

## CREDIT RISK MANAGEMENT AND FINANCIAL PERFORMANCE OF LISTED DEPOSIT MONEY BANKS IN NIGERIA

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### Abstract

This study examined the effect of credit risk management on the financial performance of listed deposit money banks in Nigeria. The study's timeline spans from 2013 to 2022. The population of the study comprises 14 banks out of which 9 were selected using stratified sampling technique. Credit risk management was proxy with non-performing loan (NPL), capital adequacy ratio (CAR) and Loan to total asset (LTA). Whereas performance was proxy with return on assets (ROA). The data were statistically tested using the panel regression model. The outcomes of the study demonstrated that LTA was found to have a positive and significant effect on ROA evidenced with t-stat. and p-value of (t=7.5378) and (0.0000p<0.05). Whereas CAR and NPL were found to have no relationship on ROA. This study therefore recommends that, manager should make sure that credit risk management policies are strictly and fully followed to minimize the adverse consequences of credit risk. Also, by actively managing non-performing loans, bank can take appropriate actions to minimize losses.

*Keywords:* capital adequacy ratio, non-performing loans, loan to total assets, return on assets, listed deposit money banks

### 1. Introduction

Credit risk is the risk that banks are mostly exposed to. It arises when financial institutions use customer's deposits to lend money to borrowers, which is their main source of income. However, it also exposes the possibility of borrowers defaulting on their loan, which could cause financial distress for the banks (Nwude & Okeke, 2018). Deposit money banks face different risk due to their business activities, with credit risk being the most substantial and prominent among them, surpassing other types of risk in significance.

Risk refers to the possibility or danger of suffering harm, loss or other negative consequences caused by internal or external factors that can be averted by applying precautions (Bhattarai, 2020). The economic performance of the institution which indicates its relative strength, weakness, liquidity and profit as well as any negative development in the financial statement which include the statement of cash flow, statement of financial position, profit or loss statement and other comprehensive income decides the state of the financial system.

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According to Natufe and Evbayiro-Osagie (2023), when a Bank creates a deposit entry which is then credited to various economic agents and is regarded as bank loans. It facilitates financial intermediation between surplus and deficit units, increases productivity, and has a beneficial effect on economic growth. Deposit money banks are crucial for sustaining growth. The crucial function of credit provided by deposit money banks in fostering growth is widely recognized.

The credit extended by deposit money banks to different economic entities, commonly referred to as bank loans and advances, serves as a means of financial intermediation between entities with deficits and those with surpluses. This process not only boosts productivity but also contributes positively to overall economic growth (Ali et al., 2016).

Due to poor credit requirement for borrowers, Nigerian Deposit Money Banks (DMBs) has faced various kinds of difficulties over the years. This has negatively affected the creditworthiness of the Banks' client and counterparts, thereby evaluating the risk of default on outstanding debt owed on credit. However, following the Central Bank of Nigeria 2005 agenda aimed at recapitalizing and reforming the banking system, several measures has been implemented to reduce the adverse effects of credit defaults on the banks operations. Additionally, specific regulations have been established to enhance the overall effectiveness of banks (Ajao & Oseyomon, 2019).

Credit risk is primarily caused by non-performing loans, according to researchers, the chance that the party entering into a contract will not fulfill its obligations in line with the terms agreed upon is termed as credit risk. It's also referred to as performance risk or default risk, alternatively counterparty risk (Witzany, 2017). According to Abdullahi and Usman (2017), credit risk is commonly represented by the loan-to-asset ratio, which measures credit growth; the capital adequacy ratio, which measures bank liquidity, and the leverage which is measured by non-performing loan ratio.

Every economy in the world deals with non-performing loans on a regular basis, but how well they are handled is crucial (Altarawneh & Shafie, 2018). Twelve banks collapse as a result of the crises in Greece, for example, According, to KMPG (2016) research revealed that the non-performing loan ratio was roughly 20 percent in Bulgaria, Hungary, Ireland, Italy, Portugal and Slovenia, and 47 percent in Greece. 45 Percent in Cyprus, and 14.84 percent in Nigeria. These countries adopted a number of strategies to deal with this issue, including the creation of asset management firms to buy bank debt.

Likewise, Nigeria passed laws that resulted in the establishment of the Nigeria Asset Management Company (AMCON) in July 2010. This initiative aimed to provide a sustainable resolution to the persistent issues on non-performing loans affecting the banking sector (Jibril, 2021).

The economic stability of commercial banks is essential of maintaining stability within the country and promoting economic prosperity. It is essential to emphasize that bank earns their income by serving as intermediaries. Maximizing returns for any investor involves taking on risks. Therefore, as banks engage in intermediary functions, they are inevitably exposed to series of risks. If banks were to avoid these risks in an attempt to reduce failure rates to zero, it would restrict the purpose of banking system, which is to enhance investor's market value, which at the same time would be detrimental to the sustainability of the financial system (Greuning & Bratanovic, 2016).

In Nigeria, the banking industry has encountered significant challenges jeopardizing its stability, notably in effectively addressing loans that are not generating

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adverse effects on the banks financial performance. Despite the presence of comprehensive regulatory frameworks and risk management strategies, the escalating ratios of non-performing loans give rise to serious concerns regarding the resilience and profitability of these banks.

Research has centered on identifying the factors influencing loan default analysis and evaluating their impact on the well-being of banks. Furthermore, there are conflicting results in empirical studies regarding credit management and financial well-being of commercial money banks. According to Ajao and Oseyomon (2019), the connection between managing credit risk and the success of savings banks in Nigeria.

The empirical findings showed a directly and statistically significant effect on return on asset performance also DBMs credit risk management variables, which are the bad loan to total loan ratio, liquidity ratio, capital adequacy ratio and loan loss provision ratio were used for measurement. The liquidity ratio and DBMs financial performance have a strong inverse relationship suggesting that excess liquidity that is improperly managed as a credit provision will ultimately result in a decline in DBMs financial performance.

Ogundele, et al (2021) investigated the impact of managing credit risk on the financial results of savings banks in Nigeria, specifically focusing on the influence of non- performing loans (NPL) on return on asset (ROA). Considering that these factors are representative of underlying risks, a significant problem emerges in terms of identifying the nature of these relationships, quantifying their impact, and determining optimal management strategies.

This research aims to methodically analyze these elements and investigate to what extent at which non-performing loan ratios, amount set aside for loan defaults, loan to total asset ratios, also credit risk management practices are interconnected with and have predictive authority over the economic results of publicly traded savings and loan institutions in Nigeria. The study will be beneficial to shareholders, management, customers, students and other researchers in the field. Therefore, this study examined credit risk management practices and their effect on the financial performance of deposit money banks listed in Nigeria.

The main objective of this study is to analyze the relationship between credit risk management practices and their effect on the financial performance of deposit money banks listed in Nigeria However, the specific objectives are to:

- i. examine the relationship between non-performing loan ratio and financial performance of listed deposit money banks in Nigeria.
- ii. investigate the relationship between capital adequacy ratio and financial performance of listed deposit money banks in Nigeria.
- iii. evaluate the effect of loan to total asset ratio and financial performance of listed deposit money banks in Nigeria.

In accordance with the specified research objectives and questions, the following hypotheses are formulated:

- H<sub>01</sub>:** Non- performing loan ratio does not significantly influence the financial performance of listed deposit money banks in Nigeria.
- H<sub>02</sub>:** capital adequacy ratio has no significant relationship with the financial performance of listed deposit money banks in Nigeria.
- H<sub>03</sub>:** Loan to total asset ratio does not influence the financial performance of listed deposit money banks in Nigeria.

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## 2. Literature Review

### Credit Risk Management

Credit risk management in the current unstable financial environment, has risen in significance as a topic of discuss. As a result, the banking industry which is the primarily focused institution and a major source of short-term loan facility for other economic sector, is frequently faced with difficulties related to managing credit effectively and how this affects their overall performance.

The global financial system's dynamic structure and the high loan default rate increase deposit money banks' exposure to credit risk which ultimately lead to unfavorable financial performance (Ajao & Oseyomon, 2019). Efficient risk management of credit by financial institutions not just safeguard their profitability but also plays an important role in promoting systemic and optimizing capital allocation within an economy (Abdallah & Pav,2023).

The credit risk management indicators are: non-performing loan (NPL), Capital Adequacy Ratio (CAR) and Loan to total asset. Non-performing loans refers to the proportion of borrowed sums that remain unpaid for a duration of at least three months. This metric helps to assess the creditworthiness and financial health of borrowers and lending institutions by indicating the proportion of loans that are in default or at risk of default (Ariyaningrum & Sriyono, 2023).

CAR lowers banks' operating losses and depicts their capacity to finance long-term expenses, but most crucially, it determines each bank's established rate of profitability (Ünvan, 2020). A crucial metric for assessing a bank capital strength is the capital adequacy ratio often known as capital to risk weighted asset ratio (Upadhyay, 2020). The capital adequacy ratio (CAR) which is the critical indicator of a bank stability and strength of finances is calculated as the percentage of banks risk weighted credit exposure.

The loan amount to total assets is a financial indicator that provides insights on how much a company or financial institution is using leverage, specifically on how much of assets are represented by loan. This ratio is crucial for assessing the risk exposure of a business or a bank, as well as understanding its ability to generate returns. It reflects how effectively a business utilizes its asset to generate loans. A higher ratio may signify effective asset utilization for generating income. For banks, this ratio is crucial for assessing loan risk and the standard of the loan portfolio.

### Financial Performance

Financial performance functions as an evaluation of the outcomes derived of a company's policies and operational activities, expressed in terms of the value of money (Busari, 2023). On the other hand, financial performance indicators encompass factors such as profitability, business valuation, and liquidity (Samo & Murad, 2017).

One of the indicators of financial well-being is Return on assets (ROA). Banks utilize the efficiency metric, ROA, to evaluate how effectively they utilize their limited which is use to get profits (Kiptoo, Kariuki & Ocharo, 2021; Muye & Muye, 2017; Kauko, 2012). Since ROA assesses the profits generated from the asset financed by a company, it is commonly employed to assess the effectiveness and operational efficiency of the business (Tian, 2021; Lam et al., 2018). It represents the ratio of total assets to net gain, and a higher ratio indicates a stronger financial position. According to the return on investment commonly referred to as return on asset, is impacted by both net profit margins and total asset turnover.

### **Credit Risk and Financial Performance**

According to Abimbola et al. (2018) analyzed the impact of credit risk management on the financial performance of Nigerian banks from 2010 to 2016. The study found a negative relationship between credit risk management and NPLs, indicating that effective credit risk management practices contribute to reducing NPLs and improving financial performance. A recent reference to credit risk management in Nigeria is the Central Bank of Nigeria's (CBN) introduction of the Global Standing Instruction (GSI) framework in August 2020.

The GSI allows banks to access customers' accounts in other financial institutions to recover outstanding loans. This initiative aims to address the high level of NPLs in the banking sector and promote responsible borrowing and lending practices. By allowing banks to recover funds from defaulting borrowers, the GSI strengthens the credit risk management framework and improves the financial performance of Nigerian banks. This demonstrates the regulatory efforts to enhance credit risk management practices and their positive impact on the financial performance of banks (Muhammad, 2021).

### **Theoretical Framework**

#### **Credit Risk Theory**

The basis of credit risk assessment was established by Robert Merton in 1974, which is known as credit risk theory. Merton proposed a model that characterizes a company's equity as a call option on its holdings. The framework approach and the intensity-based approach, which is also referred to as the simplified method approach are the two primary method of modeling credit risk.

According to Karim (2023), credit risk management is a crucial aspect of financial institutions and plays a significant role in ensuring the stability and profitability of these institutions. According to the credit risk management theory, it is essential for financial institutions to carefully assess, monitor, and mitigate credit risks associated with their lending activities. This involves establishing suitable lending conditions, assessing borrower's creditworthiness, and putting in place efficient risk management procedures.

The theory of credit risk management places a strong emphasis on the necessity for financial organization to comprehend, quantify and manage credit risks. Financial institutions can improve their overall stability and performance and manage credit risk more efficiently by adhering to recognized frameworks and concepts like the Basel Accord and the Credit Metric Model. Financial institutions must always update their credit risk management procedures in order to comply with new regulations and adjust to shifting market conditions (Karim, 2023).

#### **Empirical Review**

Fadun and silwimba (2023) examined the impact of credit risk management on the financial performance of commercial banks, using a sample of five leading banks in Nigeria. The research utilizes a panel dataset spanning fifteen years (2005-2019), data was gathered from the audited financial statements of these banks listed on the Nigerian Exchange Group. The findings show that credit risk management, as indicated by NPL and ECL, has an insignificantly positive influence on the financial performance of commercial banks in Nigeria in Nigeria.

Natufe and Evbayiro-Osagie (2023) examined credit risk management and return on equity of Nigerian deposit money banks (DBMS). The study covered a time frame of twelve (12) years (2020-2021). The analysis used was Panel data regression

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analysis. The findings of this study indicate that shareholders of deposit money banks holding global financial services in Nigeria during the period of study, did not receive higher compensation due to their visibility to risk compared to investors in risk -free asset like treasury bills.

Robert (2020) research aimed to scrutinize the impact of credit risk on the financial performance of commercial banks in Kenya over a five-year period (2014-2018) utilizing secondary data sourced from the annual financial statements of the respective banks. Descriptive statistics, including mean and standard deviation, were employed to elucidate the characteristics of the study variables. A multiple regression method was applied to assess the effect of credit risk on the bank's performance. The findings indicated that non-performing loans and loan loss provisions had non-significant negative effects on the profitability of banks, with p-values of 0.394 and 0.0653, respectively.

Ephias and Anthenia (2020) examined the impact of credit risk on the financial performance of 18 South African banks from 2008 to 2018. Various panel data techniques, including pooled ordinary least squares (OLS), fixed effects, and random effect estimators, were applied to assess the relationship between credit risk and financial performance. The study outcome reveals a negative association connecting credit risk, proxied alongside non-performing loans (NPLs), and financial performance.

Al- Zaidanin and Al- Zaidanin (2021) study assessed how independent factor, such as loan to deposit ratio, cost income ratio, non-performing loan ratio, liquidity ratio, and capital adequacy ratio affect the sixteen (16) commercial banks that operates in the Unites Arab Emirates in terms of their financial performance for the period 2013 to 2019. Utilizing panel data, the study employed the random effect model and standard descriptive statistics for hypothesis testing. The regression analysis shows that non-performing loans ratio significantly and negatively impacts the United Arab Emirates commercial banks performance.

Busari (2020) study analyzed the influences of credit risk management and capital adequacy on the performance of deposit money banks in Nigeria. Employing panel data regression analysis conducted on E-view 7 data analysis software. Secondary data, in the form of time series and cross-sectional data were extracted from the banks' reports. Credit risk variables and capital adequacy ratios were derived from the yearly financial statements of 12 banks for the period from 2015 to 2021. The study finds that the capital adequacy ratio (CAR) has a positive and significant relationship with bank's financial performance, as proxy by Return on Equity (ROE). Loans and advances show a negative and significant relationship with Return on Asset (ROA). Non -performing loans exhibit a negative and significant relationship with Return on Equity.

Kajola et al. (2018) examined the impact on credit risk on the financial performance of deposit money banks was analyzed in this study covering the period from 2005- 2016, the study employed the random effects generalized least square (GLS) as the data estimation techniques, the study found a significant relationship between the three credit risk parameters and both ROA and ROE ( $p < 0.05$ ). The results suggests that the management of deposit money banks should establish a strong credit guidelines to effectively evaluate the creditworthiness of their customers.

### **3. Methodology**

This study adopts an ex-post facto research design. The population of this study will focus on deposit money banks in Nigeria. A total of fourteen (14) deposit money banks is listed in Nigerian Exchange Group (NGX) under the financial services sector.

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The stratified sampling technique was used and the sample size is nine (9) listed deposit money banks and for the period of ten years (10) from (2013-2022).

These banks were selected because they have been in existence before 2012 and still in existing till date. Data were obtained from secondary sources of audited annual reports and accounts of nine (9) listed deposit money banks. To analyze the secondary data collected, the study used descriptive analysis, correlation analysis and panel regression analysis.

**Table 1**

*Measurement of Variables*

| Variable                        | Measurements                                   | Sources                                                     |
|---------------------------------|------------------------------------------------|-------------------------------------------------------------|
| Return on Assets (ROA)          | Profit before interest and tax/<br>Total asset | Chhetri (2021)                                              |
| Non-performing loanratio (NPLR) | Non-performing loan/Total loan and advance     | Ariyaningrum and Sriyono (2023), Ogundele et al. (2021)     |
| Capital adequacy ratio (CAR)    | Total equity/<br>Total asset                   | Ogundele et al. (2021), Upadhyay (2020).                    |
| Loan to total asset (LTA)       | Total loan /<br>Total asse                     | Ariyaningrum and Sriyono (2023), Erhabor and Ofiafoh (2020) |
| Firm Size                       | log of total asset                             | Septiani et al. (2020), Chhetri (2021)                      |
| Leverage                        | Total Debt/<br>Total Equity                    | Jie & Pradana (2021)                                        |

**Source: Author's computation (2025)**

**Model Specification**

The model for this study adopted Chuxuan and Xiaoyue's (2018) model, which investigated the relationship between credit risk and profitability of commercial banks in US. The model for this study is stated thus:

$$ROA=f(NPL, CAR, LTA)..... eq1$$

The following in its econometric forms:

$$ROA_{it} = \alpha_0 + \beta_1 NPL_{it} + \beta_2 CAR_{it} + \beta_3 LTA_{it} + \beta_4 FZ_{it} + \beta_5 LV_{it} + \mu_{it} ..... eq 2$$

Where,  
 $\alpha$  = constant;  $\beta_{1-3}$  = Coefficient of the independent variable; ROA= Return on Assets; NPL= Non- Performing Loan; LTA = Loan to total asset (LTA); CAR= Capital Adequacy Ratio; FZ= Firm size; LV= Leverage;  $\beta_0$ = Constant intercept;  $\alpha$ = Constant;  $\beta_1$ -  $\beta_5$ = Vector coefficient;  $u_t$ = error term.

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## 4. Results and Discussion

**Table 2**

*Descriptive statistics*

|              | ROA       | LTA      | NPL      | CAR       | FZ       | LEV       |
|--------------|-----------|----------|----------|-----------|----------|-----------|
| Mean         | 0.038404  | 0.806857 | 0.034380 | 0.433212  | 6.853155 | 4.332969  |
| Median       | 0.018147  | 0.382680 | 0.000714 | 0.149019  | 6.514092 | 5.137002  |
| Maximum      | 0.282878  | 6.408504 | 0.980000 | 9.646892  | 9.156459 | 16.35242  |
| Minimum      | -0.091003 | 0.002660 | 0.000000 | -1.547496 | 4.877377 | -2.951338 |
| Std. Dev.    | 0.064229  | 1.438747 | 0.114065 | 1.103721  | 1.290326 | 4.531318  |
| Skewness     | 2.252409  | 2.594686 | 6.857692 | 6.456885  | 0.283745 | 0.451336  |
| Kurtosis     | 8.394096  | 8.369004 | 55.18271 | 55.39902  | 1.751067 | 2.582206  |
| Jarque-Bera  | 185.2113  | 209.0842 | 10795.50 | 10921.59  | 7.057040 | 3.710136  |
| Probability  | 0.000000  | 0.000000 | 0.000000 | 0.000000  | 0.029348 | 0.156442  |
| Observations | 90        | 90       | 89       | 90        | 90       | 90        |

**Source: Author's Computation (2025)**

The means for ROA, LTA, NPLR, CAR, FS and LEV are 0.038404, 0.806857, 0.034380, 0.433212, 6.853155 and 4.332969 respectively. The median for ROA, LTAR, NPLR, CAR, FZ, LEV depicts values of .018147, 0.382680, 0.000714, 0.149019, 6.514092 and 5.137002 respectively. The maximum for ROA, LTARR, NPLR, CAR, FZ, LEV which are 0.282878, 6.408504, 0.980000, 9.646892, 9.156459 and 16.35242 respectively and the minimum for each variable are -0.091003, 0.002660, 0.000000, -1.547496, 4.877377 and -2.951338 respectively.

The standard deviation measures the variation that exists from mean; a low standard indicates that data are too close to the mean while high standard deviation data shows that data spreads over a wide range of values. The spread of samples series ROA, LTA, NPLR, CAR, FZ, LEV are 0.064229, 1.438747, 0.114065, 1.103721, 1.290326 and 4.531318 respectively. This study discovers that ROA, LTA, NPLR, CAR have kurtosis coefficient of 8.394096, 8.369004, 55.18271, 55.39902 which have a high peak, while FZ and LEV have a low coefficient of 1.751067, 2.582206 respectively.

From the analysis the Jarque-Bera test for ROA, LTAR, NPLR, CAR, FZ, LEV are 185.2113, 209.0842, 10795.50, 10921.59, 7.057040, 3.710136, the Jarque-Bera P-value for each variable series ROA, LTAR, NPLR, CAR, FZ, LEV are 0.000000, 0.000000, 0.000000, 0.000000, 0.029348 and 0.156442 respectively.



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**Correlation Matrix**

**Table 3**

*Correlation matrix*

|      | ROA       | LTA       | NPL       | CAR       | FZ       | LEV      |
|------|-----------|-----------|-----------|-----------|----------|----------|
| ROA  | 1.000000  |           |           |           |          |          |
| LTAR | 0.758139  | 1.000000  |           |           |          |          |
| NPLR | -0.035790 | 0.075147  | 1.000000  |           |          |          |
| CAR  | 0.423959  | 0.420176  | -0.013162 | 1.000000  |          |          |
| FZ   | -0.531144 | -0.472067 | 0.153326  | -0.330519 | 1.000000 |          |
| LEV  | -0.388112 | -0.254542 | 0.066551  | -0.266338 | 0.263794 | 1.000000 |

**Source: Author's Computation (2025)**

Above in table 3, is a correlation analysis which shows the relationship between ROA, LTAR, NPLR, CAR, FZ and LEV. The result of study shows that ROA is positively correlated with LTAR and CAR with a figure of 0.758139 and 0.423959, while ROA is negatively correlated with NPLR, FZ and LEV with a figure of -0.035790, -0.531144, and -0.388112 respectively.

**Hausman Test Result**

**Table 4**

*Correlated Random Effect Test –Hausman Test*

| Test Summary         | Chi-Sq.<br>Statistic | Chi- sq, d.f. | Prob.  |
|----------------------|----------------------|---------------|--------|
| Cross-section random | 16.090230            | 5             | 0.0066 |

**Source: Author's computation (2025)**

Hausman test is used to test the random effect against the null or fixed effect result to determine whether the random effect is being correlated with the explanatory variables. In table 4, the chi-sq. is 16.090230, the P- value of the houseman test is 0.0066 less than 5% level of significance. From the table above, the P-value of hausman test is less than 5% ( $0.0066 < 0.05$ ) this indicates that the fixed effect specification is appropriate.

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### Panel Regression Analysis

**Table 5**

*Fixed Effect Regression Result*

Dependent Variable: ROA

| Variable                 | Coefficient | Std. Error | t-statistic | Prob.  |
|--------------------------|-------------|------------|-------------|--------|
| C                        | 0.085184    | 0.029160   | 2.921275    | 0.0045 |
| LTAR                     | 0.027634    | 0.003666   | 7.537871    | 0.0000 |
| NPL                      | -0.015584   | 0.035993   | -0.432977   | 0.6662 |
| CAR                      | 0.002776    | 0.004047   | 0.685974    | 0.4946 |
| FZ                       | -0.008674   | 0.004051   | -2.141137   | 0.0352 |
| LEV                      | -0.002321   | 0.001000   | -2.322194   | 0.0227 |
| R- square                | 0.595408    |            |             |        |
| Adjusted                 | 0.571035    |            |             |        |
| F- statistic             | 24.42902    |            |             |        |
| Prob(F-statistic)        | 0.000000    |            |             |        |
| Durbin- Waston Statistic | 1.774983    |            |             |        |

### Source: Author's computation (2025)

An R- squared of 1 indicates the regression is perfect in our regression result; R-squared is 0.5954, which indicates that about 59.54% of variation in the dependent variable is explained by the model explanatory variable. This indicates a good fit since 40.46% (100% -72.8%) of the variables are attributed to the error term, the closer the R- squared to 1 the better the regression model.

The DW table shows an upper and lower value of 1.383 and 1.661 respectively. This means that there is no presence of autocorrelation here, since the DW calculated does not fall within the DW tabulated. Using the probability value of F-stat (P-value (F-stat)) to test for the joint hypothesis, which states that reject null hypothesis if the P-value (F-stat) < level of significance. In the regression result P -value is 0.000000 which is less than 5% level of significance (0.000000 < 0.05), we reject the null hypothesis. This indicates that the dependent variable has a joint effect.

Also, LTA was found to have a positive and significant effect on ROA evidenced with t-stat. and p-value of (t=7.5378) and (0.0000p<0.05). Whereas CAR and NPL were found to have no noteworthy effect on ROA. The control variables FZ and LEV were found to have a negative noteworthy effect on ROA evidenced with t-stats., and p-values of (t=-2.1411, -2.322) and (0.0352, 0.0227 p<0.05). The findings concludes that credit risk management proxy with LTA has a positive noteworthy effect on ROA whereas CAR and NPL proxy of credit risk management have no noteworthy impact on ROA.

### **Discussion of Findings**

The study examines Credit risk management and financial performance of listed deposit money banks in Nigeria from 2013 to 2022. Based on this research, Hausman test indicated that fixed effect should be adopted. However, it was discovered that Loan to total asset (LTAR) has a positive and significant relationship with financial performance of deposit money banks in Nigeria which is not in line with a-priori expectation.

Non-performing loan ratio (NPLR) has a negative and insignificant effect on the financial performance of deposit money banks in Nigeria which is not in line with a-priori expectation. This result contradicts the findings of Ephias and Anthenia (2020), which revealed a negative notable effect on the impact of credit risk on the financial performance of 18 South African banks from 2008 to 2018. The result is in line with the finding of Fadun & silwimba (2023),

Capital adequacy ratio (CAR) has a positive and insignificant effect on the financial performance of listed deposit money banks in Nigeria which is not in line with a-priori expectation. The result of this finding contradicts the findings of Oloruntoba, Zaid & Folakemi (2018) and the findings of Busari (2020). Firm Size (FZ) has a negative and significant effect on the financial performance of listed deposit money banks in Nigeria. Leverage (LV) has a negative and significant effect on the financial performance of listed deposit money banks in Nigeria.

### **5. Conclusion and Recommendations**

The results of this study show the conclusion that was reached based on the interpretation of the analysis variables. Loan to total asset ratio has a significant positive relationship on the financial performance of listed deposit money banks in Nigeria. Non-performing loan ratio (NPLR) has a negative and insignificant effect on the listed deposit money banks financial performance in Nigeria.

Capital adequacy ratio (CAR) has a positive and insignificant effect on the financial performance of listed deposit money banks in Nigeria, Firm size (FZ) has a negative and a significant effect on the financial performance of listed deposit money banks in Nigeria, while Leverage (LEV) has a negative and significant effect on the financial performance of listed deposit money banks in Nigeria.

Given the findings and conclusion, the following recommendation were made; Banks need to keep a close eye on loan that are not being repaid on time or are in default. By actively managing these non-performing loans, bank can take appropriate actions to minimize losses, Risks are mainly from the uncollected loans as a result of improper loan policies, unlawful or illegal manipulations or unanticipated financial crises, therefore, manager are charged with the responsibility to make sure that credit risk management policies are strictly and fully followed to minimize the adverse consequences of credit risk management.

Since leverage do significantly affect the financial performance of listed deposit money banks in Nigeria, this study recommend that less priority should be given to debt source of finance and deposit money banks (DBMs) should ensure that they have adequate capital to absorb possible losses and fulfil legal requirements, this will help them maintain the financial position of the bank and develop confidence in their stakeholders.

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