EFFECTIVE ASSETS INVESTMENT AND FINANCIAL PERFORMANCE: EVIDENCE FROM DEPOSIT MONEY BANKS IN NIGERIA (2013-2022)

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Abstract

This is a quasi-experimental study that investigated the relationship between assets investment and financial performance of deposit money banks (DMBs) in Nigeria for a period of 10 years ranging from 2012 to 2022. The study used time series, secondary data collected from annual financial reports of the purposefully selected banks to estimate how effective assets investment affected the financial health of DMBs in Nigeria. An econometric model was specified in this study using return on assets (ROA) as the metrics for financial performance while cash and cash equivalents like money market products, tangible assets like plants and equipment and intangible assets were used as indicators of asset investment which is the independent variable. Linear regression tool was adopted in the analysis and the results revealed a positive and significant correlation between dependent variable, ROA and the independent variables, the asset investment indices. Based on this findings, the study concluded that effective assets investment is a good predictor of sound financial health of the DMBs in Nigeria and it was further recommended among other things that DMBs in Nigeria should adopt optimal investment mix that will enable them become more profitable as to enhance their earning-retention potentials and high financial performance and also the Central Bank of Nigeria's guideline on assets investment for DMBs should be adequately

monitored and evaluated with offenders sanctioned in order to ensure prudence, effectiveness and overall financial soundness in the financial sector.

Keywords: Assets Investment, Financial Performance, Return on Assets.

Introduction

The banking sector of any nation plays a vital role in the economic developmental trend of such nation/s and Nigeria is not an exception. The Nigerian financial sector has undergone significant transformation steps in recent years with increased competition, regulatory reforms, technological advancements and visible improvements.

One critical aspect of banking is investing in particular assets that will significantly impact on their financial health. Obizue and Obizue (2022) asserted that an effective and efficient investment in assets is essential for building a vibrant and sustained banking operation that will tend to grow faster with high liquidity and strong positive impact on the financial sector and overall economic growth of the nation. In the same vein, Odukwu et al (2023) observed that the quality of a bank's assets is a key determinant in its profitability and such assets include, among other things, the value of its loan portfolio, buildings, and cash in hand. The financial health of the DMBs and the national economy as a whole depends critically on their ability to make sound investments in assets. In the words of Amaeze et al (2020), the asset of a deposit money bank is the most reliable indication of financial health hence deposit money institutions, especially in Nigeria, rely heavily on asset acquisition.

Based on this, all stakeholders ought to understand and pursue all the factors including assets investment that will enhance and sustain their financial performance to enable them remain in business, expand and maintain profitability as a going concern.

In this present dispensation, banks operate in a highly competitive and volatile business environment, hence they actively seek to invest in performing assets that will sustain and give them an edge in the local and global competitive market.

Assets investment is the allocation of a bank's resources into various assets such as loans and advances, fixed assets and other securities (Adebisi and Olatinji, 2022). It is important to understand the effectiveness in assets investment by deposit money banks will go a long ways to improving operational efficiency in risk management, revenue generation and financial performance. According to Ojesse and Lazura. (2013), tangible assets, intangible assets, cash and cash equivalents may all provide a bank with

significant and irreplaceable competitive advantages and may also be considered as some of the

fundamental strategic assets that will positively affect a bank's business performance. Obizue and Obizue (2022) opined that the relationship between DMBs and their financial performance is complex and usually influenced by banks-specific factors like their business strategies, appetite for high yielding but risky investments and volatile operating environment.

Despite the important financial intermediation role of DMBs in the economic development of Nigeria, they have been operating with inconsistent and undulating financial performance levels.

Odukwu et al (2023) observed that the ability to create revenue that places the company in a position to benefit from economic growth and prosperity is a key sign of a bank's health. Therefore, a bank with high net assets and low profit might is seen as a sign of non-liquidity, which is bad

for the bank's bottom line. The Nigerian banking industry has been faced with periods of significant growth and periods of dwindling and challenged operations arising from declining profits, high level bad, doubtful and non-performing loans and of course ineffective and inefficient regulatory scrutiny. One of the reasons for these financial performance issues is unwise allocation of funds which is poorly strategic and non-contributory to the financial health of the DMBs. It has been observed that many DMBs are grappling with significant loss of money due to the issue of non-performing loans in their investment portfolios and this have been affecting their operations adversely (Sathyamoorthi and Dzimiri, 2020).

Again, it is possible that most stakeholders lack good understanding or have limited understanding of the DMBs operating environment due to the incessant consolidation and recapitalization activities and regulatory reforms in Nigeria which have somehow been altering the existing landscape where these banks operate. This may have distorted the equilibrium and of course posed challenges on the bank management in ascertaining potential profitable investment areas that will positively affect their operations and profitability.

By investigation in this area, the study will create awareness on the essentiality for stakeholders to re-examine the relationship between assets investment and banks' financial performance in Nigeria in this new context with a view to providing insight for bank management, regulatory bodies, policy makers and other stakeholders on bank-specific factors, industry-specific factors and national-specific factors and how it affects the correlation between DBMs investment mix and their financial positions.

The broad objective of this study is to examine the relationship between assets investment and financial performances of DMBs in Nigeria and the study went further to specifically investigate the following:

(1) To ascertain the effect of cash and cash equivalents on the return on assets of DMBs in Nigeria

(2) To examine the relationship between property, plant and equipment of DMBs in Nigeria and their return on assets

(3) To investigate the impact of intangible assets on the return on assets of DMBs in Nigeria

In line with the specific objectives in this study, three research questions were formulated to guide the study.

(1) What is the effect of cash and cash equivalents on the return of assets of DMBs in Nigeria

(2) What is the relationship between property, plant and equipment and the return of assets of DMBs in Nigeria

(3) To what extent does intangible assets impact on the return on assets of DMBs in Nigeria

Also based on the specific objectives, three hypotheses stated below were postulated to guide this study.

H_{01}. Cash equivalents does not have any significant effect on the return on assets of DMBs in Nigeria

H_{02}. There is no significant relationship between property, plant and equipment and the return on assets of DBMs in Nigeria

H_{03}. Intangible assets does not significantly impact on the return on assets of DMBs in Nigeria

Literature Review

It is necessary to examine and clarify some concepts, theories and previous empirical works that related to this study and this is done under three headings; Conceptual Review, Theoretical Review and Empirical Review.

Concepts

Financial Performance of Deposit Money Banks

Deposit money banks have played important role in the global financial system by contributing towards the stabilization of the economies of many nations. Good performance which is usually measured by the level of a firm's profitability is the central goal of every organization including the deposit money banks. According Muritala (2012) and Ubesi (2016), the performance of a firm serves as a benchmark in judging the efficiency and effectiveness of their business unit, department, branch and the organization as a whole and banks are not exempted. Bank performance has always attracted the interest of researchers and bank stakeholders (depositors, management, investors, shareholders, regulators and government) as hinge their confidence on it.

Bank performance can be referred to the extent to which a bank accomplishes useful

operations estimated in terms of timely discharge of her obligations to its publics with minimal risk and remarkable level of profiting. Sabaruru and Mmani (2020) asserted that banks' performance among other things means the ability of a bank to be in the position to consecutively maintain good financial position and actively meet the needs of its shareholders and other stakeholders.

In order to achieve these profits, Obizue and Obizue (2022) posited that banks must employ the funds obtained from different sources and invest effectively in assets that will help them earn more income and reduce its operating expenses.

Banks' performance is traditionally measured by their profitability margin hence the most critical challenge facing every bank management in the present competitive financial market is how to maximize profit while operating within the ethical, professional and prudential limits as prescribed by their regulatory bodies. The extent of a bank's success and/or failure is what explains whether such bank is performing well or not and this is usually revealed through a careful study of their financial statements which exposes their investment prudence or not. Profit is the general increase of cash generated over capital invested within a given period of time. Adeola (2017) noted that profitability is always related with performance and productivity. He further stated that pure profit is the increase that investors realize out of their investment efficiency after considering all costs associated with such investment including the opportunity costs. Janah (2012) and Charles and Fortune (2019) generally opined that profitability is the relationship or difference between earnings and operating cost (margins) and investments made to the achievement of such margins. He also puts it as the ability of the firm to achieve an increase in the value of invested assets.

Measurement of Banks' Financial Performance

In line with earlier studies that examined the determinants of banks' performance, there are different measures of performance. Banks' performance can be measured through their profit after tax (PAT), return on asset (ROA), return on equity (ROE), net interest margins (NIM), profit after tax (PAT), earnings per share (EPS) etc.

Return on Assets (ROA)

In this study, Returns on Assets (ROA) is used as the measure of financial performance and it represents the level of profitability of an organisation. The performance of management in employing firm assets to generate profits is shown by the return on total assets or total investment (Imo (2021) and Odukwu et al (2023).

ROA is calculated as net profit after tax divided by average total assets. This is probably the most important measure used in comparing the operating performance of banks. This is supported by the view of Epure

and Lafuente (2012) that many regulators believe ROA is the best measure of bank efficiency and is often seen as the key ratio for evaluating the performance of banks given that it is not distorted by high equity multipliers.

Assets Investment (AI)

Assets investment refers to the allocation of various assets of an organization with goal of generating returns or income. According to Obizue and Obizue (2022), the different asset investment categories include; stocks (equities), real estate (property), mutual fund, hedge fund, exchange fund, currencies (forex) and commodities like gold, oil etc. they also observed that effective assets investment is a personalized investment strategy that will involve diversification, risk management, research and analysis and regular portfolio rebalancing.

In the words of Imo (2021), Investment of assets is the use of both liquid and non-liquid funds with the expectation of future growth.

Cash and Cash Equivalents (CCE)

Cash is money in form of physical currency like coins and bank notes which serve as a medium of exchange, unit of account and store of value while cash equivalents represent highly liquid investments or assets that can easily be converted into cash within very short period of time like commercial papers, money market funds, treasury bills, bankers' acceptances and other short term government securities. Obizue and Obizue (2022) posited that they are considered as cash equivalents because they are highly liquid with low risk of default, easy conversion into cash and short term maturity. Aglarere and Bankalo (2019) averred that cash equivalents include savings accounts at banks and short-term debt products like convertible bonds while Charles and Fortune (2019) stated that cash and equivalents are a kind of asset for a business that also helps in determining her financial position. In financial reporting, cash and cash equivalents are combined to provide a comprehensive view of a bank's liquidity level to discharge short term financial obligations like customers withdrawals and enhances their capital adequacy ratio and overall financial performance in dividend payout, other investments, lending and to absorb potential losses from loan defaults. Obizue and Obizue (2022) supported with their assertion that CCEs are very vital for banks' overall performance as they impact liquidity, risk management and regulatory compliance.

Property, Plant and Equipment (PPE)

This is the category of banks' assets that represent the long term physical and tangible assets used in their business operations. According to Modupe and Elijah (2017) fixed assets are characterized by their physical existence, generation of economic benefits and long term ownership, control and usage by business ownership. PPE is an essential component of the financial statements of DMBs. PPE is important because it represents a significant portion of banks' overall assets and also influences her

cash flow and financial performance. Specifically, investing in fixed assets is a capital expenditure that impacts on banks' cash flow and capital expenditure budget; it improves operational efficiency, reduces costs, enhances service delivery speed, customer satisfaction/relationship as well as income generation (Ubesi, 2016).

PPE has significant impact on the financial performance of DMBs and the effective management of PPE is very crucial for maintaining a healthy balance sheet, controlling expenses and ensuring long term sustainability.

Intangible Assets

Intangible assets are those non-physical assets that also help to generate revenue, create competitive advantage, add value and growth potentials to a business entity (Obizue and Obizue, 2022). Intangible asset investment could be in form of investments in human capital training and development, market research and development, business inventions and innovations, advertisement, sales promotion, branding social media presence, goodwill, reputation etc. According to Ezenwa and Amadi (2019), the impact of these intangible assets in certain circumstances may even exceed that of the conventional physical/tangible assets.

Janah (2012) observed that investment in intangible assets are favorably correlated with financial health of business organisations and can play significant role in their success and growth like the tangible assets. In the view of Obizue and Obizue (2022), intangible assets like brands, reputation and intellectual property can differentiate banks from competitors, attract and retain more customers than others.

Theories

This study is anchored on two theories; first, the Efficient Structure Hypothesis and the Agency Theories of Banks' profitability. The major reason is that efficient management strategies of the agents which includes a bank's management has a lot to contribute to the bank's size, market share and financial performance.

Efficiency Structure Hypothesis (ESH)

The Efficiency Structure Hypothesis (ESH) is one of the market structure theories developed by Demsetz (1973) and it argues that if banks enjoy a higher degree of efficiency than their competitors, they can increase shareholder value, gain market share and increase profitability. This efficiency can be related to efficiency in strategic investment and management of assets. This theory recognizes that there is a positive relationship between concentration, operational efficiency and profitability. According to Smirlock (1985), this hypothesis states that efficient banks in the market leads to increase in the firms size and market share due to the aggressive behaviour and this behaviour is what allows such banks to concentrate and earn higher profits and

further helps them to enhance their market share. Adeola (2017) and Sabaruru and Mmani (2020) observed that these banks can maximize profits by wise investments thereby maintaining the present or increase their level of liquidity, available products or services, size and profitability. The ESH theory holds that the positive relationship between profit and efficiency results from the level of superior management and efficient production process.

Agency Theory

The Agency Theory highlights the relationship between business principals (owners or shareholders) and business agents (managers and executives) and how such relationships affect decision making, investment, risk taking and overall financial performance.

According to Jensen and Meckling (1976), a firm can be viewed as the intersection of a number

of contracting relationships between individuals, whereby shareholders (the principal) assign

daily decision-making authority over the company to managers (the agent), who should use

their specialized knowledge and the resources of the company to maximize the principal agent's

return. However, managers' interests and choices are not always in line with those of the shareholders, which might lead to extra costs, losses and different issues in the bank and the consequences lie on the head of the owners.

Obizue and Obizue (2022) advocated that the key points to note in agency theory are; bank management may prioritise their interest over that of the owners and may take excessive risks with the feeling that the shareholders will bear the consequences or may avoid taking certain investment risks leading to loss of business opportunities, they may hide or misinterpret vital information leading to poor decision-making etc. by the understanding of agency theory in banking, regulators, shareholders and managers can better address potentials conflicts and promote safer and more efficient banking system to the advantage of individual banks financial performance.

Empirical Review

Few previous empirical works of different scholars are examined hereunder and they are as follows

Amaeze, Nkemdirim amd Ezeoke (2017) investigated the effect of fixed asset investments on the financial position of banks in Nigeria using time series secondary data gathered from the annual financial reports of fifteen deposit money banks which were randomly selected from the banking sector. Using the fixed effects method of analysis, the study revealed that statistical significant relationship between fixed assets and banks' return on assets (ROA) in Nigeria.

the researchers concluded that the banks should also venture into currents assets like loans which may also have high yielding power even though there are serious risks attached to it.

Aglerere and Benkalo (2019) studied the relationship between investment structure and financial performance of deposit money banks listed in the Stock Exchange for the period of 2002 to 2017. The study collected secondary data from the financial reports of ten banks purposefully selected from the exchange market for the period 2002 - 2017. The investment variables used in this study were fixed assets, current assets and total assets as the independent and three models were specified using return on equity (ROE), return on asset (ROA) and profit after tax (PAT) as indicators of banks' financial performance (dependent) measured by. The Autoregressive distributive Lag (ADRL) analytical technique was adopted and the results indicated that investment structure variables individually and collectively influenced the financial performance of DMBs. The study tested three hypotheses and revealed that there is meaningful link between investment structure and return on equity ROE, return on asset ROA and profit after tax, TAX respectively. The study therefore recommended that banks' management should invest in assets that will not hamper their cash flow.

The impact of asset investment on financial performance of Nigerian deposit money banks was conducted by Adebisi and Olatunji (2022) and the study was from 2005 to 2020. Panel data on asset investment indices; cash, cash equivalents, tangible assets, and intangible assets and the financial performance proxied with return on assets were respectively collected from the annual financial statements of the DMBs selected for this study. The researcher made use of the panel data econometric tool for this investigation and the result indicated that cash, cash equivalents and tangible assets recorded positive and significant relationship with return on assets of DMBs while there was a negative and significant correlation between intangible assets and financial performance which was measured by return on assets DMBs in Nigeria. Based on this result, They made the recommendation that financial managers should take proactive study of the trend of their asset investment decisions and attending performance effect and ensure they strategically improve their investment in intangible assets so as to be able to enhance their financial performance and maximize the shareholders' wealth.

Obizue and Obizue (2022) conducted a study on investment mix and financial performance of deposit money banks in Sub-Saharan Africa covering from 2000-2020. The study was an empirical analysis of the corporate financial characteristics and performance of five deposit money banks selected from the five economic blocks in African according to United Nations Conference on Trade and Development (UNCTD) (2011). Five banks were purposefully sampled from Egypt as a forerunner, South Africa as an achiever,

Nigeria as a catching up, Kenya as a falling behind and Tanzania as infant stage giving a total of twenty five banks used in this study. The capital structure/independent variables for their study were fixed assets (FA) and current assets (CA) while return on assets (ROA) served as the performance metrics. They collected secondary data from the annual financial statements of the various banks as published in their respective countries and all the data collected were standardized to naira rate as same unit for the analysis purpose. The study used panel data statistics to analyse the data and the result indicated that both fixed and current assets had profound, positive and significant impact on the performance variable, ROA in Nigeria, South Africa, Kenya and Tanzania respectively while in Egypt, current assets related positively and significantly with ROA and fixed asset showed negative influence on ROA. They recommended that DMBs should adopt optimal investment mix that will enable them become more profitable as to enhance their earning-retention potentials and high financial performance.

Odukwu, C. V., Eke, P., Alafuro, E. L., Obi, M. E. and Effiong, U. E. (2023) investigated descriptive study on assets investment and financial performance of deposit money banks in Nigeria using a time series and a secondary approach to estimate how asset investments affected deposit money institutions' financial health with a sample of six banks in Nigeria. The Linear regression data analytic method used to used and the study found a substantial correlation between cash equivalents, intangible assets, property, plant and equipment and return on assets' of DMBs in Nigeria. DMBs in Nigeria. The researchers therefore recommended that the Nigerian Central Bank ensure adequate monitoring and evaluation of banks with respect to the stipulated maximum amount a bank can invest in intangible assets, property, plant, and equipment.

Methodology

This study is a quasi-experimental research design study that investigated the relationship between assets investment mix and financial performance of deposit money banks (DMBs) in Nigeria for a period of 10 years ranging from 2012 to 2022. The study used time series, secondary data collected from annual financial reports of the purposefully selected banks to estimate the impact of assets investment on the financial health of DMBs in Nigeria. The selected banks are First bank Plc, Access bank Plc, Zenith bank Plc, Union bank Plc and United bank for Africa Plc.

An econometric model was specified in this study using Return on Assets (ROA) as the metrics for financial performance while Cash and Cash equivalents like money market products, tangible assets like Plants Property and Equipment and Intangible Assets were used as indicators of asset investment which represented the independent variable. This study stipulated a positive relationship

between the explanatory variables and the dependent variable. Given the cross-sectional nature of the data involving a time series analysis, the researcher adopted the panel data analytical technique in obtaining the numerical estimates of the coefficients in the model formulated. In conducting the panel data analysis, the Hausman test specification was carried out in order to effectively choose the best performing effects between the random effects and the fixed effects. The E-view 10.0 econometric software was used for the analysis.

The functional form of the model specified in this study is shown below;

ROA = f (CCE, PPE, IA) …….. (1)

The econometric format of equation (1) can be explicitly written as;

ROA = $b_0 + b_1CCE + b_2PPE + b_3IA + Ut$

Where ROA = Return on Assets of DMBs in Nigeria

CCE = Cash and Cash Equivalents of DMBs in Nigeria

PPE = Plants Property and Equipment of DMBs in Nigeria

IA = Intangible Assets of DMBs in Nigeria

Ut = Stochatic error term (unexplained variables in the model)

b_0 = Constant

b_1 - b_3 = the unknown parameters to be estimated

Results and Analysis

Unit Root Test Result

To begin, it is necessary to conduct the unit root/stationarity test to check whether the underlying processes that generated the data series can be assumed to be invariant with respect to time. If the process is not stationary, it will often be difficult to represent the time series with equations with fixed coefficients. Furthermore, the unit root test was conducted to avoid a biased estimate that may lead to spurious regression results in the stated model.

In this study, the test for stationarity was conducted by using unit root test suggested by the Levin & Chu t* and all the unit roots were done at 5% level of significance. The result of the pooled unit root test is summarized and presented in table 1 below.

Table 1: Unit Root Result

Pool unit root test: Summary

Sample: 2012 2022

Exogenous variables: Individual effects

Automatic selection of maximum lags

Automatic lag length selection based on SIC: 0

Newey-West automatic bandwidth selection and Bartlett kernel

Balanced observations for each test

Method	Statistic	Prob.**	Cross-sections	Obs
Null: Unit root (assumes common unit root process)				
Levin, Lin & Chu t*	-37.4131	0.0000	49	200
Null: Unit root (assumes individual unit root process)				
Im, Pesaran and Shin W-stat	-10.0991	0.0000	49	200
ADF - Fisher Chi-square	200.420	0.0000	49	200
PP - Fisher Chi-square	219.413	0.0000	49	200

** Probabilities for Fisher tests are computed using an asymptotic Chi

-square distribution. All other tests assume asymptotic normality.

The unit root result in Table 1 above specified the four test (Levin, Lin & Chu statistics, Im, Pesaran and Shin W-statistic, ADF-Fisher Chi-square and PP- Fisher Chi-square tests) and their associated test statistics and probabilities. The summary results indicate that the series were all stationary at level. Thus, the null hypothesis of a unit root is hereby rejected.

Estimated Results

Table 2: Correlated Random Effects - Hausman Test

Pool: POOL01

Test cross-section random effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	11.318124	5	0.0247

Cross-section random effects test comparisons:

Variable	Fixed	Random	Var(Diff.)	Prob.
CCE?	-0.144216	0.118924	0.032413	0.0722
PPE?	0.101933	0.336192	0.021190	0.1153
IA?	0.139913	0.500141	0.022599	0.0127

The Random and Fixed Effects methods were used to estimate the relationship between return on assets and asset investment indices (CCE, PPE and IA) of DMBs in Nigeria and the Correlated Random Effects - Hauseman Test was used to compare the two sets of estimates, one of which is consistent. Based on the results in table 2 above, there is a significant difference between the random effects specification and that of the fixed effects specification with a chi-square value of 11.318124 at 5 degrees of freedom and 0.0247 probability. Going by the summary test result, the

fixed effects specification is superior to the random effects specification; so we reject the random effects model as inconsistent and adopt the fixed effects model instead.

Following the Correlated Random Effects - Hausman Test results, the estimated relationship between Return on Assets and Asset Investment of DMBs in Nigeria using the fixed effects model is therefore presented in Table 3 below.

Table 3: Results of Estimated Fixed Effects Model

Dependent Variable: ROA?

Method: Pooled Least Squares

Date: 17/10/24 Time: 18:23

Sample: 2012 2022

Included observations: 7

Cross-sections included: 7

Total pool (balanced) observations: 49

Variable	Coefficient		Std. Error	t-Statistic	Prob.
C	20.21581		25.01273	0.573334	0.3522
CCE?	0.151219		0.311240	0.491323	0.1981
PPE?	0.102243		0.413310	0.239416	0.0354
IA?	0.139151		0.402209	0.310364	0.0332
R-squared	0.884124	Mean dependent var			14.12494
Adjusted R-squared	0.843520	S.D. dependent var			8.403011
S.E. of regression	2.481284	Akaike info criterion			4.120137
Sum squared resid	221.1149	Schwarz criterion			4.922604
Log likelihood	-102.2044	Hannan-Quinn criter.			5.102100
F-statistic	33.14630	Durbin-Watson stat			1.317337

Prob(F-statistic)	0.000000

The regression equation in table 3 above can be presented as;

$b_0ROA = 20.21581 + b_1CCE0.151219 + b_2PPE0.102243 + b_3IA0.139151.$

The constant parameter (bo) has a positive value of 20.21581 which implies that the dependent variable (ROA) will increase at the rate of 20.21581 units annually if all the independent variables are held constant.

Conversely, keeping all conditions constant, a unit increase in CCE, PPE and IA will cause an increase in ROA by 0.151219, 0.102243 and 0.139151 respectively

- **T-test Result (Individual Test)**

The researcher adopted the t-test statistical tool to test for the individual significance of the estimated parameters.

From the result, all the asset investment variables in this study; CCE, PPE and IA recorded positive coefficients of 0.151219, 0.102243 and 0.139151, with t-test statistic values of 0.491323, 0.239416 and 0.310364 and probability values of 0.1981, 0354 and 0.332 respectively This indicated that PPE and IA have a positive and significant relationship with Return of Assets (ROA) but CCE exhibited a positive and insignificant impact on ROA with the probability of 0.1981 which is above the 5% significance level. Based on this result, the null hypotheses which states that PPE and IA have no significant relationship with ROE is rejected while the null hypothesis on CCE is accepted having an insignificant influence over ROA.

- **F-test Result (Joint Test)**

The F-test result with f-statistic value of 33.14630 and probability value of 0.0000 indicates that the explanatory variables have a joint and significant impact on the dependent variable hence it can be concluded that the model has predictive value.

- **Coefficient of Determination R^2- Adjusted**

Also, the Adjusted R-squared value of 0.843520 or 84.35% still indicates that the asset investment decisions variables explain about 84.35% of the variation in Return on Assets of the DMBs while the remaining 15.65% is due to other stochastic variables.

- **Serial or Auto-Correlation Test**

The Durbin-Watson statistic of 1.317337 is closer to 1 than 2 and therefore indicates that there may be serial or auto-correlation in the residuals of the estimated model.

Discussion of Findings

In this study, the following findings were summarised and discussed hereunder;

There is a mixed relationship among the investment indices and financial performance of DMBs in Nigeria. Specifically, the result revealed that two out of the three investment variables (PPE and IA) have positive and significant impact on the Return of Assets (ROA) of DBMs while CCE showed a positive but insignificant correlation with ROA. This could be attributed to the fact that most DMBs in Nigeria prefer to invest in plants, property and equipment (PPE) and intangible assets (IA) respectively which make their operations efficient, faster, easier thus helping them to face market competition, draw more customers and enhance their market value and profitability level. This result aligns with the findings of Modupe and Elijah (2017), Aglerere and Benkalo (2019) and Obizue and Obizue (2022 and Odukwu et al (2023) who respectively found positive coefficients of investment variables in their various studies and concluded that asset investment is a good predictors of DMBs' financial performance in Nigeria. Also in this study, the investment structure of Nigerian DMBs indicated a joint impact on ROA as revealed by the F-test probability figure and this further confirms that assets investment is a good predictor of banking sector performance in Nigeria. Ojesse and Lazaru (2013) relevantly validated the findings in this study with their assertion that fixed and current assets have positive and significant influence over banks' financial performance in Nigeria.

The agency theory which analyses the relationship between ownership and management of business organisations like the DBMs also laid credence to this findings in the sense that banks' management will likely invest in assets that will favour them hence it could judged or related from the findings in this study that the management of DBMs in Nigeria prioritized to invest in PPE and IA more than in CCE at the times that it favoured them with less risk involvement and fair yields. The Agency Theory which is adopted in this study also gives credence to this findings. This theory was proposed to examine the managerial efficiency of banks' executives towards assets investment and how it influences the financial health of DMBs and also demonstrate the conflicts between the parties to a business organisation under the perspective of corporate governance. These parties include the outside stockholders, creditors and managerial insiders. By this theory, stockholders are the owners of a company and the Directors merely ensure that shareholders' interests are maximized but the managers who are the DBMs' agents are more interested in their personal gratification for which reason they can easily seek to access fund in order to operate and make personally related gains without minding the cost of such fund. This is further supported by the assertion of Muritala (2012) who stated that the agency

theory is based on the notion that ownership of a firm is different from its management and that managers will not always act in the best interest of the shareholders and they are tempted to pursue the profits of the firms they manage to their own personal gain even through unverified fund sources at the expense of the shareholders.

Conclusion

The study concluded that effective assets investment is a good predictor for sound financial health among the DMBs in Nigeria

Recommendations

Given the study findings, the following recommendations were made;

1. The Nigerian government should continually formulate policies that will encourage the citizens to invest more in assets with greater potentials of high yielding for the DBMs in Nigeria

2. The Central Bank of Nigeria's prudential guideline on assets investment for DMBs should be adequately monitored and evaluated with offenders sanctioned in order to ensure prudence, effectiveness and overall financial soundness in the financial sector.

3. DMBs in Nigeria should adopt optimal investment mix that will enable them become more profitable as to enhance their earning-retention potentials and high financial performance.

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