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Sequence of Manuscript

I. Title page
II. Abstract (150-250 words)
III. Keywords (3-5)
IV. Introduction
V. Literature Review
VI. Methodology
VII. Results and Discussion
VIII. Conclusion and Recommendations
IX. References (APA 7th Edition)
X. Appendices (if necessary)
XI. Author Biographies (optional)

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MODERATING EFFECT OF CAPITAL ADEQUACY RATIO ON THE RELATIONSHIP BETWEEN LIQUIDITY MANAGEMENT AND VALUE OF LISTED DEPOSIT MONEY BANKS IN NIGERIA

BLESSING TICKY and MUSA ADEIZA FAROUK

ABSTRACT

This study investigates the moderating effect of capital adequacy ratio (CAR) on the relationship between liquidity management and value among listed deposit money banks (DMBs) in Nigeria. A longitudinal research design was employed, analyzing data from annual reports of eleven selected Nigerian deposit money banks listed on the Nigerian Exchange Group (NGX) from 2013 to 2022. Panel regression analysis was used has a technique of data analysis. Findings reveal that effective liquidity management, as indicated by current and deposit to assets ratios, positively correlates with increased firm value. The study further demonstrates that CAR significantly moderates the relationship between liquidity management and firm value of listed DMBs in Nigeria. The study concludes effective management of liquidity metrics positively influences firm valuations by enhancing the bank's ability to meet short-term obligations and manage financial risks, with the Capital Adequacy Ratio (CAR) playing a crucial role in moderating this relationship and amplifying the positive impact on firm value through robust capital reserves. Based on the findings the study recommends that the regulatory authority such as Central Bank of Nigeria (CBN) should strengthen operational frameworks for monitoring and optimizing liquidity ratios to ensure adequate cash flow management and risk mitigation. Also the management of DMBs in Nigeria should maintain capital buffers above regulatory requirements to support growth initiatives, manage risks effectively, and enhance stakeholder confidence. By implementing these recommendations, banks can strengthen their competitive edge and contribute to a resilient and prosperous banking sector in Nigeria.

Keywords: Liquidity management, Capital Adequacy Ratio (CAR) and Firm value

Introduction

The assessment of firm value holds significant importance for a diverse array of stakeholders involved in financial decision-making. At its core, firm value represents the aggregate worth of a business entity, encapsulating its assets, liabilities, operational efficiency, growth prospects, and future cash flows. This metric serves as a fundamental yardstick for evaluating the overall health, performance, and potential of a company in both domestic and global markets (Berg, 2020).

Firm value is crucial for stakeholders such as investors, creditors, management teams, and regulators. However, liquidity management plays a crucial role in determining the firm value of businesses across various industries and sectors (Jihadi et al 2021; Sabila, et al 2024). Effective management of liquidity is critical for banks to maintain financial stability, meet regulatory requirements, and sustain operations.

The recent failures of some banks in Nigeria such as Diamond Bank and Heritage Bank due to poor liquidity management practices have eroded investor confidence in the Nigerian banking sector. These failures highlight significant issues that impact market perception, investor sentiment, and overall firm value.

Liquidity management enhances financial stability by ensuring that a company can meet its short-term liabilities and unforeseen expenses. This reduces the risk of financial distress and bankruptcy, which can significantly enhance firm value (Njue, 2020). Despite the recognized importance of liquidity management, there are limited empirical studies in Nigeria (Chabbal& Umar 2022; Alhassan& Islam, 2021; Dadepo&Afolabi, 2020; Samuel &Abdulateef, 2018) that explicitly examine its impact on firm value

in Nigerian mostly focused in non-financial firms. Most existing research tends to focus broadly on financial performance metrics or isolated financial indicators, without investigating deeply into the moderating effect of capital adequacy on liquidity management (current ratio, loan deposit ratio, Cash to Deposit Ratio) and firm value. Capital adequacy ratio (CAR) is a critical factor in the banking sector, serving as a buffer against financial instability. However, there is limited research on how CAR moderates the relationship between liquidity management and firm value. This study addresses the literature gap and contributed to new knowledge.

2.0 Literature Review and Theoretical Framework
2.1 Conceptualization
i. Liquidity Management
Liquidity is a financial term that means the amount of capital that is available for investment (Harsono, 2024). Liquidity management therefore involves the strategic supply or withdrawal from the market or circulation of the amount of liquidity consistent with a desired level of short-term reserve money without distorting the profit making ability and operations of the bank. It relies on the daily assessment of the liquidity conditions in the banking system, so as to determine its liquidity needs and thus the volume of liquidity to allot or withdraw from the market. The liquidity needs of the banking system are usually defined by the sum of reserve requirements imposed on banks by a monetary authority (CBN 2022).

ii. Current Ratio
The current ratio is a financial metric used to assess a company's ability to meet its short-term obligations with its short-term assets (Hasanuddin, et al 2021). It is a key indicator of liquidity and overall financial health.Current ratios are of how solvent a company is, a company will not become insolvent overnight, deterioration in these ratios is an indications of insolvency. If a company is unable to renew its short-term liabilities, there would be a danger of insolvency unless the company is able to realize sufficient amount of its current assets into cash.
A current ratio of 2:1 is regarded to be indicative that a company is reasonably well protected against the danger of insolvency through sufficient (Noh, et al 2021). A higher current ratio generally indicates better liquidity management, as the company has more liquid assets available to cover its short-term liabilities.

iii. Deposit to Assets Ratio
The Deposit to Assets Ratio (DAR) is a financial metric used primarily by banks and financial institutions to measure the proportion of a bank's total assets that are funded by customer deposits (Okoth, 2017). This ratio provides insight into the bank's funding structure and stability (Lawal, 2019) A high

DAR indicates that a significant portion of the bank's assets are funded by stable customer deposits, which are generally less volatile compared to other funding sources. This stability can enhance investor confidence and positively impact firm value. Banks with a high DAR are perceived as less risky because they rely more on stable deposit funding rather than potentially volatile market-based funding. This reduced risk profile can lead to a lower cost of capital and higher firm value (Egwu, et al (2020).

iv. Loan Deposit Ratio
According to Steven and Toni, (2020) Loan Deposit Ratio is a ratio used to measure the composition of the amount of financing/credit given compared to the number of public funds and the amount of own capital used. The loan to deposit ratio (LDR) is a critical metric in banking, indicating the proportion of a bank's loans funded by deposits.

The Central Bank of Nigeria (CBN) recently announced a significant policy change, reducing the Loan to Deposit Ratio (LDR) for banks from 65% to 50%. This policy shift has wide-ranging implications for the banking sector, influencing liquidity management, lending practices, and overall financial stability. This ratio plays a pivotal role in a bank's liquidity management and overall financial health. A higher LDR typically signifies that a bank is efficiently utilizing its deposits to generate loans, which can lead to increased interest income and, consequently, higher profitability. Banks with a higher LDR are often seen as more aggressive in pursuing growth opportunities through lending, which can attract investors looking for growth-oriented institutions (Saleh&Winarso, 2020)

v. Capital adequacy Ratio
The Capital Adequacy Ratio (CAR) is a critical financial metric used to evaluate a bank's financial strength and stability (Alnajjar& Othman, 2021). It measures a bank's capital in relation to its risk-weighted assets and current liabilities. The primary purpose of CAR is to ensure that banks have enough capital to absorb potential losses, protecting depositors and maintaining overall financial system stability. A higher CAR provides banks with a stronger financial cushion to manage liquidity risks effectively. Banks with adequate capital are better positioned to withstand short-term funding pressures without resorting to costly measures, such as emergency borrowing or asset sales. Regulatory frameworks often require banks to maintain a minimum CAR to ensure liquidity and solvency (Keqa2023).

vi. Firm Value
Firm value is a fundamental concept in finance that represents the total worth of a company as perceived by investors and stakeholders (Orsag, 2018). It reflects the market's assessment of the company's

assets, future cash flows, growth potential, and overall financial performance. For publicly traded companies, firm value is often measured by market capitalization, which is the total market value of all outstanding shares of the company's stock. Market capitalization is calculated by multiplying the current market price per share by the total number of outstanding shares.

2.2 Empirical Review

Rahman et al (2019) examined the effect of Current Ratio on firm performance. The samples used in this study were 13 manufacturing companies in the food and beverages sub-sector listed on the Indonesia Stock Exchange during 2013-2017, using the Purposive sampling method. Data collection techniques using library study techniques with analytical methods, using multiple regression analysis through classical assumption test, hypothesis test, and coefficient of determination. The results showed that the Current ratio had a negative and not significant effect on firm performance.

Hasanuddin et al (2021) analyzed the effect of current ratio on firm performance . The study subjects are IPO companies engaged in the food and beverage sector with a study observation period using secondary data (financial statements), namely in 2016-2019, totaling 17 companies. Several stages of testing are carried out to answer statistical analysis (eg, normality test, heteroscedasticity test, multicollinearity test, T-test, and F-test) then the final testing stage is the regression test. These results of this study explain that the current ratio contributes to firm performance.

Sukmadewi (2020) studied the effect of Loan to Deposit Ratio (LDR) on Financial Performance of Banking Companies Listed on the Indonesia Stock Exchange in 2016-2018. The data used in this study were obtained from the Annual Financial Statements of Banking Companies Listed on the Stock Exchange in 2016-2018. The samples used were 23 Banking Companies Listed on the IDX. The analytical method used is multiple linear regression. The results showed that the NPL had a positive and significant effect on Return on Assets (ROA).

Salehand Winarso (2021) examined the effect of Loan to Deposit Ratio on financial performance of Rural Bank of Bandung City. The research methodology is descriptive and verification research. The population in this study was Rural Banks Bandung Period 2014 - 2019 which amounted to 29. In this study, the sampling technique used is non-probability sampling and the method is purposive sampling. Based on the sample criteria, the sample in this study is Rural Banks Bandung period 2014 - 2019 which amounted to 24 companies. The analytical method used in this research is multiple linear regression analysis using SPSS 20. The result showed that Loan to Deposit Ratio affected profitability (ROA).

Hutasoit et al (2022) analyzed the effect of Loan Deposit Ratio, Capital Adequacy Ratio, Return on Equity, and Dividend Payout Ratio on stock prices with Bank Indonesia interest rates as moderating variables. The research data was collected using secondary data from the financial statements of banking companies listed on the Indonesia Stock Exchange for the 2017-2020 period. The sample of issuers was selected by purposive sampling so that 18 companies were selected according to the criteria. The collected data is processed using the Partial Least Square (PLS) data analysis method with the help of SmartPLS software. The results show that there is no influence of Loan to Deposit Ratio, Capital Adequacy Ratio, and Dividend Payout Ratio on stock prices; there is an effect of Return on Equity on stock prices,

Iskandar et al (2023) studies the effect of loan to deposit ratio on performance by return on assets at commercial banks listed on the Indonesian stock exchange in 2016-2018. The sample used in this study was 20 bank companies that met predetermined criteria. The data that has been collected is then analyzed using Path analysis to test the proposed hypothesis. The findings of this study indicate that loan deposit ratios each have a significant effect on stock returns and are mediated by return on assets.

Sochib et al (2023) examined the effect of Loan to Deposit Ratio (LDR) and Non-Performance Loans (NPL) on financial performance by proxy Return on Assets (ROA). The research population is conventional national private commercial banks listed on the Indonesia Stock Exchange for the 2018-2021 period and 43 commercial bank entities. With the purposive sampling method, 16 entities were observed over four periods so that 64 observations were obtained. This study uses a linear regression analysis technique with the independent variables Loan to Deposit Ratio and Non-Performance Loans as independent variables and financial performance variables as the dependent variable. The results of this study indicate that the Loan to Deposit Ratio (LDR) has a significant effect on financial performance (ROA), while Non-Performance Loans (NPL) have no effect on financial performance.

Abdulsalam et al (2023) studied the moderating effect of capital adequacy on the relationship between financial risk and financial performance of MFBs in Nigeria secondary data was collected covering the period of seven years from 2014 to 2020. The study focused on National MFBs. Descriptive and panel regression analysis was employed to establish relationship between financial risks and financial performance of MFBs in Nigeria. Result of the regression analysis shows that the moderated relationship between capital adequacy and credit risk, and liquidity risk, was found to be negative and significant.

2.3 Theoretical Framework

This study was underpinned with Trade-off theory

developed by Modigliani and Miller (1958). The theory suggests that firms, including banks, face a dilemma in allocating resources between liquidity and profitability. Allocating resources towards liquidity management, such as holding excess cash or liquid assets, may reduce profitability as these assets typically yield lower returns compared to investments in higher-risk, higher-return opportunities.

In the banking sector, maintaining adequate liquidity is crucial for meeting deposit withdrawals, managing cash flow fluctuations, and complying with regulatory requirements. However, excessive liquidity can tie up capital that could otherwise be deployed to generate higher returns through loans and investments.

3.0 Methodology

This study employed a longitudinal research design. Longitudinal research is also compatible with positivism because it seeks to establish causal relationships and identify patterns or trends over time by collecting and analyzing empirical data. The population of the study comprises of 13 quoted deposit money banks on the Nigerian Exchange Group (NGX) as of 31st December 2022.

Table 1: Population of the Study

1	Access Bank Plc,
2	Fidelity Bank Plc,
3	First City Monument Bank Plc,
4	First Bank Nigeria
5	Guaranty Trust Bank ,
6	United Bank of Africa Plc
7	Zenith Bank Plc,
8	Ecobank Nigeria Plc,
9	Polaris Bank Plc,
10	StanbicIbtc Bank Plc
11	Sterling Bank Plc,
12	Unity Bank Plc
13	Wema Bank Plc.

To ensure the reliability and relevance of the data, a filtering process was employed to select the sample based on specific criteria. These criteria include:

1. Banks must not have been delisted during the study period.
2. Banks must possess all the necessary data required for measuring the variables under investigation within the defined study period.

Based on these criteria, Ecobank Nigeria Plc and Polaris Bank Plc were excluded due to the absence of income data. Consequently, the final sample consists of eleven (11) banks.

The data for the study was obtained through the secondary source and was mainly from the annual reports of the listed DMBs on Nigerian stock exchange fact book. The use of secondary data in this study is justified based on the fact that the study is based on the quantitative research methodology, and hence requires quantitative data. This study adopted panel multiple regression as a technique of data. Using panel multiple regression analysis in this study is a sound choice, particularly when dealing with data that exhibits both time-series and cross-sectional characteristics.

3.1 Model Specification

The model is stated as follows:

$FV_{it} = \beta 0 + \beta_1 CA_{it} + \beta_2 DAR_{it} + \beta_3 LDR_{it} + \beta_4 CA*CAR_{it} + \beta_5 DAR*CAR_{it} + \beta_6 LDR*CAR_{it} + \varepsilon_{it}$

Where:

FV = Firm value

β = coefficient of parameter estimate

b0 = intercept (constant)

CA = Current Ratio

DAR = Deposit to Assets Ratio

LDR = Loan to Deposit Ratio

CA*CAR = Interaction term for Current Ratio and Capital Adequacy Ratio.

DAR*CAR = Interaction term for Deposit to Assets Ratio and Capital Adequacy Ratio.

LDR*CAR = Interaction term for Loan to Deposit Ratio and Capital Adequacy Ratio.

ε Error Term

it Firm i at time t

3.2 Variable Definitions and Measurements

Table .2 Measurements of variables

Variables	Measurement	Source
Firm Value	Net income divided by outstanding share of common stock.	Choiriyah, et al 2020
Current ratio	Current Asset/Current Liabilities	Putranto, et al 2017
Deposit to Assets Ratio	Total Deposit/Total Asset	Kiser, 2003
Loan to Deposit Ratio	Total Loan/Total Deposit	Lee, & Wang 2021
Capital adequacy ratio	Total capital / risk weighted assets	Tahir 2023

4.0 Result and Discussion

In this section, we present and discuss the findings of the research. The analysis begins with a set of descriptive statistics, providing an overview of the data. This is followed by the presentation and discussion of the regression results, which highlight the relationship between liquidity management, capital adequacy, and firm value.

Table 3: Descriptive Statistics

```
   Variable |        Obs        Mean    Std. dev.         Min         Max
------------+--------------------------------------------------------------
         FV |        111    10.96477     8.53947        1.03       49.18
         CA |        111    1.848016    .6083577      .36974     3.99278
        DAR |        111    .7093818    .1700122     .206897     .965517
        LDR |        111    .4472246    .1685933     .123889     .878764
      CACAR |        111    .5865244    .3982919    .0386063    2.034282
------------+--------------------------------------------------------------
     DARCAR |        111    .2420239    .1503758      .01174     .7300254
     LDRCAR |        111    .1392796    .0896279    .0074932     .3873951
```

Source: Output of data analysis using Stata 17

From Table 3 the mean value of firm value (FV) is 10.96 with stddev of 8.53. The mean firm value is 0.011. This indicates that, on average, the listed deposit money banks in Nigeria have a firm value of approximately 11.96. The minimum firm value is 0.00103, equivalent to 1.03. This indicates that the least valued bank in the sample has a firm value of 1.03. The maximum firm value is 49.18. This indicates that the highest valued bank in the sample has a firm value of 49.18. This represents the upper bound of firm value, showing significant variation in market valuation among banks.

The current ratio (CA) has a mean of 1.85, indicating that, on average, banks have current assets that are nearly twice their current liabilities. The standard deviation of 0.61 suggests moderate variability in liquidity levels among the banks, with values ranging from 0.37 to 3.99.

The deposit to assets ratio (DAR) averages approximately 0.71, indicating that, on average, banks hold deposits that make up about 71% of their total assets. The standard deviation of 0.17 indicates relatively consistent practices across the sample, with ratios ranging from 0.21 to 0.97.

The loan to deposit ratio (LDR) averages around 0.45, suggesting that banks typically lend out approximately 45% of their deposits. The standard deviation of 0.17 indicates variability in loan utilization practices, with ratios ranging from 0.12 to 0.88.

The interaction term between current ratio and capital adequacy ratio (CACAR) averages approximately 0.59, with a standard deviation of 0.40. This interaction assesses how the impact of current liquidity on firm value is moderated by capital adequacy, with values ranging widely from 0.04 to 2.03.

The interaction term between deposit to assets ratio and capital adequacy ratio (DARCAR) has a mean of 0.24, indicating that the effect of deposit management on firm value is moderated by capital strength. The standard deviation of 0.15 suggests some variability, with values ranging from 0.01 to 0.73.

Table 4: Correlation Matrix Table

```
             |      FV       CA      DAR      LDR    CACAR   DARCAR   LDRCAR
-------------+-----------------------------------------------------------------
          FV |   1.0000
          CA |  -0.0629   1.0000
         DAR |   0.0020  -0.2082   1.0000
         LDR |  -0.2043   0.0241  -0.1506   1.0000
       CACAR |   0.0368   0.3775   0.3353  -0.1364   1.0000
      DARCAR |   0.1559  -0.1526   0.6431  -0.1695   0.5010   1.0000
      LDRCAR |   0.0422  -0.0909   0.3584   0.3728   0.3912   0.7537   1.0000
```

Source: Output of data analysis using Stata 17

The correlation coefficient between the current ratio and firm value is **-0.0629**. This negative correlation suggests a weak inverse relationship between current liquidity levels (current assets to current liabilities) and firm value. While not strongly correlated, a lower current ratio may indicate less immediate liquidity, potentially impacting investor perception of financial stability and thereby firm value.

The correlation coefficient between the loan to deposit ratio and firm value is **-0.2043**. This negative correlation indicates a moderately inverse relationship between the ratio of loans to deposits and firm value. A higher loan to deposit ratio may suggest greater risk exposure or less conservative lending practices, which could negatively affect firm value. While the correlation coefficient between the deposit to assets ratio and firm value is **0.002**. This value indicates a very weak positive correlation between the proportion of deposits to total assets and firm value.

Table 5. Breusch–Pagan/Cook–Weisberg test for heteroskedasticity

```
Breusch-Pagan/Cook-Weisberg test for heteroskedasticity
Assumption: Normal error terms
Variable: Fitted values of FV

H0: Constant variance

    chi2(1) =  0.42
Prob > chi2 = 0.3201
```

Source: Output of Data Analysis Using Stata 17

The result of Breusch- pagan / Cook-Weisbaerg test for the study shows that the chi2 value is 0.42 and the p-value of chi2 is 0.3201 indicating the absence of heterosckedasticity

Table 4. Multicollinearity Test

```
   Variable |       VIF      1/VIF
------------+----------------------
     DARCAR |      1.20    0.835578
     LDRCAR |      1.19    0.838899
        LDR |      2.75    0.363133
        DAR |      2.00    0.500620
      CACAR |      1.93    0.518486
         CA |      1.48    0.674549
------------+----------------------
   Mean VIF |      1.74
```

Source: Output of data analysis using Stata 17

The multicollinearility test from Table 4. showed that all the VIF values are less than 10 and the tolerance values are not less than 0.1 In addition, the mean VIF as indicated by the table 4 is 1.35. The result means that there is no evidence of multicollinearity among the explanatory variables.

Table 6. The Hausman speciation Test

```
                    ---- Coefficients ----
                 |      (b)          (B)            (b-B)      sqrt(diag(V_b-V_B))
                 |       F            R          Difference          S.E.
-----------------+-------------------------------------------------------------------
           CA    |   .1849323      .4615782      -.2766459         .0745825
           DAR   |  -.1174412      .0953397      -.2127809         .0554789
           LDR   |   .1127073      .0961352       .0165721         .1234705
         CACAR   |  -.1758086      .2180345      -.3938432         .1425322
        DARCAR   |  -.2200106     -.3152784       .0952678         .1029729
        LDRCAR   |  -.0348441     -.0930874       .0582433         .0189591
                 --------------------------------------------------------------------
                            b = consistent under Ho and Ha; obtained from xtreg
                  B = inconsistent under Ha, efficient under Ho; obtained from xtreg

       Test:  Ho:  difference in coefficients not systematic

                    chi2(18) = (b-B)'[(V_b-V_B)^(-1)](b-B)
                             =        26.82
                  Prob>chi2 =         0.0025
                  (V_b_V_B is not positive definite)
```

Source: Output of data analysis using Stata 17

The result of the hausman test revealed that the value of chi2 is 26. 82 and the prob>chi 0.002.The significant value as reported by the probability of chi2 indicates that the hausman test is in favour of fixed effect model. This means that the individual-specific effects (fixed effects) significantly contribute to explaining the variation in the dependent variable (firm value) rather than assuming these effects are random.

Table 7. Regression Result

```
.
Fixed-effects (within) regression          Number of obs      =          111
Group variable: id                         Number of groups   =           11

R-sq:   within  = 0.3313                    Obs per group: min =           11
        between = 0.2244                                   avg =         11.0
        overall = 0.3821                                   max =           11

                                            F(18,52)           =       107.43
corr(u_i, Xb)  = -0.6336                    Prob > F           =        0.000

-----------------------------------------------------------------------------
             |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+---------------------------------------------------------------
          CA |   .0049988   .0023579     2.12   0.039     .0002673    .0097302
         DAR |   .4615782   .1081131     4.27   0.000     .2496804    .673476
         LDR |   .1347748   .137552      0.98   0.329    -.137821    .4073706
       CACAR |   .789621    .2752689     2.87   0.006     .2391867   1.340055
      DARCAR |   .1958067   .0986616     1.98   0.050     .0002825    .3913309
      LDRCAR |  -.1737307   .083653     -2.08   0.038    -.3376875   -.0097738
       _cons |   .8964032   .5391749     1.66   0.102    -.1855304   1.978337
-------------+---------------------------------------------------------------
     sigma_u |  .20325023
     sigma_e |  .09158541
         rho |  .83122468   (fraction of variance due to u_i)
```

Source: Output of data analysis using Stata 17

The R-square value showed the level at which the explanatory variables explain the dependent variable. Table 7 reveals that the R-square is 3821. This means that approximately 38.21% of the variation in firm value can be explained by the combined effects of liquidity management variables (such as current ratio, loan to deposit ratio, deposit to assets ratio) and their interaction with the moderating variable (e.g., capital adequacy ratio).

The value of F - statistic is 107.43 with probability of chi2 = 0.000. The probability of chi2 is significant at 1%, indicating that the model is fit. This serves as a basis for stakeholders, such as investors, policymakers, and bank managers,

can rely on these results to understand how liquidity management practices, influenced by capital adequacy, contribute to firm value in the Nigerian banking sector.

Table 7 shows that current ratio has this indicates that for every unit increase in the current ratio (all else being equal), firm value increases by approximately 0.0049988 units. The positive effect also suggests that higher current ratios (indicating stronger liquidity positions) are associated with higher firm values. This finding is consistent with the expectation that banks with better liquidity management practices are perceived as more stable and valuable in the market.

Deposit to Assets Ratio also has a coefficient of .4615782 which is significant at 5% level of significance (0.00) on firm value. The positive coefficient suggests that a higher deposit to assets ratio is associated with higher firm values. This relationship is economically significant because it implies that banks with a larger proportion of deposits relative to their total assets tend to have higher valuations. A higher DAR reflects a stable funding base primarily from customer deposits, which are generally considered a reliable and cost-effective source of funding. This stability contributes to enhanced financial health and resilience against market volatility.

The coefficient of 0.1347748 for the loan to deposit ratio suggests that for every unit increase in the LDR (all else being equal), firm value increases by approximately 0.1347748 units. However, the reported p-value of 0.329 indicates that this coefficient is not statistically significant at the conventional 5% level. While a higher LDR indicate increased lending activities, which could potentially lead to higher earnings from interest income, the lack of statistical significance suggests that variations in LDR do not reliably predict changes in firm value.

Capital adequacy ratio significantly moderates the relationship between current ratio and firm value .evidence from the coefficient of .789621 and p-value of 0.006. The positive coefficient suggests that the relationship between current ratio and firm value is enhanced by higher levels of capital adequacy. In other words, for banks with stronger capital adequacy ratios, improvements in current liquidity (CA) are more positively associated with increases in firm value.

Capital adequacy ratio significantly moderates the relationship between Deposit to Assets Ratio and firm value .evidence from the coefficient of .789621 and p-value of 0.050. The positive coefficient suggests that higher levels of capital adequacy enhance the relationship between deposit to assets ratio and firm value. Banks with stronger capital adequacy ratios are likely to benefit more from a higher DAR in terms of enhancing firm value. This underscores the importance of maintaining adequate capital reserves to support deposit growth and asset expansion.

Capital adequacy ratio significantly moderate the negative relationship between Loan to Deposit Ratio and firm value evidence from the coefficient of -.1737307 and p-value of 0.038. The negative coefficient (-0.1737307) suggests that higher levels of capital adequacy ratio moderate or lessen the negative impact of loan to deposit ratio on firm value. In other words, banks with stronger capital adequacy are better positioned to mitigate the adverse effects of higher LDRs on their firm value. Maintaining adequate capital reserves enables banks to absorb potential losses associated with higher LDRs, thereby enhancing financial stability and resilience.

5.0   Conclusion and Recommendations

In examining the relationship between liquidity management, capital adequacy, and firm value among Nigerian deposit money banks, this study reveals crucial insights into the factors influencing financial stability and market performance. By analyzing key liquidity ratios and their interactions with capital adequacy, the study provides a comprehensive understanding of how these metrics collectively impact firm valuations.

Effective management of liquidity metrics such as current ratio and deposit to assets ratio positively correlates with higher firm values. These metrics are essential indicators of a bank's ability to meet short-term obligations and manage financial risks proactively.

Capital adequacy ratio (CAR) significantly moderates the relationship between liquidity metrics and firm value. A higher CAR enhances the positive impacts of liquidity management on firm value, underlining the importance of robust capital reserves in strengthening financial resilience.

Based on these conclusion, the following recommendations are proposed for Nigerian deposit money banks:

The regulatory authority such as Central Bank of Nigeria (CBN) should strengthen operational frameworks for monitoring and optimizing liquidity ratios to ensure adequate cash flow management and risk mitigation.

The management of DMBs should maintain capital buffers above regulatory requirements to support growth initiatives, manage risks effectively, and enhance stakeholder confidence. By implementing these recommendations, banks can strengthen their competitive edge and contribute to a resilient and prosperous banking sector in Nigeria.

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