

## INVESTMENT INTENSITY AND PERFORMANCE DYNAMICS IN NIGERIAN DEPOSIT MONEY BANKS

<sup>1</sup>Onochie Chukwugozi & Ikeogwu, Sunny Nwachonimuya<sup>2</sup> Dr. Owa Frederick (CNA)<sup>3</sup>

<sup>1&2</sup>Department of Accountancy Faculty of Management Sciences, University of Delta, Agbor, Delta State, Nigeria

<sup>3</sup>Accountancy Department, Delta State Polytechnic Ogwashi -Uku Delta State, Nigeria.

Email: <sup>1</sup>chukwugozi.onochie@unidel.edu.ng & sunny.ikeogwu@unidel.edu.ng<sup>2</sup>  
<sup>3</sup>Chukwumenimefred@yahoo.com

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### INTRODUCTION

The banking sector serves as the lifeblood of every modern economy, facilitating capital formation, promoting savings, supporting investments, and driving sustainable economic growth. In Nigeria, deposit money banks play an indispensable role in channelling financial resources from surplus to deficit units, thereby stimulating productive activities across various sectors of the economy. However, the effectiveness and stability of these banks largely depend on their strategic financial

### ABSTRACT

*This study investigated the effect of investment intensity on performance dynamics among Nigerian deposit money banks between 2013 and 2023. The research adopted an ex post facto design, since the data used were already in existence and extracted from the published annual financial statements of the sampled banks. The population comprised sixteen (16) listed deposit money banks on the Nigerian Exchange Group as of December 2023, all of which were purposively selected based on data availability. The study utilized secondary panel data, analyzed through descriptive statistics, correlation analysis, and random effects panel regression models using the E-Views econometric software. Two models were estimated: one assessing the effect of long-term investment intensity (LTIV) on earnings per share (EPS), and the other examining its effect on market price per share (MPS). The regression results revealed that LTIV exerted a negative but statistically insignificant effect on both EPS and MPS. Specifically, the coefficients (-41.77 for EPS and -4.67 for MPS) indicated that higher long-term investment intensity marginally reduced profitability and market valuation, though not significantly. The R-squared values (0.162 and 0.097) showed that investment intensity explained only a small proportion of variations in performance indicators. The study concluded that increasing long-term investment intensity does not significantly enhance profitability or share value of Nigerian deposit money banks. It therefore recommended that banks should optimize rather than expand their long-term investment portfolios, focusing on efficient asset utilization and short-term productive investments to improve performance and shareholder returns.*

decisions, particularly regarding the intensity of their long-term investments. Investment intensity reflects the degree to which an organisation commits resources to durable assets that promise future economic benefits. In banking, such investments may include expenditures on technology infrastructure, branch expansion, securities, and other capital-intensive projects that enhance service delivery and profitability.

According to Okonkwo and Abiola (2023), the commitment of financial institutions to long-term investment projects is a major determinant of their growth trajectory and resilience in dynamic market conditions. Banks that prioritise such investments are more likely to enhance their operational efficiency and maintain competitive advantage over time. However, the Nigerian banking industry operates within a volatile economic environment characterised by fluctuating interest rates, inflationary pressures, exchange rate instability, and regulatory constraints, which make long-term investment decisions inherently risky. These challenges raise fundamental questions about the extent to which investment intensity translates into improved financial performance indicators such as earnings per share (EPS) and market price per share (MPS). Earnings per share, as observed by Adegoke, Ibrahim, and Omodero (2022), serve as a crucial measure of a firm's profitability and shareholders' wealth. It reflects how efficiently a company utilises its resources to generate profit for its investors. On the other hand, market price per share represents the perception of investors about the company's future performance and financial soundness. In the context of Nigerian deposit money banks, both measures are essential for assessing the sustainability and attractiveness of banking institutions in the eyes of investors and regulators. Consequently, any factor such as long-term investment intensity that potentially influences these indicators warrants critical empirical examination.

Over the years, several studies have examined the determinants of bank performance in Nigeria, focusing on aspects such as capital adequacy, liquidity, risk management, and corporate governance (Eze & Nwakoby, 2021). Yet, limited attention has been directed toward the strategic allocation of funds into long-term investments and how such decisions affect both accounting-based and market-based performance measures. This gap is significant given the capital-intensive nature of the banking industry and the increasing need for technological transformation. As Udo and Ojo (2024) emphasised, digitalisation and infrastructural investments are reshaping the competitive landscape of Nigerian banks, influencing not only their operational costs but also market valuation and investor confidence. Furthermore, empirical evidence on the nexus between investment intensity and bank performance has been mixed across different economies. While some scholars argue that long-term investments enhance profitability through improved productivity and customer service (Ali, Musa, & Danladi, 2022), others contend that excessive investment intensity can strain liquidity and reduce short-term profitability (Etim & Aremu, 2023). These conflicting perspectives underscore the need for a contextual study that focuses specifically on the Nigerian banking environment, where market conditions and institutional frameworks differ markedly from those of developed economies.

In recent times, the Central Bank of Nigeria has intensified efforts to strengthen financial stability through policies that encourage efficient resource utilisation and prudent investment management among deposit money banks. However, despite these reforms, the link between banks' long-term investment behaviour and their performance outcomes remains insufficiently explored. As observed by Obasi, Adetayo, and Hassan (2023), inconsistencies in the performance of listed banks on the Nigerian Exchange Group (NGX) suggest that factors beyond macroeconomic indicators may be influencing their earnings and market valuation. Therefore, assessing how investment intensity contributes to performance dynamics can provide valuable insights for both policymakers and bank executives. Against this backdrop, this study aims to investigate the effect of long-term investment intensity on the performance of listed deposit money banks in Nigeria.

### Statement of the Problem

The banking industry in Nigeria is confronted with several enduring challenges that affect not only its operational efficiency but also the returns delivered to shareholders and the evaluations accorded by the market. One key issue is the under-utilisation of investment opportunities in long-term projects by deposit money banks. Many banks are constrained by liquidity pressures, regulatory thresholds and short-term performance demands, which may limit their willingness or capacity to commit resources to long-term investments. Consequently, banks may forgo growth avenues that require upfront investment for longer-term gain. Furthermore, the banks that do invest may not always be able to translate investment intensity into improved earnings per share or sustained increases in market price per share because of timing mismatches, risk exposure, or sub-optimal investment turning. In addition, the Nigerian banking sector's market valuation of banks often seems disconnected from their accounting earnings performance. Market price per share can reflect investor expectations, confidence in management, forward-looking prospects and investment strategies areas where long-term investments may help or hinder a bank's market standing. Yet, empirical evidence about how long-term investment intensity influences market value of Nigerian banks is sparse. While some studies explore the relationship between investment securities and bank performance, they seldom focus specifically on long-term investment intensity and market price per share in tandem with earnings per share. For example, existing research on investment securities found mixed results regarding earnings and return on equity, but did not consider market valuation directly. Therefore, there exists a gap in the literature regarding the specific effect of long-term investments intensity on both earnings per share and market price per share for listed Nigerian deposit money banks. The present study seeks to fill this void by empirically assessing the intensity of long-term investments and its dual effects on performance metrics that matter to both internal management and external capital markets.

### Objectives of the Study

The broad objective of this study was to investigate the effect of investment intensity and performance dynamics in Nigerian deposit money banks. Specifically, the study was to;

- i. assess the effect of long-term investments intensity on earnings per share of listed money deposit banks in Nigeria.
- ii. determine the effect of long-term investments intensity on market price per share of listed money deposit banks in Nigeria.

### Research Questions

To achieve the above specific objectives, the following research questions were formulated:

- i. how does long term investments intensity affect earnings per share of listed money deposit banks in Nigeria?
- ii. to what extent does long term investments intensity affect market price per share of listed money deposit banks in Nigeria?

### Research Hypotheses

In line with the specific objectives, the under listed null hypotheses were stated to guide the study:

**H<sub>01</sub>:** There is no significant effect of long-term investments intensity on earnings per share of listed money deposit banks in Nigeria.

**H<sub>02</sub>:** Long term investments intensity does not affect market price per share significantly of listed money deposit banks in Nigeria.

## LITERATURE REVIEW

### Concept of Stock Returns and Measures

Stock return represents the gain or loss that an investor earns from holding a company's shares over a given period. It captures both the price appreciation (capital gain) and any dividends received during the investment horizon. As noted by Adebajo and Yusuf (2022), stock return serves as a key performance indicator that reflects the efficiency of firms in generating value for shareholders. In capital market analysis, stock returns are fundamental to investment decisions, portfolio evaluation, and risk assessment. According to Bello, Nwosu, and Adamu (2023), stock returns can be categorised into realised and expected returns. Realised returns refer to the actual gains recorded from past investments, while expected returns denote the projected gains investors anticipate based on market information and risk perceptions. The measurement of stock returns is often expressed as the percentage change in stock price between two periods, adjusted for dividend income. A common

formula is  $R = \frac{P_1 - P_0 + D}{P_0}$  where  $P_1$  and  $P_0$  are the current and previous stock prices, respectively,  $D$

represents dividends. Furthermore, as affirmed by Enyi, Okafor, and Sanni (2024), other measures such as market-adjusted returns, risk-adjusted returns, and abnormal returns are employed in financial research to assess the true performance of a firm relative to market benchmarks. These measures provide deeper insights into value creation and investors' confidence in firm performance.

### Earnings per Share (EPS)

Earnings per share (EPS) is a vital accounting-based performance indicator that reflects the portion of a company's profit attributable to each outstanding ordinary share. It serves as a fundamental measure of profitability and is widely employed by investors, analysts, and policymakers in assessing firm performance. According to Alabi and Dada (2023), EPS provides a concise picture of how effectively management utilises the firm's assets to generate profit for shareholders. A higher EPS generally signals improved profitability and enhances investor confidence, often leading to positive movements in share price. EPS is calculated by dividing the net income available to ordinary shareholders by the weighted average number of outstanding shares during a financial period. As observed by Ibrahim and Okechukwu (2022), this ratio allows for comparison across firms and time periods, irrespective of their capital structures. EPS also plays a crucial role in determining dividend policy and market valuation, as it directly influences investors' perception of a firm's earning capacity and future growth potential. Furthermore, Omotayo, Bello, and Oyinlola (2024) emphasised that EPS is not only an indicator of profitability but also a performance benchmark for management accountability. In capital markets such as Nigeria, where investor sentiment is highly sensitive to financial disclosures, fluctuations in EPS can significantly affect market price per share and overall firm reputation. Hence, maintaining sustainable growth in EPS is critical for ensuring long-term shareholder wealth maximisation.

### Market Price per Share (MPS)

Market Price per Share (MPS) represents the current value at which a company's shares are traded on the stock exchange. It serves as a crucial indicator of investors' perceptions regarding a firm's performance, growth prospects, and financial soundness. According to Aremu and Nwachukwu (2023), MPS reflects the collective judgment of market participants about a company's profitability and future earning potential. It is therefore influenced not only by the firm's internal financial indicators but also by broader macroeconomic conditions, industry performance, and investor sentiment. As noted by Oduyemi, Sanni, and Abubakar (2022), MPS is often considered a market-based performance measure that complements accounting indicators such as earnings per share. It provides investors with insights into how efficiently a firm's management decisions, including investment and dividend policies, are valued by the market. MPS can fluctuate due to factors such as interest rate changes, inflation, corporate announcements, or changes in investor confidence. Furthermore, Adeyemi and Olatunji (2024) argued that the stability and growth of MPS are vital for maintaining investor trust and ensuring access to capital in financial markets. In emerging economies like Nigeria, MPS remains a sensitive and dynamic measure that captures real-time

investor reactions to firms' strategic decisions, including long-term investment intensity and profitability performance.

### **Capital Intensity and Dimensions**

Different economic sectors typically have different capital intensity requirements, according to Yogendrarajah (2013). Certain industries are therefore regarded as requiring more capital than others. Increasing capital intensity leads to better financial performance in these highly capital-intensive sectors because of higher-quality and on-time production. To increase their market share and the company's market value, organizational managers must make sure they have considered the best financing option when deciding whether to increase the capital intensity of their businesses (Irianto, Sudibyo, & Wafirli, 2017). The measurement of capital intensity, however, poses a significant challenge. Businesses typically think about raising their capital intensity to enhance quality and ensuing financial performance, but choosing the best financing option to support such an increase is extremely important. Numerous distinct dimensions have been created and applied in the management science literature. Some of the proxies used in prior studies include: depreciation as a percentage of revenue, property plant & equipment per employee, total assets to revenue, and property, plant & equipment to revenue. The value added per employee, property, plant, and equipment to value added, salaries to revenue, and other metrics are also based on value added figures. This studies measures capital intensity using property plant and equipment intensity, intangible assets investments, long term investment and deferred tax assets intensity. These are discussed below:

**Long Term Investments Intensity** -Long-term investments are included in a company's non-current assets. These investments cannot be easily converted to cash in a single accounting period. A company's investments made to support a prosperous and successful future are shown as long-term investment assets on the statement of financial position. These could include investments that are for sale, investments in subsidiaries, associates, long-term financial asset investments, investment properties, etc. They differ from current assets, which are typically liquid assets used in many of the company's immediate operations and that can be easily convertible to cash in a single accounting period. Examples of these assets include cash, inventory, assets held for sale or trade, and other receivables. Long term assets intensity can be measured as the ratio of total long-term investments to value of total assets as indicated on the statement of financial position during a given period. It displays the long-term asset to total asset ratio or percentage. This indicates that it serves as a gauge or indicator of a company's capital intensity.

### **Theoretical Review**

#### **Stakeholders Theory**

This study is also based on the stakeholder theory, which looks at how financial statement approximations affect a company's performance. The stakeholder theory is one of the theories that will be examined. In order to highlight the importance of identifying important stakeholders within an organization, Ansoff (1965) first proposed stakeholder theory. The company wants to successfully meet the different needs of its stakeholders, according to Ansoff (1965). By integrating stakeholder theory into business policy and corporate social responsibility models, Freeman (1983) developed this idea further. According to stakeholder theory, groups of stakeholders can influence and support the strategic choices a company makes about its business policies. Stakeholder behavior can also constrain the company's strategy, which managers develop to match resources with the outside world. Any group or individual that has the ability to influence or be influenced by the firm's goals is considered a stakeholder, according to Freeman (1994). Individuals like owners, clients, suppliers, and other public groups may be considered stakeholders under this definition. According to the stakeholders' theory, managing a company's relationships with all of its stakeholders effectively is essential to its success. The Stanford Research Institute (SRI) first used the aforementioned statement to highlight the significance of particular groups whose backing is essential to the organization's continued existence (Freeman 1983). Stakeholder theory highlights how crucial management is to preserving connections and satisfying the demands of different stakeholders, including workers, shareholders, suppliers, business partners, and contractors. The theory runs counter to agency theory,

which upholds the notion that managers and shareholders have a contractual arrangement. The managers' only duty in this arrangement is to maximize the wealth of the shareholders. The agency theory is viewed as limited by stakeholder theory, which considers the wider effects of manager decisions on all stakeholders, not just shareholders. Stakeholder theory recommends having representatives from various interest groups on the organization's board in order to protect stakeholders' interests. This promotes agreement, avoids disputes, and synchronizes efforts to accomplish company objectives (Donaldson and Preston, 1995).

### **Empirical Review**

Glova and Mrázková (2018) assess how intangible assets affect a company's worth. Ordinary Least Square regression and a descriptive design were used, and data from 1520 fiscal years between 2011 and 2015 were compiled. Research and development served as a stand-in for intangible assets. The results demonstrate that research and development significantly increase a company's value. The results show that a firm's market value is influenced by its research and development.

Chukwu and Egbuhuzor (2017), looked into how tangible assets affected financial fortune of consumer goods companies in Nigeria. The study obtained data and analyzed it using regression method and the results indicated that tangible assets impacted ROA of consumer goods firms favourably and to a great extent.

Chukwu, Ohaka, and Nwanyanwu (2017), investigated how intangible assets affected the market value of Nigerian quoted money deposit banks. It specifically examined how software expenses and goodwill affected the earnings per share of banks that were quoted. The findings showed that while goodwill resulting from business combinations was positively correlated with market performance, computer software costs were not significantly correlated with market value.

Okobo and Ikpor (2017), investigated how investments in fixed assets affected the financial performance of a few Nigerian banks. This study specifically looked at how the cost of additions, maintenance and repairs, and impairments affected banks' return on assets (ROA). The study was conducted using the Expost Factor research design. Over the course of eleven (11) years (2002–2014), secondary data was gathered from the annual reports and accounts of Deposit Money Bank of eight chosen banks. The method of random sampling was used to choose the eight (8) banks. The relationship between the independent variables—the cost of maintenance and repairs, additions, and impairments of fixed assets—and the dependent variable (ROA) was examined using multiple regression. The study's conclusions demonstrate that the cost of upkeep and repairs significantly and negatively affects banks' return on assets. Additionally, the study's findings showed a statistically significant negative correlation between banks' return on assets (ROA) and further fixed asset acquisitions. Additionally, the study demonstrates a significant and negative correlation between return on asset (ROA) and fixed asset impairments. The findings have the implication that banks' return on assets declines as fixed asset maintenance and repairs become more expensive. The results also suggested that the return on assets of the company would rise in tandem with the number of fixed asset acquisitions and impairments.

Zhang (2017), investigated the nexus between intangible assets and profitability. The study was for the period between 2014 and 2016. Data were collected from companies listed on the Chinese Stock Exchange. Data analyzed showed that intangible assets affected return on assets of Chinese firms.

Olatunde, Ogbeide, et al (2017), investigated the effect of assets tangibility on stock returns. The study adopted the quasi-experimental design. Data was collected from 2012 to 2015 and analyzed using regression techniques. The results indicated that asset tangibility had significant and positive impact on financial performance.

Lubyayaya, Mailov et al (2016), investigated effect of non-current assets and asset management effectiveness on profitability of companies listed on the Russian Stock Exchange. The study adopted the deductive methodology. The results showed that non-current asset had significant impact on profitability of firms in Nigeria.

Nnado and Ozouli (2016), used secondary data drawn from the audited annual reports of 46 manufacturing companies to determine the effect of total intangible assets on the financial performance of manufacturing companies publicly listed on the Nigerian Stock Exchange (NSE). The study tested the relationship between the variables using Prais Winsten Regression Correlated Panels Corrected Standard Errors (PCSEs). The results show a perfect positive relationship between EVA and ROA, which explains why firms minimize the value of intangible assets when the relationship between intangible assets and financial performance as measured by EVA is significantly negative. However, there is a strong negative relationship between EVA and intangible assets.

Kamasak et al (2016), conducted a study to examine the intricate relationship and basis of various resource sets and capabilities in the process of performance creation within the framework of resource-based theory. The study also looked at the relative impact of tangible and intangible resources and capabilities on a firm's performance based on the metrics of market share, sales turnover, and profitability. To achieve these goals, a mixed-approaches research strategy that included both qualitative and quantitative elements was employed. Although qualitative data analysis identified the most significant factors influencing a firm's performance as organizational culture, reputational assets, human capital, business processes, and networking capabilities, a survey of 243 questionnaires collected from 951 firms showed that intangible resources and capabilities had a greater impact on a firm's performance than tangible resources. The distinctions between developed and emerging markets were also used to elaborate on some noteworthy findings. All things considered, the study presents some intriguing questions about the impact of resource contributions on a firm's performance and provides a promising direction for future investigation.

Alexandra et al., (2016) assessed how non-current fixed assets affected asset management effectiveness and profitability. The issue, which arises from non-current fixed assets impacting profitability and asset management effectiveness, was examined in the article. Non-current fixed assets include financial assets, intangible assets, and tangible assets. Through a number of goals, the study sought to determine how estimates and valuation affected the accounting for non-current fixed assets. For instance, an explanation of the International Financial Reporting Standard's (IFRS) impairment tests for both tangible and intangible assets. Combining the deductive approach with the quantitative analysis approach was the study's main strategy. The deductive approach was used to establish the topic through books, periodicals, scientific communications, and online electronic articles. The study's findings showed a strong positive correlation between noncurrent assets and a company's profitability.

Abubakar (2015) examined the connection between Nigerian listed companies' market value and their intangible assets. Utilizing nine of the thirty high-tech companies that were listed for the study. The research design used in the study was quasi-experimental. Both linear regression and correlation were used in the analysis. Regression and correlation analysis showed a significant relationship between market value and intangible assets (brands).

Davies and Nangih (2014), looked into how Nigerian stock market performance was affected by both macro and micro manipulation. Two research hypotheses were developed in order to accomplish the study's goal, and they are as follows: Micro manipulation has no discernible impact on Nigerian stock market performance, and macro manipulations have no discernible relationship with stock market performance. For this study, an ex-post facto research design was used. For the study, a sample of 1000 respondents were chosen from five Nigerian banks. Data was gathered using a structured questionnaire that had been thoroughly validated. The ordinary least square regression technique was used to analyze the collected data. The results showed that there is no significant correlation between macro manipulation and stock market performance in Nigeria, but there is a significant impact of micro manipulation on stock market performance.

A study by Hanran and Wang (2014), sought to determine the connection between listed technology companies' financial performance on the Hong Kong exchange market and their intangible assets. They gathered information on three types of intangible assets—research and development costs, employee benefit costs, and sales training—by looking over the annual reports of the listed companies over a five-year period (2008–2012). In the meantime, the relationship between intangible assets and

financial performance, as indicated by firms' return on assets (ROA), was analyzed using total assets and net profit as control variables. Their findings, which used lagged research and development expenditure as an instrumental variable, indicated that while employee benefit expenses are not helpful to a company's financial performance, research and development investments and sales training are.

## RESEARCH METHODOLOGY

**Research Design:** The ex post facto approach was chosen in an effort to fulfill the fundamental goals of this study. The choice of the design is the fact that the data is already available.

**Population of the Study:** The study's population comprises all listed deposit money banks that trade on the Nigerian Exchange Group floor. There are sixteen (16) of them as at December 2023.

**Sample Size and Sampling Technique:** Purposive sampling techniques were used to determine the study's sample size based on the information that was available. Based on companies that had complete and accessible data on the study's variables, the sample size was purposively chosen. Those who provided insufficient details about the variables used in the study during the period under review were not included. The same population served as sample size.

**Sources of Data:** This research used secondary data. The type of data used was the panel data set, which consists of cross-sectional and time series data. The firms chosen for this study provided their annual reports as the source of the data.

**Method of Data Collection:** The study's data came from secondary sources, namely the financial statements and annual reports of the chosen banks for the eleven-year period between 2013 and 2023.

**Method of Data Analysis:** Both descriptive, correlation and panel regression methods were used to analyze the data that the researcher had gathered. The application of tools like the mean and standard deviation, among others, to assess the fundamental properties of the data is the focus of descriptive statistics. To find out if there is multi-collinearity between the explanatory variables, the correlation analysis was also performed. However, in order to analyze the cause-and-effect relationship between the variables under investigation, the Panel Regression Model was utilized. The researcher will accept the null hypothesis and reject the alternative hypothesis if the probability value is greater than the intended level of significance, which is 0.05. If not, the alternative is accepted and the null hypothesis is rejected by the researcher. The required statistics were calculated using the Econometric Views (E-views) program.

**Model Specification:** The model utilized in this investigation was modified from the Nangih and Onuora (2020) study. The following is how their model represented the relationship between a set of explanatory variables and firm performance.

### Model 1

$$EPS = \beta_0 + \beta_1 LTIV_{it} + \mu$$

### Model 2

$$MPS = \beta_0 + \beta_1 LTIV_{it} + \mu$$

Where:

EPS = Earnings per share;  
 MPS = Market Price per Share  
 LTIV = Long term investments intensity;  
 $\beta_0$  = Constant;  
 $\beta_1$  = Coefficient of the regression equation;  
 $\mu$  = Error term;  
 $i$  = Cross-section of firms;

$t$  =Timeperiod

### Measurement of Variables

EPS– Earnings per share is defined as profit after tax divided by total number of ordinary share

MPS-Market price per share is defined as the current price of the shares of the firms as at year end.

LTIV- This represents the amount of long term investment assets per statement of financial position for the year

### DATA ANALYSIS AND DISCUSSION OF FINDINGS

#### Data Analysis

#### Descriptive Statistics

Descriptive statistics provide information concerning the basic characteristics of the data, such as the mean, standard deviation, skewedness, kurtosis and normality, etc. They also enable the comparative assessment of the variables under study. The result of the descriptive statistic is shown in table 1.

**Table 1: Descriptive Statistics**

	LTIV	EPS	MPS
Mean	0.007663	2.572545	9.557000
Median	0.000686	1.540000	6.275000
Maximum	0.050863	19.07000	40.75000
Minimum	0.000000	-5.450000	0.500000
Std.Dev.	0.012307	3.608879	9.926335
Skewness	1.727843	2.535306	1.386181
Kurtosis	5.024645	11.30019	4.019320
Jarque-Bera	73.52105	433.6025	39.98962
Probability	0.000000	0.000000	0.000000
Sum	0.842910	282.9800	1051.270
SumSq.Dev.	0.016509	1419.617	10740.00
Observations	150	150	150

*Source: Author's Computation*

The descriptive statistics in Table 1 show that long-term investment intensity (LTIV) has a mean value of 0.0077, indicating relatively low investment levels among the banks studied. Earnings per share (EPS) and market price per share (MPS) have mean values of 2.57 and 9.56 respectively, suggesting moderate profitability and valuation. The high standard deviations reveal wide variability, particularly in MPS. Positive skewness across variables implies distributions with long right tails, while high kurtosis values indicate peaked distributions. The Jarque-Bera probabilities of 0.0000 confirm non-normality in the data. Overall, the statistics suggest heterogeneity among banks in investment intensity, profitability, and market performance.

#### Correlation Test

The test for correlation shows the degree of association among the variables employed in the study. It also gives an indication of the existence or non-existence of multi-collinearity among the independent variables. The correlation statistics for the variables in the model employed in this study is shown in table 2 below.

**Table2:C orrelationMatrix**

	LTIV	EPS	MPS
LTIV	1.000000		
EPS	0.100002	1.000000	
MPS	0.012397	0.801114	1.000000

*Source: Author's Computation*

The correlation matrix in Table 2 reveals the degree of association among the study variables. Long-term investment intensity (LTIV) shows a weak positive correlation with earnings per share (EPS) at 0.10, suggesting that higher investment intensity slightly relates to improved profitability. LTIV also exhibits a very weak positive relationship with market price per share (MPS) at 0.012, implying minimal direct linkage. However, EPS and MPS display a strong positive correlation of 0.801, indicating that higher earnings per share are closely associated with higher market valuations.

### Multiple Regression Test

The multiple regression technique was employed to determine the functional relationships existing between the variables in the model formulated in this study. To this end, the panel least square regression technique was employed in determining cause and effect relationships existing among the variables in the model. Specifically, the fixed effect panel regression tests were carried out in a bid to vividly determine the effect of the various capital intensity on the stock returns indicators, as shown in Tables 3.

### Fixed and Random Effect (Hausman) Test

To examine the effect of the independent variable on the dependent variables we used the fixed/random effect panel regression technique. The panel summary result of multiple regression analyses is presented and well discussed below. Before that, the study takes into cognizance the fact that there could be homogeneity among the various data samples, hence the need to choose between fixed or random effect models. To achieve this, Hausman Test is employed to select between fixed and random effect that is best to be adopted in the study. The Hausman's test specifies the random effects model as the null hypothesis while the fixed effect is the alternative hypothesis. The decision rule is to reject the null hypotheses at 5% level of significance if the probability value of the computed chi-square statistic is less than or equal to 0.05, and vice versa. Details of the results for each of the models (equations) are presented in Table 3.

**Table3: Hausman Test**

	Chi-Sq. Statistic	Prob.
Model1	2.538458	0.00390
Model2	0.390006	0.04423

*Source: Author's Computation*

In table 4.3, the Chi-Square statistics are given as: 2.538458 and 0.00390 with associated probability values of 0.4684 and 0.04423 respectively. Given that the probability values are more than 0.05, the null hypotheses are rejected, thus, the results indicate that the random effects model is most appropriate for estimating both models.

### Table4: Random Effects Panel Regression Test (Model 1)

Dependent Variable: EPS

Method: Panel EGLS (Cross-section random effects)

Date: 01/24/25 Time: 09:36

Sample: 2013 2023

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	5.502466	1.059052	5.195651	0.0000
LTIV	-41.77204	56.34029	-0.741424	0.4601
WeightedStatistics				
R-squared	0.162053	Meandependent var		0.660683
AdjustedR-squared	0.145576	S.D.dependentvar		1.937540
S.E.ofregression	2.661885	Sumsquaredresid		641.0769
F-statistic	5.953427	Durbin-Watsonstat		1.348546
Prob(F-statistic)	0.000441			

**Source: Author's Computation**

The random effects regression result in Table 4 shows that long-term investment intensity (LTIV) has a negative but statistically insignificant effect on earnings per share (EPS), with a coefficient of -41.77 and a probability value of 0.4601, exceeding the 5% significance level. This implies that variations in investment intensity do not significantly influence bank profitability. The model's R-squared value of 0.1620 indicates that approximately 16.2% of the changes in EPS are explained by LTIV, while the remaining variation is due to other factors. The F-statistic (5.953) with a probability of 0.0004 confirms the model's overall significance. The Durbin-Watson statistic of 1.35 suggests minimal autocorrelation.

**Table 5: Random Effects Panel Regression Test (Model 2)**

Dependent Variable: MPS  
 Method: Panel EGLS (Cross-section random effects)  
 Date: 01/24/25 Time: 09:41  
 Sample: 2013 2023

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	12.76370	3.617244	3.528571	0.0006
LTIV	-4.666776	92.01816	-0.050716	0.9596
WeightedStatistics				
R-squared	0.097260	Meandependent var		1.129951
AdjustedR-squared	0.064520	S.D.dependentvar		4.359675
S.E.ofregression	4.278546	Sumsquaredresid		1930.321
F-statistic	2.742530	Durbin-Watsonstat		1.179152
Prob(F-statistic)	0.004352			

**Source: Author's Computation**

The random effects regression result in Table 5 indicates that long-term investment intensity (LTIV) has a negative but statistically insignificant effect on market price per share (MPS), with a coefficient of -4.67 and a probability value of 0.9596, far above the 5% significance threshold. This suggests that variations in banks' long-term investment intensity do not meaningfully influence their market valuation. The R-squared value of 0.0973 shows that about 9.7% of the variation in MPS is explained by LTIV, while other factors account for the remainder. The F-statistic (2.7425) with a probability of 0.0043 indicates overall model significance, and the Durbin-Watson statistic of 1.18 suggests slight positive autocorrelation.

**Discussion of Findings**

The result of the tests, as shown in Tables 4 – 5, indicated t-statistics and p-values (in parenthesis) of -0.741424 (0.4601) and -0.050716 (0.9596). Since the p-values of t-statistics are greater than 0.05, we accept the null hypotheses and reject the alternative hypotheses. The negative coefficient values of -

0.741424 and -0.050716 respectively revealed that long term investments intensity negatively influenced stock returns, the probability values revealed that the effect of long-term investments on stock returns of listed banks in Nigeria was statistically insignificant at 5% level. Based on the analysis result, the study rejects the alternate hypotheses and accepts the null hypotheses, it therefore concludes that, long term investments intensity has insignificant effect on stock returns of listed money deposit banks in Nigeria. Further, the study also found an insignificant negative effect of LTIV on stock returns, as theoretically unexpected, which also implies that increase in long term investment will stimulate a reduction in increase in stock returns. The negative relationship between LTIV and stock returns is hinged on the fact that such investments may constitute a hold-up of a large chunk of firm resources, and may also be very risky ventures.

### Conclusion and Recommendation

This study was undertaken to examine the effect of investment intensity and performance dynamics in Nigerian deposit money banks. In line with the objectives of the study, six hypotheses were formulated. The study also explores conceptual, theoretical and empirical literatures on the relationship between the various capital intensity dimensions and stock returns. The study also utilizes data for the thirteen-year period from 2013 to 2023, which are analyzed using the fixed effect panel regression technique. The results reveal that long term assets intensity had negative effects on the dependent variables but not significant. Thus, increasing levels of long-term assets intensity would negatively impact stock returns, and also not significant. However, it was also discovered and concluded by the study and long-term investments have negative effects on the dependent variables but not significant. Thus, increasing levels of long-term investments will not stimulate stock returns since it's not significant. Hence, due the findings of the study, it was recommended by the study that listed money deposit banks should not increase their level of long-term investments since it will not increase their stock returns level.

### Contributions to Knowledge

It is believed that this study has contributed to the already existing literature on the subject matter. It is also believed that it has provided an empirical prove and evidence that may be useful for further research in the area of investment intensity and performance dynamics. Specifically; it has filled the gap in literature by being an improvement on studies done by prior authors in the subject area by expanding the period of the study and also focusing on money deposit banks in Nigeria. Also, providing a guidance to accountants and other stakeholders regarding the effect of capital intensity and stock returns, particularly in the banking sub-sector in Nigeria.

### REFERENCES

- Adebanjo, S. K., & Yusuf, R. T. (2022). Determinants of stock market returns in emerging economies: Evidence from Nigeria. *Journal of Applied Finance and Investment Research*, 8(2), 65–79.
- Adegoke, A. M., Ibrahim, S. A., & Omodero, C. O. (2022). Firm performance and shareholders' wealth maximisation: Evidence from Nigerian deposit money banks. *Journal of Banking and Financial Studies*, 14(2), 87–99.
- Adeyemi, O. K., & Olatunji, S. A. (2024). Stock valuation and investor confidence in emerging markets: Evidence from Nigeria. *Journal of Financial Economics and Investment Analysis*, 12(3), 98–111.
- Alabi, T. A., & Dada, R. O. (2023). Earnings performance indicators and shareholder value creation in Nigerian quoted firms. *Journal of Contemporary Accounting and Finance*, 11(2), 74–88.

- Ali, Y. M., Musa, A. G., & Danladi, M. A. (2022). Investment intensity and firm profitability: Evidence from emerging financial markets. *International Journal of Finance and Economics*, 9(1), 34–45.
- Aremu, L. J., & Nwachukwu, C. F. (2023). Market-based indicators and corporate performance of listed firms in Nigeria. *International Review of Economics and Finance Studies*, 10(2), 67–81.
- Bello, O. J., Nwosu, C. A., & Adamu, I. S. (2023). Measuring stock returns and market efficiency in developing capital markets. *International Journal of Financial Analysis*, 10(1), 44–58.
- Enyi, J. U., Okafor, M. L., & Sanni, T. O. (2024). Risk-adjusted performance measures and stock return behaviour in Sub-Saharan African markets. *African Journal of Business and Economic Studies*, 12(3), 91–104.
- Etim, J. E., & Aremu, T. K. (2023). Financial investment decisions and profitability of Nigerian deposit money banks. *African Review of Economics and Finance*, 15(3), 119–137.
- Eze, P. O., & Nwakoby, I. C. (2021). Determinants of financial performance of deposit money banks in Nigeria. *Journal of Accounting, Business and Social Sciences*, 9(4), 205–216.
- Ibrahim, A. U., & Okechukwu, L. C. (2022). Financial ratios and profitability analysis of deposit money banks in Nigeria. *International Journal of Accounting Research*, 9(1), 33–46.
- Obasi, F. E., Adetayo, A. A., & Hassan, I. S. (2023). Market valuation and profitability of listed financial institutions in Nigeria. *Nigerian Journal of Financial Research*, 11(1), 44–58.
- Oduyemi, B. A., Sanni, P. A., & Abubakar, M. L. (2022). Market reaction to earnings and dividend announcements in the Nigerian stock market. *African Journal of Business and Financial Research*, 8(1), 45–59.
- Okonkwo, K. C., & Abiola, R. A. (2023). Investment strategies and performance sustainability of commercial banks in Nigeria. *Journal of Economics and Management Research*, 18(2), 132–148.
- Omotayo, F. J., Bello, I. A., & Oyinlola, M. K. (2024). Earnings per share and market performance of listed companies in emerging economies. *Global Journal of Finance and Business Studies*, 13(1), 102–116.
- Udo, E. I., & Ojo, K. S. (2024). Digital transformation, infrastructure investment, and banking sector competitiveness in Nigeria. *International Journal of Digital Finance*, 5(1), 56–70.