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Relationship Between Liquidity Management and Deposit Mobilization of Banks in Nigeria

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ABSTRACT: *This study investigates the relationship between liquidity management and deposit mobilization of banks in Nigeria. The study, which examines the impact of liquidity management measures, including the cash-to-current asset ratio, the current ratio, and the cash reserve ratio, expresses a well-founded view that, while both the cash-to-current asset ratio and current ratio do not significantly affect total deposits, the cash reserve ratio shows a significant positive correlation between it and deposits. These results confirm that cash reserves serve as a primary function for depositor satisfaction and contribute to financial stability. According to the results of the study, banks should make it a point to preserve optimum cash reserves to increase deposits while looking into other issues that could be affecting the way they handle liquidity. The study helps to better understand the liquidity management practices in Nigerian banks and gives viable suggestions for compliance by banks and regulators to liquidity management and deposit mobilization strategies. Future research is suggested for the analysis of the effects of other liquidity levels and some macroeconomic factors on mobile deposit funds.*

Keywords: liquidity management, Nigerian banks, liquidity indicators, cash-to-current asset ratio, current ratio, cash reserve ratio, total deposits, deposit mobilization, liquidity-risk management

INTRODUCTION

Background of the study

The Nigerian banking sector is not only a participant but also the main actor in the country's economic development, namely, the banking sector is the centre of its financial market and catalyzes all the economic growth that a country can experience. The system is a hangar of various financial institutions which include main types of banks. The supermajority of them carry out neutral economic policies and ensure economic stability. The structural liquidity

management and deposit mobilization activities in the Nigerian banking system are important instruments for the stabilization and growth of the banks operating in the country.

Banks in Nigeria use liquidity management as an effective strategy to maintain or improve their resilience in case of operational problems (Adbelaziz, et al., 2020). The most appropriate way of managing a bank asset-liability framework is to maximize a bank's liquidity, which is the cornerstone for the bank to carry out its main function--namely, to fulfil its short-term financial obligations. Due to the unfavourable market conditions and the volatile economic conditions found in Nigeria, it is necessary to have a well-functioning liquidity management system to guarantee the liquidation of bank enterprises and the proper financial richness of these financial organizations. Hamdi and Hakimi (2019) opine that liquidity forms a fundamental part of banks' operations and as a result, low liquidity causes the instability of banks and the financial sector at large.

Hakimi and Zaghdoudi (2017) submit that low liquidity arises when banks cannot meet all the requests of depositors either totally or partially for a given period. The World Bank (2019) has noticed the rise in banks' liquidity risk position as liquidity which is the major cause of financial instability to banks is the risk that has the characteristics of credit risk due to the remark that low liquidity creates risk that dovetails into others. The research will explore variables related to liquidity management, including the cash-to-asset ratio, the current ratio, and the regulatory cash reserve ratio (CRR) which are the main indicators of a bank's ability to deal with short-term financial claims.

Deposit mobilization is the backbone of banking operations and it is a main source of funds that are used for lending and investment (Byyiyet, et al. 2019). Nigerian banks employ several strategies to mobilize deposits among others including the opening and attraction of savings and current accounts (Mamo, 2017). The diversification of the different deposit instruments along with the amount of funds gathered in the bank, is the factor that determines its ability to increase the credit turnover and the economic development in the country. The study will specifically contend the total deposit being the dependent variable representing the overall funds mobilized by the bank.

The regulatory environment supervised by the Central Bank of Nigeria (CBN) and other entities that are regulating liquidity management and deposit mobilization in Nigeria is established there. These regulations are intended to be a means of maintaining the stability and integrity of the financial system (Central Bank of Nigeria, 2021). Clear understanding and managing of this regulatory framework are important aspects that the banks must follow as execution of the standards is necessary to ensure the whole banking sector functions properly. Even though there is a high level of importance on liquidity management and deposit mobilization, Nigerian banks have to face the difficulties arising from market conditions that are not stable, customer preferences that are changing, and dynamic regulatory environments. Conversely, these challenges could be converted into opportunities for the emergence of innovation and the introduction of skillful strategies that could be targeted at improving the effectiveness and efficiency of liquidity management and deposit mobilization. Thriving

through these challenges can be of great importance for banks as it will increase their resistance and contribute to their competitive position in the Nigerian financial landscape.

Statement of the Problem

The Nigerian banking sector is ideally viewed as a system that transfers the deposits of one institution to another using liquidity management impinging on the efficient operations of the sector. The industry would be in such a case that the deciding factors of these banks' liquidity or liability levels are regulated, indices by the CBN are extensively monitored and within limits, or investors by their discretion adjust asset or liability levels, hence optimal liquidity position is almost guaranteed for the satisfaction of short-term obligations. Effective deposit mobilization becomes a stepping stone for the banks to be able to accumulate and keep getting funds, enabling them to increase the amount of lending which can, in turn, translate to economic development. The above illustration propels such banks to go through production, still taxes levied by the government, fluctuations in markets that sponsored movement, and dynamic customers, as a result bank sector is truly seen as the main bank becoming the major driver for growth in Nigeria.

On the other hand, the truth in the nearest of the world shows a different picture. A substantial number of banks find it difficult to reach an ideal balance between the two as a result of problems related to liquidity management and also because of the rather composite regulatory compliance, which in turn may bring about inflexibility. Besides such problems, the ineffective deposit mobilization together with the intense economic and shifting customer activities worsens the dilemma. The existence of a gap between the ideal and the actual state in terms of liquidity management along with deposit mobilization tactics curtails the sector's potential to make significant contributions to economic development.

These problems should be addressed here, as well as the unearthing of those issues in the context of Nigeria which the literature in existence points to.To this end, the main objective of this study is, to find a link between liquidity management and deposits mobilization amongst Nigerian banks. More specifically, it: will check the correlation between the cash-to-current asset ratio and the total deposits; will scrutinize the relationship between the current ratio and the total in the country; and will also define the connection between the cash reserve ratio and the total deposits of banks in Nigeria. Tackling all these issues together should point out the differences in Nigeria's banking sector vs. its actual position.

REVIEW OF RELATED LITERATURE

Liquidity Management

Liquidity is the potential that the bank of the enterprise has to make good on its short-term financial obligations by converting assets to cash fast enough. It undeniably takes a primary role in sustaining the operation and financial stability of these organizations, hence banks, a bank for example, which must satisfy the cash withdrawals, the cheque payments, and loans as well as, conform to the regulations on reserves. Prudent liquidity management thus secures the ability to fund the organization's operations and deals with the dynamic payables without the organization suffering any losses (Nwaezeaku, 2022). The research evidence points to the

delicate consideration of treasuring the right level of liquidity and maximizing profits as either insufficient or too high liquidity could damage the asset base of such firms (Obida & Owolabi, 2012; Pandey, 2005). Liquidity management ratios, for example, the current ratio, which is very commonly used, are applied to assess liquidity (Lamberg & Valming, 2019).

On a global scale, liquidity management has been a focus mainly because of its part in the prevention of financial crises and sustainability. The knowledge is obtained from the demonstration through the Morningstar Factors survey that the instances of poor liquidity management were recorded in conjunction with less effective risk management policies. This was verified in the 2008 global financial crisis. During the crisis, the forms of contributing factors due to liquidity management problems were found. Consequently, changes in regulations were introduced, for example by the Basel Committee (2020). These updates underscore the vital role of the banks which is to secure enough liquid assets and manage the short-term liquidity needs efficiently for the prevention of solvency issues and find a way to uplift the confidence of the depositor once more (Paul De Grauwe, 2018; Vodova, 2013).

The balance between liquidity and profitability remains a central point of debate for businesses. Of course, high liquidity is very important for meeting obligations and avoiding financial distress, but a disproportionate orientation towards profitability and deficiency in liquidity can lead to operational risks (Junaidu & Aminu, 2014; Bhunia, 2020). Scholars such as Padachi (2006) and others promote a balanced method, which secures the required amount of liquidity for the obligations and at the same time guarantees the profitability of the organization. Liquidity management, therefore, is primarily a means of supporting the dí- vino functión and by extension the generation of long-term growth, profitability, and shareholder wealth, thus it is a key element in effective financial management (Nasr & Raheman, 2020).

Cash-To-Current Asset Ratio (CCAR)

Cash to current assets is a liquidity ratio that measures how much of the current assets in a company are made up of cash and cash equivalents (Tomasetti, 2024). The researcher further stated that the current assets of a company refer to any asset that can quickly be sold or consumed in less than twelve months. Companies depend on such assets to pay for their day-to-day operations, such as employees' salaries and other short-term liabilities. Current assets include cash and cash equivalents, short-term investments such as marketable securities, accounts receivable, inventories, and prepaid expenses.

Cash and cash equivalents and marketable securities form the most liquid current assets and can generally be referred to as "cash". Cash and cash equivalents are considered some of the most important components of current assets and are the lifeline of corporate financial management (Tomasetti, 2024). The Managers hold a substantial portion of their assets in the form of cash and liquid securities for reinvestment distribution to shareholders and to keep cash inside the firm. Managers make decisions regarding how much liquidity a firm's statement of financial position should have. Cash holding, according to Gill and Shah (2012) is defined as cash in hand or readily available for investment in physical assets and to distribute to investors. When cash is compared to the total current assets of a company, we get the cash-to-current asset ratio. A high, or increasing cash-to-current assets ratio can be generally a positive sign,

showing the company's most liquid assets represent a larger portion of its total current assets. It might also mean that the company is more capable (it can convert its stock and such non-liquid assets to cash).

Current Ratio (CR)

The current ratio is a liquidity ratio determining the company's ability to cover the short-term obligations or the ones that need to be paid within a year. Fernando (2021) opines that the current ratio shows investors and analysts how a company can maximize the current assets on its statement of financial position to satisfy its current debt and other payables. The current ratio is mainly used to give an idea of a firm's ability to pay back its liabilities (debts and accounts payable) with its assets (cash, marketable securities, inventory, accounts receivable). As such, the current ratio can be used to make a rough measurement of a firm's financial health. The higher the current ratio, the more capable a firm is of meeting its obligations as and when they fall due, as it has a larger proportion of assets value relative to its liabilities' value.

The current ratio is the result of the ratio of current assets to current liabilities incurred. It is an indicator of the short-term solvency of a commercial bank. Cash and assets that can be converted into cash in a very short period, such as marketable securities, receivables, inventories, and prepared expenditures are treated as current assets. All commitments that mature within a year are considered current liabilities. Accounts payable, bills payable, notes payable, unpaid expenses, and tax liability are among them. Even though it is impossible to set one benchmark for all businesses, a current ratio greater than one is considered sufficient for the majority of them. The problem with using the current ratio to calculate liquidity is that it is a measurement of quantity rather than the quality of assets, so it does not show the true state of a company's liquidity. The current ratio provides an estimate of a company's liquidity (Olagunju, Adeyanju & Olabode, 2011).

Cash Reserve Ratio (CRR)

This is the proportion of total deposit liabilities that the deposit money banks and other financial institutions are expected to keep as cash with the Central Bank of Nigeria (CBN) (Udeh, 2015). The reserve requirement is one of the most powerful instruments of monetary control, if it changes, the required reserve ratio has another effect. A change in the required ratio changes the ratio by which the banking system will expand deposits through the multiplier effect. If the required reserve ratio increases, it thereby reduces the liquidity position of the banking system (Udeh, 2015).

Under the cash reserve ratio (CRR), commercial banks have to hold a certain minimum amount of deposits as reserves with the central bank. The percentage of cash required to be kept in reserves as against the bank's total deposits, is called the Cash Reserve Ratio. The cash reserve is either stored in the bank's vault or sent to the CBN. Banks can't lend the CRR money to corporates or individual borrowers, banks can't use that money for investment purposes. And Banks don't earn any interest on that money.

Deposit Mobilization

Deposit mobilization or deposit collection belongs to the first bricks in the banking operations foundation worldwide, because it is the basis on which the banks run and offer their services across different sectors (Jhingan, 2001; Uremadu, 2002; Bakare, 2011; Orji, 2012), Bank of Savings and Thrift to mention but a few. Banks achieve the first part of the task, namely, to attract clients to deposit money in the bank, with the help of a variety of account types, e.g., savings, current, and fixed accounts, which are essentially the main financial resources of the bank (Digaria, 2011). Further, banks have optimally developed the deposit mobilization strategy through investment growth, technology, and staff training – all of these along with building trust measures are the tools through which banks have done it. (Mohan, 2012). These are the steps that have been able to make the banks not only survive but also fully use their capacities for expansion in the financial market and offering more services.

From the banking institutional viewpoint, deposit mobilization is a cheaper option for banks to get operational funds than other financing mechanisms (Elser, 1999; Kutan, 2010). A good example is the next situation: in Zimbabwe, currency adaptations made banks increase deposit mobilization by modifying products and services which made banks more competitive with diverse clients (2009). This strategy approach made the deposit accumulations reach the highest peak, hence, the banking sector was thus able to stabilize its growth through mobilization. Such practices underscore the importance of effective deposit mobilization in ensuring the resilience and sustainability of banking institutions.

Customer deposits are fundamental to a bank's ability to function and thrive, forming the basis for lending activities that fuel economic development. These deposits, particularly low-cost options such as current and savings accounts, help banks manage operational costs while staying competitive (Opoku, 2011). The size and composition of deposits directly influence a bank's capacity to engage in profitable operations and serve its community (Mamo, 2017). Strictly speaking, customer deposits are over and above financial assets—they form the core of the banking operations and thus, the main driver of a bank's ability to contribute to economic growth.

Theoretical Framework

The research is essentially drawn from two theories: the Liquidity Preference Theory formulated by John Maynard Keynes, and the Baumol Model developed by William Baumol. The primary hypothesis of the Liquidity Preference Theory is that individuals and firms should hold money in liquid form due to transactional, precautionary, and speculative motives. Banks, in particular, have the looming issue of liquidity that needs to be solved daily for them to continue with their usual activities and cover any unexpected expenses that might occur, as well as to be able to make a judicious decision when potentially profitable investment opportunities befall them. Nonetheless, two conflicting situations can happen to a bank if either too much or too little liquidity is maintained: the firm's financial performance, interest margin, customer confidence, and flexibility of operations will be affected. The theory further points out that interest rate levels have a direct impact on liquidity decisions wherein low rates encourage keeping more liquidity while high rates spur more spirited investments, thus both sides of the coin could be causes of good or bad performance in the bank.

The study's objectives explore these liquidity dynamics by examining the relationships between key liquidity indicators—such as the cash-to-current asset ratio, current ratio, and cash reserve ratio—and total deposits. These align with the transactional and precautionary motives outlined in the Liquidity Preference Theory, providing insights into how Nigerian banks manage liquidity to optimize deposit mobilization. Furthermore, the foundation provides a more subtle explanation of how regulatory measures and interest rate changes affect the banks' liquidity strategies. As a result, banks' financial performance and their ability to mobilize deposits efficiently are influenced by the liquidity strategies they put in place.

The Baumol Model supports this structural basis by giving a systematic approach to establishing the optimum liquidity level for transaction purposes. It draws on inventory management principles to minimize the costs of holding and converting cash, emphasizing the trade-off between transaction costs and the opportunity cost of idle funds. Although the model has limitations—such as oversimplified assumptions of constant costs and liquidity production—it remains a valuable guide for banks in establishing efficient liquidity management practices. Together, these theories offer a considerable methodology for the analysis of the conjunction between liquidity management and deposit mobilization in the Nigerian banking sector.

Empirical Review

Many studies have explored the effects of liquidity management on financial performance by sector and region using various methodologies and variables.

Fagboyo et al. (2016) looked at liquidity management's influence on the profitability of deposit money banks in Nigeria (2007–2016) through pooled regression. They discovered that quick ratio, cash ratio, and liquidity coverage ratio were the main factors in determining bank performance (ROA and ROE). Similarly, Duruechi et al. (2016) used OLS regression to reveal a significant positive effect of most CBN liquidity measures on banks' performance (1990–2014), except foreign claims. Etale and Bingilar (2016) examined food and beverage firms (2011–2015), finding significant positive effects of cash and quick ratios on ROCE, while cash conversion cycles were nonsignificant. Akinwumi et al. (2017) reported a negative relationship between liquidity (current ratio) and performance (ROA and ROE) in Nigerian banks (2007–2016), with ROE showing a significant connection. Tamunosiki et al. (2017) used advanced econometric methods and found mixed effects: cash reserve ratios negatively impacted ROE, while loan-to-deposit ratios were significantly positive. In the study by Ologbenla (2018), it was demonstrated that liquidity did not affect insurance companies' performance, however, this fact was emphasized later, during the period (2003-2012), through stronger stock management by the companies.

Onyekwelu et al. (2018) report that the positive and significant effect of liquidity on banks' profitability ratios (2007-2016) was evidenced in Nigerian banks meanwhile Ali and Jameel (2019) claimed that despite liquidity management, the profitability of banks in Iraq (2006-2016) was not significant and rather had a negative influence. Etale and Sawyerr (2020) observed mixed results in GlaxoSmithKline Nigeria, with current and cash ratios positively linked to ROA, but quick ratios showed a negative relationship. Ajayi and Lawal (2021) noted

significant negative relationships between loan-to-deposit ratios and ROA in Nigerian banks (2009–2018), while liquid ratios had a nonsignificant positive effect. Ali et al. (2021) found that financing cash and bank age positively influenced Nigerian banks' performance, whereas cash-to-total assets had a significant negative effect.

In Pakistan, Khan and Ali (2016) revealed a significant positive link between liquidity and profitability of commercial banks (2008–2014). Olaoye (2020) and Akinleye and Olanipekun (2021) looked at the manufacturing sector and the food industry in Nigeria, respectively, and came to the conclusion that liquidity risk had a positive effect on profitability, but market risk was found to have no tangible impact. Research by Obi-Nwosu et al. (2017) and Bassey (2017) came to the conclusion that mechanisms of liquidity present both short and long-term impacts on Nigerian DMB thereby, the disagreement between the findings. Bassey and Ekpo (2018) found out that DMBs were engaged in too cautious liquidity practices, and Otekunrin et al. (2019) examined performance indicators of quoted DMBs on the NSE (2012–2017) and concluded that sustainable liquidity strategies are crucial for success.

Gap in the Empirical Literature

This research aims to fill the vital gaps that exist in the already-known literature on the subject of liquidity management and Nigerian banks. The previous research, which is always conducted in many countries, this survey is only conducted in one country, thus it is more detailed, and we can learn about the unique issues and operations of Nigeria's liquidity management. The context-specific results become more relevant and therefore, it will have a huge impact on local policymakers, regulators, and banking practitioners. Furthermore, the study narrows its scope to key liquidity indicators—cash-to-current asset ratio, current ratio, and cash reserve ratio—enabling a detailed examination of their relationships with total deposits. This focused approach provides deeper insights into liquidity management practices within the Nigerian banking sector. The paper also keeps it current with time by having data covering years from 2012 to 2022 collected to present contemporary methods of cash management against varying economic and regulatory conditions. One impressive part of the research is that it has looked at the correlation between liquidity ratios and total deposits, thereby explaining how these indicators of liquidity and resistance to liquidity risk affect deposit collection. Through filling in such gaps, this study has contributed to a better understanding of liquidity management practices in Nigerian banks, it has action-oriented insights that can be used to enhance banking practices and regulatory frameworks locally.

METHODOLOGY

The study employed an ex-post-facto research design that utilized only the data from the annual reports of listed deposit money banks in Nigeria as the main source of input. The research, done in the Nigerian financial services sector, focused on the period 2012 to 2023, thus indicating the sector's catalyst in economic growth. Data collection took place strictly through secondary sources, i.e., annual reports of the 24 deposit banks listed on the Nigeria Exchange Group. A group consisting of four major banks including Access Bank Plc, First Bank Holding Plc, Guarantee Trust Bank Plc, and United Bank for Africa Plc was drawn from the larger population. This selection of the banks was informed by their market share, being sector

pacesetters, and the availability of complete data for the study period, which guarantees the precision and truthfulness of the analysis of research objectives.

Model Specification

A correlation model was utilized for the assessment of the link between liquidity management and deposit mobilization of deposit money banks in Nigeria. In agreement with Inyiama and Ezeugwu (2016), the model was delineated in this manner:

$$r = \frac{\sum (x_i - \bar{x})(y_i - \bar{y})}{\sqrt{\sum (x_i - \bar{x})^2 \sum (y_i - \bar{y})^2}}$$

Where,

r = Pearson Correlation Coefficient

x_i = x variable samples

y_i = y variable sample

$\bar{x}$ = mean of values in x variable

$\bar{y}$ =mean of values in y variable

x represents the Total Deposit
y represents Cash-To-Current Asset Ratio, Current Ratio, and Cash Reserve Ratio

Description of Variables in the Model

Deposits as a total were the chief factor in the study, meanwhile, the independent variables were Cash-to-Current Asset Ratio, Current Ratio, and Cash Reserve Ratio, and they were measured appropriately in a detailed fashion. Multiple regression was used to conduct data analysis to calculate the contribution of liquidity management to the development of deposit mobilization, which was represented by the adjusted R-square. Also, correlation analysis was used to examine the interrelations between liquidity management and deposit mobilization. The methods of analysis, such as regression and correlation, were meant to explicate and forecast the movements in the performance of deposit money banks within Nigeria.

DATA ANALYSIS AND DISCUSSION

Table 4.2.1: Descriptive Statistics for Data Variables

	LOGTDP	CCAR	CR	CRR
Mean	6.502432	0.250335	1.707293	22.83333
Median	6.519426	0.213798	1.350336	22.50000
Maximum	6.966200	0.578735	12.49612	32.50000
Minimum	5.860722	0.093091	0.364859	12.00000
Std. Dev.	0.254568	0.117947	1.602004	6.388991
Skewness	-0.248849	0.901375	5.311803	-0.189608
Kurtosis	2.704109	3.031473	35.67552	2.383858
Jarque-Bera	0.838138	8.127240	2951.377	1.308591
Probability	0.657659	0.017187	0.000000	0.519808
Sum	390.1459	15.02010	102.4376	1370.000
Sum Sq. Dev.	3.823491	0.820784	151.4187	2408.333
Observations	60	60	60	60

Source: Eviews 10.0 Software (2024)

Normality analysis of the distribution of the data variables listed in Table 4.2.1 shows these:

Total Deposit (LOGTDP): The mean is 6.50 and the median is 6.52 which indicates that the Total Deposit is quite symmetrical and covers the mean as well. The skewness of -0.25 indicates a slight leftward skew, although it is not significant. The kurtosis value of 2.70 is close to the normal distribution's kurtosis of 3, suggesting that the distribution is relatively close to normal, with moderate tails. The Jarque-Bera test statistic of 0.84, with a probability value of 0.66, suggests that the hypothesis that the distribution differs significantly from normality should be rejected. Therefore, the distribution, which in real terms is LOGTDP, can be considered normal (Gaussian).

Cash-To-Current Asset Ratio (CCAR): The CCAR variable, on the other hand, with a mean of 0.25 and a median of 0.21, which represents a slightly positive skew. Put simply, a dive into the level of skewness by the 0.90 value further points to the evidence of a longer right-tail distribution. The kurtosis of 3.03 is very close to the normal distribution's kurtosis of 3 which means that there is no significant difference in the tails and peak of the distribution with those of a normal distribution. However, the Jarque-Bera test statistic of 8.13, with a probability value of 0.017, indicates a significant deviation from normality. This result implies that while CCAR's distribution is somewhat close to normal, the positive skew and deviation highlighted by the Jarque-Bera test suggest it is not perfectly normal.

Current Ratio (CR): The CR variable has a mean of 1.71 and a median of 1.35, suggesting a pronounced positive skew. The skewness value of 5.31 is quite high, indicating a significant right skew and a long right tail. The kurtosis value of 35.68 is significantly higher than the normal distribution's kurtosis of 3, showing extremely heavy tails and a very peaked distribution. The Jarque-Bera test statistic of 2951.38, with a probability value of 0.000, points to a severe deviation from normality. The outcome verifies the fact that the CR distribution is highly non-normal due to its extreme values which affect both the tails and the skewness.

Cash Reserve Ratio (CRR): In this particular case, CRR has a mean of 22.83 and a median of 22.50, which is evidence of symmetric distribution. When looking at the skewness of -0.19, there is a slight tendency toward left-sided down, but it is not clear. The kurtosis value of 2.38 which is less than that of the normal distribution shows that the distribution data has shorter tails. The Jarque-Bera test statistic, 1.31, having a probability value of 0.52, does not prove any significant diversion from normality. As a result, the CRR distribution turns out to be quite close to a normal distribution.

Table 4.2.2: Correlation Analysis Result

	LOGTDP	CCAR	CR	CRR
LOGTDP	1.000000	0.016848	0.083532	0.858324
CCAR	0.016848	1.000000	0.153204	-0.063336
CR	0.083532	0.153204	1.000000	0.137567
CRR	0.858324	-0.063336	0.137567	1.000000

Source: Eviews 10.0 Software (2024)

Cash-To-Current Asset Ratio (CCAR) and Total Deposit (LOGTDP): The correlation coefficient between CCAR and LOGTDP is 0.017, which is very close to zero. This indicates a negligible relationship between the Cash-To-Current Asset Ratio and Total Deposit. This weak correlation suggests that the proportion of cash to current assets, represented by CCAR, does not significantly influence or is not significantly influenced by the size of Total Deposits. Practically speaking, alterations to CCAR have negligible or no impact on the Total Deposit amount.

Current Ratio (CR) and Total Deposit (LOGTDP): The correlation coefficient between CR and LOGTDP is 0.084 which indicates a very weak positive relationship also. This suggests that the Current Ratio, which measures the firm's ability to meet short-term obligations, has only a minor effect on or is only slightly influenced by the Total Deposit. Essentially, variations in the Current Ratio do not substantially impact the amount of Total Deposits held by the firm.

Cash Reserve Ratio (CRR) and Total Deposit (LOGTDP): The correlation between CRR and LOGTDP is 0.858, thus denoting a very, very, strong positive relationship. The high correlation implies that as the Total Deposits go up, the Cash Reserve Ratio also goes up considerably. This is to say that banks with larger Total Deposits are more likely to maintain a greater percentage of money reserves out of their total assets. A high positive correlation illustrates that the company's cash reserve management is very much related to the amount of its Total Deposits.

Out of all the independent variables, Cash Reserve Ratio (CRR) has a strong connection with Total Deposit (LOGTDP), which indicates that the organizations with larger Total Deposits are the ones that tend to have higher Cash Reserve Ratios. Quite the opposite, the Cash-To-Current Asset Ratio (CCAR) and Current Ratio (CR) have very weak correlations with Total Deposits which means there is either very little or no impact on the sum of Total Deposits.

Table 4.2.5: Multiple Regression Result

Dependent Variable: LOGTDP

Variable	Coefficient	Std. Error	t-Statistic	Prob.
CCAR	0.010193	0.136811	0.074506	0.9409
CR	-0.011941	0.007984	-1.495656	0.1408
CRR	0.032329	0.002165	14.92931	0.0000
C	5.782083	0.062472	92.55439	0.0000
R^2 = 0.83, Adjusted R^2 = 0.81, F-Stat = 37.24292, Prob(F-stat) = 0.0000, D.W. Stat. = 1.56				

Source: E-views 10 software, 2024

The regression analysis utilizes a Panel EGLS (Cross-section weights) method to examine the effect of the independent variables—Cash-to-Current Asset Ratio (CCAR), Current Ratio (CR), and Cash Reserve Ratio (CRR)—on the dependent variable, Total Deposit (LOGTDP). Covering a balanced panel of 60 observations from 5 cross-sections over the period 2012 to 2023, the study applies a one-step weighting matrix for linear estimation. The results indicate that CCAR has a negligible and statistically insignificant impact on LOGTDP, with a coefficient of 0.0102, a standard error of 0.1368, and a p-value of 0.9409. Similarly, CR has a

low and statistically insignificant impact as specified through a coefficient of -0.0119, a standard error of 0.0080, and a p-value of 0.1408. In contrast, CRR possesses a strong and statistically significant positive impact on LOGTDP, through a coefficient of 0.0323, a standard error of 0.0022, and a p-value of 0.0000, thus emphasizing the crucial importance of cash reserves in increasing the Total Deposits.

The model is well-fitted, having a weighted R-squared value of 0.8337 and an adjusted R-squared value of 0.8113 which means that almost 83% of the variation in the LOGTDP is explained by the independent variables. The F-statistic is 37.2429 and the p-value is 0.0000 together with, which confirms the general importance of the model thus making the emphasis on the joint influence of CCAR, CR, and CRR on Total Deposits valid. However, the Durbin-Watson statistics with the weighted value of 1.5652 and unweighted of 1.3343 imply a slight positive autocorrelation in the residuals. Hence, this implies that there might be some temporal dynamics the model cannot capture which require further exploration or introduction of other explanatory variables to make the model more robust.

Test of Hypotheses

Decision Rule: If the absolute value of the Calculated Correlation Coefficient (r) is greater than or equal to the critical value for the chosen significance level (alpha – 0.5), reject the null hypothesis. This means there is a statistically significant relationship between the variables being studied. If the absolute value of the calculated r is less than the critical value (alpha – 0.5), fails to reject the null hypothesis, suggesting that the relationship between the variables is not statistically significant.

Hypothesis One

H_0: Cash-to-current asset ratio does not have a significant relationship with the total deposits of banks in Nigeria.

H_1: Cash-to-current asset ratio has a significant relationship with the total deposits of banks in Nigeria.

Decision: The absolute value of r which is 0.0.168 is less than the critical value (0.5), so, consequently, we cannot reject the null hypothesis. It is also worth noting that the cash-to-current asset ratio of banks in Nigeria has no statistically significant relationship with total deposits.

Hypothesis Two

H_0: Current ratio does not significantly relate to the total deposits of banks in Nigeria.

H_1: Current ratio has a significant relationship with the total deposits of banks in Nigeria.

Decision: Since the absolute value of the calculated r (0.0835) is less than the critical value (0.5), we fail to reject the null hypothesis. This suggests that the Current Ratio does not have a statistically significant relationship with the Total Deposits of banks in Nigeria.

Hypothesis Three

H_0: Cash reserve ratio does not have a significant relationship with the total deposits of banks in Nigeria.

H_1: Cash reserve ratio has a significant relationship with the total deposits of banks in Nigeria.

Decision: The absolute value of the computed r (0.8583) being greater than the critical value (0.5) does not allow us to accept the null hypothesis. Therefore, we discard the null hypothesis. Such relationships between a depository institution's Cash Reserve Ratio and its Total Deposits are so closely correlated that they are statistically significant in Nigeria's banking system.

DISCUSSION OF FINDINGS

Relationship Between Cash-to-Current Asset Ratio and Total Deposits

The ratio of cash to current assets is explained by the Cash-to-Current Asset Ratio (CCAR) including information having to do with the liquidity management of a bank. However, it could be interpreted differently that this inability of banks to form the CCAR and Total Deposits relationship can be because banks have asset management policies that prefer returns over liquidity. For example, banks may invest more of their current assets in the money market or short-term loans, which are profitable, instead of keeping large cash balances. This operational focus thus implies that CCAR might not be associated with deposit volumes, with other factors such as deposit strategies and market dynamics being more important.

One more possible reason can be the regulatory and policy frameworks that exist in Nigerian banks. Regulatory absences and internal policies frequently make sure that strong liquidity ratios will stabilize, which could enable the standardization of CCAR levels across banks. In these cases, slight changes in CCAR will have smaller possibilities of affecting Total Deposits as the ratio is interconnected with the adherence to liquidity standards rather than being the main driver of the accumulation of deposits. This ongoing steadiness shows that CCAR is a major factor in either compliance with the rules or the ability of the banks to develop internal liquidity strategies, not a dynamic factor that influences the rise and drop in deposit levels.

Furthermore, according to research, the wider economic and behavioural determinants may be stronger Total Deposit factors than CCAR. Economic factors such as interest rates, economic stability, and consumer confidence are the main determinants of the movements in deposits by customers. The main conclusion from Waswa et al. (2018) is that prudent liquidity management, among other things, involves the strategic placement of assets besides keeping liquid assets. The researchers' main contributions include the fact that although proper liquidity management is essential, high liquidity ratios are not necessarily the key to performance metrics such as Total Deposits. Therefore, CCAR's low influence on deposit levels infers that banks in Nigeria ought to adopt a more comprehensive liquidity management approach.

Relationship Between Current Ratio and Total Deposits

The Current Ratio, also called CR, is a bank performance measure for dealing with short-term debts by using short-term assets, that shows a weak connection with Total Deposits. This is probably because the Current Ratio is not related to the different strategies used by banks to

recruit and keep customers such as attractive interest rates or opening different branch networks. Deposit levels being these strategies that are an essential part of the process are not indicated in the CR itself which in turn shows the CR's limited ability as a single factor for Total Deposits.

One of the explanations for this is the constancy of the Current Ratio among the banks, which is probably due to the regulations or the adoption of certain internal liquidity practices. Some of the banks always operate their CR levels within a specified optimal range, to be on the safe side, no matter the deposit volumes. Consequently, the low variation in the CR could mean that it is not linked closely with Total Deposits, thus leading to the conclusion that it is a mere indicator of liquidity compliance rather than a dynamic element of deposit growth.

On the other hand, factors that are external and indicators that are wider in finance could be a stronger power over Total Deposits rather than the CR weightiness. The economy, policy towards the rate of interest, and the legal framework that are set up by regulators often have greater effects on deposit levels than liquidity ratios, such as the CR. This was confirmed by Murthy et al. (2018) who showed in their research that in Indian tyre manufacturing companies, liquidity management had no dramatic effect on profitability. Their study emphasizes that liquidity ratios e.g. CR are not directly linked to performance outcomes, rather concentrating on other crucial factors which are more important for getting the total deposits of banks in connection.

Relationship Between Cash Reserve Ratio and Total Deposits

The observed strong positive correlation between the Cash Reserve Ratio (CRR) and Total Deposits confirms the importance of keeping sufficient cash reserves as opposed to assets. It implies as the banks pile up their cash reserves, it becomes clear that they are managing liquidity in a better manner, something that salves depositors' fears. The availability of these balances enables the banks to show that a particular financial institution is financially stable, which, in return, gives depositors the needed confidence to add more funds into their accounts. At the same time, the link between CRR and Total Deposits can also be established through regulatory compliance as another factor. Elements are made in this direction since the banks have to follow certain guidelines and maintain a minimum cash reserve. The higher reserves reflect that the banks are adhering to the regulations. Consequently, such compliance not only warrants financial stability but also raises depositor trust which translates into the increased volume of depositors. Consequently, a high CRR can be understood as compliance and a good image among depositors.

Additionally, CRR points to a bank's financial managing approach, and the liquidity strategy itself is in tight relation with deposit dragging and retention. Banks that are in a better position to fulfil the requests for withdrawals and to exploit opportunities to add deposits can be the reserves of banks. The top-level positive relationship shows that cash reserves are one of the key means of securing a high level of deposits and financial stability which will, in turn, skyrocket the economy. As a resultant part of liquidity being, which is measured by CRR, has a remarkable effect on the financial performance of Nigerian banks, Onyekwelu et al. (2018)

pointed out. It underlines CRR as being the most crucial factor in condition growth and keeping stability, according to Onyekwelu et al. (2018) and others.

CONCLUSION AND RECOMMENDATIONS

The study investigated the effects of various liquidity management ratios on the total deposits of banks in Nigeria. According to the report, the cash-to-current asset ratio and the current ratio do not have a major impact on total deposits. In contrast, the cash reserve ratio shows a significant correlation with total deposits. These outcomes indicate that even though some liquidity measures may not be directly linked to deposit levels, others, like the cash reserve ratio, are important in driving liquidity and depositors' trust in Nigerian banks. The study highlighted that the importance of liquidity management is strategic in promoting financial stability and attracting deposits in the banking sector. The researcher made the following recommendations:

i. Cash-to-Current Asset Ratio: As the cash-to-current asset ratio does not significantly affect the total deposits of banks, banks should focus on other liquidity measures that are designed to increase depositor confidence and stability. Therefore, it is suggested that the banks' liquidity portfolio should be a balanced one that is in harmony with other strategic objectives rather than the sole focus on the cash-to-current asset ratio.
ii. Current Ratio: The findings of the research state that since the current ratio is not significantly associated with the overall deposits of a bank, banks should not depend entirely on this measure of liquidity management. Instead, they must contain comprehensive liquidity management strategies that consider several factors that are causing depositors' behaviour and financial stability. This can be done by banks through the implementation of advanced forecasting tools. These tools could provide banks with the ability to manage their liquidity effectively.
iii. Cash Reserve Ratio: The significant correlation between the cash reserve ratio and total deposits proves that the cash reserve is a vital element of banking systems. Furthermore, the data show that stronger cash reserves make a bank a safer deposit institution. The banks, thus, should stick strictly to the regulatory cash reserve supply and also consider storing reserves above the minimum requirement for depositor confidence. Also, banks are recommended to engage in an active liquidity management plan that ensures they satisfy the withdrawal demands during a crisis and maintain financial stability.

Contribution to Knowledge

This study extends the extant literature on this subject by providing convincing data on how bank liquidity management ratios affect the total deposits of Nigerian banks. It demonstrates the variance in the impact of different money market tools with special regard to the influential role of the cash reserve ratio in ensuring depositor confidence and financial stability. The results thus, improve our understanding of liquidity in the Nigerian banking environment and also provide banking professionals and supervisors with valuable information concerning the enhancement of liquidity management.

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