. Adequate liquidity grants freedom for operations with little or no hitches as firms are buoyant enough with liquid assets to discharge its obligations with ease (Ogonna & Ikechukwu, 2016). Abnormal liquidity comes at a cost to the organizations and often lead to losses which affect financial performance (Marozva, 2015)

Furthermore, Charlmer et al., (2018), examined liquidity management of commercial banks in Ghana for a period of ten years (2007-2016) and found that capital adequacy ratio had significant positive effect on profitability of banks. It connotes that, a standard CAR leads to

high performance which is guaranteed by less exposure to risk and enough liquidity to handle the affairs of the organization. However, Sile, et al., (2019) documented negative and significant effect of capital adequacy ratio on financial performance. The finding connoted that, the firm under consideration had poor capital adequacy ratio and as such, it affected performance adversely.



Two important theories were used to underpin the study because of the link its established between the dependent variable and the independent variables. These theories are; the shiftability theory and liquidity-Profitability trade-off theory. The shiftability theory advocates that a bank's liquidity is adequately maintained if it holds assets that could be shifted or sold to other lenders or investors for cash even during period of crisis or distress. The rational is to have assets that can be "shifted" or liquidated immediately to attend to pressing needs. Therefore, shiftability or transferability of a bank's assets is a basis for ensuring liquidity and the proponents argued that a bank's liquidity could be enhanced if it holds specified liquid assets required to sell to the Central Bank and the discount Market

2.5 Research Framework and Underpinning Theory

The research framework shows the link between the explained and the explanatory variables, including the control variable as in this case. Therefore, the framework for this study is presents below;

(interbank window). The liquidity-profitability trade-off the synchronization of liquidity and maturity which ensures that a mismatch is capable of causing financial shock. The theory maintained that there has to be balance between liquidity and maturity to avoid skewed relationship which in turn affect performance.

3.0 Methodology

Longitudinal research design was appropriate so as to establish links between the explained (Return on Asset) and the explanatory variables (Capital Adequacy ratio, Loana d advances ratio and current ratio). A positivist research paradigm is considered appropriate for this study as data were collected after the event had happened. Data sets used were collected from secondary sources for a

period of 9 years starting from 2015 to 2023. The population comprised all the fourteen (14) Deposit Money Bank listed on the floor of the Nigeria Exchange Group (NGX) as at 31 December, 2023. Because of the periods covered, census approach became impossible as such, it necessitated the introduction of certain filters to arrive at the adjusted population. Banks to be considered must; have been listed on the Nigerian Exchange Group prior to 2015, be actively trading and have complete financial report for the periods

(2015 to 2023). Upon the application of the filters, twelve (12) DMBs made the list while Ecobank and Polaris bank were exempted (See Appendix I). Correlation analysis was used to assess the degree of relationship between the variables. Descriptive statistics in the study analyzed the nature of the data and Multiple regression technique was used to test the effect of the explanatory variables (capital adequacy ratio, loans and advance ratio and current ratio) on the explained variables (return on asset).

Table 1: Variables, Definition and Measurements

S/n	Variable	Acronym	Measurement	Signs
Dependent Variable				
1	Return On Assets	ROA	Profit after tax/Total Assets (Wachukwu & Okey-Nwala, 2025; Chinweoda et al., 2020)	
Independent Variables				
2	Capital Adequacy Ratio	CADQ R	Total Equity/total assets (Sathyamoorthi, et al., 2020)	+
3	Loan & Advances Ratio	LADR	Loans and Advances/ total total deposits (Poroye & Okolie, 2024; Emmanuel & Samuel, 2020)	+
Control Variable				
4	Current Ratio	CR	Current Assets/Current Liability (Wofuru-Nyenke & Iwedi, 2023; Emmanuel & Samuel 2020)	+
5	Bank Size	SIZE	Natural Logarithm of total assets (Kitere, et al., 2019))	+

3.1 Model Specification

The model for this study shall be a panel regression model because; the study seeks to examine the effects of liquidity management on financial performance of listed Deposit Money Banks in Nigeria. The panel data model is succinctly presented below:

$$Y_{it} = \beta_0 + \beta_1 X_{1it} + \beta_2 X_{2it} + \dots \beta_n X_{nit} + \mu_{it} \text{-----}$$

(1) The second model for this study explains the relationships between elements of bank liquidity management and financial performance in equation 2

$$ROA_{it} = \beta_0 + \beta_1 CAR_{it} + \beta_2 LADR_{it} + \beta_3 CR_{it} + \beta_4 FS_{it} + \varepsilon_{it} \text{-----}$$

-(2)

Where;

ROA = Return on asset

β_0 - β_4 = regression co-efficient or parameters

CAR = Capital adequacy ratio

LADR = Loan and advances ratio

CR = Current ratio

FS = Firm size

ε = Error term

it = panel data used in the study

i = cross sectional data &

t = time series data

4 Result and Discussion

Table 2 Descriptive statistics

Variables	Observations	Mean	Std. deviation	Min	Max
ROA	108	0.01552	0.05813	0.0026	0.3205
CAR	108	0.36523	0.23682	0.0945	0.4543
LADR	108	0.78135	0.15321	0.3226	0.8921
CR	108	1.51251	1.12523	0.0685	1.9235
FS	108	16.8194	3.67685	12.2701	22.991

Survey (2025)

Table 2 contains the description of variables used in the study. The variables are Return on Asset (ROA), Capital Adequacy Ratio (CAR), Loans and advances ratio, (LADR), Current Ratio (CR) and Bank Size (FS). A total of twelve (12) banks were studied over a

period of nine (9) years, thus giving one-hundred and eight observations.

The average ROA of the banks was ₦0.016, connoting that, on the average, sampled banks were able to realize ₦0.016 for every 1₦ invested on the asset of the banks. The least ROA was ₦0.0026

and the maximum ROA was ₦0.3205 indicating that, the ROA for the period, even it is small, the positive nation of the data showed that returns on asset were was small. This gives the banks the desired returns that can keep them in business for a significant period of time.

CAR has a mean value of 0.3652 showing a 36.52% which represent an amount higher than the minimum required CAR. Thus, sampled banks, are more likely to survive financial downturn and unforeseen losses. This high percentage of CAR provides solid base upon which the financial stability of the sampled banks in guaranteed. This is because, high CAR provides sufficient security for liquidity challenges, thus ensuring steady and reliable liquidity management practices that boost financial performance. On the other hand, low CAR percentages expose the banks to risks by constrained liquidity which is capable of thwarting financial performance.

The average LADR stood at 0.781351 which showed that banks for the stipulated period gave 78.14% of customers deposits as loans which makes it less likely to meet up with their short-term obligation as they fall due since loans and advances on the average is very high. High LADR reduces liquidity volume in banks thereby blocking access to attending to viable and timely meeting with required obligations. Low LADR on the other hand, entails that banks are unable to push interest bearing transactions which reduces the amount of profit.

The mean CR of 1.51251 indicated the ability of sampled banks to meet it short term obligations as they fall due. The standard CR is 1.5 and meeting the required threshold is an excellent liquidity management practice. High CR showed that banks have idle cash that could have been invested to make desired returns while low CR puts the sampled banks at risks of failing to meet its short-term obligations.

Table 3 Correlation Analysis

	ROA	CAR	LADR	CR	FS
ROA	1.0000				
CAR	0.7316*** 0.0000	1.0000			
LADR	0.4112* 0.0201	0.8202*** 0.0000	1.0000		
CR	-0.3777 0.1063`	0.5219** 0.0116	-0.4317** 0.0445	1.0000	
FS	-0.4183* 0.0624	0.6168*** 0.0011	-0.4917*** 0.0052	0.8278*** 0.0000	1.000

***(significant 1%)

** (significant 5%)

*(significant 10%)

Survey (2025)

Table 3 above shows that there is positive and significant statistical relationship between CAR and ROA. This connotes that, increase in CAR can lead to corresponding increase in ROA of listed DMBs in Nigeria for the period of the study. The relationship that exists between LADR and ROA is significant and positive which implies that, a reasonable

increase in LADR can lead to increase in ROA of listed DMBs in Nigeria. CR has a negative and insignificant association with ROA. This inverse relationship showed that, the CR of listed DMBs in the Nigeria for the period is somewhat counterproductive to corporate performance proxied with ROA.

Table 4: Summary of Random Effect Regression and post estimation tests

ROA	Coefficient	Std. error	T-value	P>(z)	VIF	1/VIF
Constant	-.0838693	.0810124	-1.04	0.238		
CAR	.1972967	.0256511	7.69	0.000	1.32	0.730739
LADR	-.0009917	.0030991	-0.32	0.650	1.12	0.871132
CR	-.0037763	.0042430	-0.89	0.480	1.14	0.867403
SIZE	.0068591	.0046345	1.48	0.238	1.47	0.904247
Mean					1.26	
Hetttest:						
Chi ² (1)	17.93					
Prob.	0.0000					
Hausman						
Chi ² (4)	16.38					
Prob	0.041					
R –overall	0.7569					
F- statistics	125.02					
Probability	0.0000					

Survey (2025)

4.1 Post Estimation Tests

The Variance Inflation Factor (VIF) and the Tolerance values estimated was used to test for multicollinearity in all the regressions. The variance inflation factor and tolerance estimated were found to be consistently smaller than ten and one respectively for all the regressions and the mean VIF of 1.26 is smaller than ten (10), an indication of harmless multicollinearity. The heteroscedasticity tests conducted showed a chi-square value

of 17.93 which has a probability that is significant at 1%, as such the study cannot rely on the OLS regression. The Hausman specification test conducted to enable a selection of the best model for analysis reveals a chi² value of 16.38 with probability value of 0.0041, thus suggesting the appropriateness of random effect model for the study.

4.2 Random Effect Regression Result

The cumulative R^2 of 0.7569 is the coefficient of determination which signified that capital adequacy ratio, loan and advance ratio, current ratio, and firms size cause 75.69% of the total variation in performance of listed DMBs while the remaining 24.31% was caused by factors not covered in the model. The F-statistics had a value of 125.02, which is significant at 1%; an indication that the model is fit. Since the model is fit, the regression result is relied upon and the hypothesis tested are valid.

4.3 Discussion and Hypotheses Testing

Capital adequacy ratio had a coefficient value of 0.1972967 with a T-value of 7.69 which is statistically significant at 1% (0.000). This shows that CADQR is positively and significantly impacting on financial performance of listed Deposit Money Banks at 1%. This signifies that CAR for the period under consideration is strong thereby giving banks the required financial resources to discharge its responsibility so as to make profit. Increase in capital adequacy ratio by 1% would lead to an increase in bank performance by ₦0.19. High capital adequacy ratio reduces risks and strengthens liquidity which gives firms the needed push to execute its financial obligations as they fall due without experiencing challenges. Weak capital adequacy ratio increases financial risk thereby plummeting the financial fortune of banks. This is consistent with chinweoda et al., (2020) and Charlmer et al., (2018) but contradict Anandasayanan

and Subramaniam (2020). On the basis of this finding, the null hypothesis one (1) formulated is thereby rejected.

Loan and advances ratio had a coefficient value of -0.0009917 with a T-value of -0.32 which is not statistically significant at any of the levels (0.650). this shows inverse relationship between the explained (financial performance) and the explanatory variable (loan and advance ratio). This signified that LADR has a negative but insignificant impact on performance of listed DMBs in Nigeria. Even though, the effect is not significant, the negative relationship is an indication that, DMBs in Nigeria are not meticulous with their loans and advances which often leads to high loan loss in DMBs. This finding underscores the issues problematized. Therefore, the study fails to reject the null hypothesis two (2) formulated.

Current ratio had a coefficient value of -0.0037763 with a T-value of -0.89 that is not statistically significant at any level (0.480). This signifies that CR has a negative but insignificant impact on financial performance of listed DMBs in Nigeria. The effect of current ratio is not significant on financial performance but the negative effect is a pointer that DMBs in Nigeria are unable to meet the required current ratio and this will be counterproductive. Weak current ratio jeopardizes bank's ability to meet it short term obligations as at when due. Banks with weak current ratio will experience cash crunch and it exposes them to risks

which have adverse effect on performance. extremely strong current ratio on the other hand can lead to excessive liquidity that thereby having idle financial resource. The findings of this study were in line with findings of previous studies conducted by Mohamad et al. (2014) and Simamora and Oswari (2019) and Mwangi (2014) but are not in conformity with the findings of Ng'aari (2016) who found a positive significant relationship between current ratio and banks performance. On the basis of this finding, the study fail to reject the null hypothesis 3 formulated.

5. Conclusion

Financial resources are the lifeline of every corporate organization, thus, Deposit Money Banks in Nigeria are the integral financial pillar in the Nigerian economy. Their financial security and freedom will have an enormous positive reverberation on the economy. This study examines the effect of liquidity management on performance of listed DMBs in Nigeria from 2015-2023 covering only listed DMBs. The study adopted correlational research design for the data obtained from secondary sources. The results of the study reveal that, Capital adequacy ratio has a positive and significant effect on performance of DMBs in Nigeria, while loans and

advances ratio and current ratio has a negative but insignificant effect on performance of DMBs in Nigeria. The study observed that, liquidity management is poor in listed deposit money banks in Nigeria. Therefore, it is imperative for the board of directors to constitute effective board that will address the management of liquidity in listed deposit money banks in Nigeria so as to attain profitability with ease.

6. Implications/Recommendations

The findings connoted that, the Capital Adequacy ratio of sampled listed Deposit Money Banks in Nigeria for the study period is well within the required threshold, hence sampled banks have the required financial strength to ensure survivability. However, the listed Deposit Money Banks in Nigeria for the study period had poor Loan and Advance ratio as well as poor current ratio. This is capable of adversely impacting on liquidity which will eventually lead to poor financial performance. It is on this bases that the study recommended that, Deposit Money Banks in Nigeria should sustain their Capital adequacy ratio and then ensure that they improve on their Loan and Advance ratio as well as Current ratio to get to the required threshold.

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Appendix I

Table 1: Adjusted population

S/	Name	Date of Incorp.	Date of Listing
1	Access Bank Plc.	08/02/1989	14/04/1998
2	Fidelity Bank Plc.	23/10/1987	20/10/1998
3	First Bank Plc.	31/03/1894	01/09/1962
4	First City Monument Bank	20/04/1945	20/06/2001
5	Guarantee Trust Bank Plc	20/07/1990	03/08/1994
6	Jaiz Bank	04/11/2011	30/11/2015
7	Stanbic IBTC	23/08/1982	19/03/1985
8	Sterling Bank	16/09/1962	01/04/2000
9	Union Bank of Nigeria	26/08/1917	02/08/1962
10	Plc. United Bank for Africa	09/08/1961	12/06/1970
11	Wema Bank Plc.	01/04/1970	23/06/1989
12	Zenith Bank Plc.	09/05/1990	21/10/1993