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**Effect of Liquidity Risk on the Financial Performance of Quoted Deposit Money Banks in Nigeria**

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**Abstract**

This study examines the effect of liquidity risk on the financial performance of quoted deposit money banks in Nigeria. The ratio of loans and advances to total assets and the ratio of loans and advances to total deposits were used to measure liquidity risk, while Return on Assets (ROA) was used to measure financial performance. Data were collected from the annual financial reports of each of the deposit money banks. The study utilized panel regression to analyse the data from a sample of eleven (11) quoted deposit money banks on the Nigerian Exchange Group from 2014- 2021. The results of the panel regression revealed that the loans and advances to total assets and loans and advances to deposit have a significant effect on the performance of the quoted deposit money banks in Nigeria. The study recommends that quoted deposit money banks management should diversify their loan portfolio to reduce concentration risk. By diversifying the loan portfolio, banks can spread the risk and reduce the impact of defaults on their performance. The current loans to deposit of 65% ordered by the Central Bank of Nigeria should be sustained. However, bank management should manage their deposit growth to ensure that they have sufficient funds to support their loan and advance activities. This can be achieved by setting appropriate deposit rates.

**Keywords:** Loans and Advances to Total Assets, Loans and Advances to Total Deposit, Financial Performance

**I. Introduction**

Deposit money banks perform a significant number of crucial tasks on both sides of the balance sheet, making them an essential component of the financial sector in most economies, particularly in emerging countries like Nigeria. By providing cash loans to consumers and boosting the flow of credit across the economy, the assets side of banks oversees the flow of funds in this context (Ghulam & Emad, 2020). In addition, it gives investors liquidity when the liabilities side of the balance sheet is taken into account. Liquidity risk is one of the many hazards that banks are exposed to due to the variety of activities they do.

Liquidity risk is the possibility that a particular security or asset won't be able to be exchanged in the market quickly enough to avoid a loss or generate the requisite profit. A bank may not be able to pay its debts due to liquidity risk since creditors might not provide the money when expected (Jenkinson, 2018). This ultimately results in the hasty sale of assets, which hurts the bank's profitability. Liquidity risk is seen as a crucial aspect of banks, and its ineffective management

creates significant issues for both banks and the economy as a whole. In addition to a fall in profit, inadequate credit and liquidity management has far-reaching effects on the bank's ability to meet its short- and long-term obligations, the trust of depositors and other customers, and the consequent reduction in the level of operations (Ejoh et al., 2014). In today's banking, it is crucial to treat the issue of liquidity risk extremely seriously for the industry's survival and performance as well as for economic growth and development (Ariffin & Kassim, 2019).

Lending is one of the many services that deposit money banks provide to their numerous clients. They carry out this duty while keeping in mind the three guiding principles of their business: profitability, liquidity, and solvency. Banks' profit on deposits is calculated as the difference between the interest rates they pay on deposits and get on loans. Only if the borrowers repay their loans will the banks be able to leverage this profit. However, there is a chance that some of the loans will not be repaid, which emphasizes the liquidity issue.

Most studies like Chuke and Chinedu (2018); Enekwe, Eziedo, and Agu (2017); and Kola and Yusuf (2017) conducted in Nigeria on liquidity risk and financial performance did not focus on the period after the adoption of the International Financial Reporting Standards (IFRS) rather they combined the data for both pre and post-IFRS implementation which may likely affect their findings since the way the annual financial statement is reported changed after the adoption of the IFRS in 2012. This study, therefore, examined the effects of liquidity risk on the performance of quoted Deposit Money Banks in Nigeria from 2014 to 2021, using the panel regression technique. The specific objectives are to:

- i. Investigate the effect of Loans and Advances to Total Assets on the financial performance of quoted Deposit Money Banks in Nigeria.
- ii. Examine the effect of Loans and Advances to Total Deposits on the financial performance of quoted Deposit Money Banks in Nigeria.

To achieve the objectives of this study, it was postulated that:

H<sub>01</sub>: Loan and Advances to Total Assets have no significant effect on the financial performance of quoted Deposit Money Banks in Nigeria.

H<sub>02</sub>: Loans and Advances to Total Deposits have no significant effect on the financial performance of quoted Deposit Money Banks in Nigeria.

## **II. Literature Review**

### **Conceptual Framework**

#### **Liquidity Risk**

The ability of the bank to fulfil its obligations, primarily to depositors, is referred to as liquidity (Olagunju et al., 2011). Deposit money banks' liquidity risk is the possibility that they won't be able to pay their debts to depositors or fund asset growth when it becomes necessary without suffering unacceptable expenses or losses (Ismail et al., 2018). The inability to satisfy current cash obligations in a timely and cost-effective manner could have adverse impacts on the interests of shareholders, clients, and other stakeholders of the financial institution, which is known as liquidity risk (Mohiuddin & Shafir, 2018). A bank may not have enough liquidity to cover its short-term financial needs when necessary (Drehmann & Nikolaou, 2013). It typically

occurs when a company finds itself unable to convert its short-term assets or securities into liquid cash without suffering a loss of capital or income in the process. When an asset can be quickly and reliably turned into cash or income whenever the asset holder wants it, such asset is said to be liquid (Enekwe et al., 2017). The main cause of liquidity risk is management's inability to properly foresee and plan for changes in funding sources and cash requirements (Awojobi, 2018; Iyinomen, et al., 2019).

Liquidity risk is thought to be a reliable indicator of any severe market crisis (Acerbi&Scandolo, 2018). A bank that struggles with liquidity suffers some business possibilities loss. This will put a bank at a disadvantage when competing with other financial institutions. Liquidity risk, which results from a bank's potential incapacity to absorb drops in liabilities or to finance growth on the assets side of the balance sheet, is therefore thought to be a significant internal factor influencing bank profitability (Athanasoglou et al., 2016). Banks frequently retain easily convertible liquid assets to prevent insolvency, although liquid assets typically have a lower rate of return.

Some of the ratios used to assess a company's liquidity include the quick ratio and the current ratio (Omar et al., 2016). According to El-faham (2020), loans and advances to total assets and loans and advances to total deposits are the two financial ratios that are most frequently used to assess a bank's liquidity condition. Other academics measure liquidity using various financial ratios. Ilhomovich (2013), for instance, utilized the cash-to-deposit ratio to gauge the banks' level of liquidity in Malaysia. Since loans and advances relate to deposit money banks, this study will use El-faham's(2020) measure of liquidity risk, which is loans and advances to total assets and loans and advances to total deposits.

### **Loans and Advances to Total Assets**

The percentage of a company's assets that are invested in loans and advances to customers is measured by the loans and advances to total assets ratio. This ratio is a helpful measure of the liquidity and credit risk of a corporation. A greater ratio shows that a business has more of its assets invested in loans and advances, which could put it in danger of non-repayment or default (Kumbirai & Webb, 2010).

According to Gbalam (2018), a ratio of loans and advances to total assets exceeding 70% is regarded as high and may show that a company is heavily dependent on debt financing. On the other side, a ratio below 50% may indicate that the business is overly cautious in its lending operations and may be missing out on possibilities to generate money.

According to a 2013 study by Berger and Bouwman, banks with larger loans and advances to total assets ratios were more likely to face financial hardship during recessionary times. Additionally, the study discovered that banks with higher capitalization levels were less likely to go through financial difficulties, which may mean that keeping proper capital levels can assist reduce the dangers associated with heavy lending.

### **Loans and Advances to Total Deposits**

A financial ratio called the loans and advances to deposit ratio assesses how many loans and advances a bank has made about the deposits it maintains. This ratio is used to evaluate a bank's liquidity, credit risk, and ability to bear prospective losses on its loans and advances (Bansal &

Mohanty, 2014). Higher loans and advances-to-deposit ratios show that the bank is more exposed to credit risk because a larger percentage of its deposits have been lent out (Bolton et al., 2016). Regulators and investors may be concerned since this increases the bank's vulnerability to loan defaults and non-repayment.

Amiti and David (2018) claim that a bank may be using funding sources other than deposits, including short-term borrowing, to finance its lending activities if the loan and advance-to-deposit ratio are higher than 100%. As a result, the bank may incur higher funding costs and become more susceptible to changes in the market. Conversely, a ratio of loans and advances to deposits that is lower than 80% may indicate that the bank is not utilizing its deposit base to its maximum potential and may be losing out on revenue prospects.

### **Financial Performance**

Financial performance is characterized as a subjective metric that assesses how well firms utilize their resource base to increase income (Abdullahi et al., 2021). Financial performance gauges the organization's financial soundness and health in monetary terms, making it possible to compare the performance of other organizations within a certain industry or across industries (Ahmed et al., 2021). Financial performance, which is expressed in terms of gains and losses for a specific period, provides information on a company's level of operations during a given period (Emeakponuzo, 2014). Concerned stakeholders evaluate performance to determine the outcome of a business' strategies and operations in objective financial terms. Kah et al. (2022) define financial performance as how well a company uses the resources at its disposal to produce returns for its investors.

According to studies by Makokha et al. (2016) and Shrivastava et al. (2018), a company's financial performance is an indicator of how well it uses its resources to generate income. This term is used to compare similar companies within the same industry and the entire industry to assess a firm's overall financial soundness over a certain period. This is the working definition of this study on financial performance, therefore to this end, we posit that the performance of deposit money banks can be surrogated by Return on Assets (ROA). The return on Assets (ROA) is a ratio that measures company earnings before interest & taxes (EBIT) against its total net assets. The ratio is considered an indicator of how efficiently a company is using its assets to generate income before contractual obligation must be paid. It is calculated as  $ROA = \frac{EBIT}{Total\ Assets}$ .

### **Empirical Reviews**

#### **Loan and advances to Total Asset and Financial Performance**

Using five banks over five years between 2013 and 2017, Edewusi et al. (2020) investigated the impact of liquidity risk management on bank performance in Nigeria. They looked at the connections between bank liquidity and return on assets of deposit money banks as well as the connections between bank liquidity and loans and advances of deposit money banks. The current ratio, liquid assets to total assets ratio, loans and advances to deposits ratio, cash to total deposits ratio, and loans and advances to total assets ratio were used in the study as proxies for managing liquidity. The study also adopted pool regression of ordinary least squares and specified return on asset as a proxy for bank performance. The findings demonstrated a significant relationship

between return on asset, loans and advances to total assets ratio, and loans and advances to deposits ratio variables, whereas there was no correlation with the deposit money banks in Nigeria for the current ratio, liquid assets to total assets ratio, and cash to total deposits ratio. According to the study's findings, deposit money banks in Nigeria perform significantly better when liquidity risk management is implemented. As a result, DMB liquidity management in Nigeria maximizes shareholder returns while delivering less-than-ideal profitability in terms of asset usage efficiency. Therefore, the study advised Deposit Money Banks to keep using their current assets, avoid buying too much inventory, and boost sales without adding any new ones. The study spanned between 2013–2017, while the study was published in 2020 indicating a three years gap between the scope of the study and the year it was published. This might make the study less relevant for policy implementation by the time it was published as economic activities and policies might have changed. After conducting several findings, providing just a general recommendation is not good enough for the study.

### **Loan and Advances to Total Deposit and Financial Performance**

For the years 2012 to 2016, Mohiuddin and Shafir (2018) looked at the impact of liquidity risk on the performance of Islamic banks in Bangladesh. In the study, bank performance is measured using ROA and ROE, while liquidity is determined using the loan deposit ratio, the liquid risky asset to total asset ratio, and the capital to total asset ratio. The relationship between liquidity and bank performance was established using panel regression analysis and correlation. They discovered a strong correlation between liquidity measures and bank performance. Additionally, they discovered a bad correlation between bank performance and liquidity metrics. The study made use of the panel regression approach, which is a solid way for studying panel data.

The impact of liquidity management on the financial performance of Nigerian banks from 2010 to 2018 was investigated by Wuave et al. (2020). The study makes use of secondary data from five banks that are publicly traded in Nigeria. The proxies used for liquidity management include the liquidity ratio (LQR), loan-to-deposit ratio (LDR), cash reserve ratio (CRR), and deposit ratio (DR), whereas the proxies used for financial performance are the return on assets (ROA), return on equity (ROE), and return on net interest margin (NIM) (Profitability). When deciding between the fixed effect and random effect models, the study uses panel regression analysis to estimate the model using the Hausman test. The study discovers that the liquidity ratio (LQR), as assessed by return on assets (ROA), return on equity (ROE), and net interest margin (NIM), has a favourable and significant impact on the financial performance of DMB. As a result, it suggests that banks in Nigeria establish sound governance and risk management systems by creating strategies and policies for liquidity management that are well integrated into their risk management practices. It also suggests that banks establish a contingency funding plan to handle any liquidity shortfall during times of stress or emergency while making sure that active monitoring of liquidity funding needs is done to prevent any liquidity challenges that could precipitate a crisis. The study combined data from both pre (2010-2011) and post (2012-2018) IFRS implementation in Nigeria in which the way the financial statements were reported differs; this might affect the findings of the study.



Jacob et al. (2022) examined the effect of liquidity risk management on the financial performance of listed deposit money banks in Nigeria. The population of the study is the 14 listed deposit money banks in Nigeria. Using census sampling techniques Jaiz Bank was filtered out. Data were collected from annual reports and accounts of the selected banks for a period of 14 years 2006-2019 and analysed using STATA 13. The findings of the study revealed that both total deposits to total assets (DTA) and total loan to total deposit (TLTD) have negative insignificant effects on returns on assets (ROA) of the selected banks. On the other hand, liquid assets to total assets (LATA) and short-term liabilities to liquid assets (STLLA) both have a negative significant effect on the ROA of the sample banks. Based on these findings, the study concludes that liquidity risk management has a significant effect on the financial performance of listed deposit money banks in Nigeria. Based on this, the study recommends that the management of listed deposit money banks in Nigeria should maintain an optimum level of liquidity as it is capable of improving their performance. The study spanned the period 2006–2019, while the study was published in 2022 indicating a three years gap between the scope of the study and the year it was published. This might make the study less relevant for policy implementation by the time it was published as economic activities and policies might have changed. Also, the study combined data from both pre (2006-2011) and post (2012-2019) IFRS implementation in Nigeria in which the way the financial statements were reported differs; this might affect the findings of the study.

### **Theoretical Framework**

#### **Shift ability Theory of Liquidity**

According to the shift ability idea, which was formally developed by Harold Moulton in 1915, banks may defend themselves from large-scale deposit withdrawals by keeping credit instruments with a ready secondary market as a sort of liquidity reserve. The approach is predicated on the idea that holding assets that might be transferred or sold to other lenders or investors for cash helps a bank preserve its liquidity. Additionally, rather than relying on maturities to address their liquidity issues, these assets might be transferred to the Central Bank for cash in an emergency without suffering a significant loss (Ngwu, 2016). According to this theory, a bank's liquidity is preserved if it owns assets that may be transferred or sold to other lenders or investors in exchange for cash. This theory further explains that a bank's liquidity could be improved if it constantly had assets to sell and the Central Bank and discount market were willing to buy the asset being sold at a discount. The shiftability, marketability, or transferability of a bank's assets is a basis for assuring liquidity, according to this theory, which also makes that claim. This argument goes on to claim that a bank's holdings of highly marketable securities are a great source of liquidity. According to Dodds (2012), such assets must satisfy three requirements to ensure convertibility without delay and appreciable loss.

Dodds (2012) claims that the operations involved in getting funds from depositors and other creditors, as well as choosing the best mix of funds for a certain bank, are all included in the liquidity management theory. Several authors have critically analyzed the liquidity theory. The general assumption is that a bank may find it challenging to secure the needed liquidity during a period of distress as the market's confidence may have been substantially impacted and

creditworthiness would unavoidably be missing. However, liabilities are a significant source of liquidity for a sound bank.

The liquidity shift ability theory provides an explicit understanding of how liquidity risk affects financial performance using liquidity coverage and net stable funding ratios as stated by the new Basel III framework. The analysis of this study provides information as to whether liquidity maintained by commercial banks affects the returns to the shareholders.

**III. Methodology**

This study adopts an ex-post facto research design. This is because the phenomenon observed in the study has already taken place. Ex post facto research is ideal for conducting social research when is not possible or acceptable to manipulate the characteristics of human participants (Kerlinger, 1986). The population of this study comprises all the twelve deposit money banks quoted on the Nigerian exchange floor. Namely: Fidelity Bank Plc, Stanbic IBTC Bank Plc, Access Bank Plc, First City Monument Bank Plc, Ecobank Transnational Incorporated, First Bank Plc, Guaranty Trust Bank Plc, United Bank of Africa Plc, Unity Bank Plc, Sterling Bank Plc, Wema Bank Plc and Zenith Bank Plc. Ecobank Transnational incorporated was exempted from the sampled banks due to accessibility to data, therefore eleven quoted deposit money banks in Nigeria were used as the sample size for this study. The eleven (11) quoted deposit money banks were sampled for an eight (8) year period spanning from 2014-2021 which is the period after the adoption of IFRS. The eight (8) year period is chosen to have fairly, reasonable and reliable up-to-date financial data. This study made use of panel secondary data precisely. The data were sourced from the annual reports and accounts of the quoted deposit money banks.

**Table 1: Measurement Table for Dependent and Independent Variables**

<b>Variables Specification</b>	<b>Proxied By</b>	<b>Description</b>	<b>Sources</b>
<b>Dependent</b> Financial Performance	Return on Asset (ROA)	$\frac{\text{EBIT}}{\text{Total Assets}}$	Edewusi et al. (2020), Jacob et al. (2022), Mohiuddin and Shafir (2018)
<b>Independent</b> Liquidity Risk	Loans and Advances to Total Assets (LATA)	$\frac{\text{Loans and Advances}}{\text{Total Assets}}$	Edewusi et al. (2020)
	Loans and Advances to Total Deposit (LATD)	$\frac{\text{Loans and Advances}}{\text{Total Deposits}}$	Wuave et al. (2020), Jacob et al. (2022)

Source: Researcher’s Computation 2023.

**Hausman test**

The Durbin–Wu–Hausman test (also called the Hausman specification test) is a statistical hypothesis test in econometrics named after James Durbin, De-Min Wu, and Jerry A. Hausman

(Durbin, 1954; Wu, 1973; Hausman, 1978; Nakamura& Nakamura,1981). The test evaluates the consistency of an estimator when compared to an alternative, less efficient estimator which is already known to be consistent (Greene, 2012). It helps one evaluate if a statistical model corresponds to the data. The Hausman test was used to differentiate between the fixed effects model and the random effects model in panel analysis. In this case, Random Effects (RE) are preferred under the null hypothesis due to higher efficiency, while the alternative Fixed effects (FE) are at least as consistent and thus preferred.

$$H = (b_1 - b_0)' (\text{Var}(b_0) - \text{Var}(b_1))^\dagger (b_1 - b_0),$$

where  $\dagger$  denotes the Moore–Penrose pseudo inverse. Under the null hypothesis, this statistic has asymptotically the chi-squared distribution with the number of degrees of freedom equal to the rank of matrix  $\text{Var}(b_0) - \text{Var}(b_1)$ .

To establish the relationship between Loans and Advances to Total Assets, Loans and Advances to Total deposits and financial performance (Return on Asset) for selected quoted deposit money banks, the study employed panel regression analysis. The panel regression model is formulated below:

$$\text{PERF}_{it} = \beta_0 + \beta_1 \text{LATA}_{it} + \beta_2 \text{LATD}_{it} + \varepsilon_{it}$$

Where:

$\text{PERF}_{it}$  = Financial Performance in  $i$  year  $t$

$\beta_0$  = Coefficient of the constant variable

$\text{LATA}_{it}$  = Loans and Advances to Total Assets in  $i$  year  $t$

$\text{LATD}_{it}$  = Loans and Advances to Total Deposit in  $i$  year  $t$

$\beta_1, \beta_2$  = Regression coefficients of independent variables

$\varepsilon_i$  = error term.

**Decision Rule:**

If the p-value is < 5%, then the null hypothesis is rejected, otherwise the null hypothesis is accepted.

The study employed descriptive statistics to know the characteristics of the variables, Pearson product moment correlation; to know the relationship among the variables, the Hausman test was carried out to know whether Fixed Effects or Random Effects is more appropriate and the panel regression technique to test relationships among theoretically related variables and estimate the effects of one variable on the other with the aid of statistical package (EVIEW 10). To ensure the reliability of results, the study carried out some diagnostic tests like Autocorrelation and Heteroskedasticity. The essence is to guard against spuriousness as observed by Granger and Newbold (1974) and Gujarati and Porter (2009) that, the presence of these factors usually



introduces bias in the OLS estimators and thus, any conclusion drawn from the results will be spurious.

The model is considered appropriate because the major purpose of regression is: first, the possibility of determining the independent variables that can best explain the variation of the dependent variable. Second, recognizing whether the independent variables are still significant while the other independent variables are controlled or held constant (Omar, 2017).

#### **IV. Data Analysis and Discussion**

Table 2: Descriptive Statistics

	PERF	LATA	LATD
Mean	1.661669	15.77688	68.98506
Maximum	5.616700	29.40590	138.0014
Minimum	-9.531800	0.579000	3.550400
Std. Dev.	1.928741	6.687731	20.43984
Observations	88	88	88

*Source: Eview Version 10 Output*

The table above revealed the data used in the study with the performance of quoted Deposit Money Banks under review having a mean of 1.66%, while the deviation from the mean (standard deviation) was 1.93%. This means that the performance of quoted deposit money banks was not normally distributed because the standard deviation value was greater than the mean value. The maximum value for the performance of the quoted deposit money banks as of the period of this study was 5.616700 which means that the performance of quoted deposit money banks was not more than 5.62% while the minimum performance of quoted deposit money banks was -9.53%.

Also, the loans and advances to total assets had a mean of 15.78% while the deviation from the mean (standard deviation) was 6.69%. This means that the loans and advances to total assets were normally distributed because the standard deviation value was lower than the mean value. The maximum loans and advances to total assets as of the period of this study were 29.40590 which means that the loans and advances to total assets were not more than 29.41% while the minimum loans and advances to total assets were 0.58%.

In a similar vein, the loans and advances to total deposit showed a mean of 68.99% and a standard deviation of 20.44%. This means that the loans and advances to total deposits were normally distributed because the standard deviation value was lower than the mean value. The maximum loans and advances to total deposit as of the period of this study was 138.0014 which means that the loans and advances to total deposit was not more than 138% while the minimum loans and advances to total deposit was 3.55%.

Table 3: Correlation Matrix

	PERF	LATA	LATD
PERF	1	0.361180	0.174393
LATA	0.361180	1	-0.103179
LATD	0.174393	-0.103179	1

Source: Eview Version 10 Output

The table above explained the relationship between liquidity risk and the performance of quoted deposit money banks in Nigeria where the loans and advances to total assets were correlated with performance to the extent of 0.361180 (36%), While the loans and advances to total deposit were correlated with performance to the extent of 0.174393 (17%).

Table 4: Hausman Test

Correlated Random Effects - Hausman Test			
Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	1.808232	2	0.4049

Source: Eview Version 10 Output

To choose between fixed and random effects models, the Hausman specification model was run. In a situation where the chi-square value was less than 5%, the fixed effects model would be more appropriate, but the random effects model would be more appropriate if the chi-square value was greater than 5%. In this case, the chi-square value was 0.5352 which was greater than 5%. This means that the random effects model was appropriate for the study.

Table 5: Regression Result

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-1.186954	0.839027	-1.414678	0.1608
LATA	0.069914	0.028004	2.496551	0.0145
LATD	0.025304	0.007145	3.541533	0.0006
Effects Specification				
			S.D.	Rho
Cross-section random			1.370125	0.5526
Idiosyncratic random			1.232836	0.4474
Weighted Statistics				
R-squared	0.159790		Mean dependent var	0.503745
Adjusted R-squared	0.140020		S.D. dependent var	1.327916
S.E. of regression	1.231444		Sum squared resid	128.8987
F-statistic	8.082587		Durbin-Watson stat	2.210823
Prob(F-statistic)	0.000612			
Unweighted Statistics				
R-squared	0.151383		Mean dependent var	1.661669
Sum squared resid	274.6495		Durbin-Watson stat	1.037585

Source: Eview Version 10 Output

The loans and advances to total assets had a significant effect on performance because the p-value was 0.0145 which was less than 5% signifying that an increase in the loans and advances to total assets will automatically increase performance to the extent of 0.069914.

Also, the loans and advances to total deposit had a significant effect on performance because the p-value was 0.0006 which was less than 5%, this signified that an increase in loans and advances to total deposit will increase performance to the extent of 0.025304.

The coefficient of determination ( $R^2$ ) is 0.159790 which means that liquidity risk variables used in this study explained variation in performance to the extent of 16% while the remaining variation was explained by other variables not captured in the model. The model is a good fit with an F-statistics p-value of 0.0006.

The R-squared of 16% is within the acceptable threshold for social science research as suggested by Ozili (2023), that an R-squared that is between 10% and 50% is acceptable in social science research when some or most of the explanatory variables are statistically significant. This is because the goal of most social science research modelling is not to predict human behaviour. Rather, the goal is often to assess whether specific predictors or explanatory variables have a significant effect on the dependent variable.

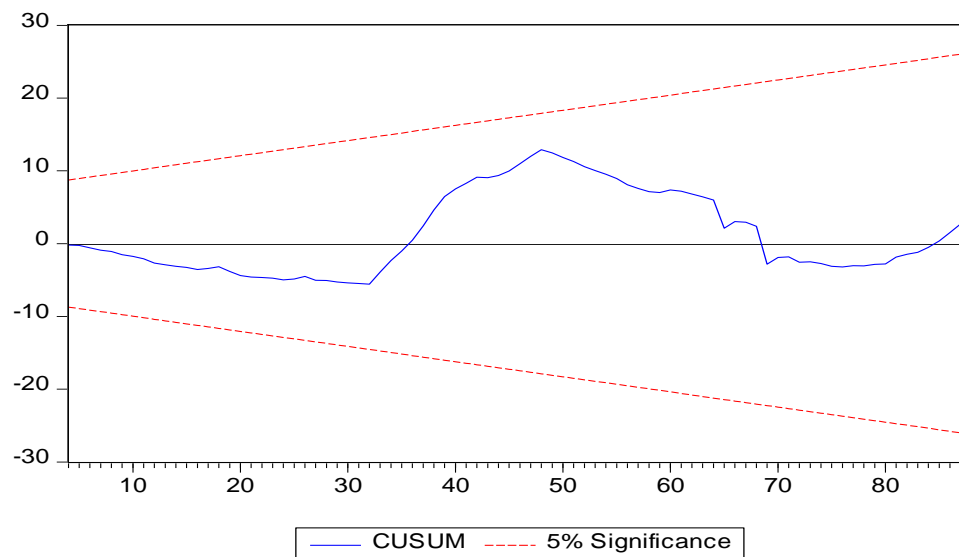
Table 6: Post-Estimation Test

<b>Description</b>	<b>Probability values</b>
<b>Serial Correlation</b>	
F-statistics	1.833912
P-value	0.1664
<b>Heteroskadasticity Test</b>	
F-statistics	0.372830
P-value	0.6899

**Source:** *Researcher's computation, 2023*

The Breusch-Godfrey Serial Correlation LM Test indicates that there is no autocorrelation. This is given by the F-statistic of 1.833912 and its corresponding P-value of 0.1664. The Harvey Test of Heteroskedasticity with F-statistics 0.372830 and its corresponding P-value of 0.6899 indicates that there is no problem with heteroskedasticity.

Figure 1: Stability Test



Source: *Eview Version 10 Output*

The stability of the model was checked using the CUSUM test and it shows that the model is stable as it is within the 5% boundary.

## V. Conclusion and Recommendations

Based on the findings of this research, the study concludes that liquidity risk has a significant effect on the financial performance of quoted deposit money banks in Nigeria. This means that the liquidity risk decisions made within each of the quoted deposit money banks affect their financial performance.

The study also concludes that loans and advances to total assets have a significant effect on financial performance. This is in tandem with the findings of Edewusi et al. (2020) and Jacob et al. (2022). This implies that quoted deposit money banks with a higher ratio of loans and advances to total assets will have a commensurate increase in return on assets which will increase the financial performance of the bank. Finally, the study concludes that loans and advances to total deposits have a significant effect on financial performance. This indicates that the ratio of loans and advances to total deposits of deposit money banks determines their financial performance. This finding was not in agreement with the submission of Jacob et al. (2022) who found that loans and advances to total deposit have no significance with financial performance.

Based on the findings of this study, it is recommended that:

Quoted deposit money banks management should diversify their loan portfolio to reduce concentration risk. Concentration risk occurs when a bank has a large exposure to a single borrower or industry. By diversifying the loan portfolio, banks can spread the risk and reduce the impact of defaults on their financial performance. They should also focus on improving the quality of their loan assets by ensuring that loans are granted to creditworthy customers and that

proper loan monitoring and recovery measures are in place. This will reduce the incidence of non-performing loans and improve the bank's financial performance.

Since loans and advances to total deposits have a significant effect on financial performance, the current loans to deposit of 65% ordered by the Central Bank of Nigeria should be sustained. However, bank management should manage their deposit growth to ensure that they have sufficient funds to support their loan and advance activities. This can be achieved by setting appropriate deposit rates. Banks should also focus on building strong customer relationships to attract and retain depositors. This can be achieved by offering competitive deposit rates, providing quality customer service, and offering a range of deposit products that meet the needs of different customer segments.

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