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# RELATIONSHIP BETWEEN DEPOSIT LIABILITIES AND PROFITABILITY OF DEPOSIT MONEY BANKS IN NIGERIA.

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**Abstract:** The objective of the study is to examine the relationship between fund deposit and profitability of deposit money banks in Nigeria. The study adopted the panel research design and data were extracted from the floor of the Nigeria Exchange Group (NGX) from 2016-2022. The population comprise of twelve (12) listed deposit money banks on the Nigeria stock Exchange and descriptive analysis were used to establish relationship between the variables of the data while the panel least square was employed to draw inference on the phenomenon under review. The result from the inferential statistics revealed that Current deposit has positive and significant impact on the profitability of return on asset (ROA) of deposit money banks in Nigeria. Savings deposit has no significant impact on profitability of return on asset (ROA) of deposit money banks in Nigeria; Time deposit has positive and significant influence on profitability of return on asset (ROA) of deposit money banks in Nigeria. The study concluded therefore that a bank's deposits have positive impact on profitability of deposit money banks in Nigeria. Specifically, current deposit and time deposit have positive impact on profitability of deposit money banks in Nigeria. The study recommended that deposit money banks in Nigeria should focus more on growing their current and time deposit as a strategy in increasing their performance.

**Key Words:** Profitability, Current Deposit, Savings deposit, Time Deposit, Deposit Money Banks.

## INTRODUCTION

The bedrock of any nation's economic growth and stability is a robust banking system. This is so because, regulatory authorities across the globe have to be very uncompromising when it comes to setting standards and operating framework for the financial institutions. Investments and savings are essential for fostering economic development. The investments of resources by financial institutions are also derived from the savings of its customers which are crucial to the expansion and development of the nation's economy. A rise in savings will result in rise of capital accumulation, which will then cause the economy to flourish if judiciously invested. An

efficient financial system improves profitability, increases the movement of cash from savers to borrowers, and provides higher-quality services to customers.

Emerging markets in developing nations in Asia and Sub-Saharan Africa, bank deposits are the primary way people save. This is due to; underdeveloped stock markets, increasing volatility in foreign exchange rate due to hyperinflation, poor financial administration, low risk appetite, and sharp practices that result in insider dealings in the financial system. Low and middle-income earners tend to favour cautious savings methods, such as bank deposits. Banks serve as crucial financial intermediary between savers and borrowers in the economy. In Nigeria, all industries rely on banks for efficient operations, whether as debtors or as creditors. Furthermore, banks are the sole legalized custodian of currencies; therefore their stability is critical to the financial system. As a result, an in-depth understanding of their functionalities and operations are very important to economy's financial stability. Deposits are crucial for economic growth in banking, insurance, pension, and equity markets (Ukinamemen, 2010). Due to the fact that deposits cover the demands of the financial resources required by banking systems, deposits may be regarded as the most significant resource of deposit money institutions. In order to meet the financial demands of its clients, banks must mobilize and amass a sufficient number of deposits. Deposit mobilization is the process of persuading current consumers to make cash deposits at the bank or luring in new ones to create accounts (Kelvin, 2001). Deposit mobilization is a key factor in increasing economic efficiency because it directs money from resource excess units to those with more potential for profitable investment. However, mobilizing deposits is a difficult process.

For banks to perform their intermediary functions optimally, they require generating deposits from the surplus side of the economy from which such will be given to the deficit side through bank lending. When banks accept deposits from customers, it pays interest on such deposits depending on the nature. In order to attract customers, banks create various deposit products that will give them leverage over competitors in attracting large depositors. As a result it is not all deposits that can contribute positively to the banks performance in terms of profitability. Hence this study will explore the impact of various forms of deposits on banks' profitability.

Furthermore, there are fewer literatures that clearly explain the relationship between fund deposits and profitability of deposit money banks in Nigeria. Also, few prior studies on the phenomenon have evidenced mixed findings. For instance, Obim and Ezeudu (2024) investigated the effect of time deposit and bank loans on the financial performance of microfinance banks in Nigeria and found that time deposit negatively affects the financial performance of microfinance banks in Nigeria. Adelegan and Idolor (2024) investigated the impact of liquidity management on financial performance of deposit money bank in Nigeria found that no relationship between deposit to asset ratio and profitability of listed deposit money banks. Fatai and Alenoghena (2023) show that fixed deposits and current deposits have a positive and significant effect on productivity at the selected deposit money banks. Haddawee and Flayyih (2020) studies revealed that there is a significant relation between deposits and the indicators of profitability. Therefore, the study would fill gap in literature in examining the relationship between bank deposits and profitability of commercial banks in Nigeria

**Objectives of the Study**

The broad of the study is to examine the relationship between fund deposit and profitability of deposit money banks in Nigeria. The specific objectives were to;

i. Examine the impact of current deposit on profitability of deposit money banks in Nigeria;
ii. Examine the impact of savings deposit on profitability of deposit money banks in Nigeria;
iii. Examine the impact of time deposit on profitability of deposit money banks in Nigeria.

**Research Hypotheses**

The hypotheses of the study are stated in null form;

i. Current deposit has no significant impact on profitability of deposit money banks in Nigeria.

ii. Savings deposit has no significant impact on profitability of deposit money banks in Nigeria.
iii. Time deposit has no significant impact on profitability of deposit money banks in Nigeria.

## LITERATURE REVIEW

### Conceptual Review

### Profitability of Deposit Money Banks in Nigeria

Profitability is a key factor in evaluating corporate performance (Pandey, 2004). The level of debt reflects the company's need for external resources and how much earnings will be used to pay down the debt and interest (Sari and Septiano, 2020). As a result, the importance of profitability and the usage of shareholders' or equity funds cannot be overstressed. This eliminates the need for the bank to pay interest to external resources providers while utilising its own money (e.g. shareholders or equity funds) to finance operations. A company's core CS impacts its profit-earning ability. Profit maximization is crucial for maintaining a going concern status and satisfying investors, administrators, and promoters.

Businesses are evaluated using many metrics, including profitability, liquidity, and turnover ratios. Profitability may be quantified using many financial statistics, including return on asset (ROA), return on capital employed (ROE), cash ratio, return on investment (ROI), return on invested capital (ROIC), operating margin, etc. The research used return on asset (ROA) and return on equity (ROE) as proxies for profitability of deposit money banks.

### Bank Deposits

The biggest liability for deposit money banks is the cash deposited deposit in the deposit money banks. According to Kelvin (2001), over 75% of the liabilities of commercial banks are made up of deposits. Different people use bank deposits for different reasons. Some people only deposit money in the bank when they have extra money and they are willing to save on a regular basis. Then, the goal of a deposit is to safeguard funds for unforeseen expenses. Some people might like to keep their money in a bank for as long as possible in order to accrue interest or to build up savings with interest in order to purchase a home, cover medical costs when they are older, etc. Some people, primarily business people, put all of their sales revenue into a bank account and use those funds to cover all of their company expenditures. In consideration of these variations, banks provide customers with the option to open several deposit account kinds based on their needs and preferences.

Legas & Shikur (2021) define a deposit account as any current account, savings account, time deposit account, or other kind of bank account at a financial institution that permits the account holder to make and receive deposits. The amount owed by the bank to the client is represented by the balance that results from these transactions, which are documented in the bank's records as a liability. This study shall look at current deposit, savings deposits and time deposits of twelve deposit money banks in Nigeria.

### Current Deposit

According to Jhingan (1995), a current account is cheque-based, non-interest-bearing account. This account allows depositors to withdraw cash by cheque without a prior notice. The bank does not pay interest on these accounts. Daily financial transactions are made using current accounts. Large corporations, businesses, and establishments like hospitals, universities, and schools all make payments via their bank accounts. Savings bank accounts are not suited for them because of the limitations on the number of withdrawals that may be made. Banks must create current accounts for them and provide an account from which they may make withdrawals at any time. Similar to savings bank accounts, starting this type of account necessitates a minimum deposit. The bank does not charge interest on the sums on this deposit; instead the account holder pays a monthly operating cost of

a specific amount. Banks also permit account holders to withdraw amounts over their balance of deposit for their convenience. We refer to this facility as an overdraft facility. It is permitted for select consumers only, and only up to a particular amount, based on a prior arrangement with the relevant bank.

**Savings Deposit**

Savings accounts as defined by Hana and Peter (2016) as deposits on demand with cheap maintenance and account administration costs, high deposit rates, and limitless disposability. Savings accounts are non-maturing liabilities that combine the characteristics of long-term deposits (higher deposit rates) with the characteristics of current accounts (withdrawal upon notice). Depending on the bank, opening a savings account requires a minimum initial deposit.

This account may accept deposits at any time, and withdrawals can be done by utilizing an ATM card, signing a withdrawal form, or writing a check.

Deposit Money Banks usually impose restriction on the maximum amount to be withdrawn from this account daily and interest is usually paid on the remaining amount deposited in this account. The account must maintain the minimum balance that the bank specifies. Therefore, the savings bank account is the best option for someone with restricted income who wishes to save money for future requirements. The majority of individuals keep these deposits as a means of saving money in order to receive interest from the banks. Individuals hold saving deposits as part of their overall wealth stock, in addition to using them to cover short-term or immediate requirements (Venkatesan, 2012).

A demand deposit that allows for a restricted number of withdrawals within a given time frame is a savings account. A moderate interest return and principal security are offered by savings accounts. Banks now impose limitations on the minimum balance as well. Customers are required to pay a penalty if they fail to maintain the minimum amount. Many services are now included with savings accounts, including free internet banking with bill pay, ATM and debit card, check book, fund transfer, prepaid mobile charge, free telephone banking, and more (Hana and Peter, 2016).

**Time Deposit (or Fixed Deposit)**

Time deposits are savings accounts that are locked in for a specific period of time. According to Ledgerwood (2000), these investments offer the highest returns while having the lowest liquidity. Investors/depositors can withdraw funds only after the specified time period. Premature withdrawals are allowed with a penalty. Interest is computed monthly, quarterly, or annually according on the bank and maturity plan. Many banks include a loan or overdraft facility with their time deposits. Time deposits are a secure investment suitable for cautious, low-risk investors. Time deposits can be either long-term or short-term obligations. According to Ismail (2010), the duration of time deposits might range from a few months to many years.

**Theoretical Underpinning**

This work is anchored on Financial Intermediation Theory propounded by John Gurley and Edward Shaw (1960). The theory explains the role and functioning of financial intermediaries, such as banks, insurance companies, and investment firms, in the economy. The theory focuses on how these intermediaries facilitate the flow of funds between savers (who have excess funds) and borrowers (who need funds), thus playing a crucial role in improving the efficiency of financial markets and reducing transaction costs. Financial intermediaries pool resources from multiple savers and lend to multiple borrowers, thus reducing the individual costs of lending and borrowing. This is more efficient than individual savers seeking out individual borrowers.

Intermediaries help diversify risk by lending to multiple borrowers or offering financial products like insurance, reducing the impact of a default or adverse event on any single investor. Financial intermediaries can also borrow funds short-term from depositors and lend long-term to borrowers, bridging the gap between the liquidity preferences of savers and the investment needs of borrowers. Financial intermediaries also perform information asymmetry by specializeing in evaluating the creditworthiness of borrowers and monitoring them, which reduces the problem of asymmetric information (where one party has more or better information than the other) that exists in direct lending relationships.

**Empirical Review**

Obim and Ezeudu (2024) investigated the impact of time deposit and bank loans on the financial performance of deposit money banks in Nigeria. This study used the exploratory research design to empirically analyse the impact of fund deposit on the profitability of deposit money banks in Nigeria. Secondary data, cross sectional data and time-series were employed in the study. Data for the study were sourced from annual reports of Twelve (12) deposit money banks in selected states in Nigeria, as well as institutional sources like the NDIC reports records and CBN statistical bulletins. Panel data analysis was employed in the carrying out of this study and the result of this analysis, the findings are summarised as follows: there was a significant negative impact of time deposit (fixed deposit) on the profitability of deposit money banks in Nigeria, there was a non-significant positive impact of deposit money banks' loans on the profitability of deposit money banks in Nigeria. There was also a significant positive impact of real interest rate on the profitability performance of deposit money banks in Nigeria, and there was a significant positive impact of gross capital formation on the profitability performance of deposit money banks in Nigeria.

Adelegan and Idolor (2024) investigate the impact of liquidity management on financial performance of deposit money bank in Nigeria using time series data from 2011 to 2020. The study analyses the data with the aid of E-view statistical package for descriptive and correlation analysis and STATA 11 after testing for the best estimator from pool OLS, fixed effect and random effect estimator based on Breusch and Pagan LM test, F-test and Hausman test. Deposit to asset ratio has negative but statistically insignificant relationship with returns on assets of DMBs in Nigeria since the P-value of 7.9% is greater than 5% significant level. Cash reserve ratio has positive but statistically insignificant relationship with returns on equity of DMBs in Nigeria since P value of 22.1% is greater than 5% significant level. Loan deposit ratio has negative but statistically insignificant relationship with net interest margin of deposit banks in Nigeria since P value of 91.8% is less than 5% significant level.

Koufopoulos (2023) investigated the correlation between deposit mobilization and financial performance of commercial banks in Nigeria. Data were sourced from secondary using annual report of banks. The study adopted multiple regressions and the result revealed that deposit mobilization positively affected the financial performance of commercial banks in Nigeria.

Fatai and Alenoghena (2023) examined the importance of deposit-based growth of two DMBs in Lagos State and their efforts to mobilise cheap deposits to increase their interest revenues and ultimately enhance their profitability. An aggressive deposit mobilisation drive is one policy option for these DMBs to motivate their staff to deliver superior performances. A survey research design was employed, and five hundred copies of research instruments were administered to the staff of the two banks. SPSS was adopted to process the data and the results showed that deposit growth positively and significantly affects overall organisational productivity. The multiple regression analysis results showed that fixed deposits and recurring deposits (have a positive and significant effect on productivity at the selected deposit money banks.

Banke and Yitayaw (2022) investigated the bank-specific and macroeconomic determinants of deposit mobilization in Ethiopian banking sectors using balanced panel data of 14 commercial banks from 2011 to 2020. Secondary data sources from sampled commercial bank audited financial statements were used to achieve the stated objective. A quantitative approach and explanatory design were used. The model result demonstrated that economic growth, population growth, loan to deposit ratio, inflation, capital adequacy, and political stability have a negative and statistically significant impact on deposit money bank's deposit mobilization. On the other hand, the bank's profitability has a positive and statistically significant impact on deposit money bank's deposit growth.
Jayaraman, Azad and Ahmed (2021) examined the impact of the key financial variables on the net profit of the selected deposit money banks in Oman. The study employs times series panel data – cross-sectional analysis of the key financials of five leading commercial banks for a period of 13 years from 2007 to 2019. The results reveal that the correlation matrix of the selected variables has a positive relationship with net profit, assets, deposits, loans, and interest income. However, the findings also shows a negative relationship between net profit and net loans to total deposits ratio. The study found net loans as the main independent variable that influences the profitability of the banks since the key source of revenue comes from the lending operations. The assets, total capital adequacy ratio have a mixed impact on the profitability of deposit money banks.
Legass, Shikur and Ahmed (2021) examined major causes of deposit growth deposit money banks in Ethiopia with explicit inference on industry specific and Macro-Economic variables. The research used secondary data from 2010-2019. Macro-economic factors selected under this study consist of age dependency ratio, unemployment rate, population growth, broad money supply, and Inflation. While bank-specific variables included are branch expansion and bank size. Since the study employed panel data in line with the nature and data of the study ordinary least square method estimation were used subsequently after the necessary diagnostic tests and Hausman test performed to determine the appropriateness of fixed effect. The result of the study indicates branch macroeconomic factors such as bank size, broad money supply, and inflation significant positive effect on deposit growth of commercial banks. Contrarily, Age dependency ratio and population growth have a statistically significant negative effect on deposit growth. The unemployment rate, on the other hand, has been found to have a positive but statistically insignificant relationship.
Femi, Odi and James (2021) examined the determinable factors affecting commercial banks deposits in Nigeria for the period of 2000 to 2019 using panel data of listed banks. The study adopted ex-post facto research design to examine the effects of bank-specific and macro-economic factors on deposit in Nigerian Deposit Money Banks. Series of diagnostic tests was carried out by the study. Panel data technique specified random effect model by Hausman test. The study found that branch network and bank size have positive and significant effects with deposit while financial intermediation ratio and economic growth have positive but insignificant effects with deposit during the study period. Also, money deposit has negative and significant impact on bank deposit.
Haddawee and Flayyih (2020) examined the relationship between bank deposits and profitability in deposit money banks in Jordan from 2012-2016. Ex post facto research design was employed and ordinary least squares was adopted to estimate the model. The study revealed that there is a significant relation between deposits and the indicators of profitability. The saving deposit is the biggest contribution to profitability of deposit money banks; followed by time deposits, and finally the current deposit which is the lowest contribution.
Hasan, Manurung and Usman (2020) explore determinant of bank profitability with size as moderating variable in Indonesia for period of 2007 to 2018. Internal ratio and macroeconomics variable are used to determine bank profitability. Return on Equity and Return on Assets are variables of deposit money banks' profitability. This

research discovered that Net Interest Margin, Ratio of Operational Expenses to Operational Profit, Capital Adequacy Ratio and Loan to Deposits Ratio significantly impacted on profitability deposit money bank.. Net Interest Margin, Non-Performing Loan, Ratio of Operational Expenses to Operational profit, and Loan to Deposits Ratio significantly affected profitability banks' Return on Equity. Consumption of Cement significant affected bank profitability of Return on Equity. Asset as moderating variable with CAR, BOPO, Consumption of cement and Fed Rate have significant to affect bank profitability of return on assets. Asset with Consumption of cement has and negative significant to affect Bank Profitability of Return on Equity.

Sari and Septiano (2020) examined the impact of intervening loan to deposit ratio on Profitability in Indonesia from 2014 to 2019. The exposit facto research design was adopted in the study. Furthermore, the ratios adopted were; Capital Adequacy Ratio, Net Interest Margin and Non-Performing Loan, as independent variables, Loan to Deposit Ratio as an intervening variable and Return on Asset on its dependent variables. The result revealed that the Variable Loan to Deposit Ratio mediates the relationship between Net Interest Margin and Return on Asset.

Serwadda (2018) examined the determinant of deposit money banks' profitability in Hungary. The study aimed to find out whether bank-specific (internal) factors impact on the profitability of deposit money banks in Hungary sixteen (16) year's period ranging from 2000–2015. The study employed a sample of twenty-six deposit money banks with four hundred sixteen observations. The study used return on average assets (ROAA) as a proxy for bank profitability, and it also considered bank-specific (internal) factors as independent variable. Panel regressions, descriptive statistics and correlation analysis for the investigations were employed in the study. The empirical findings reveal that non-performing loans, overhead costs and liquidity had a significant negative impact on bank profitability as bank size had a significant positive impact on profitability. However, net interest margin and capital adequacy ratio had no impact on bank profitability.

Ukinamemen (2010) examined internal factors affecting profitability of Deposit Money Banks (DMBs) in Nigeria for the period of 2008-2016 using panel data of 14 listed banks drawn from the Nigerian Stock Exchange. Secondary data obtained from the listed Deposit Money Banks' financial statements were analysed. Capital adequacy, Credit Risk, and Inflation while profitability were considered as proxies to the independent variables was proxied by Return on Assets (ROA). The study adopts correlational research design to investigate the determinants of profitability of the Deposit Money Banks. Panel data techniques (fixed and random effects model) were employed to examine the effect of internal factors on profitability of the sampled listed Deposit Money Banks. Although Hausman specification test suggested that fixed effect model is more appropriate, the study used Feasible Generalized Least Square (FGLS) to underpin the outcome of the Hausman specification. The study found that internal factors had significantly influenced the deposit money banks' profitability over the study period. The Capital Adequacy had a positive and significant relationship with bank profitability while Credit Risk had a negative and significant relationship with bank profitability during the study period.

Olaoye and Olanrewaju (2015) examined the impact of credit deposit ratio on bank profitability in deposit money banks in India. CD Ratio of all deposit money banks taken as an independent variable whereas, Return on Assets (ROA), Return on Investment (ROI), Return on Equity (ROE), and Ratio of net interest income to total assets (Net Interest Margin) were taken as dependent variables. The study covers the period ranging from financial year 2004-5 to 2015-16 and entire dataset was taken from Reserve Bank of India website. The study reveals that there exists a statistically significant relationship between CDR and OPTA, INTTA, ROE and NIM implying that Credit Deposit Ratio (CDR) has bearing on bank profitability.

Wami (2017) examined the factors affecting profitability of banks operating in Jordan from 2000 to 2015. Some of the factors considered were Assets, Direct credit Facilities, Deposits, Owner's equity, Branches, and Automated Teller Machines (ATMs). The exposit factor research design was adopted and regression analysis was used to test the hypotheses of the study.

The study found that there is a significant statistical impact of the factors (Assets, Direct credit Facilities, Deposits, Owner's equity, Branches, ATM) together on the return on assets (ROA). Also, there is a significant statistical impact of the factors (Assets, Direct credit Facilities, Deposits, Owner's equity, Branches, ATM) together on the return on Owners' equity (ROE).

Unvan and Yakubu (2020) investigated the impact of bank-specific and macroeconomic factors on deposit bank profitability in Turkey. The exposit facto research design was adopted in the study, and the ordinary least squares was used to estimate the model. Empirical results suggested that, equity over total assets, non-performing loans to total cash loans, net interest revenues to average total assets, and central bank policy interest rate have a significant impact over return on assets while non-interest income over total assets, market share of deposit banks in banking sector, operational expenses to average total assets, and exchange rate are not statistically significant. Also, effect of recent global financial crisis on bank performance is significantly negative.

**Summary and Gap Identified in the Literature**

A plethora of studies have been carried on the determinants of the profitability of deposit money banks across the globe. Majority of the studies used ordinary least square technique but in this study I intend to apply panel least square techniques using return on asset (ROA) to measure profitability as dependent variable. Therefore, the study will fill this gap existing in literature.

**METHODOLOGY**

The ex-post facto research design was used in this study. The choice of an ex-post facto research design is justified by the fact that it prevents the researcher from altering the data and study results because the events that led to the design have already transpired and scientific data is readily available. The population of study comprises of all twelve (12) listed deposit money banks listed on the Nigeria stock Exchange from 2016-2022. The rationale for selecting this population and periods the study was when government implemented fully the Treasury Single account policy. Secondary data for the study was sourced from annual reports of listed deposit money banks on the Nigerian Exchange Group from the period 2016-2022. The data for dependent and independents variables will be taken from the annual reports of listed banks.

**Model Specification**

The study adopted the model of Haddawee and Flayyih (2020) in their study 'the relationship between fund deposits and profitability in deposit banks in Jordan'. The model is specified thus as;

In functional form;

$PROF = f(CURDP, SAVDP, TMEDP)$ …….....(i)

In econometric form:

$ROA_{it} = \beta_0 + \beta_1 CURDP_{it} + \beta_2 SAVDP_{it} + \beta_3 TMEDP_{it} + \beta_4 FSZE + \beta_5 FAGE + \varepsilon_{it}$.....(ii)

Where;

PROF = Profitability (ROA & ROE);

$\beta_0$ = Constant;

ROA = Return on asset;

CURDP = Current Deposit;

SAVDP = Savings Deposit;

TMEDP = Time Deposit

FSZE = Firm Size

FAGE = Firm Age

$B_0$ = Constant

$\beta_1, \beta_2 \beta_3,$ = Coefficient of explanatory variables
ε = Standard error
i = Cross sectional (Companies)
t = Time Series
A priori expectation = $\beta_1 - \beta_3 > 0$

**Operationalization of Variables**

This study employed Return on Asset (ROA) as measure for profitability. These measures have been previously used as good proxies for profitability and financial performance of firms. While bank deposit was measured in terms of time (fixed) deposit, savings deposit, and current deposit,

Table 1: Measurement of variables

| Variable | Proxy | Measurement |
|---|---|---|
| Profitability (Dependent) | Return on Asset (ROA) | Ratio of net annual profit to total assets |
| Fund Deposit **(**Independent) | Current Deposit | Ratio of current deposit to total deposit |
| | Savings Deposit | Ratio of total savings deposit to total deposit |
| | Time (Fixed) Deposit | Ratio of total time deposit to total deposit |
| **Firm size** (Control) | Total Assets of firms | Natural logarithm of total assets |
| **Firm age** (Control) | Age of firm since Incorporation till date | Number of years from the time the company was quoted on the floor of the Nigerian Stock |

**Source:** Author's Source: Compilation, 2024

**Method of Data Analysis**

Descriptive and inferential statistics were used to analyze the data of the study. The descriptive statistics include the mean, minimum, maximum and standard deviation. The panel least square was the inferential statistic employed to test the hypotheses stated in the study. The rationale for using the panel least squares is because our data include properties of time-series and cross-sectional data (Studenmund, 2014).

**Data Presentation, Interpretation and Discussion**

**Descriptive Statistics**

Table 2

*Descriptive Statistics*

| **Variables** | **Mean** | **Minimum** | **Maximum** | **Std. Dev** |
|---|---|---|---|---|
| ROA | 0.0283 | -0.0080 | 0.2050 | 0.0316 |
| ROE | 0.1361 | 0.0154 | 0.2619 | 0.0719 |
| CURDP | 76476.60 | 2033 | 189593 | 49956.67 |
| SAVDP | 23214.63 | 42 | 189472 | 46686.79 |

| | | | | |
|---|---|---|---|---|
| TMEDP | 47666.17 | 6000 | 902409 | 69868.71 |
| FSZE | 10.45 | 7.234 | 13.21 | 1.2558 |
| FAGE | 47.82 | 10 | 129 | 30.325 |

Source: Author's computation, 2024

Table 2 shows a descriptive statistic of variables used in the study. The mean of study – ROA stood at 0.0283. The minimum and maximum value of stood at -0.0080 and 0.2050, respectively. The deviation of ROA which stood at 0.0316 failed to exhibit a considerable clustering around the mean,

The mean of the independent variable – CURDP, SAVDP and TMEDP has means of 76476.60, 23214.63 and 47666.17, respectively. The control variables introduced in the study – FSZE and FAGE had means of 10.45 and 47.82. All standard deviation of the control variable exhibited a considerable clustering around the mean.

**Table 3:** *Correlation Matrix*

| | ROA | CURDP | SAVDP | TMEDP | FSZE | FAGE |
|---|---|---|---|---|---|---|
| ROA | 1.000 | | | | | |
| CURDP | 0.270 | 1.000 | | | | |
| SAVDP | 0.146 | -0.072 | 1.000 | | | |
| TMEDP | 0.048 | 0.069 | 0.235 | 1.0000 | | |
| FSZE | 0.201 | -0.097 | -0.021 | 0.098 | 1.000 | |
| FAGE | 0.217 | -0.202 | 0.0663 | 0.119 | -0.064 | 1.000 |

Source: Author's computation, 2024

The linearity of variables (correlation matrix) in Table 3 show that the variables exhibited both positive and negative relationship. This is seen in the association between SAVDP and ROA (0.146), CURDP and ROA (0.270). The strength of association between variable were below the threshold of 0.80, suggesting the absence of the problem of multi-collinearity in the predictor variables (Studenmund, 2014). However, to further validate the veracity of this result, the Variance Inflation Factor test was done.

**Diagnostics tests**

Diagnostics tests was conducted in order to fulfil the assumptions of regression. Some of the diagnostics test we did was autocorrelation test, serial correlations test, constant residual error (Heteroskedasticity), multicollinearity, Ramsey, Husman, normality and model misspecification test. All the test conducted yielded positive results.

Table 4: Inferential Statistics – Panel Least Squares

| **Variables** | **Dependent variable: ROA** Random Effect | | | |
|---|---|---|---|---|
| | ***B*** | **S.E** | **t-Stat.** | **Prob.** |
| Constant | 0.1786 | 0.1761 | 1.0143 | 0.3134 |
| CURDP | 0.4102 | 0.1078 | 3.8056 | 0.0246** |
| SAVDP | 0.1560 | 0.1333 | 1.1708 | 0.2450 |
| TMEDP | 0.2007 | 0.0954 | 2.1019 | 0.0386** |
| FSZE | 0.1266 | 0.1183 | 1.071 | 0.2877 |

| | | | | |
|---|---|---|---|---|
| FAGE | 0.297 | 0.1724 | 1.7248 | 0.0893 |
| R-squared | | 0.7946 | | |
| Adjusted R-squared | | 0.6483 | | |
| Dnrbin-Watson stat | | 1.928 | | |
| S.E. | | 0.1739 | | |
| F-statistics | | 13.2402 | | |
| Prob. (F-statistics) | | 0.0043** | | |

**significant at 5 per cent level

Source: Authors' Computation, 2024

Table 4 revealed the results of the panel least squares regression for the model of the study. The study measure profitability of commercial banks through return on assets. The explanatory variables employed in the study significantly explain the relationship between bank deposits and profitability of deposit money banks in Nigeria. This conclusion was drawn from the result of the random effect panel least square regression, F-statistics = 13.2402, p = 0.0043 < 0.05.; F-statistics = 11.8744, p = 0.0226 < 0.05. Furthermore, the adjusted R-Squared stood at 0.6483; that is about 65% of the systematic variation in the dependent variable (ROA) is caused by the explanatory variable used in the study. While about 35% of the variations are caused by other variables not included in the model but were adequately captured by the standard error of the regression, SE = 0.1739.

The control variable introduced- firm size and firm age had mixed association with profitability of deposit money banks in Nigeria. Firm size has no significant impact on profitability of deposit money banks in Nigeria. While firm age has positive impact on profitability of deposit money banks in Nigeria. The Durbin Watson Statistics was close to 2, indicating absence of autocorrelation.

**Test of Hypotheses of the study**

The hypotheses of the study were tested at 5% level of significance (that is, if p-value < 0.05 reject Ho, else do otherwise).

*$Ho_1$:* Current deposit has no significant impact on the profitability (ROA) of deposit money banks in Nigeria

From the result in tables 4.9, it was found that current deposit has positive and significant impact on the profitability (ROA) of commercial banks in Nigeria, $\beta_1 = 0.4102$; SE = 0.1078, p = 0.0246 < 0.05. Therefore, this study rejected the null hypothesis stated on the study, that current deposit has no significant impact on the profitability (ROA) of deposit money banks in Nigeria.

Therefore, this study accepted the null hypothesis stated on the study, that current deposit has no significant impact on the profitability (ROA) of deposit money banks in Nigeria.

*$Ho_2$:* Savings deposit has no significant impact on profitability (ROA) of deposit money banks in Nigeria

Result from the panel least squares revealed that savings deposit has no significant impact on profitability (ROA) of deposit money banks in Nigeria, $\beta_2$ = 0.1560; SE = 0.1333, p = 0.2450 > 0.05. Thus, an increase in the proportion of savings deposit will not increase the profitability (ROA) of deposit money banks in Nigeria. Therefore, the study failed to reject the null hypothesis stated that savings deposit has no significant impact on profitability (ROA) of deposit money banks in Nigeria.

*$Ho_3$:* Time deposit has no significant influence on profitability (ROA) of deposit money banks in Nigeria.

From the result from the panel least squares revealed that Time deposit has positive and significant influence on profitability (ROA) of deposit money banks in Nigeria, $\beta_3$ = 0.2007; SE = 0.0954, p = 0.0386 < 0.05. This result implies that an increase in the volume of time deposit will significantly increase the profitability (ROA) of deposit money banks in Nigeria.

**Discussion of Findings**

The study examined the relationship between fund deposit and profitability of deposit money banks in Nigeria. The result from the analysis yielded mixed findings on the relationship between banks deposit and profitability of deposit money banks in Nigeria. First, the study found positive relationship between current deposit and profitability (ROA) of deposit money banks in Nigeria.

This finding is in tandem with works of Haddawee and Flayyih (2020); Baqui et al (1987) who found that current deposit has positive impact on profitability of banks.

Secondly, a critical analysis of the result from study, revealed that Savings deposit has no significant impact on profitability (ROA) of deposit money banks in Nigeria. This finding does not support work of Haddawee and Flayyih (2020); Baqui (1987) who found that savings deposit has positive and significant impact on profitability of banks.

Lastly, the study found that time deposit has positive and significant influence on profitability (ROA) of deposit money banks in Nigeria. Therefore, an increase in volume of time deposit will lead to an increase in profitability (ROE) of deposit money banks in Nigeria. This finding also buttresses the argument of Haddawee and Flayyih (2020); Baqui et al (1987) that time deposit has an impact on the profitability of banks.

**Summary, Conclusion and Recommendation**

**Summary of Findings**

The study investigated the relationship between fund deposit and profitability of money deposit banks in Nigeria. It however achieved this through specific objectives which include to: ascertain the impact of current deposit on the profitability of deposit money banks in Nigeria; examine the impact of savings deposit on profitability of deposit money banks in Nigeria; and examine the impact of time deposit on the profitability of deposit money banks in Nigeria. The study found the following;

i. Current deposit has positive and significant impact on the profitability (ROA) of deposit money banks in Nigeria;

ii. Savings deposit has no significant impact on profitability (ROA) of deposit bank banks in Nigeria;

iii. Time deposit has positive and significant impact on profitability (ROA) of deposit money banks in Nigeria and

**Conclusion**

Based on the findings of the study, the study concluded that a fund deposit has positive impact on profitability of deposit money banks in Nigeria. Specifically, current deposit and time deposit have positive impact on profitability of deposit money banks in Nigeria.

**Recommendations**

Based on the finding of this study the following recommendations were made. They include;

1. Commercial banks in Nigeria should improve on the current strategy in increasing the volume of current deposit;
2. The regulatory institution in the financial sector should look at improving policies on ground to increase the volume of savings deposit and capture the unbanked population; and
3. Time deposit policies put in place in commercial banks should be sustained to improve its volume since it impacts positively on bank's profitability.

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