

LIQUIDITY MANAGEMENT ON FINANCIAL PERFORMANCE OF DEPOSIT MONEY BANKS IN NIGERIA

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Abstract

Despite having investments in safe, high-yielding, illiquid assets, many banks are bankrupt. Because of sudden withdrawals and a lack of liquid capital, some banks incur a large loss when they take out emergency loans, even when they have a lot of assets. This study therefore examined the impact of liquidity management on financial performance of deposit money banks in Nigeria. The study adopted an ex-post facto research design. The population of the study consists of all deposit money banks in Nigeria quoted firm on the floor of the Nigeria Stock Exchange (NSE). The data obtained were analyzed using correlation and regression analysis. Results of the analysis revealed that cash reserve ratio and loan deposit ratio have positive and significant impact on deposit money banks. The study concluded that liquidity management has significant impact on financial performance of deposit money banks in Nigeria. Recommendations were proffered in line with the findings of the study.

Keywords: Liquidity management, cash reserve ratio, loan deposit ratio, financial performance.

1.1 Background to the Study

The world's economies view the financial industry as a basic and essential sector. According to Sanyaolu et al., (2019), many rising nations need a monetary market that is well-established and functional because without financial sector funding, such economies cannot run adequately or productively. Because it contributes positively to the economic growth and progress of every country, Bagh et al., (2017) view the financial sector as a formidable force and a bulwark of any economy. The proper operation of any enterprise is greatly dependent on the amount of liquidity available. Profitable banking operations are facilitated by adequate liquidity, particularly when it comes to maintaining depositor's confidence in fulfilling immediate obligations. Holding a sizable amount of liquid assets that are easily convertible into cash becomes extremely wise in order to prevent insolvency, since even a slight lack of liquidity can seriously harm a financial institution's operations and client relationships. On one hand, effective liquidity management entails planning and managing the liquid current assets to minimize the risk of short-term obligations causing nonpayment, and on the other hand, avoiding overinvestment in these assets.

The ability of a bank to satisfy its present and future obligations to its creditors and depositors, as well as to satisfy new loan demand while maintaining current reserve requirements, is known as bank liquidity. Through its monetary specialists, a nation's government frequently uses liquidity to evaluate a bank's ability to carry out its intermediation duty, which enhances beneficial venture (Agbada & Osuji, 2013). Positively, banks require substantial financial assets to perform their intermediation function and other functions; hence, maintaining profitability and managing consumer withdrawals on demand are essential. Due to their intrinsic contradiction, these two functions require careful evaluation. Through their position as monetary intermediate, banks revive inactive money acquired from loan specialists by allocating them to different portfolio classes. If the last alternative is not able to satisfy their financial obligations, the deposits made by these fund savers which were given by the bank's revenue-driven maximization can be assessed or sought.

High profitability in banks' business operations and adequate liquidity show that banks have a balanced structure of assets and liabilities, ensuring the banks' stability (Okoliet al., 2020). Inadequate capital, assets, and liabilities combined with an aggressive loan program that raises credit risk and, as a result, increases the possibility of losses, can impair the financial stability of banks over the medium term. Poor credit portfolio quality suggests that some banks' capitalization is insufficient and that unqualified credit portfolio management techniques are being implemented (Klaas & Vagizova, 2014). In this respect, some banks have not fully valued the importance of liquidity risk management and the implications of such risk (Mohanty & Mehrotra, 2018). Any profit-oriented organization, including deposit money banks, can effectively measure its corporate wealth and performance using profitability and liquidity.

The shareholders and depositors, who make up the majority of a bank's stakeholders, place great importance on these performance measures. While depositors expect the bank to keep enough idle cash to meet their demand, shareholders expect the bank management to expand lending to maximize their return on investment. Effective liquidity management is required

to balance the competing interests of the shareholders' and depositors' interests, as well as the profitability target and that of liquidity, to maintain the survival and expansion of deposit money banks (Mokuolu et al., 2021). By absorbing financial surpluses from their depositors and making them available to investors (borrowers) for use in a variety of investment channels, deposit money banks fulfill their duty as intermediaries.

The bank's investment activity is not without risks and issues because it aims to maximize the expected returns on these investments. This call for the best use of the available resources because the bank is always exposed to meeting the obligations of its customers and depositors who wish to withdraw their funds, so it must always be prepared to do so (Gbegi et al., 2017). The issue occurs when the bank is unable to meet these demands, particularly the unforeseen ones, which could humiliate the bank in the eyes of its customers and cause the bank to gradually lose its faith given the intense competition in the banking industry brought on by the growth in local banks as well as the intense competition from banks operating in the industry. According to Alshatti (2015), there are two types of liquidity management: By a business's ability to trade an asset at its current price, such as stocks or bonds, and secondly by its size, such as huge corporations like financial institutions.

Deposit money banks are typically evaluated on their ability to supply cash needs, meet collateral requirements, and do so without suffering significant losses. Therefore, in both situations, liquidity management refers to all of the steps taken by managers and investors to reduce their exposure to liquidity risk. There has been several corporate liquidity management strategies used in the banking industry, according to Duruechi et al., (2016). These tactics may be created by monetary or regulatory authorities, as well as the bank itself, to fulfill obligations that have come due, take full advantage of market profit opportunities, or maintain the level of public confidence now in place.

However, in Nigeria, the relationship between bank performance and liquidity management has long been debated. While Adegbe and Dada (2018) and Sanyaolu et al., (2019) found a negative and irrelevant relationship with performance, other researchers, including Okaro and Nwakoby (2016), Akinwumi et al., (2017), and Fagboyo et al., (2018), found a positive and significant relationship with performance. Consequently, it may be said that the results of the previously listed studies are conflicting and ambiguous. To the best of the researchers' knowledge, no recent study has examined how liquidity management affects deposit money banks' (DMBs) performance using Tobin's Q. Therefore, it is necessary to look into how liquidity management affects the financial performance of deposit money banks in Nigeria.

1.2 Statement of the Problem

One of the biggest risks to the sustainability and financial performance of DMBs in Nigeria is liquidity. According to several analysts, DMBs financial performance is mostly determined by their liquidity position. The complex and inverse relationship between liquidity and financial performance is a continuing challenge for the DMBs. In order to secure their existence in the dynamic, competitive, and ever-changing corporate business world, firms' primary goal is to maximize profits and optimize their liquidity position. In order to maintain continuity, prevent insolvency, and maximize returns, DMBs aim to accomplish the business objectives that enable them to combine liquidity and financial success. As a result, since investment decisions are based on the availability of liquidity, liquidity is crucial (Wahdan, 2017).

Even if they have investments in safe, high-yielding, illiquid assets, many banks are nonetheless burdened with loans. Even if they have a lot of assets, some banks lose a lot of money when they take out emergency loans because of sudden withdrawals and a lack of liquid capital. This was determined to be the primary cause of bank failures and nationalizations in 2008, together with the incapacity to generate a sufficient profit (Barrell & Davis, 2008). Most Nigerian money deposit banks are losing a lot of their customers because they put profit maximization ahead of implementing liquidity measures to meet customer requests and fulfill client commitments on time and in full (Otekunrin, Fagboro, Nwanji, Asamu, Ajiboye & Falaye, 2019). Before the Central Bank of Nigeria bailed out many banks due to illiquidity, several banks in Nigeria experienced liquidity issues as a result of a liquidity mismatch. The Assets Management Company of Nigeria (AMCON) purchased these banks as toxic assets when they became technically insolvent and could not meet their liquidity needs. Examples of these banks include Oceanic, Intercontinental, Bank PHB, etc. These banks are no longer in existence.

Nonetheless, some academics have conflicting views regarding the connection between DMB performance and liquidity management. According to other research, the performance of businesses is not much impacted by liquidity management. The inconclusive findings of extensive research that assessed the effect of liquidity management on banks' financial performance served as the foundation for this investigation. In light of this, the purpose of this study is to look into how liquidity management affects the financial performance of Nigerian deposit money institutions.

1.3 Research Question

- i. Does cash reserve ratio have impact on performance of DMBs?
- ii. To what extent does loan deposit ratio have impact on performance of DMBs?

1.4 Research Hypothesis

H0₁: Cash reserve ratio has no significant impact on performance of DMBs.

H0₂: Loan deposit ratio has no significant impact on performance of DMBs.

2.0 Literature Review

2.1 Liquidity Management

Liquid assets are mostly current assets, which can quickly be converted to cash when the need comes in order to meet financial and debt obligations (Okaro & Nwacoby, 2016). Graham (2013) defines liquidity as a bank's capacity to fund increase in assets and meet both expected and unexpected cash and collateral obligations at a reasonable cost and without incurring unacceptable losses. According to Bhattacharyya and Sahoo (2011), liquidity management entails maintaining a sufficient cash balance and its related balances to satisfy customers' needs at any time as well as making sure that there is money available to carry out the daily tasks of the bank. Liquidity management is an ongoing process that ensures cash conforms to the required level of reserves with the central bank as well as meeting their customers expected and contingent cash needs and other obligations (Jena & Shekhar, 2020).

2.2 Performance of DMBs

Financial performance of financial institutions is usually expressed as a function of internal and external factors. Financial performance in financial institutions has been widely discussed in the scientific literature, it has also been considered in a number of theoretical and empirical researches of different kinds. Matolcsy and Wright (2011) measured firm performance by return on assets which is $EBIT / \text{average total assets}$, return on equity that is $\text{net profit} / \text{equity}$, change in market value of equity, change in market value of equity, adjusted for dividends and risk. Yasser and Ismail (2011) used return on equity and profit margin for the measurement of firm performance. Market based measures of companies' performance were done by Shah *et al.* (2011) by market value of equity divided by book value of equity and Tobin's Q (market value of equity plus book value of debt/total of assets minus in book value), whereas financial reporting perspective was measured by Return On Equity (ROE) and return on investment which is $\text{net result} + \text{interest over equity} + \text{total debt}$.

2.3 Theoretical Framework

Commercial Loan Theory

Adam Smith was among the scholars that propounded the commercial loan theory otherwise known as theory of real bills doctrine. He propounded this theory in 1776 in his book entitled "Wealth of Nations". The commercial loan or the real bills doctrine theory states that a commercial bank should forward only short-term self-liquidating productive loans to business organizations. Loans meant to finance the production, and evolution of goods through the successive phases of production, storage, transportation, and distribution are considered as self-liquidating loans. This theory also states that whenever commercial banks make short term self-liquidating productive loans, the central bank should lend to the banks on the security of such short-term loans. This principle assures that the appropriate degree of liquidity for each bank and appropriate money supply for the whole economy. This theory will be significant to this study because of the following reasons. These short-term self-liquidating productive loans acquire three major advantages. First, they acquire liquidity so they automatically liquidate themselves. Second, as they mature in the short run and are for productive ambitions, there is no risk of their running to bad debts. Third, such loans are high on productivity and earn income for the banks. This theory will also be relevant to DMBs because loans mature in the short run and are for productive ambitions, therefore there is no risk of their running to bad debts and such loans are high on productivity and earn income for the banks. Also the short-term commercial loans were desirable because they would be repaid with income resulting from the commercial transaction financed by the loan.

3.0 METHODOLOGY

This study adopted an ex-post facto research design to determine the relationship between liquidity management and financial performance of deposit money banks in Nigeria. The population of the study comprises of all listed deposit money banks in Nigeria. The data was gathered from secondary sources of banks annual financial reports from 2015-2023. Accounts of fourteen (14) selected deposit money banks quoted in the Nigerian Stock Exchange were considered. The study used descriptive research method to describe the situation of liquidity management to make sure there was minimum bias in the collection of data. Stata 13 was used as the data analysis tool, and multiple regression techniques were used in the analysis.

4.1 RESULTS AND DISCUSSIONS

The summary of the results of the regression analysis presented below is used to explain the specific objectives of the study hypothesis.

Table 4.1: Summary of the regression results

Hypotheses	Beta Value	Standard Error	T Stat	P-value	Decision
Cash Reserve Ratio -> DMB	0.1833	0.0490	3.7409	0.000	Rejected
Loan Deposit Ratio -> DMB	0.1738	0.0562	3.0945	0.000	Rejected
Adjusted R ²	0.590				

From Table 4.1, it can be seen that cash reserve ratio has a significant impact on DBM ($\beta = 0.183$ and t -value = 3.741, p -value < 0.05). This means that, a unit change in cash reserve ratio will lead to 18.3% increase in DBM. Hence, hypothesis one that states cash reserve ratio has no significant impact on performance of DMBs is unsupported.

Also, loan deposit ratio has a positive and significant impact on DBM with $\beta = 0.1738$; $t = 3.094$, $p = < 0.05$). This implies that, a unit change in loan deposit ratio will lead to 17.4% increase in DBM. Hence, hypothesis two that states loan deposit ratio has no significant impact on performance of DMBs is rejected.

The Adjusted R² value of 0.59 implies that 59% of the variance in the dependent variable (deposit money banks) is jointly explained by cash reserve ratio and loan deposit ratio. The remaining 41% accounted for other liquidity management that is not captured in this study.

4.1 Discussion of Findings

Having presented the results of the hypothesized in the previous sections of this chapter, it is worthy enough to summarize such findings in a single Table representing all the findings of the study. Hence, Table 4.2 presents the summary of findings.

Table 4.2: Summary of Findings of Hypotheses Testing

Hypotheses	Statement of Hypotheses	Findings
H ₀₁ :	Cash reserve ratio has no significant impact on performance of DMBs.	Rejected
H ₀₂ :	Loan deposit ratio has no significant impact on performance of DMBs.	Rejected

Cash reserve ratio has no significant impact on performance of DMBs. This finding is in line with the studies of Wisdom et al., (2021) assessed the impact of liquidity management on the financial performance of quoted deposit money banks in Nigeria. Secondary data were gathered from the corporate annual reports and accounts of fifteen (15) Banks for eleven (11) years spanning from 2007 to 2017.

Loan deposit ratio has no significant impact on performance of DMBs. This finding is in line with study of Zidan (2020) investigated the impact of liquidity management on Palestinian firm profitability. Loan-to-deposit ratios were used as proxies for liquidity management and return on assets as a measure of profitability. A significant impact on return on assets can be attributed to the loan to deposit ratio.

5.1 Summary and Conclusion

This research was able to determine the nexus between liquidity management and its impact on cash reserve ratio and loan deposit ratio on performance of deposit money banks. Based on the analysis conducted to test the three attributes on various relationships, both proxies of liquidity management considered (cash reserve ratio and loan deposit ratio) have positive and significant relationship with deposit money banks. The study therefore concluded that liquidity management considered financial performance of deposit money banks in Nigeria

5.2 Recommendations

The following recommendations were suggested on the basis of the findings of the study and the conclusion agreed upon:

- i. Banks should embrace measures that will make certain or ensure effective liquidity management rather than directing attention, time and resources to the profit maximization concept only. This, therefore, indicate that banks should invest the available excess cash in short-term instruments of the money market.
- ii. Finally, effective liquidity management is critical for businesses, as reliance on bank loans may not be sustainable due to the increase in banks' non-performing loans. Also, the Central Bank of Nigeria and other government regulatory authorities should set up a board of professionals to oversee liquidity management within Deposits Money Banks in the country, to avoid liquidity problems amongst the banks.

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