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Digital Banking and Financial Performance of Quoted Commercial Banks in Nigeria

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ABSTRACT
The study examined the digital banking and financial performance of commercial banks in Nigeria. The specific objective was to investigate the effect of internet banking and point of sale transactions on return on investment of commercial banks in Nigeria. *Ex-post facto* research design was used in the study. The population of the study consist of all the twenty seven (27) quoted commercial banks in Nigeria Exchange Group limited up to 31st December, 2025. Secondary data were extracted from the bank's annual reports and the Central Bank of Nigeria bulletin from 2014-2025. Descriptive tools such as mean and standard deviation were used to summarise the data. Ordinary least square regression was used to test the hypotheses. The findings revealed that, internet banking transactions show a positive significant effect at 5% level of significance on return on investment, with a coefficient of 27.56747 and a p-value of 0.0000; Point of sale transactions have a significant positive effect at 5% level of significance on return on investment of commercial banks in Nigeria, as shown by a coefficient of 114.1960 and a p-value of 0.0000. The study suggest that bank management should re-evaluate and optimize POS-related operations to minimize negative impacts on, possibly by adjusting transaction fees or improving service efficiency.
Keywords: Digital banking, financial performance, internet banking, point of sale Return on investment

1.0 INTRODUCTION
The global banking industry has experienced profound transformation over the last two decades, largely driven by advancements in information and communication technology (ICT). One of the most significant outcomes of this transformation is the emergence of digital banking, which refers to the provision of banking services through electronic platforms such as Automated Teller Machines (ATMs), Point of Sale (POS) terminals, mobile banking, and internet banking. Digital banking has revolutionized traditional banking by improving service delivery, enhancing operational efficiency, and reducing transaction costs. It also enables banks to expand their outreach beyond physical branches, thereby promoting financial inclusion and competitiveness. Existing literature indicates that digital financial services play a critical role in improving firm performance through increased profitability, efficiency, and market expansion (Abbasi & Weigand, 2017). In Nigeria, the adoption of digital banking has accelerated significantly due to financial sector reforms and technological advancement. The introduction of the cashless policy by the Central Bank of Nigeria (CBN) has further strengthened the use of electronic payment systems and digital banking channels. As a result, deposit money banks have increasingly deployed digital platforms such as ATMs, POS systems, mobile banking applications, and internet banking services to enhance customer convenience and operational performance. The Nigerian banking sector, being one of the largest in

Africa, has benefited from the growing adoption of digital banking, which has contributed to improved revenue generation and profitability. Evidence suggests that the rapid adoption of digital banking services has been a key driver of growth and performance in African banking systems, including Nigeria (McKinsey, 2026).

Agaba et'al (2025) revealed that POS and internet banking transactions exert negative effects on bank performance in both the short and long run, while mobile banking and ATM transactions show insignificant effects. Likewise, Akinuli, Owoputi, and colleagues (2025) observed that although digital payment platforms generally have a positive relationship with bank performance, internet banking may negatively affect performance due to inefficiencies and operational challenges. These mixed findings suggest that the impact of digital banking on financial performance may vary depending on the type of digital channel, level of adoption, and operational efficiency.

Nigerian banking environment faces several challenges that may hinder the effective implementation of digital banking. These include inadequate technological infrastructure, cybersecurity threats, network failures, and low levels of digital literacy in some parts of the country. While digital banking offers opportunities for cost reduction and revenue growth, these challenges may limit its potential benefits if not properly addressed (Ojo & Fadare, 2021).

Despite the growing body of literature, notable gaps still exist. Many of the existing studies are limited in scope, focusing on specific digital channels, short time periods, or particular performance measures, thereby failing to provide a comprehensive understanding of the relationship between digital banking and financial performance. This study therefore seeks to fill this gap by examining the effect of digital banking on the financial performance of deposit money banks in Nigeria over the period 2014–2025. The main objective of the study is to examine the effect of digital banking on financial performance of deposit money banks in Nigeria. Specifically, the study determine the effect of internet banking transactions and point of sale on return on investment of deposit money banks in Nigeria.

2.0 Review of Related Literature

Conceptual Review

Digital Banking

Digital banking refers to the use of electronic platforms and information and communication technology (ICT) to deliver banking services to customers without the need for physical interaction within bank premises. It encompasses a wide range of services such as Automated Teller Machines (ATMs), Point of Sale (POS) systems, mobile banking, internet banking, and other electronic payment systems that facilitate financial transactions efficiently and conveniently. Digital banking represents a shift from traditional banking methods to technology-driven service delivery, enabling customers to access banking services anytime and anywhere. According to Abbasi and Weigand (2017), digital financial services enhance firm performance by improving operational efficiency, expanding market reach, and increasing profitability through cost reduction and innovation.

The emergence of digital banking is closely linked to technological advancements and globalization, which have compelled banks to adopt innovative strategies to remain competitive. In Nigeria, the adoption of digital banking has been accelerated by regulatory initiatives such as the cashless policy introduced by the Central Bank of Nigeria (CBN), aimed at reducing the volume of physical cash transactions and promoting electronic payment systems. As a result, deposit money banks have increasingly integrated digital channels into their operations to enhance service delivery, reduce transaction costs, and improve customer satisfaction. These technologies have significantly transformed banking operations by automating processes, minimizing human errors, and increasing transaction speed. Akinuli and Owoputi (2025) observed that internet banking can negatively affect financial performance due to system inefficiencies and service disruptions. Furthermore, the adoption of digital banking has significant implications for financial inclusion and economic development. It enables banks to reach unbanked and underbanked populations, particularly in rural areas, thereby expanding access to financial

services. Digital banking also enhances transparency and accountability in financial transactions, which is essential for economic stability. However, the effectiveness of digital banking in achieving these outcomes depends on the availability of adequate infrastructure, regulatory support, and customer awareness.

Internet Banking Transactions

Internet banking allows customers of a financial institution to conduct financial transactions on a secure website operated by the institution, which can be a retail or virtual bank, credit union or society. It also referred to as on-line banking. Banks increasingly operate websites and transaction portals through which customers are able not only to inquire about account balances, interest and exchange rates but also to conduct a range of transactions. Internet banking, however, is prone to internet fraudsters and hackers if carried out over an unsafe platform (Alabar, 2012). Internet banking extends the opportunity to create another alternative method of banking beyond the bank branch and ATM network through which vast section of the population, including people who live in remote areas will have easier and faster access to formal financial services (Abid et'al 2025). Thus, internet banking is simply defined as carrying out banking transactions via mobile devices such as cell phones or personal digital assistant(s). The services offered may include transaction facilities such as checking account balances, transferring funds and accessing other banking products and services from anywhere, at any time as well as other related services that cater primarily for financial information and communication needs revolving around bank activities (Ensor et' al, 2012). This study will measure internet banking (IB) as the value of online payment transfers, which can be boosted by fintech services that offer easy, quick, and secure transactions. This increase can, in turn, positively reflect bank performance. Thus, the following null hypotheses were formulated: **H_{02}:** *Internet banking transactions have no significant influence on return on investment of deposit money banks in Nigeria.*

Point of Sale (POS) Transactions

The financial institutions and telecommunication companies worldwide are facing new loop on the information and communication technology convergence curve. POS terminal has emerged as a promising new application of the next generation e-payment system. The role and importance of efficient payment systems have been closely monitored and promoted by monetary authorities in all countries. The Nigerian payment system that is cash- driven cannot and has not guaranteed the much needed efficient and effective payment platform required for a sustainable economic development (Adeoti, 2013). The Nigerian economy being largely cash-based is associated with high cost of cash management. Reliance on cash based payment platform has been found to be risky and cumbersome. Carrying cash in the economy is responsible for large pool of money being found in the hands of the unbanked citizens. In an effort to reduce the volume of cash in circulation and reduce the risk of going about with huge cash, the CBN introduced electronic payment system such as POS terminal, automated teller machine (ATM), payment cards (Smart card) etc into the Nigerian economy. This has given rise to the introduction of switch companies that facilitate interconnectivity (Adeoti 2013). A point of sale/ service (POS) terminal is used to conduct retail transactions. It can provide many services including credit card processing check reading and transactions depending on the model. These devices can be found virtually anywhere, from grocery stores to gas stations. The technology used in POS machine results in a speedy and secured transaction. Based on CBN policy on cash lodgments and withdraws all businesses that accept cash up to N0.5m for individuals and up to N3m for corporate customers for their daily business transactions require a POS terminal to avoid being charged from 2% in excess of the approved free lodgment limit. These include supermarkets, hotels and restaurants, electronic shops, pharmacies, boutiques, hospitals, distributorships, airlines, etc. POS is the location where payment is made in respect of a transaction an electronic device and card. A POS terminal manages the selling process by a salesperson accessible interface (Chitokwindo, 2014). POS consists of stock management, purchasing and sales reporting, customer and supplier management, transaction security standards (passwords), and the return process. This study will measure Point-of-sale (POS) transactions as the value of transactions occurring through POS systems.

The introduction of fintech can streamline and boost the number of transactions, which could influence banks' performance metrics. Thus, following hypothesis were formulated: *H_{02}: Point of sale transactions does not have significant effect on return on investment of deposit money banks in Nigeria.*

Return on Investment

According to Emilio, et'al (2020), the investment decision is a strategic decision and it is an integral part of the general policy of the company. Investments are means to secure the company's development in the medium and long term. The term investments have been defined by many authors over time. Note that investments are considered "resources deployed in the hope of achieving benefits during a long period of time" or money or other resources expended in the hope that in the future they will bring higher amounts of money or other benefits will occur (Mieilă, 2019). ROI (Return on Investment) is a concept of performance in any form of investment. For shareholders, the ultimate goal of the company is expressed in ROI. ROI is an indicator that shows to which extent a specific business produces gain from the use of capital. It shows the extent to which the amount invested in a particular action returns as profit or loss. Thus, it enables efficient assessment of an amount invested or, in other words, ROI allows measuring the result in relation to the means used to obtain it. ROI is calculated as the ratio between operating profit obtained after the action of investment and the total amount invested (or the total investment costs). The result is a percentage of the relation obtained multiplied by 100. ROI is used by investors to select an investment project of several possible. As well it can be used after the completion of the investment, to measure its profitability. ROI is an indicator frequently used in performance analysis and decision-making. (Emilio, et'al 2020).

Theoretical Framework

Financial Innovation Theory

This study is anchored on the financial innovation theory propounded by Joseph Schumpter (1912) in his seminal work *"The Theory of Economic Development."* Schumpeter posited that innovation is the key driver of economic and institutional development. He argued that financial intermediaries, such as banks, play a crucial role in facilitating innovation by providing the necessary financial resources to entrepreneurs who introduce new products, production processes, markets, or organizational forms. According to the theory, the financial system does not only serve as a passive channel for savings and investment but acts as a catalyst that fosters technological progress and economic expansion. Schumpeter's ideas laid the foundation for understanding how financial innovations that is, new financial products, services, or processes—stimulate growth in both the financial sector and the broader economy.

The theory assumes that innovation emerges from entrepreneurial activity—where banks, as financial entrepreneurs, design new ways of mobilizing savings and allocating credit. These innovations often occur in response to changing market conditions, regulatory adjustments, or technological advancement (Tufano, 2003). Schumpeter argued that the desire for *supernormal profits* motivates financial institutions to innovate. Banks develop new financial products and technologies to gain a competitive edge, attract new customers, and increase market share (Levine, 1997). Thus, innovation is not purely altruistic but profit-driven. Financial innovation is viewed as a response to inefficiencies or rigidities in existing financial systems. When traditional products or regulations hinder financial intermediation, innovation arises as a corrective mechanism that enhances market efficiency. The theory recognizes that innovations spread through diffusion—meaning that early adopters of financial technologies gain temporary advantages, but over time, competitors replicate these innovations, leading to industry-wide efficiency gains. Financial innovation often evolves alongside changes in the regulatory environment. According to Schumpeterian logic, periods of deregulation or policy reform often trigger waves of innovation as institutions exploit new opportunities for growth and differentiation.

This theory is relevant to this study because it contributes to financial performance in several ways: Innovations reduce transaction costs and operational inefficiencies, enabling banks to serve a larger number of customers with fewer resources. Also, innovations such as credit scoring systems, data

analytics, and digital monitoring tools improve risk assessment and portfolio diversification, leading to more stable financial performance.

Empirical Review

Abid et'al (2025) studied mediating role of financial innovation on board gender Diversity and Bank's Financial Performance: Evidence from Commercial Banks of Developing Economie. The study engaged a sample of 456 bank-year observation of 38 banks selected from developing economies over the period from 2011 to 2023. To test the research hypothesis and mediation analysis, and to control for endogeneity issues, the Generalized Method of Moments (GMM) estimation was applied. The study reported a significant impact of gender diversity on ROA and ROE separately considering three controlling factors namely, asset quality, leverage and capitalization. Further, financial innovation partially mediates the link between gender diversity and financial performance.

Monday et'al (2024) examined Financial Innovation and Financial Performance of Nigerian Listed Deposit Money Banks: Evidence from Panel Data Modeling. The utilizing secondary data from 2008 to 2023. This data was sourced from the banks' annual financial statements and the Nigerian Exchange Group Factbook. Nine banks with international authorization were purposively selected for the study. Financial innovations in the banking sector include automated teller machines (ATMs), point of sale (POS) terminals, internet banking (WEB), and mobile money payments (MOB) transactions, while return on assets (ROA) and return on equity (ROE) were used as measures of bank financial performance. Panel data models were designed and estimated using the Feasible Generalized Least Squares (FGLS) regression technique. The findings indicated that financial innovations positively influenced the banks' financial performance. However, while ATM and POS transactions significantly impacted the banks' ROA and ROE, WEB and MOB transactions had no significant impact on the financial performance of the deposit money banks.

Jungo et'al (2024) studied financial literacy, financial innovation, and financial inclusion as mitigating factors of the adverse effect of corruption on banking stability indicators. The purpose of this study is to examine the ability of financial literacy, financial innovation, and financial inclusion to mitigate the adverse effect of corruption on banks' credit risk, profitability, and financial stability. Furthermore, we aim to compare the results across four different groups of countries, namely African, Asian, American, and European countries. The Feasible Generalized Least Squares (FGLS) estimation results indicate that corruption increases credit risk, reducing profitability and bank stability, these effects mitigated by financial literacy, financial innovation, and financial inclusion. Furthermore, we find that financial literacy, financial innovation, and financial inclusion reduce credit risk while increasing bank profitability and stability.

Otonne and Ige, (2023) studied exploring the influence of financial technology on banking services in Nigeria. This study employed a quantitative research approach, analyzing data from the financial statements of selected Nigerian banks, and financial technology application statistics through econometric modelling and descriptive analysis. The study found that fintech positively impacts Nigerian banks' traditional and market-based performance measures.

Iwedi (2023) studied effect of financial technology on financial inclusion in Nigeria. This study used quarterly secondary data and all the data were extracted from Central Bank of Nigeria (CBN) Statistical Bulletin (2021) from 2009-2019. Financial technology was proxy using point of sale, automated teller machine, web banking technology and mobile banking technology, while financial inclusion in Nigeria was proxy using deposit ratio. Time series data were analyzed using the vector auto regression (VAR) estimation technique. The results show that web banking technology has a positive and significant effect on financial inclusion in Nigeria, whereas point of sale, automated teller machine and mobile banking technology have a positive but not significant effect on financial inclusion in Nigeria.

Domeher et'al (2022) evaluated financial innovations and economic growth: Does financial inclusion play a mediating role? This study sought to establish if financial inclusion mediates the relationship between

innovation and growth. Secondary data from 26 selected SSA countries over the period 2004 to 2017 were used. The data were analysed using the GMM estimation technique. It was found amongst other things that investments in innovations in the banking sector promote financial inclusion.

Anifowose and Ekperiware (2022) examined the effect of automated teller machines, point of sale terminals and online banking transactions on economic growth in Nigeria. This research makes use of primary Data collected using descriptive statistics such as tables. The objectives of this study are to assess the effect of Automated Teller Machines, Point of Sale terminals and lastly Online Banking transactions value on economic growth. Furthermore, this study therefore concluded that cashless policy is very important to the Nigerian economy and therefore the ATM and POS platforms must be further promoted by stakeholders. The study recommended that The Central Bank of Nigeria should put in place additional regulations and strengthen guidelines to govern the activities of point-of-sale terminal operators in Nigeria to boost financial inclusion and economic growth.

3.0 METHODOLOGY

Research Design

This study adopted *ex-post facto* research design, and it was conducted in Nigeria, focusing on quoted deposit money banks in Nigeria Exchange Group from 2014 to 2025. The population of the study consist of all the twenty seven (27) commercial banks in Nigeria Exchange Group (NGX) up to December, 2025. The study adopted purposive sampling techniques to select 10 commercial banks as sample size of the study due to availability of data. The study used secondary data that covered the period of twelve (12) years spinning from 2014-2025. The data were collected from the Central Bank Statistical Bulletin and National Deposit Insurance Corporation (NDIC) publications. The secondary data that were collected was analyzed using descriptive statistics, correlation and regression analysis.

Model Specification

This study adapted the model in the study of Tahir et al (2018) which used the function: $EFR_t = f(VATM, VWEB, VMOB, VPOS)$

Where: EFR = efficiency ratio, VATM = value of ATM transactions, VWEB = value of WEB transactions, VPOS = value of POS transactions, μ = error term

The model was modified to suit the variables used. Hence the model for the study is anchored on specific objectives.

ROI = f(VIB, VPOS) …….....……..…..1

This can be econometrically expressed as

$$\mathbf{ROI_{it} = \beta_0 + \beta_1 VIB_{it} + \beta_2 VPOS_{it} + \mu} \text{ …….....2}$$

Equation 1 and 2 are the linear regression model used in testing the null hypotheses.

Where:

ROI = Return on Investment, VIB = Volume of Internet Banking, VPOS = Value of Point of Sale, β_0 = Constant, $\beta_1 - \beta 2,$ = are the coefficient of the regression equation, μ = Error term, i = is the cross section of firms used, t = is the year (time series).

4.0 DATA PRESENTATION AND ANALYSIS

Descriptive Analysis of Data

Table 4.1: Below shows the descriptive analysis of the data.

Table 4.1 Descriptive Analysis

	ROI	VIB	VPOS
Mean	21.50808	15774.31	234990.7
Median	14.00000	1896.460	331.3700
Maximum	143.2500	110347.1	1097133.
Minimum	-15.00000	48.01000	31.57000
Std. Dev.	27.05667	31105.31	367386.4
Skewness	2.138937	2.342844	1.252784

Kurtosis	8.361456	7.314696	3.150301
Jarque-Bera	235.2271	202.8614	31.50232
Probability	0.000000	0.000000	0.000000
Sum	2580.970	1892917.	28198885
Sum Sq. Dev.	87115.57	1.15E+11	1.61E+13
Observations	120	120	120

Source: Eviews 10 Output (2026)

The descriptive statistics of each variable for this study provide hints into the variability, central tendency, and distribution characteristics of firm growth and the independent variables over the period under review.

Return on Investment (ROI): The mean return on investment for deposit money banks is 21.51%, reflecting a positive average increase. The minimum and maximum values of -15.00% and 143.25%, respectively, indicate considerable variability in growth, suggesting that some banks experienced high growth, while others faced declines. The standard deviation of 27.06% highlights this volatility in growth rates. The skewness of 2.14 suggests a right-skewed distribution, meaning a few instances of very high growth rates drive the average up. The kurtosis of 8.36 further confirms this, indicating a leptokurtic distribution with more extreme values than a normal distribution.

Volume of Internet banking Transactions (VIB): The mean value for VIB transactions is approximately ₦15,774.31 billion, with a high maximum of ₦110,347.1 billion, indicating significant uptake in digital payment methods among some banks. The standard deviation of ₦31,105.31 billion shows notable variation across banks in IB usage. A skewness of 2.34 suggests a positive skew, with a few banks conducting particularly high IB transactions compared to others. Kurtosis at 7.31 implies a leptokurtic distribution with more frequent extreme values, indicating that POS adoption rates vary widely, with a handful of banks performing exceptionally well.

Volume of Point of Sale Transactions (VPOS): Point of sale has an average transaction volume of ₦234,990.7 billion, suggesting that it is a crucial digital banking channel for deposit money banks. The range between the minimum value of ₦31.57 billion and the maximum of ₦1,097,133 billion is extensive, reflecting the broad spectrum of point of sale adoption and its contribution to banks' return on investment. A standard deviation of ₦367,386.4 billion further confirms high dispersion in point of sale usage across banks. With a skewness of 1.25, the distribution is moderately skewed to the right, and a kurtosis of 3.15 indicates a slightly leptokurtic distribution with some degree of outliers but less extreme than VIB.

Model Diagnostics

A number of model diagnoses were conducted to assess the Serial Correlation, heteroskedasticity and normality of the residuals. Tables 4.2 and Table 4.3 along with Figure 4.1 show the result of the diagnostic analyses.

Table 4.2 Breusch-Godfrey Serial Correlation LM Test:

F-statistic	0.855703	Prob. F(2,113)	0.4277
Obs*R-squared	1.790307	Prob. Chi-Square(2)	0.4085

Source: Eviews 10 Output (2026)

The Breusch-Godfrey Serial Correlation LM test is designed to detect the presence of autocorrelation in the residuals of a regression model. Autocorrelation occurs when the residuals are correlated across time or space, which violates one of the key assumptions of ordinary least squares (OLS) regression. In this case, the F-statistic is reported as 0.855703, with a corresponding p-value of 0.4277. At a 5% significance level, we typically reject the null hypothesis (which posits that there is no serial correlation) if the p-value is less than 0.05. Since the p-value of 0.4277 is significantly greater than 0.05, we fail to reject the null hypothesis, indicating that there is no evidence of autocorrelation in the residuals of the regression model.

The essence of this test lies in its ability to provide insights into the reliability of the regression results. If autocorrelation were present, it could lead to inefficient estimates of the coefficients, ultimately compromising the validity of statistical inferences, such as hypothesis tests and confidence intervals. In this instance, the absence of serial correlation suggests that the model's residuals are independently distributed, thereby validating the robustness of the regression analysis. This finding is crucial for ensuring that the conclusions drawn from the model are sound and that any relationships identified between the dependent and independent variables are not confounded by temporal dependencies in the data.

Table 4.3 Heteroskedasticity Test: Breusch-Pagan-Godfrey

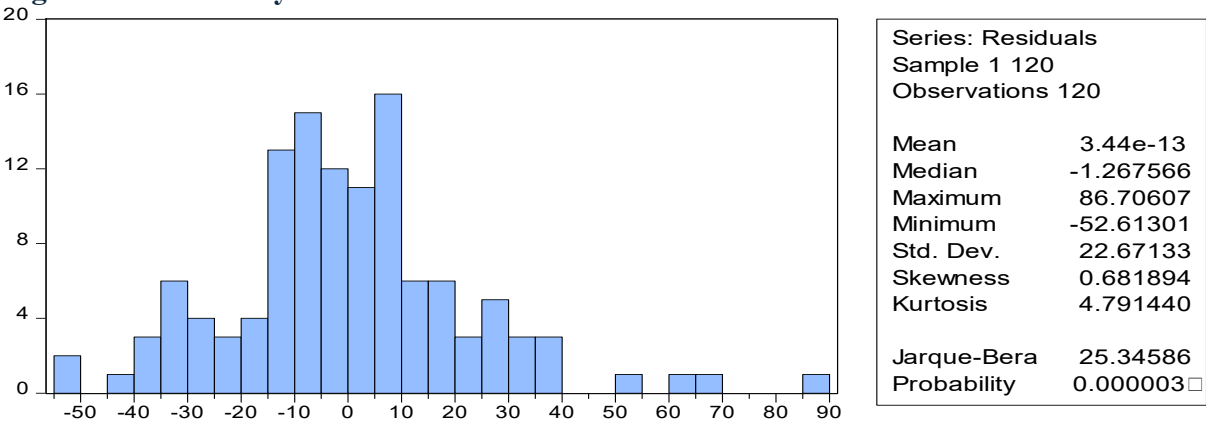
F-statistic	13.61283	Prob. F(4,115)	0.0000
Obs*R-squared	38.56068	Prob. Chi-Square(3)	0.0000
Scaled explained SS	67.13547	Prob. Chi-Square(3)	0.0000

Source: Eviews 10 Output (2026)

The Breusch-Pagan-Godfrey test assesses whether there is a constant variance in the residuals of a regression model, an assumption known as homoskedasticity. In the output, the F-statistic is reported as 13.61283, with a p-value of 0.0000. Since the p-value is significantly less than the 5% significance level, we reject the null hypothesis, which posits that the variance of the residuals is constant. The result indicates the presence of heteroskedasticity in the model, meaning the variability of the errors changes across different levels of the independent variables.

Detecting heteroskedasticity is essential because it can lead to biased estimates of the standard errors, affecting the reliability of hypothesis tests and confidence intervals. When heteroskedasticity is present, it may suggest that certain predictors could explain the varying dispersion of the residuals. This finding prompts researcher to consider using robust standard errors or alternative estimation techniques, such as Heteroskedasticity and Autocorrelation Consistent (HAC) standard errors, to obtain valid statistical inferences.

Figure 4.1 Normality Test



Source: E-views 10 Output (2026)

The Jarque-Bera test assesses the normality of the residuals in a regression model. A key assumption of OLS regression is that the errors are normally distributed, which is particularly important for small sample sizes when conducting hypothesis tests. In this analysis, the probability value associated with the Jarque-Bera statistic is reported as 0.000003, indicating a strong departure from normality. However, the results are suggested to be ignored because the sample size exceeds 120 observations, which may provide sufficient robustness for the Central Limit Theorem to apply.

Even though the test suggests that the residuals deviate significantly from normality, the implication is less critical due to the larger sample size. As sample sizes increase, the distribution of the sample mean tends to approximate normality regardless of the shape of the population distribution.

Test of Hypotheses

The hypotheses were tested using the estimates from the multiple regression. Heteroskedasticity and Autocorrelation Consistent (HAC) standard errors were used in the multiple regression analysis in order to account for the observed issues with heteroskedasticity (non-constant variance of errors) in the residuals of a regression model.

Table 4.4 Test of Hypotheses

Dependent Variable: ROI
Method: Least Squares
Date: 07/08/26 Time: 14:12
Sample: 1 120
Included observations: 120
HAC standard errors & covariance (Bartlett kernel, Newey-West fixed bandwidth = 5.0000)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
LOGVIB	27.56747	6.018058	4.580792	0.0000
LOGVPOS	114.1960	21.96732	5.198450	0.0000
C	417.9852	110.8658	3.770192	0.0003

R-squared	0.297890	Mean dependent var	21.50808
Adjusted R-squared	0.273469	S.D. dependent var	27.05667
S.E. of regression	23.06225	Akaike info criterion	9.155045
Sum squared resid	61164.73	Schwarz criterion	9.271190
Log likelihood	-544.3027	Hannan-Quinn criter.	9.202212
F-statistic	12.19799	Durbin-Watson stat	1.814864
Prob(F-statistic)	0.000000	Wald F-statistic	7.598566
Prob(Wald F-statistic)	0.000018		

Source: Eviews 10 Output (2026)

The results of the study, as presented in Table 4.4, reveal the effect of various digital banking—, internet banking transactions and Point of Sale (POS) transactions on the Return on Investment (ROI) of deposit money banks in Nigeria. The adjusted R-squared value of 0.2735 indicates that the model explains approximately 27.35% of the variation in the return on investment for deposit money banks, based on the selected digital banking variables. Although this level of explanatory power is relatively modest, it suggests that these variables collectively provide valuable insights into how digital banking influence return on investment, while also indicating that there are other significant factors not captured by this model. Additionally, the probability of the F-statistic is recorded as 0.000000, which demonstrates that the overall model is highly statistically significant. This low p-value indicates a very strong likelihood that the independent variables—, internet banking transaction and POS transactions, collectively have a significant effect on the return on investment of deposit money banks in Nigeria.

Test of Hypothesis

H_{01} *Internet banking transactions have no significant influence on return on investment of deposit money banks in Nigeria.*

The coefficient for internet banking transactions (LOGVIB) is 27.56747, with a p-value of 0.0000. This positive coefficient suggests that a unit increase in internet banking transactions results in an increase of approximately 27.56747 units in gross earnings growth. The p-value being less than the 5% significance level indicates that this effect is statistically significant. Thus, we accept the alternate hypothesis,

concluding that internet banking transactions significantly and positively contribute to the return on investment in deposit money banks in Nigeria.

H_{02} Point of sale transactions does not have significant effect on return on investment of deposit money banks in Nigeria.

The coefficient for POS transactions (LOGVPOS) is 114.1960, with a p-value of 0.0000. This positive coefficient indicates that an increase in POS transaction value is associated with an increase in return on investment by approximately 114.1960 units for each additional unit of POS transactions. The statistically significant p-value (0.0000) leads us to accept the alternate hypothesis and conclude that POS transactions have a significant positive effect on return on investment among Nigerian deposit money banks.

5.0 CONCLUSION AND RECOMMENDATIONS

The study indicates that the integration of digital banking significantly enhances key performance metrics in the Nigerian banking sector, demonstrating that technological advancements are vital for improving the operational efficiency of banks. Also show that digital banking contributes to greater financial inclusion, allowing a wider segment of the population to access banking services, which can facilitate economic growth and development. These findings underscore the importance of recognizing digital banking not merely as an enhancement of service delivery but as a transformative element capable of reshaping the financial landscape, particularly in emerging markets. Based on the findings the study recommends as follows:

1. The marketing team should develop targeted strategies to increase the adoption and usage of internet banking, focusing on improving customer awareness and experience to enhance its contribution to earnings.
2. Bank management should re-evaluate and optimize POS-related operations to minimize negative impacts on return on investment, possibly by adjusting transaction fees or improving service efficiency.

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