

CASHLESS POLICY AND THE FINANCIAL PERFORMANCE OF BANKS IN NIGERIA

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Abstract

The world is transitioning rapidly with many economies already implementing cashless policies to make transaction seamless. It is a lot easier to move from one location to another without having to worry about moving cash around. The innovation has implication on how banks perform. The study aimed to examine the effect of cashless policy on financial performance of commercial banks in Nigeria. The objectives include determining the effect of ATM transactions, NEFT transactions, POS transactions, and e-banking transactions on financial performance of commercial banks in Nigeria. The study was panel in nature, requiring data from the annual reports of top five (5) commercial banks in Nigeria. Data were collected for the period between 2013 and 2020. The study utilized E-Views 10 statistical software for the analysis. The study employed regression to investigate how ATM transactions, NEFT transactions, POS transactions, and E-banking transactions have affected performance. The findings revealed that ATM transactions, NIP transaction, mobile banking transactions, and cheque transaction have significant impact of the performance of commercial banks in Nigeria. Therefore, the study recommended that banks should sponsor training of technical staffs abroad where they can learn and update themselves about modern and advanced technology used in banking system. It was further recommended that bank management should pay more attention on the activities that would improve the ATM services of their banks to increase the ROA of their banks as this would lead to high customer's satisfaction and patronage.

Keywords: ATM, POS, NEFT, e-banking, ROA.

Introduction

Today's financial system is the product of centuries of innovation. It started as a barter economy and has moved through various incarnations in response to limitations inherent in the evolving systems. The world today is termed a global village because of the electronic clearances and settlements made by banks all over the world. Therefore the importance of banks cannot be overemphasized because there are essential agents for the growth of an economy (Godswill, Ailemen, Osabohien, Chisom and Pascal, 2018).

Before the introduction of electronic payment into Nigerian banking system, customers had to walk into the banking hall to do transactions of all kind. They had to queue up and spend more hours to talk to a teller to make their transactions. Inconveniences caused by these long queues discourage most customers who sometimes renegade from the queues in annoyance. For many years, banker, IT experts, entrepreneurs and others have advocated for the replacement of physical cash and the introduction of more flexible, efficient and cost effective retail payment solutions (Adu, 2016).

Electronic banking forms the bedrock of cashless policy through E-Payments; the cashless economy will eventually be achieved. Some of the means of E-Payments include online/internet banking, point of sale terminals (POS), mobile banking, etc. All these channels are effective means which are adopted and thereby improves a cashless state (Ikpefan, Akpan, Godswill, Grace and Chisom, 2018). Cashless policy aims to curb some of the negative consequences associated with the high usage of physical cash in the economy, which includes high cost of cash, high risk of using cash, high subsidy, informal economy, inefficiency and corruption.

Cashless economy is not the complete absence of cash, it is an economic setting in which goods and services are bought and paid for through electronic media. Cashless economy is an economy where transaction can be done without necessarily carrying physical cash as a means of exchange of transaction but rather with the use of credit or debit card payment for goods and services. The cashless economy policy initiative of the Central Bank of Nigeria (CBN) is a move to improve the financial terrain but in the long run sustainability of the policy will be a function of endorsement and compliance by end-users (Muotolu and Nwadiolor, 2019).

The upsurge in Information Communication Technology (ICT) is what has made cashless banking both possible and meaningful globally. Cashless banking introduction in Nigeria has brought about changes in the banking patterns of the government, organizations, and individuals. It has thrown up so many challenges to all the parties too. The cashless policy has birthed numerous electronic payment channels the commonly used e-payment machinery in the country are Automatic Teller Machine (ATM), Point of Sale Terminals (POS), Mobile Money Transfer (MMT), and Online Money Payment (WEB).

Statement of the Research Problem

The introduction of the cashless policy by the Apex bank, Central Bank of Nigeria brought e-products like the use of Automated Teller Machines (ATM), Point of Sales (POS), mobile banking, internet banking, NIBBS Electronic Funds Transfer (NEFT), NIBBS Instant Payment (NIP) transfers, and others to the fore. This became possible as a result of the rise in ICT globally. The deposit money banks invested a lot in ICT in order to face the challenges posed by cashless policy so as to remain relevant and competitive. Most banks in Nigeria in their operations under a cash based economy are known for the huge profit they declare each year, notwithstanding the fact that such system is characterized by high cost of operations (Okafor, 2020).

The cashless policy in Nigeria is quite enhancing to the business climate. It however has certain draw back level of fraud and fraudulent practices is observed to associate with the cashless policy. Since the cashless policy is all about electronic money transactions, series of

cybercrime and fraud have been a common thing with it in Nigeria over the yea addition with high level of unstable networks (Ogbeide and Fapohunda, 2017).

Akhalumeh and Ohiokha (2011) observed some challenges with the introduction of cashless policy and their findings show that 34.0% of the respondents cited problem of internet fraud, 15.5% cited problem of limited POS/ATM, and 19.6% cited problem of illiteracy and 30.9% stayed neutral.

Objectives of the Study

The main objective of the study is to examine the effect of cashless policy on financial performance of commercial banks. While specific objectives are to:

- i. determine the effect of ATM transactions on profits of Deposit Money Banks in Nigeria.
- ii. determine the effect of NEFT transactions on profits of Banks in Nigeria.
- iii. ascertain the degree to which E-banking transactions influence the profits of Deposit Money Banks in Nigeria.
- iv. examine the effect of POS transactions on deposits of customers.

Research Questions

The research questions for the study are stated below:

- i. To what extent do Automated Teller Machines (ATM) transactions have impact on profits of Deposit Money Banks in Nigeria?
- ii. What effect does volume of National Electronic Fund Transfer (NEFT) transactions have on profit of Banks in Nigeria?
- iii. To what degree does E-banking banking transactions influence the profits Deposit Money Banks in Nigeria?
- iv. To what extent have Point of Sales (POS) transactions have effect on deposits of customers?

Statement of the Hypotheses

The following research hypotheses were tested in this study:

Hypothesis One

H₀: Volume of Automated Teller Machines (ATM) transactions has no significant effect on profits of Deposit Money Banks in Nigeria.

H₁: Volume of Automated Teller Machines (ATM) transactions has significant effect on profits of Deposit Money Banks in Nigeria.

Hypothesis Two

H₀: Volume of National Electronic Fund Transfer (NEFT) transactions has no significant effect on profits of Banks in Nigeria.

H₁: Volume of National Electronic Fund Transfer (NEFT) transactions has no significant effect on profits of Banks in Nigeria.

Hypothesis Three

H₀: E-banking banking transactions has no significant influence on profits of deposit money banks in Nigeria.

H₁: E-banking banking transactions has significant influence on profits of deposit money banks in Nigeria.

Hypothesis Four

H₀: Volume of Point of Sales (POS) transactions has no significant effect on deposits of customers.

H₁: Volume of Point of Sales (POS) transactions has no significant effect on deposits of customers

Literature Review

Concept of Cashless Policy

According to Ogbeinde and Fapohunda (2017), cashless policy is defined as “one with no transaction frictions which can be reduced through the use of money balances, and that accordingly provide a reason for holding such balances even when they earn rate of return”. Onoh (2017) expressed the difficulty in rightly defining the electronic money but agree that it blends technological and economic characteristics. It was further emphasized that cashless policy does not mean a total elimination of cash, as money will continue to be a means of exchange for goods and services in the foreseeable future. It is a financial environment that minimizes the use of physical cash by providing alternative channels for making payments. Contrary to what is suggestive of the term, cashless economy does not refer to an outright absence of cash transactions in the economic setting, but one which the amount of cash-based transactions are reduced to the barest minimum(Adu,2016).

Forms of Electronic Banking

Internet Banking

This is a form of e-banking whereby the internet is used for dissemination of information and also allowing customers to perform banking transactions. Tools such as computers, laptops that have access to the internet are used for this process (Okafor, 2020). The bank’s website is used to advertise services. When conducting E-Banking, the instruction of customers is taken and then attended to via the same platform, The Internet. Through this product, customers are now able to enjoy 24/7 services from banks.

Mobile Banking

This involves the use of mobile phone for settlement of financial transactions. Mobile banking (m-banking) can therefore be defined as the provision and processing of banking and financial services through the help of mobile telecommunication devices. This is more or less fund transfer process between customers with funds available immediately for the beneficiary. Card infrastructure is used for movement of payment instructions equally as secure SMS messaging to beneficiaries intended for confirmation of receipts. It has become a very popular as well as exciting innovation to the customers given that it requires low infrastructure to function and the speedy mobile phone penetration in the country. Services covered by this product include account enquiry; funds transfer; recharge phones; changing passwords, bill payments (Adu, 2016).

Automated Teller Machine (ATM)

An ATM is a machine that can be used to carry out bank transactions. Some of the services offered by an ATM include withdrawal of funds, account balance inquiry, transfer of funds,

and top-up on airtime for mobile phones etc. An ATM is operated with an electronic card. Each card has a Personal Information Number (PIN) which gives access to the account of the owner of the card. The first ATM that was offered to the public was in 1969 at the chemical bank in Rockville Center, New York. ATM'S were introduced into Nigeria in the year 1989. It was installed by national cash registers (NCR) for the society General Bank of Nigeria (Ikpefan, Akpan, Godswill, Grace and Chisom, 2018). Because ATM machines are mainly used for cash withdrawals, they do not go far enough in turning Nigeria into a cashless economy. ATM only makes more cash available in the economy because of the ease at which depositors can withdraw cash. To turn Nigeria into a cashless economy Nigerians need more than just ATM cards, Nigerians need credit/debit cards (Okafor, 2020).

Point of Sale (POS)

This is a form of e-payment that handles balance inquiry, payment for goods and service, electronic fund transfer at a specific point of sale. The device allows customers to make payment for goods and services purchased without the physical use of cash. At POS terminals, when a customer slots in his card into the POS, he inputs his details and in the case of payment for goods or services, his account is debited at that point resulting in a transfer of funds to the service provider's account. A Point-of-Sale machine allows credit/debit cardholders make payments at sales/purchase outlets. It allowed customers to perform the following services: retail payments, cashless payments, cash back balance enquiry, airtime vending, printing mini-statement, etc. (Ikpefan, Akpan, Godswill, Grace and Chisom, 2018).

NIBSS Fund Transfers

The Nigerian Interbank Settlement Scheme is an online platform where banks exchange value thereby enabling the performance of interbank transfer such as NEFT and NIBSS instant transferring of funds between banks for single or multiple beneficiaries for individual amounts not exceeding N10million. NEFT transfers (National Electronic Funds Transfer), once affected works with the next available clearing session of CBN and is received in the beneficiary's account the same day or next working day, but NIBSS instant payments are immediate (Onoh, 2017)

Empirical Review

Omotunde, Sunday and John-Dewole, (2013) studied the impact of cashless policy in Nigeria. Survey research was adopted with questionnaire as data collection instrument. Responses from the respondents show that cashless policy will increase employment; reduce cash related robbery thereby reducing risk of carrying cash; cashless policy will also reduce cash related corruption and attract more foreign investors to the country.

Materials and Methods

Population and Sample Size

The population of the study consists of all commercial banks in the country, there are 19 commercial banks in the country. The top five commercial banks in the country are selected as samples in the study (Zenith bank, GTbank, Access bank, UBA and First Bank) while time series as data on each variable are collected over time between period of 2013 and 2020.

Model Specification

In the model, average profits of the banks selected (Zenith Bank Plc., GT Bank, UBA Plc, Access Bank Plc. and First bank Plc.) were used as indicator for financial performance of commercial banks, hence dependent. On the other hand, forms or tools of cashless policy (ATM, NEFT, NIP, EBN, POS, CHQ, WEB) are used as indicators for cashless policy in the study and are the independent variables.

Functional form:

$$\text{PERF} = f(\text{ATM}, \text{NEFT}, \text{NIP}, \text{EBN}, \text{POS}, \text{CHQ}, \text{WEB}) \dots\dots\dots (i)$$

Structural form:

$$\text{PERF}_t = \beta_0 + \beta_1\text{ATM}_t + \beta_2\text{NEFT}_t + \beta_3\text{NIP}_t + \beta_4\text{MBN}_t + \beta_5\text{POS}_t + \beta_6\text{CHQ}_t + \beta_7\text{WEB}_t + \mu_t \dots\dots\dots (ii)$$

Where;

PERF_t = Performance of banks at time t

ATM_t = Volume of ATM transactions at time t

NEFT_t = Volume of NEFT transactions at time t

NIP_t = Volume of NIP transactions at time t

MBN_t = Volume of mobile banking transactions at time t

POS_t = Volume of POS transactions at time t

CHQ_t = Volume of cheque transactions at time t

WEB_t = Volume of web pay transactions at time t

β_0 = Constant or intercept of the model

$\beta_1; \beta_2; \beta_3; \beta_4; \beta_5; \beta_6$ and β_7 = Coefficients of the variables in the model

μ_t = Stochastic error term of the model

Results and Discussion

Table 4.1: Summary Statistics of Variables

Variable	Mean	Standard Deviation	Minimum	Maximum
PROFIT	94895.52	29381.49	66709	145474.2
ATM	5495.75	4282.801	1561.74	16513.61
NEFT	13541.99	1539.732	10845.18	14946.46
NIP	50234.14	50716.18	3891.026	158223.6
MBN	1712.818	2467.623	18.98	7231.965
POS	1782.305	2774.143	31.02	9065.753
CHQ	7811.481	5200.768	4481.669	22302.65
WEB	240.4268	252.8716	31.56736	675.9167

Source: Author's Computation (2022)Using E-views 9.0 Software

Average profit of banks over the years is ₦94.9 billion minimum profit after tax over the years is ₦66.7 billion while maximum is ₦145 billion. Average value of transactions performed using ATM over the years of study is ₦5.5 trillion, standard deviation of 4282 shows that the values over the years spread far from their mean, minimum value of transactions at the ATM over the years is ₦1.5 trillion while maximum value of transactions processed through ATMs in a year is ₦16.5 trillion. Over the years, average of ₦13.5 trillion NEFT transactions were processed, minimum value of transactions in a year is ₦10.8 trillion while maximum is ₦14.9 trillion. Average value of NIP transactions over the years is ₦50.2 trillion, minimum value is ₦3.9 trillion while maximum in a year is ₦15.8 trillion. Over the years, mean value of

transactions processed through mobile banking stood at ₦1.7 trillion, minimum of ₦18 billion and maximum of ₦7.2 trillion. Average value of transactions processed through POS over the years is ₦1.7 trillion, minimum value is ₦31 billion while maximum is ₦9 trillion. Value of transactions processed through cheque over the years is ₦7.8 trillion, maximum value of cheque transactions in a year is ₦22.3 trillion while minimum is ₦4.5 trillion. Over the years, average value of transactions processed through web is ₦240 billion, minimum value of transactions processed the platform in a year is ₦31.5 billion while maximum is ₦675 billion.

Regression Analysis

Ordinary Least Square Regression method was adopted in estimating the regression model
 $PERF_t = \beta_0 + \beta_1ATM_t + \beta_2NEFT_t + \beta_3NIP_t + \beta_4MBN_t + \beta_5POS_t + \beta_6CHQ_t + \beta_7WEB_t + \mu_t \dots \dots \dots (ii)$

Table 4.2: Regression Result

Variables	Coefficients	T-Statistics	Prob. Value
ATM	33.04	5.4958	0.0400
NEFT	5.51	1.5513	0.2610
NIP	3.42	4.6264	0.0417
MBN	41.25	4.5966	0.0484
POS	-42.33	2.8942	0.1015
CHQ	1.14	5.1940	0.0405
WEB	-114.9	2.0677	0.1746
C	61.58	1.283	0.3281
Dependent Variable	PROFIT	Sample: 2011 - 2020 (11 Obs)	
R-squared	0.9948	Adjusted R-squared	0.976986
F-statistic	55.5818	Prob(F-statistic)	0.017785
*indicates significance at 5% significance level			

Source: Author's Computation (2022) Using E-views 9.0 Software

Test of Significance

ATM transactions, NIP transactions, mobile banking transactions and cheque transactions have positive and significant impact on profit of banks in Nigeria as the probability values of these variables (0.040, 0.0417, 0.0484 and 0.0405 respectively) are less than 5% significance level. On the other hand, NEFT transactions, POS transactions and web transactions do not have significant impact on profits of banks as their probability values are greater than 5% significance level.

Evaluation of Results

In the regression result, POS transactions and web transactions are the only variables which signs of coefficients do not conform to priori expectations.

The R-squared value of 0.9948 and adjusted R-squared of 0.9769 as shown in the regression result in Table 4.2 shows that 99% variations in profits of banks in Nigeria is explained by the independent variables in the model. This shows that the model is a good fit.

The F-statistics of the model is 55.58, the Prob (F-statistics) of 0.0177 shows that the variables in the model are jointly significant as the value is less than 5% significance level.

Table 4.3: Regression Result Showing Impact of POS on Deposits of Banks

Variables	Coefficients	T-Statistics	Prob. Value
POS	9.077	4.70621	0.0015
C	78715.98	12.8388	0.0000
Dependent Variable	DEPOSIT		Sample: 2011 - 2020 (11 Obs)
R-squared	0.7346		Adjusted R-squared 0.70147
F-statistic	22.148		Prob(F-statistic) 0.0015
*indicates significance at 5% significance level			

Source: Author's Computation (2022) Using E-views 9.0 Software

The regression result summarized in Table 4.3 above shows the impact of POS transactions of deposits of customers. The coefficient of the independent variable (POS) is 9.077, this implies a positive impact of POS on deposits of customers. The probability value of the coefficient (0.0015) shows that the variable is significant as this is less than 5% significance level.

Test of Hypotheses

Hypothesis One

H₀: Volume of ATM transactions has no significant effect on profits of Deposit Money Banks in Nigeria.

H₁: Volume of ATM transactions has significant effect on profits of Deposit Money Banks in Nigeria.

In the regression result, the probability value of ATM transactions (0.0400) is less than 5% significance level, therefore the null hypothesis is rejected and concluded that volume of ATM transactions has significant effect on profits of Deposit Money Banks in Nigeria.

Hypothesis Two

H₀: Volume of NEFT transactions has no significant effect on profits of Banks in Nigeria.

H₁: Volume of NEFT transactions has no significant effect on profits of Banks in Nigeria.

The probability value of the variable (NEFT) in the regression analysis (0.2610) is greater than 5% significance level, as a result of this, the null hypothesis is accepted and concluded that Volume of NEFT transactions has no significant effect on profits of Banks in Nigeria.

Hypothesis Three

H₀: E-banking banking transactions has no significant influence on profits of deposit money banks in Nigeria.

H₁: E-banking banking transactions has significant influence on profits of deposit money banks in Nigeria.

MBN which proxy electronic banking in the regression model has probability value (0.0484) less than 5% significance level. As a result of this, the null hypothesis is rejected and concluded that E-banking banking transactions has significant influence on profits of deposit money banks in Nigeria.

Hypothesis Four

H₀: Volume of POS transactions has no significant effect on deposits of customers.

H₁: Volume of POS transactions has significant effect on deposits of customers

Results of the regression analysis presented in Table 4.3 above shows that the probability value of POS (0.0015) is less than 5% significance level and as a result of this, the null hypothesis is rejected and concluded that volume of POS transactions has significant effect on deposits of customers.

Findings, Conclusion and Recommendations

Summary of Findings

Findings of the study revealed that volume of ATM, NEFT, NIP, mobile money and Cheque transactions have positive effect on performance of banks. Volume of POS and web transactions have negative effect on profits of banks. Among the variables, only transactions processed through ATM, NIP platforms, mobile money platform and cheque transactions have significant impact on profits of commercial banks. It was also found out from regression analysis conducted that volume of POS transactions have positive and significant effect on deposits of customers with commercial banks.

Conclusion

From findings of the study, it is therefore concluded that volume of ATM transactions and E-banking transactions have significant influence on profits of deposit money banks in Nigeria likewise volume of POS transactions has significant effect on deposits of customers.

Recommendations

The following recommendations were suggested based on the findings from the study: Banks should training technical staff within and outside the country where they can learn and update themselves about modern and advanced technology used in banking which would enable them implement such innovation or build software that could be used to improve and enhance the Nigerian banking system.

Bank management should pay more attention on the activities that would improve the ATM services, increase the ROA value of their banks as this would lead to high customer's satisfaction and patronage.

Banks should work together with the Central Bank and Financial Settlement companies like Interswitch, Union Pay, MasterCard to ensure prompt reconciliation, increase the turnaround time in resolving dispute that relates to dispense error and failed transactions as these are part of reasons most bank's customers are afraid to use cashless platforms.

More awareness should be created by banks and Central Bank to enlighten bank customers and the general public about the cost and risk associated with keeping cash at home, and carrying huge cash around.

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