ELECTRONIC BANKING AND PERFORMANCE OF DEPOSIT MONEY BANKS IN NIGERIA (2011-2018)

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ABSTRACT

Electronic banking has become a central concept in the banking industry due to its ability to increase operational efficiency and enhance financial performance. Nevertheless, the challenges of huge capital expenditure on development, and the increased cost of operation on the maintenance of e-banking facilities to achieve operational efficiency subsist in Nigeria. This paper examined the effects of electronic banking on the aggregate financial performance of Deposit Money Banks in Nigeria for eight years. The focus was on selected electronic banking products - Mobile payments, Automated teller machine (ATM), Internet banking (WEB) and Point of sale (POS) transactions. Secondary data were collected and analyzed quantitatively. Four hypotheses were formulated and tested at a ninety-five percent confidence interval using the Ordinary Least Square (OLS) inferential statistical tool. The results indicated that e-banking in the aggregate has a positive but insignificant effect on the overall performance of Deposit Money Banks (DMBs) in Nigeria.

Keywords: Return on Assets, E-banking products-Mobile payments, Automated teller machine, Internet banking, Point of sale.

INTRODUCTION

The impact of technological developments on businesses particularly in the area of information technology is so significant that it cannot be overlooked. This is because information about money is just as important as money itself. No wonder, Siyanbola (2013) opined that the way an enterprise manages and uses its financial information can either reduce or optimize its performance hence information technology has become a strategic instrument in modern-day banking for increasing operational efficiency and attaining higher performance level.

To be able to attain a higher performance level during the tight competition in the industry, Nigerian banks adopted the strategy of automating their operations. Total and complete automation of all operations and services through electronic banking (E-banking) inadvertently became a necessity when the Central Bank of Nigeria introduced cashless policy and e-banking among others as part of the reforms to revitalize banks.

E-banking simply refers to transacting banking business electronically from anywhere with ease, without visiting a physical bank building. This can be achieved by the click of a button, all through the day and night, and all year round. The expectation of this technology-driven banking is a very high level of performance package which indicates goal attainment; customer satisfaction; and improved efficiency and effectiveness of operations amongst other benefits. These advantages are meant to translate to a higher volume of turnover with its attendant profitability to the banks which is a reflection of its financial performance.
The financial performance of banks is very important given that the economic well-being of a nation is a function of the advancement and development of her banking industry. The industry is an indispensable element in the economy’s intermediation drive because it provides the bulk of the money supply as well as the primary means of facilitating the flow of credits especially to the real sector.

Deposit Money Banks referred to as DMBs have remained the largest financial intermediaries in the Nigerian economy. They ensure adequate flow of money to service deficit sectors of the economy and facilitate the movement of funds amongst economic units and agents. DMBs, like all other banks, embraced e-banking platforms with the introduction of internet facilities for e-commerce purposes to have improved operational efficiency; attain minimal running cost with short transaction time; increased market shares and ultimately, enhanced performance.

E-banking operation concentrates more on the payment aspect of banking activities therefore, most of the technology innovations are meant to support payment activities. E-banking offers numerous services such as Internet banking (WEB); Automated Teller Machines (ATMs) services; Mobile payments (MP) from a smart device; the Remita; Point of sale (POS) terminals; NEFT and many others. The Automatic Teller Machines (ATMs); Point of Sale (POS) technology; Mobile Money transfer (MMT) technology and online Money Payment (WEB) are known to be the widely use e-payment technologies in Nigeria as reported by the Nigeria Interbank Settlement System. This claim is supported by Okoro (2014) who argued that electronic banking products such as Automated Teller Machines (ATMs), Mobile, internet (WEB), and point of sale (POS) are the major e-payment instruments in Nigeria, however, the focus of this paper is on Mobile payments (MP); Internet banking (WEB); Automated Teller Machines (ATMs) services and POS.

Notably, efficiency and effectiveness in the use of resources is a major concern for all business entities. The banks, DMBs, in particular, are very much concerned with cost and operational efficiency given the struggle for a large market share and broad asset base by the banks in the economy resulting from the keen competition amongst the banks. This is very crucial at this time due to the low deposits flowing into the banks because of the low-interest rates accruing on deposits.

E-banking seems to have demonstrated that tussle for customers alone cannot sustain operational efficiency and guaranty financial performance since the bottom line is profit hence the need for e-banking which has cost reduction as an advantage. Nevertheless, alongside the benefits of e-banking are challenges of power failure, inconsistency in services of the on-line connectivity, and insecurity motivated by the activities of hackers and internet fraudsters. Addressing these issues requires a substantial financial commitment which raises the cost of operations thereby reducing profitability and leading to poor financial performance.

Furthermore, the use of e-banking products for transactions as compared with traditional banking models is said to have the advantage of increased performance and operational efficiency (Ayo, 2010; Taiwo & Agu, 2017). Contrariwise, there have been arguments as to whether the rapid development in electronic banking innovations has impacted positively and significantly on banks’ performance in Nigeria (Ugwueze & Nwezeakwu, 2016; Kiragu, 2017; Anthony, Jonathan, Asidok & Onyinye, 2018). Mustapha (2018) raised some concerns about the introduction of cashless policy which has generated mixed feelings and mixed results from studies. The author posits that most DMBs in the economy possess increased profit without sustainable growth and that the adoption of electronic technologies has reduced the actual returns of bank stakeholders and raised their risk exposure. All these combined, affect DMBs financial performance negatively.

The issues raised have brought about the quest to respond to the following questions:

i. To what extent has the use of Mobile payment-banking enhanced the financial performance of DMBs in Nigeria?

ii. To what extent has the use of ATM transactions enhanced the financial performance of DMBs in Nigeria?

iii. How has the use of internet banking (WEB) transactions improved the Financial performance of DMBs in Nigeria?

iv. How has the use of POS transactions improved the Financial performance of DMBs in Nigeria?

Based on these pertinent questions, the study set out to examine the effects of e-banking on the financial performance of DMBs in Nigeria. Specifically, the study analyzed the extent to which the use of Mobile payment-banking has enhanced the financial performance of DMBs in Nigeria; examined the extent to which the use of ATM transactions has enhanced the financial performance of DMBs in Nigeria; evaluated the extent to which the use of Internet banking (WEB) transactions has improved the financial performance of DMBs in Nigeria; and examined the extent to which the use of POS has improved Financial performance of DMBs in Nigeria.

To achieve the objectives of the study, four hypotheses were formulated:
Financial performance simply defines the strength of the financial position of a profit-oriented entity. It principally reflects business sector outcomes and results that show the overall financial health of the sector over a specific period (Faraz, Farrukh, & Faizan, 2016). It also indicates how well an entity is utilizing its resources to maximize the shareholders’ wealth and profitability. Financial Performance in a broader sense refers to the degree to which financial objectives have been accomplished. It is the process of measuring the results of a firm’s policies and operations in monetary terms. The primary concern for this paper is how the financial performance of DMBs has been affected by selected e-banking products.

Electronic Banking

Studies by Idowu, Alu, and Adegunodu (2002); Agboola (2006); Ayo (2010) and Taiwo and Agwu (2017) respectively showed that e-banking brought about faster service delivery, competitive advantage and introduction of value-added products. This explains why more banks opted for the use of electronic banking. It gives everyone the opportunity for easy access to banking activities thus promoting financial inclusion. The introduction of the e-banking platform provided financial institutions especially DMBs the opportunity to gain market advantage by offering a variety of value-added services to customers. There are a variety of e-banking services ranging from simple to complex ones such as Internet banking (WEB); Automated Teller Machine (ATMs) services; Mobile payments from a personal computer or a smart device; the Remita, Point of sale (POS), NEFT and many others.

E-banking services

The focus of this work is on e-banking products in the form of Mobile payments, WEB; ATMs and POS. The choice is informed by the fact that payment activities on the platform or channels are sponsored by DMBs in Nigeria with support from FinTech companies such as Visa International, MasterCard Incorporation and Inter-switch companies (Mustapha, 2018).

a. Mobile-Payment (MP)

This is also referred to as mobile money or mobile wallet. It refers to payment services operated under financial regulations and performed through a portable electronic device. Sorenson (2018) explains that they work through digital encryption and tokenization. It is a method using time-limited token numbers generated to process the specific transaction using a customer’s already encrypted card stored in the mobile wallet. This service is adopted worldwide but in different dimensions. Mobile payments are represented by the value of mobile banking transactions.

b. Automated teller machines (ATMs)

ATMs are computer-enhanced telecommunication machines that permit bank customers’ accessibility to cash and perform financial transactions. El. Aziz., ElBadrawy, and Hussien, (2014) described them as banking terminals located in public places connected to the data system and related equipment. Chinofunga, Charumbira, Govere, and Dzvuke, (2012) held that the automated service provides a good opportunity for organizations to provide new models for service design strategies and new service development. The obvious results are usually reduced manual and paperwork within the banking system.

c. Internet banking (WEB)

Internet banking or web banking also known as online banking is an electronic payment system that enables customers of a bank or other financial institutions to conduct a range of financial transactions through the financial institution's website. There are three types of internet banking services namely, informational, communicative and transactional. The transactional type is of interest in this study because it offers all of the benefits of a traditional brick-and-mortar institution. Suriya, Mahalakshmi, and Karthik, (2012) describe it as a service delivery platform through which customers can carry out banking transactions using their smartphones and computers. This was corroborated by Abubakar (2014) who also added that internet banking has the potential to improve productivity, profitability, growth, and performance due to the low-cost advantage associated with it.

d. Point of Sale (POS) terminal

POS terminal is a hardware system for processing card payments at a retail location. It is a device that interfaces with payment cards to make electronic fund transfers for payments of products by permitting real-time online access to funds and information on ones’ bank account. The works of Yomere and Osazebaru (2015) acknowledged the benefits
but emphasized on the special charges that it attracts when
compared to cash transactions.

EMPIRICAL LITERATURE

Some studies by Ogotu and Fatoki (2019); Akyuz,
Opusunju, and Isaac, (2019); Kiragu (2017), Ugwueze and
Nwezeaku (2016) which were carried out in both Nigeria and
other countries have shown that e-banking enhances the
studied the effect of e-banking on the financial performance
of Commercial Banks in Kenya with a focus on Mobile
Banking, Agency banking, online banking, and ATM
transactions. The study employed multiple regression with
panel data analysis for a period of five years from 2013 to
2017 and found that M-banking and ATM transactions
(which are part of the product this study is examining) have
a positive and significant effect on financial performance.

Akyuz, Opusunju, and Isaac (2019) also studied the
effects of Internet banking on the performance of 41
branches of First Bank of Nigeria based in Abuja through
survey research. They used OLS to analyze the collected
primary data. The finding revealed a significant effect of
internet banking on the operational performance of First
Bank of Nigeria.

Inegbedion, Inegbedion, Osifo, Eze, Ayeni, and
Akintimenin (2019), used a survey research design on
selected banks in a selected state of Nigeria to examine the
exposure and usage of e-banking channels and their
implications on bank customers’ awareness and attitude.
They found that ATMs, internet banking and mobile banking
had a significant influence on the attitude and awareness of
customers towards e-banking in Nigeria.

Anthony, Jonathan, Asidok, and Onyinye (2018)
estimated the impact of e-banking innovations (ATMs,
Mobile banking and POS transactions) on the performance
of six selected banks in Nigeria using the SURE model. The
analysis was on both old and new generation banks. The
study concluded that ATM, POS and mobile banking
transactions contributed to the performance of the bank
studied. Ayo (2010) and Agboola (2006) in their studies in
the same area also attributed success in service delivery to
the adoption of e-banking.

Agwueze and Nwezeaku (2016) studied E-banking
and commercial bank performance in Nigeria. The study
used the value of Point-of-Sale transactions as a proxy for
electronic banking and customers’ deposits for commercial
banking performance. The study established that e-banking
showed a positive relationship with the demand deposit.
Unlike, the study by Agwueze and Nwezeaku (2016), this
study used MP, WEB, ATM, and POS as a proxy for e-
banking.

Hassan, Mamman and Farouk (2013) also examined
electronic banking products (ATMs, E-mobile, e-direct SMS
alerts) against the performance of Nigerian listed deposit
money banks. The study sampled six selected banks and
found that ATMs and e-mobile had a strong and significant
impact on return on equity which was used as a proxy for
performance. While E-direct and SMS alerts did not impact
on the banks’ performance. This study used all the DMBs
listed on the stock exchange in Nigeria.

There have been some studies on the effect/impact of
e-banking on the performance of DMBs both in Nigeria and
other countries but the existing studies used case studies and
selected banks except for Agwueze and Nwezeaku, (2016)
who used all commercial banks in Kenya. This study
examined the overall value-added of e-banking products on
the aggregate performance of DMBs in Nigeria.

METHODOLOGY

Once again, this study examined the effect of e-
banking on the overall financial performance of Deposit
Money Banks in operation in Nigeria for a period of 8 years
from 2011 to 2018. The choice of the period was influenced
by the time the cashless policy was introduced and the
availability of data. The ex-post facto research design was
employed since the study covered all the DMBs and a period
of time. Secondary data for both the dependent (Financial
performance) and independent variables (mobile payments,
ATM transactions, Internet banking, and POS) used for the
study were collected from Federal Reserve Economic Data
bank and National Bureau of statistics Nigeria.

Financial performance (the dependent variable) was
indexed by return on assets (ROA) of the DMBs. ROA is a
key index measure frequently used in the literature of bank
financial performance. It does not only show the profit
earned per naira of assets, it reflects the management’s
ability and efficiency to utilize banks’ financial and real
investment resources to generate profits (Hassan & Bashir,
2003). ROA depends on the banks’ policy decisions as well
as on uncontrollable factors relating to the economy and
government regulations.

The explanatory variables or independent variables
were selected electronic-banking services offered by DMBs.
The items selected were the frequently used services, and on
which data were available. These e-banking services are
Mobile payments (MP), Automated teller machines (ATMs),
Internet banking; and Point of sale (POS) terminals. These
variables were measured using the value of transactions on
each for the specified period.

Details of raw data on both the Dependent (Financial
performance), measured by return on assets (ROA) and the
explanatory variables {Mobile payments (MP), Automated
teller machines (ATMs), Internet banking; and Point of sale
(POS) terminals} measured by the values of the various
transactions are shown in tables 1 and 2 respectively.

Model Specification

\[ ROA = f (\beta_0 + \beta_1 MP + \beta_2 ATM + \beta_3 WEB + \beta_4 POS ) \] …1

Where:

\[ ROA = \text{return on assets as proxy for financial performance} \]
\[ \beta_0 , \beta_1 , \beta_2 , \beta_3 , \beta_4 = \text{coefficients} \]
\[ \text{value of remote payments for transactions} \]
\[ \text{Mobile payments} = \]
\[ \text{ATM} = \text{value of ATMs transactions} \]
\[ \text{WEB} = \text{value of internet banking transactions} \]
\[ \text{POS} = \text{value of point of sale transactions} \]

Table 1: Return on Assets values for DMBs in Nigeria

<table>
<thead>
<tr>
<th>S/N</th>
<th>Year</th>
<th>Return on Asset (ROA) for Nigeria</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2011</td>
<td>0.217465000000000000</td>
</tr>
<tr>
<td>2</td>
<td>2012</td>
<td>2.99869000000000000</td>
</tr>
<tr>
<td>3</td>
<td>2013</td>
<td>2.04182000000000000</td>
</tr>
<tr>
<td>4</td>
<td>2014</td>
<td>2.08639000000000000</td>
</tr>
<tr>
<td>5</td>
<td>2015</td>
<td>1.47160000000000000</td>
</tr>
<tr>
<td>6</td>
<td>2016</td>
<td>1.53139000000000000</td>
</tr>
<tr>
<td>7</td>
<td>2017</td>
<td>2.43538000000000000</td>
</tr>
<tr>
<td>8</td>
<td>2018</td>
<td>2.09421166666667000</td>
</tr>
</tbody>
</table>

Source: Federal Reserve Economic Data Economic Research Division.

Table 2: Value of E-Banking Products used for the study

<table>
<thead>
<tr>
<th>S/N</th>
<th>Year</th>
<th>Mobile payments N' Billion</th>
<th>Internet (WEB) Value N' Billion</th>
<th>ATM Value N' Billion</th>
<th>POS Value N' Billion</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2011</td>
<td>76.52</td>
<td>11.28</td>
<td>427.81</td>
<td>64.11</td>
</tr>
<tr>
<td>2</td>
<td>2012</td>
<td>68.67</td>
<td>10.41</td>
<td>424.64</td>
<td>66.44</td>
</tr>
<tr>
<td>3</td>
<td>2013</td>
<td>230.31</td>
<td>43.63</td>
<td>1536.85</td>
<td>260.58</td>
</tr>
<tr>
<td>4</td>
<td>2014</td>
<td>62.76</td>
<td>12.36</td>
<td>469.75</td>
<td>71.81</td>
</tr>
<tr>
<td>5</td>
<td>2015</td>
<td>81.70</td>
<td>16.52</td>
<td>494.16</td>
<td>81.15</td>
</tr>
<tr>
<td>6</td>
<td>2016</td>
<td>85.85</td>
<td>14.75</td>
<td>572.94</td>
<td>107.62</td>
</tr>
<tr>
<td>7</td>
<td>2017</td>
<td>260.59</td>
<td>46.58</td>
<td>1502.05</td>
<td>285.97</td>
</tr>
<tr>
<td>8</td>
<td>2018</td>
<td>610.23</td>
<td>55.63</td>
<td>3615.06</td>
<td>158.77</td>
</tr>
</tbody>
</table>

Source: National Bureau of Statistics, Nigeria

RESULTS

Test of Multicollinearity

Multicollinearity was tested using the variance
correlation coefficient (VIF) which detects Multicollinearity with
the aid of tolerance and its reciprocal. The rule is that if the
tolerance value is greater than 0.2 or 0.1 and, simultaneously,
the value of VIF 10 and above, then the Multicollinearity is
problematic. The results from the analysis for Multicollinearity is
depicted in table 3. The value of tolerance from the test conducted as revealed in table 3 ranges from 0.221-0.601. Since

The Ordinary least square method was used to
estimate the coefficients which measured the effects of e-
banking variables on the performance proxy by ROA of
DMBs. The model specification in the structural format is
reflected in equation 1.
Mobile-payments, and POS) and Return on Assets of Deposit Money Banks. R-square showed that there was about a 15 percent relationship between electronic-banking and the financial performance of DMBs in Nigeria. Adjusted R-square (0.18) showed that electronic banking can only explain Return on Assets of DMBs up to 18%, which is not statistically significant.

Examining the individual effects of electronic banking devices on the financial performance of DMBs, ATM had a positive but insignificant effect on the ROA of DMBs. ATM contributes only about 12% to the ROA of DMBs in aggregate, which is not statistically significant at 5% level of significance given the coefficients (Coefficient = 0.12, t = 0.31, sig., = 0.779).

Internet Banking (WEB) had positive but insignificant effect on the ROA of DMBs. WEB contributed about 8% to the ROA of DMBs (Coefficient = 0.08, t = 0.17, sig., = 0.817).

Mobile Payments had a positive but insignificant effect on the ROA of DMBs. Mobile Payments contributed about 7% to the ROA of DMBs (Coefficient = 0.07, t = 0.17, sig., = 0.877). POS had a positive but insignificant effect on the ROA of Deposit Money Banks. It contributed about 10% to the ROA of Deposit Money Banks (Coefficient = 0.10, t = 0.32, sig., = 0.772).

Considering the effects of electronic banking on the financial performance of deposit money banks in Nigeria the analysis simply revealed that electronic banking cannot solely explain the Return on Assets of Deposit Money Banks. The result established a constant increase in the electronic banking variables but the increase did not result in a corresponding increase in ROA.

Table 3: The results from the analysis for Multicollinearity showed by Multicollinearity coefficients

<table>
<thead>
<tr>
<th>Model</th>
<th>Collinearity Statistics</th>
<th>Tolerance</th>
<th>VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mobile Payments</td>
<td>.524</td>
<td>4.223</td>
<td></td>
</tr>
<tr>
<td>Internet (WEB)</td>
<td>.601</td>
<td>2.566</td>
<td></td>
</tr>
<tr>
<td>POS</td>
<td>.221</td>
<td>5.449</td>
<td></td>
</tr>
<tr>
<td>ATM</td>
<td>.411</td>
<td>3.830</td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: ROA  
Source: SPSS Version 25.

Table 4: Results of the Least Square Analysis

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>1.379228</td>
<td>0.808858</td>
<td>1.705155</td>
<td>0.1867</td>
</tr>
<tr>
<td>ATM</td>
<td>0.122025</td>
<td>0.006606</td>
<td>0.306560</td>
<td>0.7792</td>
</tr>
<tr>
<td>INTERNET - WEB</td>
<td>0.076516</td>
<td>0.303105</td>
<td>0.252439</td>
<td>0.8170</td>
</tr>
<tr>
<td>MOBILE – PAYMENTS</td>
<td>0.066578</td>
<td>0.039149</td>
<td>0.168018</td>
<td>0.8773</td>
</tr>
<tr>
<td>POS</td>
<td>0.100397</td>
<td>0.032843</td>
<td>0.316573</td>
<td>0.7723</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.149262</td>
<td>Mean dependent var</td>
<td>1.859618</td>
<td></td>
</tr>
<tr>
<td>Adjusted R-squared</td>
<td>0.185055</td>
<td>S.D. dependent var</td>
<td>0.821462</td>
<td></td>
</tr>
<tr>
<td>S.E. of regression</td>
<td>1.157375</td>
<td>Akaike info criterion</td>
<td>3.399356</td>
<td></td>
</tr>
<tr>
<td>Sum squared resid</td>
<td>4.018548</td>
<td>Schwarz criterion</td>
<td>3.449007</td>
<td></td>
</tr>
<tr>
<td>Log likelihood</td>
<td>-8.597424</td>
<td>Hannan-Quinn criter.</td>
<td>3.064480</td>
<td></td>
</tr>
<tr>
<td>F-statistic</td>
<td>0.131588</td>
<td>Durbin-Watson stat</td>
<td>2.755920</td>
<td></td>
</tr>
<tr>
<td>Prob(F-statistic)</td>
<td>0.960367</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: E-View 10 Output
DISCUSSION OF FINDINGS

Test of Hypotheses

\[ \text{ROA} = f(1.379\delta + 0.07; \text{MP} + 0.12; \text{ATM} + 0.08; \text{WEB} + 0.10; \text{POS}) \]

**Hypothesis One**

The use of Mobile payment for banking transactions has not significantly enhanced the financial performance of DMBs in Nigeria.

An increase in the value of mobile banking transactions enhances the payment system thus increased bank performance, therefore the coefficient of mobile banking variable is expected to be positive. The result showed Since the p-value is greater than 0.05 level of significance (p = 0.877 > 0.05), we hereby failed to reject the null hypothesis and conclude that the use of Mobile payment for banking transactions has not significantly enhanced the financial performance of DMBs in Nigeria.

Mobile payment-banking transactions have an increasing but insignificant effect on the financial performance of DMBs. In other words, it had only enhanced the return on assets of DMBs in Nigeria by 7%. Varying effects were found in the literature reviewed. However, this study’s result is consistent with the work of Anthony, Jonathan, Asidok, and Onyinye (2018) that showed an improved effect for Mobile payment.

**Hypothesis Two**

The use of ATM for banking transactions has not significantly enhanced the financial performance of DMBs in Nigeria.

An increase in the number of ATMs leads to an increase in the volume and value of transactions which will lead to improved banking sector performance resulting from the enhanced payment system. The coefficient of ATMs is expected to be positive about the financial performance of deposit money banks. The result of the analysis showed Coefficient = 0.12, t = 0.31, sig., = 0.779. Since the p-value is greater than 0.05 level of significance (p = 0.779 > 0.05), we failed to reject the null hypothesis and conclude that the use of ATM for banking transaction positive but has not significantly enhanced the financial performance of DMBs in Nigeria. ATM transactions account for only about twelve percent (12%) of the financial performance of the return on assets of DMBs in Nigeria. This effect is positive but not statistically significant.

This finding partially agrees with the study of Ogutu and Fatoki (2019) who studied the effect of e-banking on the financial performance of Commercial Banks in Kenya and results revealed a positive and significant effect for ATMs transactions while our study showed a positive but insignificant effect for ATM transactions.

**Hypothesis Three**

The use of Internet banking (WEB) for banking transactions has no significant effect on the financial performance of DMBs in Nigeria. Coefficient = 0.08, t = 0.17, sig., = 0.817. Since the p-value is greater than 0.05 level of significance (p = 0.817 > 0.05), we hereby failed to reject the null hypothesis and conclude that the use of Internet banking (WEB) for banking transactions has no significant effect on the financial performance of DMBs in Nigeria.

The use of internet banking (WEB) transactions also improved the Financial performance of DMBs in Nigeria by about 8% holding all other factors constant but the improvement is insignificant at a 95% confidence interval. This result is consistent with the study of Agwueze and Nwezeakwu (2016) on E-banking and commercial bank performance in Nigeria.

**Hypothesis Four**

The use of POS has not brought about any significant effect on the financial performance of DMBs in Nigeria.

The variable POS is represented by the value of point of sale transactions. A positive relationship is expected on the coefficient of POS since the POS terminal reduces operation costs. The result showed Coefficient = 0.10, t = 0.32, sig., 0.772. Since the p-value is greater than 0.05 level of significance (p = 0.817 > 0.05), we hereby failed to reject the null hypothesis and conclude that the use of POS has not brought about any significant effect on the financial performance of DMBs in Nigeria. The use of POS transactions had improved the Financial performance of DMBs in Nigeria by about 10% though not significantly. This finding is consistent with the result of Agwueze and Nwezeakwu (2016) who studied E-banking and commercial bank performance in Nigeria using the value of Point-of-Sale transactions as a proxy for electronic banking and customers’ deposits for commercial banking performance.

**CONCLUSION**

The study examined the effects of e-banking on the financial performance of DMBs in Nigeria by looking at the aggregate monetary value of the selected e-banking transactions {Mobile payments (MP), Automated teller machines (ATMs), Internet banking(WEB); and Point of sale (POS)} and the overall performance (ROA) of all the twenty-one DMBs as at 2018. It found that the use of e-banking products had a positive but insignificant effect on the overall financial performance of DMBs in Nigeria during the period covered by the study.

It is important to note that this study considered the entire Deposit Money Banks as a whole, meaning that electronic banking does not have a significant effect on the
Overall financial performance of the Deposit Money Banks
thus, the findings from this study differed in terms of the
level of significance in comparison with studies that sampled
some banks and their results establish that e-banking services
may be statistically significant to the financial performance
of some selected banks.

This implies that e-banking transactions are not
solely responsible for the financial performance of DMBs.
The implication of this to practitioners is that more effort
would be required, especially on the part of the Deposit
Money Banks to pursue a higher drive for financial inclusion
and increased usage of common e-banking products. The study,
therefore, recommends aggressive enlightenment and awareness
creation through a generally accessible information medium.

Despite the failure of this paper to pass a 100%
plagiarism test, the researchers strongly believe that it is
original and is of value because the analysis is on a macro
level and a total departure from previous studies. However,
the obvious limitation of the study is the absence of
intervening variables in the analysis.

References


