"Effect of electronic banking on financial performance of deposit money banks in Nigeria"

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EFFECT OF ELECTRONIC BANKING ON FINANCIAL PERFORMANCE OF DEPOSIT MONEY BANKS IN NIGERIA

Abstract

The impact of technology on commerce cannot be denied, especially in relation to trade. This study was conducted to examine the impact of electronic banking on the financial performance of Nigerian deposit money banks. The data for the study was obtained from the Central Bank of Nigeria's Statistical Bulletin and the National Bureau of Statistics' Statistical Bulletin for various years, as well as from published financial statements of the banks under study. An ex-post facto research design was used and a normality test was carried out to establish the goodness of the data; descriptive statistics and a multicollinearity test were conducted in which the independent variables were found good. Regression was adopted to test two hypotheses. It was found that ATM has a positive and significant association with Earning EPS and ROA; POS and NEFT significantly affect ROA only, while WEB has an insignificant impact on both EPS and ROA. It is concluded that electronic banking significantly affects financial performance of deposit money banks in Nigeria. Thus, the study recommended that deposit money banks in Nigeria should educate their customers more in the use of NEFT, WEB, and POS, and that the amount of ATM withdrawals should be increased to improve bank performance.

Keywords	automatic teller machine, point of sale, web banking, national electronic fund transfer
JEL Classification	G20, G21

INTRODUCTION

Electronic banking may be described as a means by which banking products and services are provided through electronic devices such as phones, iPods, etc. The nascent advances in technology seen around the world have eliminated the traditional manual banking system and brought about a paradigm shift in banking to the extent that banks are using internet technologies to improve efficiency and scale up the provision of a wide range of value-added products and services (Oyewole et al., 2013). Consequently, Nigerian banks, especially commercial ones, now identify electronic banking as a unique means of differentiating themselves from their rivalries by investing in complicated expertise (Ovia, 2001; Ayo et al., 2007).

However, despite irresistible benefits attributable to electronic banking, there has been a serious and uncontrollable lamentation from members of the public and bankers about its shortcomings that hinder banking operations in that if nothing is done to curtail the excesses, it might hinder the progress of banks.

Besides, poor networking conditions have also posed a great threat to successful e-payments systems. Businessmen now prefer cash transactions to electronic payments owing that such payments do not reflect

on their accounts instantly and therefore do not conform the business principle of cash and carry, and this has open the customers to great danger like armed robbery, etc. On the other hand, the government also loses income from a transaction that would have been accrued to them as a tax, and the bank also loses income that could have been accrued to them as a result of a fee for such a transaction.

Moreover, the lack of accessibility to rural dwellers is another challenge facing the electronic banking system. Banks in Nigeria are not located close to rural areas and thus deprive them of access to electronic banking and affect the operational performance of banks and the government, as well as encourage them to actively engage in underground economic activities.

Furthermore, incessant and unregulated charges by banks have been a source of discouragement to members of public making it difficult for them to willingly use various channels. The attendant effect has been a decline in the financial performance of banks and a decline in government revenues. A situation where a paying bank and a receiving bank charge a customer for the same transaction is very disheartening and makes the customer prefer cash transactions as one kobo today worth billions tomorrow.

The extant literature includes studies by Beg (2018), Ismail (2007) Adelisa (2017), Yadav (2016) and Kloviene and Gimzauskiene (2015); these studies are carried out in foreign countries. In Nigeria, Taiwo (2016) did not address specific organizational performance measures, but conducted an empirical analysis. Akande's (2016) did not relate the banking sector, but explored medium scale enterprises and used primary data. Despite extant literature and researchers' knowledge, there is no study of this nature in the banking industry of Nigeria's economy that has used secondary seven-year data to examine the impact of electronic banking on the financial performance of money deposit banks in Nigeria to the current date.

It is against this background that this study was designed to examine the impact of electronic banking on the financial performance of money deposit banks in Nigeria with the following specific objective to explore the impact of the National Electronic Fund Transfer (NEFT), web banking (WEB), Point of Sale (POS), Automatic Teller Machine (ATM) on Return on Assets and earnings per share of banks in Nigeria.

1. LITERATURE REVIEW

Information and Communication Technology (ICT) influences the decisions of managers regarding the products and services offered in the banking sector. Laudon and Laudon (1991) opine that managers cannot ignore information systems because they play a key role in the modern organization. The success of the Fortune 500 companies is traceable to their formidable information system. Suffice to say that an application of computer-based accounting systems has become a sine qua non to all banks, both locally and globally, to ensure competitiveness. ICTs affect the way corporate institutions around the world govern their innovative devices available to improve service delivery. Brewer and Lunsford (1995) asserted that the modification of the operating practices of financial service providers would be a determinant of their relevance in decades to come. In their opinion, at the center of the failures of financial

institutions is management's inability to embrace technological advancement and its applications in banking operations. Woherem (2000) suggest that only banks that embrace the electronic payment channels will stand the test time. Banks in Nigeria are not let out as various changes brought about by technological advancement in IT since 2005 have necessitated the need to dive into technological advances to remain in business and retain their market share in the economy (Akesinro & Adetoso, 2016).

1.1. Benefits of ICT in the accounting system for the Nigerian banking sector

Task reduction: Before the introduction of a computer into the accounting system, records were kept manually, which was tedious and required many hands to render the necessary services. Consequently, this has led to an increase in

the cost of the maintaining financial institutions. However, the devices have not only reduced these costs but drastically perform these tasks with amazing accuracy and speed.

Economy: The cost of acquiring, installation and, of course, training staff on the use of such devices is much less compared to the revenue it generates for the banking industry.

Decision making: Obviously, computers provide details that human cannot, therefore, organizations that use information and communication technology in their accounting have access to this detailed information and make better decisions.

Business opportunities: Better business opportunities are available to organizations that adopt information communication technology due to their ability to perform tasks with ease, accuracy, and speed.

Control: This provides management with better options for controlling its activities, since operations are processed with minimal human errors.

Competition: Again, information and communication technology provides organizations with a competitive edge over others, since it increases the quality and efficiency of the work done.

1.2. Challenges of ICT in the accounting system of the Nigerian banking sector

Korpelainen (2011) as cited in Taiwo (2016) identified the following setbacks or challenges of the adoption of ICT by organizations.

Infrastructure: ICT experts needed to design, install and maintain systems, and special persons to maximize the use of such technologies and systems and even train posterity who will enable the organization to maximize such benefits is a challenge, therefore a limitation.

Training and qualification: The cost of education and continuous training of staff of these organizations is very high; hence, the inadequate training and workers' skills hinder the proper adoption of ICT in the banking industry. This factor is highly

responsible for the engagement of a smaller number of staff in many bank branches.

Adaptability and responsiveness: Many employees in these organizations are unresponsive to training, despite the fact that organizations spend a lot of money on it. They are so unwilling to go along with change and are unproductive. The attendant effect has buried the introduction of ICT.

Management system: Rigidity in the management of some organizations is itself a challenge in ICT implementation. Where management shows less interest in ICT and unwilling to incentivize workers, ICT adoption will collapse.

Cost: In all managerial decisions, cost is the most important, because its misapplicationmay lead to the liquidation of the organization. This includes acquisition costs, time, intellectual, staff training, etc. Any organization that cannot afford these costs will derail in ICT adoption.

1.3. Influence of electronic banking on performance in Nigeria

Before this era, banking jobs in Nigeria ware so tiring and incompetency was the order of the day. People were not enthusiastic about securing banking jobs because of their nature. Often, everyday banking halls were flooded with an unprecedented multitude and even at that not many transactions were carried out at the end of the day. When one remembers the pains, he will have to go through, he prefers personal safe-keeping of his money Adewuyi and Akpokodje (2013). Banks on their own, in an attempt to retain their customers and meet shareholders or management goals, keep recruiting and training staff at regular intervals. This is, however, of concern to banks, government and the general public, as the profitability of banks was heavily affected by the cost of employment and staff training. Moreover, tracing individual transactions from cradle to grave was not easy. Fraud and incessant looting of funds were on the high increase, as managers and chief executives were enormously involved in practices that were very detrimental to the financial institutions they represented. The collapse of banks was even very common, so it brought unbearable intentions to depositors, since the purpose of safeguarding their

financial resources was in great doubt. Paying and receiving dividends were also a matter of who will bell the cat.

Economic activities also declined due to the lack of tools for facilitating transactions. Consequently, the performance of the banks was hit hard, and government tax revenues from these banks were also affected, and complaints from all parties were the subject of the day.

However, over time, advancement in technology have emerged, driven by the desire to alleviate these human burdens. Today, both businessmen and non-businessmen do business with ease. Even the charges of the transaction are known to an individual (Agboola, 2001; Ololade & Ogbeide, 2017). Bank performance has also improved tremendously owing to the adoption of electronic banking, which have led to the use of electronic payments channels. Banking operations today can be carried out independently.

Kathuo et al. (2015) examined the effect of mobile banking on the financial performance of Kenya's banking sector. The study utilized the descriptive research design and employed ROA and ROE as measures of financial performance, while fund transfers between accounts/e-fund transfers, bill payments, order for check books and bank statements were used for M-banking. The data was primarily gathered through questionnaires with a population of 42 commercial banks up to December 2014. Descriptive statistics were used. The study concluded that the financial performance of banks providing these mobile banking products improved as they ensure the efficiency of banking services using mobile banking.

Oyewole et al. (2013) investigated evidence from Nigeria with regard to e-banking and bank performance. The objective was to find out the effect of electronic banking on the performance of Nigerian banks. Panel data of the yearly account of eight banks that have fully used e-banking was applied covering the period 2000–2010. Return on assets (ROA), return on equity (ROE) and net interest margin (NIM) were used to measure performance. The findings indicated a positive relationship between e-banking and financial perfor-

mance, so the study recommended that investment decisions on e-banking should be rational to justify the cost and revenue implications for bank performance.

Hassan et al. (2013), in a similar study of Nigeria, used ROE to measure financial performance and mobile banking and ATM to measure electronic banking with a sample of six banks. They revealed a positive and strong relationship between electronic banking and financial performance of deposit money banks in Nigeria.

Addae-Korankye (2014), in a similar study in Ghana, sampled ten banks using 250 customers; it was found out that electronic banking improved the profitability of banks in Ghana and recommended that there should be twenty-four hour monitoring of the ATM to quickly address failures and to ensure that the banks' profitability does not drop.

Aliyu and Tasmin (2012), in their study in Malaysia, found that ICT also improved the financial performance and customer delivery services in the country.

Hossein (2013), in his study in Allame Tabataba, used ATMs to measure e-banking and ROE to measure profitability from 1990 to 2010. The OLS regression was used for the analysis, and the results showed that internet banking started contributing with a three-year time lag, but had a negative impact in one lag period.

Al-Adwan et al. (2013) found a positive relationship between banks' profitability and electronic payment pillars in Saudi Arabia. Though the study heard three different opinions on electronic payment channels in Suadi Arabia, its rigorous measures led to its conclusions.

Aduda and Kingoo (2012), in their study in Kenya, used several ATMs and several debit cards issued to measure electronic banking, and ROA was used to measure performance; the data for the study was obtained from the Central Bank of Kenya. Descriptive and inferential statistics were used to test hypotheses. A positive and significant relationship was found between electronic banking and bank performance.

Akande (2016) focused on 7,474 listed small and medium-scale firms in Nigeria with a sample of 380, and 301 questionnaires were distributed. Data collected were analyzed using a frequency table and a percentage. The results of the study indicate that technological advancement guarantees business success. The study recommended that business owners should embrace CAS as it accounts for efficiency and effectiveness of business. Ismail (2007) also confirmed that IT positively contributed to the performance of the business. The researchers recommended business enterprises to find IT useful in business. The finding was supported by Eveka-Nwokeji (2012).

Alshaefee (2007) used primary data and found out that the application of IT improves the performance of petroleum companies in Yemen. He suggested that petroleum companies in Yemen should embrace accounting information systems (AIS) to improve performance.

Salehi et al. (2010) confirmed that the adoption of AIS brings a better future to organizations, and accurate and dependable financial reports are produced. The result of the study is affirmed by the studies by Soudani (2012), Amidu et al. (2011), Polo and Oima (2013), Abdallah (2013), Breen et al. (2003), Amveko (2011), Rajeshwaran and Gunawardana (2008), Khan (2017), Alshebeil (2010), El-Dalabeeh (2012) and Okoye et al. (2012).

It is clear from the extant literature no study in Nigeria that looked at the influence of electronic banking on financial performance of banks over the period 2005–2019 used the same variables as this study. Therefore, the above gaps have made this study relevant.

2. AIMS AND HYPOTHESES

The aim of the study is to examine the impact of electronic banking on the financial performance of deposit money banks in Nigeria. The specific objectives are as follows:

- To investigate the effect of Automatic Teller Machine (ATM), Web banking (WEB), Point of sale (POS), and National Electronic Fund

Transfer (NEFT) on Earnings per share (EPS) of deposit money banks in Nigeria.

- To examine the effect of Automatic Teller Machine (ATM), Web banking (WEB), Point of sale (POS), and National Electronic Fund Transfer (NEFT) on Return on Assets (ROA) of deposit money banks in Nigeria.

The research hypotheses are as follows:

H1: *The effect of Automatic Teller Machine (ATM), Web banking (WEB), Point of sale (POS), and National Electronic Fund Transfer (NEFT) on Earnings per share (EPS) of deposit money banks in Nigeria is not significant.*

H2: *The effect of Automatic Teller Machine (ATM), Web banking (WEB), Point of sale (POS), and National Electronic Fund Transfer (NEFT) on Return on Assets (ROA) of deposit money banks in Nigeria is not significant.*

3. DATA AND METHOD

In an attempt to vigorously pursue the objective of this study, an ex-post facto research design was used (Madugba et al., 2016). The data relating to each variable in this study was obtained from the National Bureau of Statistics Statistical Bulletin, the Central Bank of Nigeria's Statistical Bulletin and financial reports of banks under study for fifteen years from 2005 to 2019. The analysis technique adopted was ordinary least square multiple regression; also, E-view 9 and SPSS 22 software were used to test the hypotheses. The tested variable is financial performance measured by Earnings per share and Return on Assets, while the predictor variable is electronic banking measured by National Electronic Fund Transfer (NEFT), Web Banking (WEB), Automatic Teller Machine (ATM), Point of Sale (POS), descriptive statistics, normality test; the Kolmogorov test was conducted to establish data stationarity, and, since the period covered by the study will not permit for Cointegration test, multiple regression analysis was carried out. Two models were formulated as follows.

3.1. Model specification

For the proper analysis of the hypotheses, the following models were developed.

$$EPS = f(NEFT, WEB, POS, ATM),$$
$$EPS = B_0 + B_1 NEFT + B_2 WEB + \qquad (1)$$
$$+ B_3 POS + B_4 ATM + et,$$

$$ROA = f(NEFT, WEB, POS, ATM),$$
$$ROA = B_0 + B_1 NEFT + B_2 WEB + \qquad (2)$$
$$+ B_3 POS + B_4 ATM + et.$$

3.2. Descriptive statistics

Table 1 shows descriptive statistics used in this study.

Table 1 shows that the average value of earnings per share (EPS) and ROA are 3.420000 and 1.690000, respectively. This is supported by the standard deviation value of 0.299595 and 0.232318. Likewise, mean values of 1.740661, 1.724000, 1.500667 and 1.32667 were indicated for ATM, POS, WEB, and NEFT, re-

spectively, all shown as positive. The standard deviation values are 0.148443 for ATM, 0.345022 for WEB, 0.402163 for POS, and 0.269488 for NEFT.

Following the above analysis, it is necessary to pass the normality test, given the fact that this is parametric data and not up or more than twenty years, to encourage the stationarity test (Unit root), the normality test was adopted to establish the decency of the data variables using the Kolmogorov test.

3.3. Test for normality

Table 2 shows the results of the normality test.

The Kolmogorov-Smirnov test was used to check customariness. Table 2 shows that Automatic Teller Machine (ATM) showed a test statistic of .133, while the p-value is 0.200^*, which is higher than the 0.05; this indicates that the data is normally distributed. The Shapiro-Wilk test statistics with a probability value of 0.239 also confirmed the data normality.

Table 2 also indicates that web banking test statistic is .154 with a p-value of 0.200^*. This also indicates normality of the data as validated by Shapiro-

Table 1. Descriptive statistics

Variables	ATM	WEB	POS	NEFT	EPS	ROA
Mean	1.740667	1.724000	1.500667	1.326667	3.420000	1.690000
Median	1.750000	1.760000	1.520000	1.180000	3.310000	1.710000
Maximum	1.990000	2.510000	2.000000	2.110000	4.140000	1.990000
Minimum	1.540000	1.180000	0.900000	1.110000	3.120000	1.180000
Std. dev.	0.148443	0.345022	0.402163	0.269488	0.299595	0.232318
Skewness	0.152348	0.356323	−0.143174	1.697021	1.200328	−0.691858
Kurtosis	1.726658	2.971581	1.399516	5.674120	3.349529	2.800937
Jarque-Bera	1.071400	0.317920	1.652215	11.66902	3.678325	1.221434
Probability	0.585259	0.853030	0.437750	0.002925	0.158950	0.542961
Sum	26.11000	25.86000	22.51000	19.90000	51.30000	25.35000
Sum Sq. Dev.	0.308493	1.666560	2.264293	1.016733	1.256600	0.755600
Observations	15	15	15	15	15	15

Table 2. Normality test

Variables	Kolmogorov-Smirnov			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
ATM	.133	15	.200*	.926	15	.236
WEB	.154	15	.200*	.901	15	.099
POS	.172	15	.200*	.918	15	.179
NEFT	.221	15	.048	.836	15	.011
EPS	.227	15	.036	.841	15	.013
ROA	.167	15	.200*	.933	15	.305

Note: * This is a lower bound of the true significance. a. Lilliefors Significance Correction.
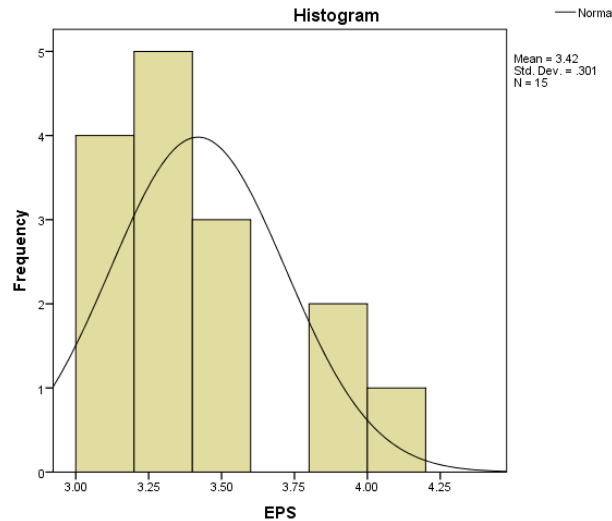
Figure 1. Normality test histogram for EPS

Wilk test statistic with a probability value of .099, which is higher than 0.05.

The Kolmogorov-Smirnov test (see Table 2) shows a probability value of 0.200* for POS, which is higher than the 0.05 meaning normality of the data. The Shapiro-Wilk test probability value of .179 corroborated the data normality.

Table 2 shows that the Kolmogorov-Smirnov test probability value is 0.048 for the National Electric Fund Transfer (NEFT), although less than 0.05, which means the data normality. The Shapiro-Wilk test probability value of .012 does not nullify the data normality, since the histogram is bell-shaped (see Figure 1).

Again, Table 2 shows the Kolmogorov probability value of 0.036 for EPS of banks under study and does not exclude the data normality. The Shapiro-Wilk test shows a probability value of 0.013. The histogram is relatively belled confirming the data normality (see Figure 1).

The Kolmogorov-Smirnovtest was used to test customariness. In Table 2, Return on Assets (ROA) shows a test statistic of .167, while the p-value is 0.200*, which is higher than 0.05, indicating that the data is normally distributed. The Shapiro-Wilk test statistic with a probability value of 0.305 also confirmed the normality of the data.
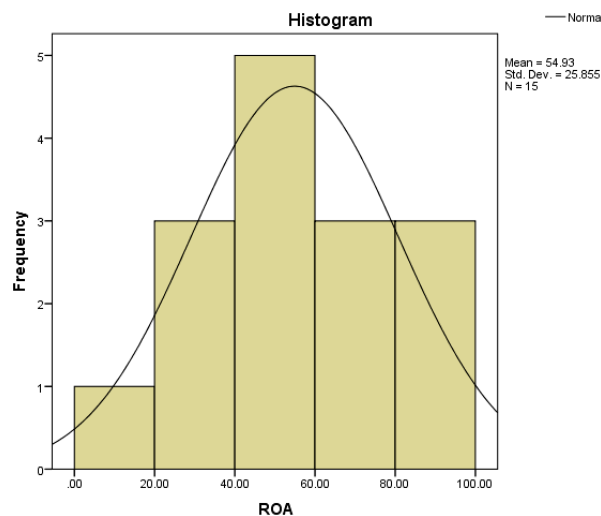

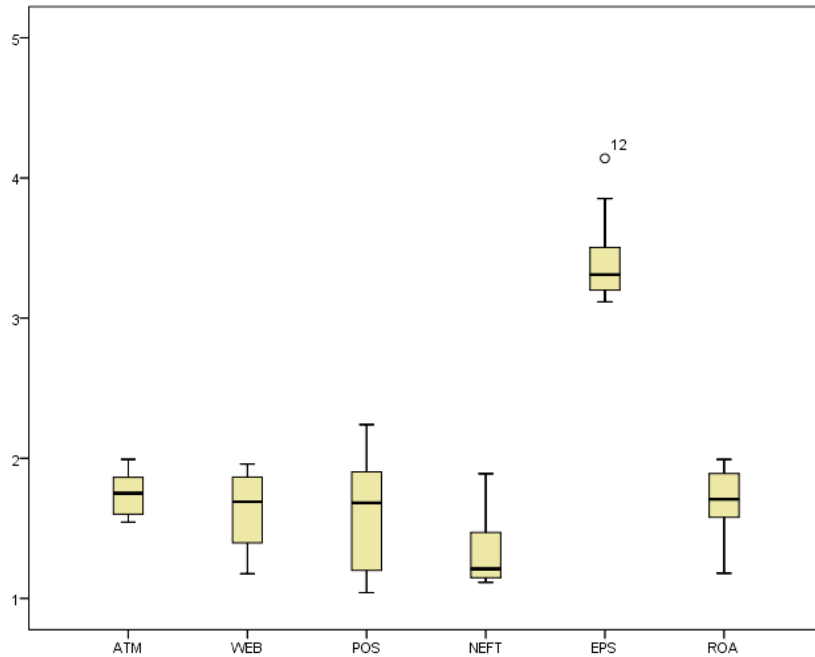**Figure 2.** Normality test histogram for ROA

Figure 3. Box plot showing outliers for variables in this study

3.4. Test for outliers

Box plot was used in this study to perform a test for outliers. Figure 3 shows only one outlier for EPS, and it is very small to affect or undermine the finding.

3.5. Multicollinearity test

Table 3 shows that the tolerance values for the independent variables in this study are 0.935, 0.963, 0.976 and 0.959. These values are not up to 0.10, which is the benchmark; this shows that the basic was not lessened as confirmed by the (VIF) values of 1.069, 1.039, 1.024 and 1.043, which is not higher than the benchmark of 10.

4. RESULTS AND DISCUSSION

4.1. Hypotheses testing

4.1.1. Hypothesis one

Table 4 shows the results of testing hypothesis one.

$H0_1$: *Automatic teller machine, Web banking, National Electronic Fund Transfer and Point of sale have no significant effect on Earnings per Share of money deposit banks in Nigeria.*

Decision rule: Accept the null hypothesis if the probability value computed by E-view is less than or equal to 0.05 (i.e. $P \leq 0.05$).

Table 3. Multicollinearity test results

		Coefficients						
	Model	**Unstandardized coefficients**		**Standardized coefficients**	**t**	**Sig.**	**Collinearity statistics**	
		B	**Std. error**	**Beta**			**Tolerance**	**VIF**
	(Constant)	−1.160	.995	−	−1.166	.271	−	−
	ATM	.936	.201	.632	4.654	.001	.935	1.069
1	WEB	.087	.409	.028	.213	.836	.963	1.039
	POS	.860	.185	.617	4.639	.001	.976	1.024
	NEFT	−.327	.093	−.474	−3.533	.005	.959	1.043

Note: a. Dependent variable: ROA.

Table 4. Regression result for Hypothesis 1

Variable	Coefficient	Std. error	t-statistic	Prob.
Dependent variable: EPS				
Method: Least Squares				
Date: 11/23/20 Time: 13:59				
Sample: 2005–2019				
Included observations: 15				
C	−2.511546	7.292122	−0.344419	0.7377
ATM	4.979763	1.478317	3.368535	0.0071
WEB	−2.431099	2.995001	−0.811719	0.4358
POS	1.441973	1.364038	1.057135	0.3153
NEFT	−0.913926	0.683545	−1.337040	0.2108
R-squared	0.591503	Mean dependent variable		2.828000
Adjusted R-squared	0.428104	S.D. dependent variable		1.069460
S.E. of regression	0.808767	Akaike info criterion		2.674589
Sum squared resid	6.541034	Schwarz criterion		2.910606
Log likelihood	−15.05942	Hannan-Quinn criteria		2.672075
F-statistic	3.619995	Durbin-Watson stat		2.120053
Prob. (F-statistic)	0.045016	−		

4.1.2. *Hypothesis two*

Table 5 shows the results of testing hypothesis two.

$H0_2$: *Automatic teller machine, Web banking, National Electronic Fund Transfer, and Point of sale have no significant effect on Return on Assets of money deposit banks in Nigeria.*

Decision rule: Accept null hypothesis if the probability value computed by E-view is less than or equal to 0.05 (i.e. $P \leq 0.05$).

4.2. Discussion of results for Hypothesis one

Table 4 indicates that the impact of ATM is significant and positive as supported by a coefficient of the statistical value of 4.9797630. This means that ATM is a determinant of earnings per share of the deposit money banks in Nigeria. In other words, the value of transactions carried out using ATM is too significant, when compared to EPS of the deposit money banks in Nigeria. The finding of this study is in line with Kathuo et al. (2015).

Table 5. Regression result for Hypothesis 2

Variable	Coefficient	Std. error	t-Statistic	Prob.
Dependent variable: ROA				
Method: Least Squares				
Date: 11/23/20 Time: 14:00				
Sample: 2005 2019				
Included observations: 15				
C	−1.193598	0.991752	−1.203526	0.2565
ATM	0.931411	0.201056	4.632598	0.0009
WEB	0.102849	0.407330	0.252496	0.8058
POS	0.869437	0.185514	4.686648	0.0009
NEFT	−0.331248	0.092964	−3.563172	0.0052
R-squared	0.827399	Mean dependent variable		1.704667
Adjusted R-squared	0.758359	S.D. dependent variable		0.223762
S.E. of regression	0.109995	Akaike info criterion		−1.315566
Sum squared resid	0.120989	Schwarz criterion		−1.079549
Log likelihood	14.86674	Hannan-Quinn criteria		−1.318080
F-statistic	11.98429	Durbin-Watson stat		2.063905
Prob. (F-statistic)	0.000787	−		

WEB is negligible and negative (see Table 4), which means that it cannot affect EPS of deposit money banks in Nigeria. This also means that the monetary value of transactions in Nigeria via WEB is too low. This finding does not agree with the study by Aduda and Kingoo (2012). But the latter never used WEB to measure performance.

POS is found to be significant but negative. This means that POS can to some extent influence banks' EPS. The value of POS transactions has a significant contribution compared to the EPS of banks in this study. This finding is in line with Oyewole et al. (2013).

NEFT is also insignificant and negative as evidenced by a coefficient of the statistical value of -0.913926. This shows that the value of NEFT transactions is not enough to influence EPS of deposit money banks in Nigeria. This finding is in the opposite direction with Addae-Korankye (2014). The reason could be that NEFT was not part of the variables tested by the latter.

4.3. Discussion of results for Hypothesis two

The hypothesis test results (see Table 5) show that ATM is significant and positive, which means that ATM is a determinant of the ROA of deposit money banks in Nigeria. The value of ATM transactions can cause noticeable changes in ROA of the banks. This conclusion contradicts the study by Aliyu and Tasmin (2012). The reason for the indifference could be based on country differences.

WEB has a coefficient of statistical value of 0.102849. This means that WEB is not significant but positive. WEB cannot influence the banks' ROA.

POS has a coefficient of the statistical value of 0.869437. This shows that POS is significant and positive and is a strong determinant of ROA of the money deposit banks in Nigeria. This implies that the value of transactions executed through POS is very high compared to the ROA of banks in this study. This finding confirms that of Aduda and Kingoo (2012).

Table 5 shows that NEFT is significant but negative, as confirmed by the coefficient of regression value of −0.331248. This means that NEFT can influence the ROA assets of money deposit banks in Nigeria. The effect of NEFT is noticeable on banks' ROA. This finding is inconsistent with Hassan et al. (2013). The reason could be based on the duration of the study and the analytical tool used in both studies.

CONCLUSION

To achieve the purpose of this study, two hypotheses were formulated and tested, and from the regression results (see Table 4), the regression coefficient of the variables and their associated probability values were ATM 4.979763 (0.0071), WEB −2.431099 (0.4358), POS 1.441973 (0.3153), and NEFT −0.913926 (0.2108), indicating that only one of the electronic banking infrastructure (ATM) has a significant influence on earnings per share of deposit money banks. Table 5 shows the regression coefficient and p-values of banking infrastructures as ATM 0.931411 (0.0009), WEB 0.102849 (0.8058), POS 0.869437 (0.0009), and NEFT −0.331248 (0.0052), implying that the three of the electronic banking infrastructures significantly affect return on assets of deposit money banks in Nigeria. It has been concluded that electronic banking has a significant association with the financial performance of deposit money banks in Nigeria. This means that people are aware of and use electronic banking infrastructures, but the cost of transactions carried out through these tools is very small or microscopic, as in case of EPS. Therefore, it is suggested that money deposit banks in Nigeria educate their customers on the use of web banking and National Electronic Fund transfers, as they are used the most poorly of others, and that deposit money banks should increase the value of withdrawals that can be performed through these means.

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82

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