

LIQUIDITY MANAGEMENT AND MARKET VALUE OF LISTED DEPOSIT MONEY BANKS IN NIGERIA

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Abstract

Illiquidity issue, due to high non-performing loan, reduces bank's market capitalisation. This study looked at the influence of liquidity management on the market value of listed deposit money banks in Nigeria. The particular objectives examined; the influence of loan to deposit ratio, ascertain the impact of current ratio, and consider the influence of cash reserve ratio on the market value (Tobin Q and share price) of the banks. The 14 banks listed on Nigerian Exchange Group (NGX) comprised the study's population. An ex post facto research design was utilised while a purposive sampling technique was applied to select 12 banks. Secondary data on liquidity management and market value were obtained from the annual reports as well as accounts of sampled banks over a period of 12 years (2011 to 2022). Inferential as well as descriptive statistics were utilised to analysed data obtained. Based on panel regression – random effect, the results revealed that only loan to deposit ratio among other substitutes had negative but significant influence on the market value (Tobin Q and share price). This indicates that banks should avoid a high loan-to-deposit ratio as it reduced a bank's market capitalisation. In conclusion, liquidity management influenced the market value of banks listed in Nigeria. This study recommended that while liquidity is essential, bank's management should not maintain a higher rate of loan to deposit ratio because it will lessen the bank's market capitalisation which will in turn weaken their capability to measure up with their financial responsibilities.

Keywords: Cash reserve ratio, current ratio, loan to deposit ratio, liquidity management, market value.

INTRODUCTION

The financial sector is the driver of the economy of any nation. The deposit money bank which is part of the financial sector plays an intermediary role to other sectors of the economy. The growth and development depend on the crucial role plays by deposit money bank that serve as the heartbeat of a nation's economy (Oladejo, 2023 & Bagh, 2017). Deposit money banks employ resources and invest cash in profitable industries in order to increase profit (Bhattarai, 2019). Banks are key contributors to every country's economy, indicating that supervision and regulation of banks are necessary to protect investors and clients as well as to maintain stability in the banking industry. Also, they play a significant part in the economic system of any country by moving funds from saving units to spending units. Therefore, effectiveness and efficiency in the financial system thereby enhance their market value (Dia et al., 2020)

Saji (2019) expressed that market value has been the centre of attention in financial study for quite some time. There are numerous options for determining its market value; like examining share prices in the stock market. In addition to that, modern finance uses Tobin Q. The share

price of a listed bank directly reflects market sentiment, investors' perception of the bank's performance, and future growth prospects. The price of stock will increase when the corporate value of the bank is high through influx of investors, while the price of stock will decrease when a bank record poor performance financially (Harningsih et al., 2019). Also, the Tobin Q ratio, a measure of market value to replacement cost, provides insights into how efficiently banks utilise their assets to create value for shareholders. A higher Tobin Q indicates that the bank's market value exceeds the cost of its assets, reflecting an effective liquidity management strategy (Saji, 2019).

Banks' liquidity refers to the ability of the bank to have adequate money to pay its due obligations. The banks are capable to meet immediate cash, cheques, other withdrawals obligations, and legitimate loan on demand while abiding by existing reserve requirements. Liquidity management involves the strategic supply or withdrawal of money from the market to ensure, the amount of liquidity is consistent with the optimal level of short-term reserve money without distorting the profit-making ability of the bank. Illiquidity of any banks neither in Nigeria nor in other countries can lead to banks failure thereby reducing the potentials of earnings and market value. This is because the high liquidity position of the bank will assist the bank to meet up obligations as required. This can lead to disbursement of loans and advances that could assist the bank to earn income in form of interest (Onyekwelu et al., 2018).

However, the global recession, which also affected the Nigerian banking industry, severely damaged banks and contributed to the financial crises of 2007–2009 (Brunnermeier, 2009). Ajayi and Lawal (2021) said that the goal of liquidity management is to mask the best possible interest income and figure out on how much marketable security and cash banks will require overall any time. The total market capitalization requirement imposed on a bank by monetary authority often defines the liquidity needs of the banking sector (CBN 2012). Due to overcrowding of high non-performing loan and illiquidity issues, the Nigerian banking industry is unable to fulfill its everyday responsibility to clients, which led to the collapse of numerous institutions in 2018 including Skye Bank, Diamond Bank sorted merger with Access Bank in 2020 in order to avoid collapse. As a result of bank mergers and acquisitions, the number of DMBs has decreased over time. (Wuave et al., 2020; Onyekwelu et al., 2018).

While few researchers like; Wajid et al. (2023); Zimon et al. (2022); Ajayi and Lawal (2021); Otekunrin et al. (2019); Onyekwelu et al. (2018); assessed the connection between liquidity policy as well as financial performance. Also, few researchers such as; Subagyo (2023); Olagunju et al. (2021); Egbuhuzor and Ugo (2021) assessed the connection between liquidity management as well as market value of banks. These researchers did not use share price and Tobin Q together as substitute for market value; and the period of 2011 to 2022 is not peculiar to any of the previous researches. The market prediction for future profit is Tobin Q and this makes it to be an excellent substitute for value of bank. While the share price reflects the level to which prospective shareholders are ready to purchase shares in the bank which reflect its valuation (Campbell & Minguez-Vera, 2008). Hence, this study contributed to literatures by the examination of liquidity management and market value of listed deposit money banks in Nigeria. In order to accomplish this target, these research questions was raised: What is the effect of loan to deposit ratio on the market value; To what extent is the relationship between current ratio and the market value; and what effect does cash reserve ratio have on the market value of Nigerian listed deposit money banks? Therefore, the research objectives are to: examine the effect of loan to deposit ratio on the market value; ascertain the extent of

relationship between current ratio and the market value; and assess the effect of cash reserve ratio on the market value of listed deposit money banks in Nigeria.

LITERATURE REVIEW

2.1 Conceptual Review

Liquidity Management

Liquidity is essential to the health of financial organization, notably banks in ensuring the smooth operation of the financial markets; it controls the expansion and development of banks. Liquidity research and knowledge therefore have significant practical applications (Sekoni, 2015). Liquidity management is a crucial part of business operations since it affects a bank's capacity to meet clients' withdrawal requests and other cash flows (Otekunrin et al., 2019). A bank must maintain equilibrium between its management of its profitability and its liquidity position; because both too little and too much liquidity have an influence that is negative on bank's ability to make a profit and thereby affect its market capitalisation (Padachi, 2006).

Market Value

The degree by which goals as well as results can be attained is reveal by the array of non-financial and financial matrices. A bank's market worth is influenced by investors' view of manager's ability to anticipate as well as adjust to change in the company's economic setting in the future. Market based as well as accounting based performance metrics are the two fundamental types. Accounting practices and manipulations have an impact on accounting based performance measurements like ROA together with ROE. Market based performance metrics are just as significant to investors as accounting-based performance metrics. Tobin's Q, stock return as well as price to book value are examples of market-based performance metrics that are widely used to assess firm success (Ersoy et al., 2022). The capability of a bank for future profits generation can be assess by investors through Tobin Q which is a market based indicator. It shows market prediction for future profit and this makes it to be an excellent substitute for value of bank. Again, the share price reflects the level to which prospective shareholders are ready to purchase shares in the bank which reflect its valuation (Campbell & Minguez-Vera, 2008).

Bank Size

Compared to small-sized banks, larger banks have more chances to finance debt capital (Titman & Wessels, 1988). Big businesses use debt more than small ones do; debt reduced costs for big businesses as well as moral hazard and monitoring expenses. Also, the likelihood of bankruptcy is lower for large enterprises (Chittenden et al., 1996). Chen et al. (2021); Jadah et al. (2020); Jadah et al. (2016); Fama and French (2002) claimed that size of bank favorably correlated with the tested companies' debt ratio; whereas, Johnson (1998) reported unfavorable connection. This indicates that big company typically issues shares to cover its expenses when stock prices are high. (Dittmar & Thakor, 2007).

Bank Age

Age of the bank, utilised as an explanatory variable in numerous research could influence decisions as regards liquidity management. Larger enterprises, that are generally stable- that

have been in the industry for a long time in markets don't require debt financing. On the other hand, smaller, recently founded businesses need more debt to meet their funding requirements. According to Sharif et al. (2012), larger, more successful companies that have built up goodwill in the market are able to readily secure the short-term loan funding they entail because creditors' confident in their capability to be prompt in making payments.

Bank Revenue Growth

The influence of the rate of growth of deposit money banks listed on NGX is something of interest to the researchers. The growth rate may indicate a need for additional funding, which will influence the liquidity management. Cheng (2022) stated that an analysts and investors are especially on the lookout for indications that a bank's profits are increasing in a sustainable rate. Most value investors also look for dividends as well as various additional accounting metrics to show growth potential.

2.2 Empirical Review

Subagyo (2023) analyzed how the debt ratio influences the association involving profitability; and liquidity as well as stock returns. Since stock prices along with returns are the same thing, it is possible to estimate stock prices and returns by looking at the financial performance of the company using financial ratios like debt-to-leverage, profitability, together with liquidity ratios. It is believed that companies with strong financial performance will also have strong stock performance. 31 public firms in the wholesale as well as retail trade subsector that were expected to trade on the Indonesian Stock Exchange between 2016 and 2020 were the sample used in this study. Purposive sampling was the basis for the research's sample selection. Path analysis, the Sobel test, and tiered linear regression are the data analysis techniques used. According to the study's findings, the debt ratio is negatively impacted by the significant liquidity ratio, while stock returns are not significantly impacted negatively by the liquidity ratio. The ratio of debt is significantly as well as positively impacted by the profitability ratio, supporting the trade-off idea. While the debt ratio significantly affects stock returns negatively, the profitability ratio significantly positively affects stock returns. The positive and negative effects of ratio of liquidity on stock returns are not significantly mediated by the ratio of debt. Similarly, there is no substantial difference among ratio of debt and profitability ratios' positive and negative effects on stock returns. The study's findings imply that investors hoping for strong stock returns should focus more on the firm's profitability together with liquidity than on the debt ratio of the corporation.

Wajid et al. (2023) looked at the influence of managing liquidity risk on Pakistani deposit money institutions' financial outcomes. A major role is being play by the banking industry in the Pakistani financial market's capacity to meet its stability and financial objectives. Thus, the banking sector's success has a greater effect on the nation's whole economy. The Pakistani central bank see to it that an ideal liquidity position is being maintain by banks in order to maximize benefits as well as maximize returns so as to meet its demand for steadiness. This study uses panel data for Ordinary Least Square analysis to ascertain the impact of management of liquidity risk on financial performance. Financial information between 2006 and 2019 was collected from the website's data archives of State Bank in Pakistan for all deposit money banks that were active in Pakistan during the study period. It was concluded that Pakistani deposit money banks do better when liquidity is more.

Olagunju et al. (2021) investigated the control of liquidity on the registered Nigerian banks'

market worth. The sample size of 12 banks was considered within the period of nine years (2011 to 2019). Data obtained from listed banks annual reports were utilized. In the study, multiple regression as well as descriptive analysis was utilized; at the same time validation of data was done through appropriate diagnostic test. The outcomes show that there exists an influence that is negatively significant between liquidity and earnings per share as well as dividend yield. An influence that is positively significant exists between bank size and earnings per share. In contrast, an influence that was negatively significant exists between bank size and dividend yield. On the part of leverage, an influence that was positively insignificant exists between it and earnings per share while it has a connection that was positively significant with dividend yield. In conclusion, the explanation for the drop in earnings per share was the negative influence of liquidity and this affect the investment growth which in turn affect dividend yield to the shareholders negatively.

Egbuhuzor and Ugo (2021) evaluated liquidity effect on the financial performance of Nigerian banks. The research design adopted was expo facto with the population of 13 banks that are traded on Nigerian Exchange Group at as 2020. Data of listed banks for 11 years (2009 to 2018) were gotten from their annual reports. The data analysis utilized was Pairwise Granger Causality test as well as regression. The outcomes showed that there exists an influence that was negatively insignificant between net profit margin as well as current ratio. It also showed an existence of an influence that was positively insignificant between return on assets together with working capital ratio; a negatively insignificant influence between net profit margin and working capital ratio. In conclusion, considering the traded banks in Nigeria; the level of liquidity does not significantly exert influence on its profitability.

Ajayi and Lawal (2021) considered liquidity management's impact on bank performance. In order to examine the link involving managing liquidity along with bank performance, this research analyses secondary data from 10 year annual reports of five chosen traded banks in Nigeria (2009-2018). Loan-to-deposit ratios, loan-to-asset ratios, as well as liquid ratios are used as proxies for managing assets with a p-value of 0.1808 (ROA). Also, the findings reveal that, managing liquidity in addition to banks' profitability in Nigeria have a strong and positive link.

Sathyamoorthi et al. (2020) evaluated the influence between management of liquidity together with financial performance of Botswana banks. In this investigation, return on equity in addition to return on assets was utilised to evaluate financial performance. As proxies for management of liquidity, the ratios of cash as well as cash equivalent to cash to deposits, total assets, loans to total assets, loans to deposits, liquid assets to deposits together with liquid assets to total assets were employed. The study's research population comprised of all the nine of Botswana's deposit money banks, and it lasted nine years (2011 to 2019). This descriptive study used the Botswana' Bank of Financial Statistics database to gather monthly secondary data. The correlation analysis, descriptive statistics in addition to regression analysis was utilized for data analysis. A significant positive link between the ratios of liquid assets to total assets together with loans to total assets; as well as return on equity together with return on assets can be shown in the regression analysis results. There exist a significant negative association among the ratios of liquid assets to deposits together with loans to deposits; as well as the returns on equity and assets. Cash to deposits ratio showed negative association with return on equity together with return on assets while a statistically unimportant positive correlation was found between the ratio of cash as well as cash equivalents to total assets and both.

financial performance of Nigerian banks within nine years (2010 to 2018). The review employs five banks' data from secondary source that are on the Nigerian Exchange Group. The loan to deposit ratio, liquidity ratio, deposit ratio as well as Cash Reserve Ratio are used as representative for managing liquidity, together with Net Interest Margin, Return on Equity (ROE) along with Return on Assets (ROA) are employed in place of financial performance (Profitability). Panel regression analysis is utilized for model estimation, and the Hausman assessment is performed in the review to determine which of the models - random effect along with fixed effect to adopt. Based on the investigation, DMB's financial performance, as considered by its return on equity, net interest margin together with return on assets is significantly and positively impacted by its Liquidity Ratio (LQR).

Otekunrin et al. (2019) assessed the performance of traded commercial banks in Nigeria as well as managing liquidity. From 2012 to 2017, a total of 17 banks were traded on the Nigerian Exchange Group (NGX). Out of those banks, 15 had secondary data taken from their financial statements. A descriptive research design was utilised in its completion. The approach utilized was ordinary least square for data examination examines the data collected. Liquidity management was monitor through the utilization of cash ratio (CR), capital ratio together with current ratio while performance was gauge with return on asset (ROA). The outcomes reveal that, positive correlation exists between firm performances (return on assets) as well as liquidity management (capital ratio, cash ratio together with current ratio). In corporate operation, the results reveal that managing liquidity is important; it lead to business profitability.

2.3 Theoretical Framework

The shiftability theory, propounded by Mouton in 1918 with the aims that banks should organise their portfolio in a manner that liquidity is at the optimum level. The assumption of this theory is to store the liquidity of the bank by encouraging asset movement. If a bank has inadequate willing money, it can repossess or sell its assets to a bank that is highly liquid. This proposition lets the banking system shift high efficiently with appropriate reserves of investment in non-current term assets. That is why the ideal standard of liquidity ratio is 2:1, which means that assets double the liabilities (Olagunju et al., 2021). Also, developed by Mitchell, (1923) who stated that, massive deposit withdrawals can be avoided by the bank when credit instruments for which prepared secondary market exists to form liquidity reserve (Alnajjar, 2017). The shiftability theory supported this study in that, liquidity management is a crucial part of business operations since it affects a bank's capacity to meet clients' withdrawal requests and other cash flows (Otekunrin et al., 2019). A bank must maintain equilibrium between its management of its profitability and its liquidity position; because both too little and too much liquidity have an influence that is negative on bank's ability to make a profit and thereby affect its market capitalisation (Padachi, 2006).

METHODOLOGY

The research design adopted was the expo facto. The Nigerian Exchange Group's fourteen listed deposit money banks comprise the study's population as of 31st December, 2022. A purposive sample approach was utilised to select 12 listed deposit money banks, which accounts for 85.7% of the total population. Detailed information as regards market value (share price and Tobin Q) as well as liquidity management (loan to deposit ratio, current ratio and cash reserve ratio) of Nigerian listed banks in question were obtained from their published annual reports as well as accounts from 2011 to 2022 together with the Fact Book, 2022 of Nigerian Exchange Group. Data derived from secondary source were analysed utilising inferential statistics as well as

descriptive statistics. Descriptive statistics such as; sum, mean, maximum, minimum, kurtosis, standard deviation, Jarqu-bera together with skewed, to identify the normality of data distribution. Inferential statistics include; panel data regression as well as correlation analysis.

Table1: Summing of Variables

Variables	Proxies	Variable Labels	Measurement	Sources	Expected Sign
Dependent					
Market Value	Tobin Q	Tobin Q	Market worth of Equity + Total Debt) ÷ Total Asset	Khlif et al., 2015	
	Share Price	SP	Closing stock price of a financial year.	Kusiyah & Arief, 2017	
Independent					
Liquidity Management	Loan to deposit ratio	LDR	Proportion of bank's total loan to total deposit.	Ajayi and Lawal (2021)	+
	Current ratio	CR	Proportion of bank's current assets to current liability.	Bagh et al. (2017)	+
	Cash reserve ratio	CRR	Stipulated minimum rate of reserve requirement as deposit or in cash with the central bank	Akinleye and Oluwadare (2022)	+
Control					
	Bank Size	BSZ	Natural log of total assets	Ozcan et al., (2017)	+
	Bank Age	BAG	Dissimilarity among years of establishment as well as observation.	Islam and Iqbal (2022)	+
	Bank growth	BRG	Change in profits over time	Ahmed et al. (2015)	+

Source: Author's Computation (2025)

Model Specification

The model specification used was adaptation from (Harrison & Muiru, 2021) study. Linear regression model was utilized as follows:

$$TQ_{it} = \beta_0 + \beta_1 X_{it} + \beta_2 X_{it} + \beta_3 X_{it} + \beta_4 X_{it} + \varepsilon_{it}$$

The econometrics as well as functional forms are used for model representation:

- | | |
|-----------------------|-----|
| TQ = (LIMP, CV) | i |
| SP = (LIMP, CV) | ii |
| LIMP = (CR, LDR, CRR) | iii |
| CV = (BSZ, BAG, BRG) | iv |

The equations iii and iv are re-stated below as:

$$TQ_{it} = \beta_0 + \beta_1 CR_{it} + \beta_2 LDR_{it} + \beta_3 CRR_{it} + \beta_4 BSZ_{it} + \beta_5 BAG_{it} + \beta_6 BRG_{it} + \varepsilon_{it}$$

$$SP_{it} = \omega_0 + \omega_1 CR_{it} + \omega_2 LDR_{it} + \omega_3 CRR_{it} + \omega_4 BSZ_{it} + \omega_5 BAG_{it} + \omega_6 BRG_{it} + \varepsilon_{it}$$

Where

TQ = Tobin Q

SP = Share price

Current ratio = CR; Cash reserve ratio = CRR; Loan to deposit ratio = LDR

BRG = Bank revenue growth; BAG = Bank age; BSZ = Bank size

$\beta_1 - \beta_6$ = Coefficients of parameter; $\varphi_1 - \varphi_5$ = Coefficients of parameter

Error term = ε ; Bank = i; Time = t

RESULTS AND DISCUSSION

The presented outcomes in Table 2 explained the statistics summing up of the variables the study utilised. It was established that 1.017 in the company of a maximum of 3.053 as well as minimum of 0.232 is the banks' average Tobin's Q. Additionally, It specify 9.631 in the company of a maximum of 49.150 as well as minimum of 0.520 as the banks' average share price. The estimated average worth of the loan to deposit ratio is 0.778 with respective maximum, minimum as well as standard deviation of 4.153, 0.083 and 0.604 respectively. The outcomes equally show that the average worth of the cash reserve ratio is 18.167 while the average current ratio is found to be -0.130.

In considering the variables under control, the outcomes establish that the sample banks' average age is 26.167 years in the company of maximum, minimum as well as standard deviation of 51, 5 and 14.518 years respectively. Additionally, the banks' average size is established to be 25.40 in the company of maximum, minimum as well as standard deviation of

28, 21.93 and 1.44 years respectively.

Table 2: Descriptive Statistics of Variables

	TQ	SP	LDR	CR	CRR	BSZ	BAG	BRG
Mean	1.017	9.631	0.778	-0.13	18.167	25.397	26.167	649.629
Median	0.953	5.950	0.648	1.234	21.250	25.725	23.000	9.922
Maximum	3.053	49.150	4.153	1.612	27.500	28.000	51.000	89695.920
Minimum	0.232	0.520	0.083	-42.77	1.000	21.927	5.000	-99.885
Std. Dev.	0.267	10.415	0.604	7.309	7.828	1.436	14.518	7475.197
Skewness	4.483	1.700	3.663	-5.221	-0.81	-0.43	0.316	11.861
Kurtosis	31.256	5.644	17.544	28.645	2.634	2.220	1.655	141.796
Jarque-Bera	5272.823	111.315	1591.165	4600.353	16.559	8.101	13.238	118962.378
Probability	0.000	0.000	0.000	0.000	0.000	0.017	0.001	0.000
Sum	146.507	1386.932	112.025	-18.685	2616.000	3657.230	3768.000	93546.598
Sum Sq. Dev.	10.171	15512.465	52.192	7639.134	8762.000	294.923	30140.000	7990634607.247
Observations	144.000	144.000	144.000	144.000	144.000	144.000	144.000	144.000

Source: Author's Computation, 2025

Again, the sample banks' average revenue growth is established to be 649.63 with its matching standard deviation, maximum as well as minimum of 7475.197, 89695.92 and -99.89 per cent.

Table 3: Estimated Matrix of Correlation

Correlation	TQ	SP	LDR	CR	CRR	BSZ	BAG	BRG
TQ	1.000							
SP	0.076	1.000						
LDR	-0.189	-0.187	1.000					
CR	0.073	0.148	-0.698	1.000				
CRR	-0.062	0.060	0.015	-0.078	1.000			
BS	-0.112	0.151	-0.137	0.118	0.011	1.000		
BA	0.170	-0.252	-0.337	0.192	0.223	-0.023	1.000	
BRG	-0.040	-0.066	0.107	-0.469	0.018	-0.049	-0.102	1.000

Source: Author's Computation, 2025

The variables' estimated coefficients of correlation are presented in Table 3. The outcomes established a weak correlation coefficient of 0.076 between price of share as well as Tobin Q meaning that there exists a positive connection between share price as well as Tobin Q. Also, the individual weak correlation coefficients of -0.189 as well as -0.187 obtained revealed that loan to deposit ratio has a connection that is negative with share price as well as Tobin Q. The outcomes of the descriptive analysis equally show that current ratio is connected positively with share price as well as the Tobin Q with associated weak correlation coefficients of 0.148 and 0.073. Cash reserve ratio is equally found to be negatively connected with Tobin Q; whereas it is positively connected together with the price of share with the individual weak correlation coefficients of -0.062 as well as 0.060.

In considering the control variables, the outcomes established that a negative connection between the size of the banks and Tobin Q exist ; whereas there exist a positively connection between the size of the banks as well as price of share as established by the respective weak and strong estimated coefficients of -0.112 as well as 0.151. The respective weak correlation coefficients of 0.170 as well as -0.252 specify the existence of positive connected between age of the bank as well as Tobin Q whereas negative connection between age of the bank as well as share price. Also, there was an existence of a negative connection between the bank growths with both Tobin Q and price of share as reflected in the estimated weak correlation coefficients of -0.040 as well as -0.066. In the subsequent section, these relationships were further probed using panel regression technique.

Table 4: Variance Inflation Factor

	VIF	1/VIF
CR	2.863	.349
LDR	2.492	.401
CRR	1.486	.672
BRG	1.147	.873
BA	1.159	.863
BS	1.026	.974
Mean VIF	1.695	.

Source: Author's Computation, 2025

The outcomes in Table 4 contain the Variance Inflation factors of the variables used in achieving objective 4 of the study. From the results, the highest VIF is 2.863 recorded by the

current ratio followed by 2.492 recorded by the loan to deposit ratio and 1.486 recorded by the cash reserve ratio while bank revenue growth, bank age and bank size respectively had VIF of 1.147, 1.159 and 1.026. The implication of these VIF results is that they are free of multicollinearity issues since none of the VIF is close to the threshold of 10 for multicollinearity to exist.

Table 5: Serial Correlation and Heteroscedasticity Test

Test	Test Type	Value	P value	Conclusion
Autocorrelation	Wooldridge Test	18.91	0.0012	Presence of serial correlation
Heteroskedastic	Breush-Pagan / Cook-Weisberg	134.81	0.000	Presence of heteroscedasticity

Source: Author's Computation, 2025

The diagnostic examination outcomes for serial correlation as well as heteroscedasticity are presented in Table 5. It was established that no proof of serial correlation, whereas proof of heteroscedasticity was noted. Hence, the results are obtained with substantial standard error to correct for the breach of the traditional linear regression's presumptions.

Table 6: Estimated Linear Panel Regression Results (Dependent=TQ)

Variables	Coeff	t-stat
LDR	-0.122**	(-2.196)
CR	-0.00623	(-1.333)
CRR	-0.00330	(-1.220)
BS	-0.0315	(-1.651)
BA	0.00240	(1.092)
BRG	-2.99e-06	(-0.917)
Constant	1.912**	(3.847)
Observations	144	
R-squared	12	
Number of fid	0.126	
Chow F	6.06	
Chow P val.	0.000	
Hausman Chi.	6.44	
Hausman P val.	0.168	

Robust z-statistics in parentheses

** p<0.05

Source: Author's Computation, 2025

In the outlined outcomes in Table 6, panel regression - random effect method was utilised after Hausman examination. From the outcomes, the influence of loan to deposit ratio on Tobin Q was established to be negative but significant at 5% level (t = -2.196; p < 0.05). This indicates that banks with higher rate of loan to deposit ratio will reduce the sum of cash with the banks which then weakens their capability to fulfil their financial responsibilities; thereby lower the level of Tobin Q and reduce the banks' market value. Also, it was established that current ratio exerts insignificant negative control on the banks' Tobin Q (t = -1.33; p > 0.05). This implies that the banks' Tobin Q is not affected by current ratio. In addition, cash reserve ratio exerts

insignificant negative control on the banks' Tobin Q. ($t=-1.22$; $p>0.05$). The established outcomes as regards control variables show that there exist an influence that is positively insignificant between bank age and price of share ($t=1.092$; $P>0.05$). Whereas bank size ($t=-1.65$; $P>0.05$) as well as bank revenue growth ($t=-0.917$; $p>0.05$) affect the Tobin Q of banks in question negatively and insignificantly.

Table 7: Estimated Linear Panel Regression Results (Dependent=SP)

Variables	Coeff	t-stat
LDR	-2.512**	(-2.171)
CR	-0.119	(-1.293)
CRR	0.140**	(2.261)
BS	5.027**	(8.975)
BA	-0.182**	(-2.011)
BRG	-6.29e-05	(-0.984)
Constant	-113.9**	(-7.916)
Observations	144	
R-squared	12	
Number of fid	0.77	
Chow F	11.19	
Chow P val.	0.000	
Hausman Chi.	4.79	
Hausman P val.	0.309	

Robust z-statistics in parentheses

** $p<0.05$

Source: Author's Computation, 2025

The outcomes obtained are detailed in Table 7 using panel regression – random effect after Hausman test. It was revealed that ratio of loan to deposit established a negative influence that is however significant on the banks' share price ($t=-2.171$; $p<0.05$). This specifies that the amount of cash with the bank will decrease due to higher rate of loan to deposit ratio. This will then weakens their capability to fulfil their financial responsibilities thereby decreases price of share which reduce the banks' market value. Also, as regards current ratio, the outcomes established a negative influence that was however insignificant on the banks' share price ($t=-1.293$; $p>0.05$); indicating that current ratio did not affect the banks share price. In addition, cash reserve ratio outcomes established a negative influence that is however significant on the banks' share price ($t=2.261$; $p<0.05$). The established outcomes as regards control variables show that there exist an influence that is positively significant between bank size and price of share ($t=8.975$; $P<0.05$). Whereas bank age ($t=-2.011$; $P<0.05$) affect the banks' share price negatively but significantly; while bank revenue growth ($t=-0.984$; $p>0.05$) affect the price of share for banks in question negatively and insignificant.

Discussion of Findings

In this study, how liquidity management influence the market value of listed banks in Nigeria was considered. It was revealed that liquidity management had an influence on the market value of the bank in question. It was recognized that among the substitutes of liquidity management, only loan to deposit ratio recorded a negative but significant influence on the share price as well as Tobin Q (market value) of listed banks. The outcomes found here align with the revelations in some other related empirical literatures such as; Subagyo (2023); Zimon et al. (2022) &

Olagunju et al. (2021). However, Egbuhuzor and Ugo (2021) recorded a negative as well as insignificant influence of current ratio on the performance of listed Nigerian banks in question; while, Ajayi and Lawal (2021) outcome revealed a positive influence. Also, the study of Otekunrin et al. (2019) agreed that, there exists a positive correlation among the firm's performance and liquidity management. Onyekwelu et al. (2018) in the same vein specified that liquidity has a positive as well as significant influence on the profitability parameters of banks as well as on return of capital employed.

CONCLUSION AND RECOMMENDATIONS

This study emphasized on how liquidity management plays a role that is essential to enhance the market value of Nigerian listed banks. This study considered panel regression analyses to investigate three principal research objectives, all of which were designed to comprehend the effect of liquidity management on the market value of deposit money banks listed in Nigeria. The study deduced that loan to deposit ratio had a negative and significant influence on market value of listed deposit money banks in Nigeria. It was inferred that, increase in the loan to deposit ratios would lead to earnings' decline because too much of cash with outsider will decrease investment growth thereby affecting market share price to shareholders adversely as well as causing market value to decline. It was established that current ratio exerts insignificant negative influence on the market value of the listed. This implies that the banks' market value is not affected by current ratio. Also, the study established that cash reserve ratio exerts insignificant negative influence on the banks' Tobin Q; while a positive and significant influence on the banks' share price. In summary, this study concluded that liquidity management is a factor that influence Nigerian listed deposit money banks' market value. While liquidity is essential, bank's management should not maintain a higher rate of loan to deposit ratio because it will lessen the ability of the amount of cash reserve ratio with the bank which will in turn weaken their strength to fulfil their financial responsibilities. Also, the management should maintain cash reserve ratio prescribed by the regulatory body.

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