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Nigerian Deposit Money Banks' Financial Innovation and Performance

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Research Article

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ABSTRACT

The process of developing and then popularizing new financial instruments, as well as new financial institutions, markets, and technologies, is known as financial innovation. The study's primary goal is to look at how financial innovations affect Nigerian deposit money banks' performance. The specific goals are to: evaluate the impact of automated teller machines on the performance of Nigerian deposit money banks; evaluate the impact of mobile banking on the performance of Nigerian deposit money banks; examine the impact of internet banking on the performance of Nigerian deposit money banks; and look into the impact of point of sale on the performance of Nigerian deposit money banks. Because the study used secondary data from the Central Bank of Nigeria Statistical Bulletin, CBN Annual Report, and Statement of Accounts, it used an ex post facto research design. The study's findings show that although online banking has a negative and negligible impact on return on asset, automated teller machines, mobile banking, and point of sale have a favorable and considerable impact. According to the study's findings, financial innovation has improved the profitability of Nigerian commercial banks and increased their return on assets. The government should provide sufficient infrastructure for the internet, telecommunications, and electricity supply, among other recommendations. To improve this infrastructure, industry stakeholders will need to collaborate with other stakeholders. It is imperative that banks, switching companies, card companies, and other organizations strive to enhance the quality, standardization, and maintenance of their equipment. When it comes to lost or stolen cards, fraud, and other customer complaints about electronic payments, the banks need to enhance their customer service and responsiveness. Public education and knowledge of the advantages of electronic payments are desperately needed. To increase public trust in electronic payments, all parties involved must enhance system security and integrity. In mobile and online commerce systems, it is also necessary to provide user-friendliness and customer-interactive features.

Keywords: Nigeria, Performance, Deposit Money Banks, and Financial Innovation

INTRODUCTION

In the global banking sector, financial innovations like those seen in ATMs, phone banking, Internet banking, debit cards, credit cards, agency banking, and smartcard applications are happening at an incredibly rapid rate. The Bank of England was founded in 1694, marking the beginning of banking.

A few people who were truly money lenders founded the bank with the intention of making interest-bearing loans. The development of instruments and methods is the history of financial innovations. According to Tufano (2002), innovation in the financial sector refers to the process of developing and subsequently popularizing new financial instruments, as well as new financial technology, institutions, and markets.
It may be seen as the creation, development, and use of novel financial tools and procedures as well as the development of original solutions to financial issues. Financial innovations are often regarded as a firm's core value competency and one of the most significant competitive weapons, according to Sandvik (2003). Given the problem of a firm's limited resources, it is thought to be an effective way to increase productivity.

Ignazio (2007) categorizes financial innovations into new products, such as exchange-traded index funds and adjustable rate mortgages; new services, such as online securities trading and Internet banking; new "production" processes, such as electronic record keeping for securities and credit scoring; and new organizational forms, such as Internet-only banks and a new kind of electronic exchange for trading securities. Key market participants, such as commercial banks, employ the majority of these financial innovations in Kenya's financial industry. In order to enhance their financial performance, commercial banks have consistently innovated new goods, services, and governance, according to Makur (2014).With innovative goods and services accessible in the financial industry, the financial sector has effectively grown throughout time. These goods, which enable the use of electronic payment methods and sometimes replace the usage of actual currency, include debit cards, credit cards, ATM cards, M-pesa, and others. In a similar vein, these products become more well-known in the financial sector, which lowers the amount of money held. By putting their financial services offering on a single platform, this most recent service innovation will advance financial inclusion and innovative service offers for all Nigerians, making banking services more accessible, flexible, easy, and inexpensive.

Statement of the Problem

The need for new kinds of investments has arisen as a consequence of the financial markets' growing globalization and integration. The danger to existing deposit taking in financial institutions is primarily caused by the ability to innovate and the financial innovation and its impacts. The organization's growth is significantly impacted by its financial performance. Financial innovation is also a result of changes in the global financial environment, the expansion of international financial markets, and the merging of local ones. In order to manage the substantial amounts of money they handle on a daily basis, local financial institutions, such as commercial banks, have had to adjust to new financial advances. Through the introduction of new products, new financial institution roles, and calls for changes to regulatory agencies' methods, they have continued to innovate and provide improved services to customers. Despite all of these developments, the financial industry has not yet properly recognized the impact of innovation on the expansion of financial institutions. According to Mabrouk & Mamoghli (2010), this might be the result of a sluggish testing of the bank's performance and a lack of knowledge about the forces behind innovation. The current global financial crisis is centered on banks and other financial intermediaries. One of the primary structural causes of the crisis was the degradation of their asset portfolios, which was mostly caused by mismanaged loans (Steven, 2002). Commercial banks must operate successfully and efficiently by consistently pursuing financial innovations due to the rapidly evolving competitive landscape, globalization, economic

shifts, regulation, privatization, and similar factors. whatever commercial bank in Nigeria must use whatever skills required to stay competitive and gain a competitive edge due to the advent of new technology, products, processes, markets, and rival banks. The banking sector has previously been portrayed (Parasuman, 2001) as having poor market orientation, providing services without considering the demands of customers, and having branches with varying levels of efficiency, all of which have led to poor financial performance. According to Smith (1999), the most common issues with banking services in Kenya are long lines, transaction errors, queuing, insecurity, and network failures. Customers' perceptions of the quality of services provided are significantly lowered as a result, which lowers the bank's reputation and therefore its profitability (Joseph et al., 2003).

Research on financial innovation is becoming more and more necessary as its significance in developing nations like Kenya grows. Joseph and others, 2003. Surprisingly few empirical investigations have been conducted despite the acknowledged significance of financial innovations and a substantial descriptive literature. Due to this circumstance, the banks have been deprived of crucial information about this significant field of financial innovations, which has sometimes resulted in reverse causality in the link between innovation and performance. According to Mugambi (2006), studies on customer satisfaction and service excellence in the banking sector have been conducted. Nevertheless, no research has examined how financial innovation affects commercial banks' financial performance in Kenya.

This study therefore, intends to investigate the impact of financial innovations on the profitability of commercial banks in Nigeria

REVIEW OF RELATED LITERATURE

Conceptual Framework

Financial Innovation

The process of developing and subsequently popularizing new financial instruments, institutions, markets, and technology is known as financial innovation (Tufano, 2002).
It may be seen as the creation, development, and use of novel financial tools and procedures as well as the development of original solutions to financial issues. Financial innovations are often regarded as a firm's core value competency and one of the most significant competitive weapons, according to Sandvik (2003). Given the problem of a firm's limited resources, it is thought to be an effective way to increase productivity. Ignazio (2007) categorizes financial innovations into new products, such as exchange-traded index funds and adjustable rate mortgages; new services, such as online securities trading and Internet banking; new "production" processes, such as electronic record keeping for securities and credit scoring; and new organizational forms, such as Internet-only banks and a new kind of electronic exchange for trading securities. Important market participants, such as commercial banks, use the majority of these financial innovations in Nigeria's financial sector. Many banks have used financial innovation as a powerful strategic variable to outweigh any rivalry among deposit money institutions. This allows banks to keep their efficacy in the market while simultaneously improving their performance (Kamau & Oluoch, 2016). Therefore, the ratio of quick and simple measures of a bank's capacity to convert resources into revenue is used to determine its efficiency. Return on equity, return on assets, and interest margin are often used efficiency metrics. In addition to increasing the number of financial institutions, the banking subsector's advancements have raised the complexity of new payment methods and asset substitutes for cash. This has mostly been caused by advances in technology and more rivalry as the number of institutions rises. A crucial aspect of banking operations has been impacted by developments in payment systems that have begun to produce near substitutes for hard currency (Okonkwo, Obinozie & Echekoba, 2015). Researchers have examined the

relationship between financial innovation and the effectiveness of the banking sector in both industrialized and developing nations. These studies' findings provide empirical support for the idea that financial innovation improves bank satisfaction. There are conflicting results about the relationship between financial innovation and the effectiveness of the banking sector in Nigeria, a growing country. Because of the concerning percentage of ATM fraud, Jegede (2014) observed that the installation of ATM terminals has only slightly enhanced the performance of Nigerian banks. On the other hand, Okonkwo, Obinozie, and Echekoba's (2015) research revealed that investments in ATMs and electronic banking services do not really enhance banks' performance as measured by return on equity in Nigeria. Growing globalization and deregulation are causing a revolution in the global banking and financial system. In the global banking sector, financial innovations like those seen in ATMs, phone banking, Internet banking, debit cards, credit cards, agency banking, and smartcard applications are happening at an incredibly rapid rate. The Bank of England was founded in 1694, marking the beginning of banking. A few people who were truly money lenders founded the bank with the intention of making interest-bearing loans. The development of instruments and methods is the history of financial innovations. Financial innovation helps a business develop, thrive, and evolve in tandem with internal and external environmental shifts. This also applies to banking. Due to several advancements in technology, business models, systems, processes, services, governance, and regulation, the banking industry has recently undergone a dramatic shift. Information technology's ubiquitous effect has revolutionized the banking industry (Kumar, 2011).

Automated Teller Machine

Customers who identify themselves with a personal identifying number (PIN) may use an ATM, which is a computer-controlled equipment that dispenses and offers other services. Both the actual transportation of cash and regular bank visits are declining. Unlike the traditional method, where customers must wait in line for a very long time to withdraw cash or transfer funds, the main benefit of an ATM is that it can dispense cash at any time of day, even though it does not need to be located within the banking premises but rather in stores, shopping malls, fuel stations, etc. In Nigeria, the ATM is the most widely used electronic transaction method. ATMs are widely used due to their convenience.

Mobile Banking

This entails using a cell phone to settle financial transactions. This is essentially a process of transferring money between clients so that the beneficiary can access the money right away. It employs secure SMS communications to confirm receipts to the recipient and card infrastructure to transfer payment instructions. Due to its modest infrastructure needs and the country's fast growing mobile phone penetration, it is immensely popular and exciting for users. Account inquiries, money transfers, phone recharging, password changes, and bill payment are among the services covered by this program. Despite the program's excitement, the majority of Nigerian consumers have not yet completely embraced it. As a result, the apex bank and other banks still have a long way to go in raising awareness of the product among the nation's saving population (Siyanbola, 2013).

Internet Banking

Internet banking refers to systems that enable bank customers to get access to their accounts and general information on bank products and services through the use of bank’s website, without the intervention or inconvenience of sending letters, faxes, original signatures and telephone confirmations (Olorunsegun, 2010). Siyanbola (2013) puts it that internet banking involves conducting banking

transactions on the internet (www) using electronic tools such as the computer without visiting the banking hall. E-commerce is greatly facilitated by internet banking and is mostly used to effect payment. Internet banking like mobile banking also uses the electronic card infrastructure for executing payment instructions and final settlement of goods and services over the internet between the merchants and the customers. Commonly used internet banking transactions in Nigeria are settlement of commercial bills and purchase of air tickets through the websites of the merchants. Level of awareness of the advantages of this product to the saving populace is still very low; hence, there is every room for improvement if cashless banking would be effective as expected (Siyanbola, 2013). Funds transfer, airtime top up, balance enquiry, password change, bill payment etc can also be conducted on the internet banking plat form.

Performance of Deposit Money Banks

In general, bank performance indicates how well a bank has done in achieving its goals throughout a trading period. Presumably, the published financial statements are the only document that explains this. A fair assessment of any bank's performance, according to Rose (2001), should begin by determining whether it has been able to meet the goals established by management and investors. Undoubtedly, several banks have distinct goals of their own. While some seem to prefer a quiet life, minimizing risk and projecting the image of a sound bank with modest rewards to their shareholders, others want to grow more quickly and accomplish some long-term growth objective (Salehi & Alipour, 2014). Generally speaking, stock prices and their behavior are thought to represent a company's performance. Since this is a market indicator, it may not always be accurate. Nonetheless, the bank's size, deposit volume, and profitability can be considered more trustworthy performance metrics. In this study, bank performance is evaluated using profitability indicators, specifically the Return on Equity Capital (ROE) and the Return on Assets (ROA).

Theoretical Framework

The Schumpeter theory of financial innovation served as the foundation for this investigation. According to Schumpeter's financial innovation hypothesis, when banks and other financial institutions spend more in innovative goods, technology generates potential for new profits and super profits. The sustainability of competitive advantage based on resources and capabilities is the subject of the second theory, known as the resource-based theory (Barney, 1991). Based on the resource-based theory's concept that effective bank performance is customer-centric, businesses aim to: deliver superior customer value; achieve relative lower costs; control dominating market share; and accomplish superior financial performance.

Empirical Review

Abubakar (2020) investigated how automated teller machines (ATMs) affected Nigerian users' satisfaction: An analysis of the United Bank for Africa in the city of Sokoto Information and communication technology has seen tremendous growth and change in Nigeria's banking industry throughout the years. The introduction of Automated Teller Machines (ATMs) is one of the developments that aims to relieve the congestion in banking halls. Customers can now complete their banking transactions, including cash withdrawals, deposits, bill payments, and account transfers, by visiting the closest ATM. Respondents were asked about ATM services using an across-sectional survey technique. Customers of United Bank for Africa in the city of Sokoto made up the majority of the study's population. One hundred respondents who utilize ATM services made up the study's sample. Multiple logistic regression analysis was used to examine the gathered data. The results showed that ATM services had a favorable and substantial influence on transaction costs, perceived ease of use, and service security. Nevertheless, the outcome also shows that ATM services have a favorable but negligible effect on money

availability. Taiwo and Agwu (2019) investigated how e-banking affected Nigerian commercial banks' operational effectiveness. Staff members of four purposively chosen banks (Ecobank, UBA, GTB, and First Bank) were given questionnaires to complete in order to collect primary data. The findings collected using the Statistical Package for Social Sciences (SPSS) were analyzed using Pearson correlation, and it was shown that Nigerian banks' operational efficiency has increased with the introduction of electronic banking in comparison to the conventional banking period. The strength of banks, income and capital bases, and client loyalty all showed improvements. It was determined that adding additional channels to their e-banking operations significantly improved bank performance since the more engaged clients are with their electronic transactions, the more lucrative it is for the banks.

Asidok and Michael (2018) use specific bank data from the Electronic Payment System Office, Central Bank of Nigeria statistics bulletin from 2007 to 2016 to assess the effect of automated teller machine (ATM) transactions on bank profitability in Nigeria.The paper does quantitative analysis for four chosen old and new generation banks using the Panel unit root and SURE model estimate approach. Economic a priori criteria, statistical criteria, and econometric criteria were used to examine the study's findings. The performance of both old and new banks in Nigeria is significantly influenced by automated teller machines, as seen by the positive and statistically significant association between these machines. The performance of both old and new banks in Nigeria is significantly influenced by the point of sale, as evidenced by the positive and statistically significant correlation between the two types of banks. The success of both new and old banks in Nigeria is significantly influenced by mobile banking, as seen by the positive and statistically significant correlation between mobile banking and both types of banks.

Adaora, Jisike, and Amalachukwu (2018) conducted an empirical investigation to determine the impact of ATM-related fraud on the financial performance of deposit money banks in Nigeria. While the impact of fraud on automated teller machine (ATM) platforms used by banks operating in the economy is frequently overlooked, empirical research on electronic banking and bank performance in Nigeria has focused on its benefit of increasing the profitability of deposit money banks. The regression equation was estimated using Ordinary Least Square (OLS), while the Granger causality analysis was used to determine the impact of fraud on different electronic banking channels and financial performance. The study's findings refuted the notion that fraud on point-of-sale terminals significantly reduces interest revenue, but fraud on automated teller machines, mobile banking, and the internet had no impact on banks' non-interest income, return on equity, or return on assets. Joseph (2019) investigated how Kenyan commercial banks' profitability was affected by electronic banking. A descriptive research approach was used in the study. The 43 commercial banks operating in Kenya as of the 31st of 2014 make up the population of the study. There was a census survey. Secondary data from many Central Bank of Kenya publications was utilized in the research. Data analysis was done using the Statistical Package for Social Sciences (SPSS). While inferential statistics produced regression and correlation results that demonstrated the causal relationship between the variables, descriptive statistics produced trends, means, and percentages. ATM transactions and bank profitability are positively correlated, according to multiple regression studies ($p<0.05$-0.004). The ROE (bank profitability) increases by 1.662 units for every unit increase in ATM transactions. Additionally, the study discovered a significant positive correlation ($p<0.05$-0.021) between POS transactions and bank profitability. ROE increased by 1.34 units for every unit increase in POS transactions. ATM transactions showed a generally upward trend over time, according to trend analysis. 2012 had the greatest number of ATM transactions. Between January 2007 and June 2015, POS transactions also climbed steadily. Since M-Pesa's launch in 2007, mobile transactions have grown exponentially. Throughout the study's duration, the average ROE of commercial banks

has remained mostly consistent. Descriptive statistics were used in the research to provide an overview of the connection between the independent and dependent variables. The study's model explained 16.9% of the dependent variable, according to the results. The model was further confirmed by the ANOVA tests, which showed that it adequately described the variance in commercial banks' profitability (F=6.407, p=0.000).

Njogu (2019) investigated how electronic banking affected Kenyan commercial banks' profitability. Commercial banks and the Kenyan Central Bank provided this information. To ascertain the impact of electronic banking on Kenyan commercial banks' profitability during that time, regression analysis was conducted. The research was conducted between 2009 and 2013, a span of five years.According to the study's results on the coefficient of determination, changes in online banking, point of sale, automated teller machines, mobile banking, and bank size at a 95% confidence interval might explain for significant shifts in the financial performance of Kenya's commercial banks.The research discovered a considerable positive correlation between commercial banks' financial performance and electronic banking. The financial performance of Kenyan commercial banks was likewise shown to be favorably impacted by the size of the bank. In comparison to traditional banking channels like Automated Teller Machines (ATMs), Point of Sale mobile banking, and internet banking, which have an impact on the bank's financial performance, electronic banking has helped commercial banks reduce their banking costs. This has been made possible by technology, which has given them more opportunities to offer their customers great flexibility. This has allowed commercial banks to adopt electronic banking very quickly. Banks are interested in growing their market via online services since electronic banking offers consumers cost savings, convenience, and promptness. The study also found that every independent variable had a P-value of less than 0.05, indicating that they were all statistically significant.

Jude (2019) examines the empirical test of whether banks that provide online banking are profitable in order to close knowledge gaps about profitability, cost effectiveness, and other aspects based on banks' perspectives for implementing online banking systems.

One state bank, fourteen private banks, and seven foreign branch banks make up the panel data from 22 retail banks that are active in the Turkish Republic of Northern Cyprus (KKTC). The Central Bank of Northern Cyprus's year-end aggregate income statements and balance sheets are the source of our dataset. The results demonstrated that banks that provide internet banking services to 57 of their clients or that use the internet as an alternative distributive channel saw an increase in their asset returns, whereas banks that do not use the internet as a medium for service delivery saw a decrease in their asset returns. This shows that internet adoption has a favorable impact on banks' profitability.

Eze and Egoro (2016) investigated how Nigerian commercial banks' profitability was affected by electronic banking. The goal of the research was to investigate the connection between Nigerian commercial banks' profitability and various e-banking platforms. The profit before tax of commercial banks operating in Nigeria between 2006 and 2014 was regressed against four e-banking channels: automated teller machines, electronic mobile banking, online banking transactions, and point of sale services. The research tested the developed hypotheses using the validated ECM model (by residual diagnosis). The findings showed that although the effects of the various channels varied, the overall effect of electronic banking on commercial banks' profitability was substantial. The study suggests, among other things, that commercial banks step up their efforts to increase the number of ATM delivery locations and improve their effectiveness and efficiency. It also suggests that regulatory bodies work with the banks to establish an

operational environment and regulatory framework that will facilitate the best possible implementation of these services for consumers. This is particularly true when it comes to handling the problem of unsuccessful transactions. Ekanem, Alhaji, Adeniyi, and Adeogun (2017) look on how automated teller machines (ATMs) affect deposit money banks' profitability and customer satisfaction in Nigeria. The research collected data from specific deposit money bank employees and clients in Maiduguri, Borno state, Nigeria, using a quantitative method. In order to gather information on the responding firms' use of ATMs for financial transactions with deposit money banks, a well-structured, closed-ended questionnaire was created and given to the participants. Descriptive statistics were used to evaluate and show the collected data in tabular form. According to this research, the notion of electronic automation has gained widespread acceptability and importance over the last several decades in almost all organizations and institutions, particularly financial institutions. Kashmari et al. (2016) assessed the effect of financial innovation, which requires significant financial and human resources, on each bank's share of deposits, which are among the most crucial objectives and competitive instruments of a bank. Panel Data-Vector Autoregressive techniques (Panel- Data from 23 Iranian banks over a seven-year period (2007–2013) was examined using the Granger causality test and VAR. According to the Granger Causality Test, the number of ATMs, POS, PIN pads, SWIFT systems, and banking facilities offered by each bank all had a causal relationship in explaining the rise in the bank's share of deposits; however, the market share was identified as the driving force behind the innovation. Additionally, a bidirectional causal relationship was seen between the number of facilities and the percentage of deposits.

Catherine (2015) looked into how financial innovations affected Kenyan commercial banks' financial performance. An explanatory research design was used in the study. The 43 commercial banks that were in operation in Kenya throughout the research period made up the study's population. A census of all 43 commercial banks was carried out for the research.Primary data was utilized in the research. The model employed was a standard linear regression model. The statistical program for social sciences (SPSS) version 20 was used to perform the regressions. Product innovation and ROA have a negative and substantial association, according to the study's results. It was discovered that there was a strong and positive correlation between organizational innovation and ROA as well as between service innovation and ROA.

METHODOLOGY

Research Design

The study adopted an *ex-post facto* research design because the data for the study are secondary data that already exist in the archives of well acclaimed financial institutions such as the Central Bank of Nigeria.

Model Specification

The model used for the study was the adaptation and modifications from the work of Alagh and Emeka (2014) they analyzed the effect of financial innovation on profitability of commercial banks in Nigeria

The model is stated thus:
ROA = f(ATM, MB,POS)
Where:
ROA = Return on Asset
ATM= Automated Teller Machine MB= Mobile Banking
POS=Point of Sales
The model was adapted and modified. ROA = f(ATM, MB,POS, ITB)
The estimation equation:

$ROA = \beta_0 + \beta_1 ATM + \beta_2 MB + \beta 3 POS + \beta_4 ITB \mu$ -- -- -- -- -- -- --- -- 1

Where:

ROA = Return on Asset

ATM= Automated Teller Machine MB= Mobile Banking

POS=Point of Sales ITB= Internet Banking

β_0 and μ are the constant and error term respectively while β_1, β_2, β_3, and β_4 are the coefficient of financial innovation on the profitability of commercial banks in Nigeria

Method of Analyses

The data will be analyzed with econometric techniques involving Augmented Dickey Fuller Tests for Unit Roots and the Ordinary Least Square (OLS).

Data Analysis

This test is a stationary test which is employed to ascertain the level of stationarity of all the variables employed, as time series data are prone to stationarity problem and in order to avoid having spurious result, we commence our estimation with unit root test. Augmented Dickey – Fuller techniques unit root test is used and its output is presented below in a summarize form. The result revealed that at level, under the "intercept only", return on asset, automated teller machine, point of sale, mobile banking and internet banking were stationary at [1(0)]. From the analyses of stationarity of the variables, it was seen that the variables were stationary at level I(0). Thus, the most suitable tool of analyses is the Ordinary Least Squire Methods of analysis

Unit Root Test

Table 1: Summary of the Unit Root Result

Variables	T-statistics	Probability	Order of Integration
ROA	-6.034595	0.0000	1(0)
ATM	-3.767393	0.0053	1(0)
POS	-4.619034	0.0410	1(0)
MB	-5.531824	0.0235	1(0)
ITB	-2.757183	0.0170	1(0)

Source: E-view Version 9.0

Analyses of the effect of Financial Innovation on the Performance of Deposit Money Banks in Nigeria

Table 2. Ordinary Least Squire

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.667553	0.824890	10.809263	0.0260
ATM	0.164745	1.010577	2.163021	0.0058
POS	0.518247	0.672745	3.770347	0.0183
MB	0.068816	0.039042	2.762604	0.0302
ITB	0.164745	1.010577	2.163021	0.0058

R-squared	0.712561	Mean dependent var	4.676947
Adjusted R-squared	0.655073	S.D. dependent var	7.153306
S.E. of regression	6.953540	Akaike info criterion	6.888364
Sum squared resid	1208.793	Schwarz criterion	7.165910
Log likelihood	-100.7696	Hannan-Quinn criter.	6.978837
F-statistic	19.349696	Durbin-Watson stat	2.971283
Prob(F-statistic)	0.006525		

Source: E-view Version 9.0

Automated Teller Machine (ATM): The coefficient automated teller machine is positive at 0.164745 with probability value of 0.0058 which revealed that automated teller machine had positive and

significant effect on return on asset (ROA). The implication is that 1 unit increase in revenue from automated teller machine (ATM) will lead to 0.65 increases in return on asset (ROA).

Point of Sale (POS): The coefficient of point of sale is positive at 0.518247 with probability value 0.0183 which showed that point of sale had positive and significant effect on return on asset (ROA).

This means that 1 unit increase in revenue from point of sale will lead to 0.518 increases on return on asset (ROA).

Mobile Banking (MB): The coefficient mobile banking is positive at 0.068816 with probability value of 0.0302 showed that mobile banking had positive and significant effect on return on asset (ROA). This means that the 1 unit increase in revenue from mobile banking will lead to 0.068 increases on return on asset (ROA).

Internet Banking (ITB): To determine the effect of internet banking (ITB) on return on asset (ROA), the coefficient of internet banking (ITB) was used. The result showed that internet banking (ITB) has positive (0.518247) and significant ($p. < 0.05$) effect on return on asset (ROA). Thus hypothesis two: Internet (WEB) banking transactions has no significant effect the Performance of Deposit Money Banks in Nigeria, is rejected. The study therefore concludes that Internet (WEB) banking transactions has positive and significant effect on the Performance of Deposit Money Banks in Nigeria

The coefficient of the Adjusted R-squared = 0.655073 showed that about 66% of changes on the performance of deposit money banks is accounted for by the level of electronic banking in Nigeria. This implies that electronic banking in Nigeria is one major contributor on the performance of deposit money banks in Nigeria

The F-statistics (19.349696; $p. < 0.05$) indicated that all the variables of the model (electronic financial innovation variables) have significant effect on the performance of deposit money banks in Nigeria

The Durbin Watson statistics (2.971283) showed that there was no autocorrelation in the model employed.

Test of Hypotheses

To test the hypotheses, the statistical significance of the individual parameters in the Ordinary Least Squire Analysis in Table 2 is use to test hypotheses.

Table 3 Summary of the Hypotheses

Variable	Probability	Coefficient	Conclusion
Constant	0.0260	0.667553	Statistically Significance
ATM	0.0058	0.164745	Positive and Significant
POS	0.0183	0.518247	Positive and Significant
MB	0.0302	0.068816	Positive and Significant
ITB	0.0058	0.164745	Positive and Significant

Source: E- view 9.0

Hypothesis One

Decision Rule:

Reject null hypothesis if p-value is less than 0.05 (i.e. $P < 0.05$) and accept alternate hypothesis. Otherwise accept null and reject the alternate.

H0: Automated Teller Machine (ATM) does not have positive and significant effect on the performance of deposit money banks

Ha: Automated Teller Machine (ATM) has positive and significant effect on the performance of deposit money banks

From table 5 above, since the probability value is less than 5% ($0.0058<0.05$), the null hypothesis is rejected while the alternative hypothesis is accepted implying that: Automated teller machine has significant effect on the performance of deposit money banks. The implication is that 1 unit increase in revenue from automated teller machine (ATM) will lead to 0.65 increases effect on the performance of deposit money banks

Hypothesis Two Decision Rule:

Reject null hypothesis if p-value is less than 0.05 (i.e. $P < 0.05$) and accept alternate

hypothesis. Otherwise accept null and reject the alternate.

Ho_2: Point of sale does not have positive and significant effect on the performance of deposit money banks

Hi: Point of sale has positive and significant effect on the performance of deposit money banks

From table 5 above, since the probability value is less than 5%(0.0183<0.05), the null hypothesis is rejected while the alternative hypothesis is accepted implying that point of sale has significant effect

on the performance of deposit money banks . This means that 1 unit increase in revenue from point of sale will lead to 0.518 increases on the performance of deposit money banks

Hypothesis Three

Decision Rule:

Reject null hypothesis if p-value is less than 0.05 (i.e. P < 0.05) and accept alternate hypothesis. Otherwise accept null and reject the alternate.

Ho_3. Mobile banking does not have positive and significant effect on the performance of deposit money banks

Hi. Mobile banking does not have positive and significant effect on the performance of deposit money banks

From table above, since the probability value is less than 5% (0.0302<0.05), the null hypothesis is rejected while the alternative hypothesis is accepted, implying that mobile banking has significant effect on the performance of deposit money banks. This means that 1 unit increase in revenue from mobile banking will lead to 0.068 increases on the performance of deposit money banks

Hypothesis Four

Decision Rule:

Reject null hypothesis if p-value is less than 0.05 (i.e. P < 0.05) and accept alternate hypothesis. Otherwise accept null and reject the alternate.

Ho_3. Internet (ITB) banking transactions has no significant effect the Performance of Deposit Money Banks in Nigeria

Hi. Internet (ITB) banking transactions has significant effect the Performance of Deposit Money Banks in Nigeria

From table above, since the probability value is less than 5% (0.0058<0.05), the null hypothesis is rejected while the alternative hypothesis is accepted, implying that Internet (ITB) banking transactions has significant effect the Performance of Deposit Money Banks in Nigeria. This means that 1 unit increase in revenue from Internet banking transactions will lead to 0.068 increases on the performance of deposit money banks

DISCUSSION OF FINDINGS

Automated Teller Machine: The result of the study indicates that automated teller machine has positive and significant effect on the performance of deposit money banks

The results of our findings are consistent with the work of Adu, (2016) in terms of automated teller machine, it was discovered that automated teller machine has positive effect on the performance of deposit money banks in Nigeria

Point of Sale: The result indicates that point of sale has significant effect on the performance of deposit money banks

The results of our findings are inconsistent with the work of Agwu, Atuma, Ikpefan, and Aigbiremolen, (2014) (2016), they posited that point of sale has negative and insignificant effect on the performance of deposit money banks in Nigeria.

Mobile Banking: The result indicates that, mobile banking has significant effect on the performance of deposit money banks

The result of our findings are consistent with the work of Asidok, and Michael, (2018) in terms of mobile banking (MB), it was discovered that mobile banking has significant effect on the performance of deposit money banks in Nigeria

CONCLUSION

The regression result shows that the performance of deposit money banks is positively and significantly impacted by automated teller machines, point-of-sale mobile banking, and the Internet. Thus, the research comes to the conclusion that financial innovations have a beneficial impact on deposit money banks' performance and have enhanced Nigerian deposit money banks' performance over the review period.

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