Macrothink Institute™

Asian Journal of Finance & Accounting
ISSN 1946-052X
2014, Vol. 6, No. 2

Impact of Cashless Banking on Banks' Profitability

(Evidence from Nigeria)

Alagh Jacinta Itah

Accounting Department, Bingham University, New Karu, Nasarawa State, Nigeria

E-mail: jacinta.itah@gmail.com

Emeka E. Ene (Ph. D, FCA) (Corresponding author)

Accounting Department, Bingham University, New Karu, Nasarawa State, Nigeria

E-mail: eneelemeka@yahoo.com

Received: Sep. 4, 2014 Accepted: Oct. 17, 2014 Published: December 1, 2014

doi:10.5296/ajfa.v6i2.6268 URL: http://dx.doi.org/10.5296/ajfa.v6i2.6268

Abstract

The quest for global relevance and sustainable development had led to wide exploitation of the benefits of cashless banking in payments system of Nigerian banks. The study examines the impact of cashless banking on the profitability of banks in Nigeria. The study used proxies for cashless banking such as Automated teller machine (ATM), Point of sale (POS), and web based transaction (WBT) to examine its impact on the aggregate return on equity (ROE) of deposit money banks in Nigeria, through an ordinary least square (OLS) multiple regression method of analysis. The result showed that ATM and POS are positively related to ROE, while WBT related negatively to ROE. This is as a result of high rates of bank charges on online deposits and as a result, most customers do not patronize the product. Non-usage of the WBT for online deposits had created a negative impact on profitability of Nigerian banks. Recommendations were made among which are that banks should provide a sufficient standby generators that could be used in case of electricity failure, provide adequate ICT infrastructure and management framework, and enlighten the public on the importance of using ICT banking products.

Keywords: Cashless Banking, Point of sale, Automated teller machine, Web based Transaction, Profitability, Payment System

1. Introduction

The importance of managing the economy efficiently cannot be over emphasized. The monetary authorities, by controlling the supply of money, maintain price stability and influence economic activities especially when combined with appropriate fiscal measures.

The banking system remains the major channel for monetary control by the Central Bank of Nigeria (CBN) and the monetary authorities in general. Unfortunately, it is estimated that about 65% of the cash in circulation in the Nigerian economy is outside of the banking system, thus severely limiting the impact of the CBN's efforts at price and economic stabilization (CBN 2011). Consequently, the amount of money in the form of deposits available to banks for the creation of more money is reduced. The profitability of the banks, which to a large extent depends on the amount of money at their disposal for lending, is therefore affected by the large size of this informal sector.

Apart from the above mentioned, the breakthrough in Information Communication Technology (ICT) has revolutionized human society in terms of communication, efficiency in processes, general exchange of information, and in the exchange of goods and services. Within seconds, businesses are carried out online across different geographical location making it impossible for physical cash to be used as a medium of such exchanges. Indeed, the world has become a global village and the economic competiveness depends largely on the effectiveness of economic agents to adopt technologies for their activities and service delivery.

Particularly, the banking institutions as major players in the process of financial intermediation, and important economic agents in the payment system, must be strongly equipped with the relevant information technology that would encourage trade, commerce and industry while promoting globalization by easing global access to fund without any barrier. Customers in recent time demand more than the traditional role of safe-keeping their money. They require their banks to meet financial obligations for E-transaction almost on real time basis. But in reality, not all Nigerians have access to E-banking services. According to (Microfinance Information Exchange, 2012) in (Thisday, 2013), Nigeria and the Democratic Republic of Congo have the largest gaps between populations living in poverty and those with access to financial services–80 million in Nigeria and 48 million in the Congo.

The Central Bank of Nigeria (CBN) in collaboration with the Bankers Committee, introduced the cashless policy designed to provide mobile payment services that aim to breakdown traditional barriers hindering the financial inclusion of millions of Nigerians, secure and make convenient financial services to urban, semi-urban and rural areas across the country.

However, implementing the cashless policy requires that the banks make huge investments on ICT and other technologies that would enhance the proper implementation of the cashless system.

For banks that barely survived recapitalization, and several others forced into a merger and acquisition, this policy may affect their performances positively or negatively depending on

the strength of the individual banks. Therefore, this study seeks to analyze the impact of this policy on Nigerian banks in relation to their profitability.

To ease understanding, the paper is structured as follows: Section one is the introduction; Section two focuses on theoretical underpinning, and empirical literature, while Section three addresses methodology and data analysis of the study. Section four summarizes and concludes the study.

2. Theoretical Framework and Literature Review

2.1 Theoretical Framework

In examining the implications of cash-less system, it is necessary to review how conventional money has evolved over time. Money performs a number of roles in economic activity; it is a unit of account, store of value, medium of exchange and means of deferred payment. Also, money has evolved over the centuries to minimize the friction of transaction costs that are involved in mediating exchange. In fact, the process can be observed from the development of the very first monetary products. For instance, conducting economic transactions in barter economies involved high transaction costs as considerable time and effort was required in finding suitable partner. Subsequently, another facet in the evolution of money was the need for durability and divisibility. Hence, the advent of study money (notes and coins) made the process less costly by allowing people specialize in production based on their strengths and by enabling the monetary authorities to mint coins in convenient denominations, thereby creating divisibility (Baddeley, 2004).

The theory of Money has its roots in the 16th century during which classical economists such as Jean Boldin at that time sought to know the cause of the increases in French prices. He concluded that, among other factors, increases in gold and silver which served as currencies were responsible for the rise in the demand for French-made goods and, hence, French prices, thus linking movements in prices to movements in money stock. By the 1690s, the quantity theory of money was further advanced by John Locke to examine the effects of money on trade, the role of interest rate and demand for money in the economy (Omanukwue, 2010). In particular, the role of money as a medium of exchange to facilitate trade transactions was born. Economists at the time inferred that the quantum of money needed for such transactions would depend on the velocity of money in circulation and the relationship between the demand and supply of money such that where there was excess demand over supply interest rates rose and vice versa (Cantillon, 1755; Locke 1692 as cited in Ajuzie, et al, 2008). The theory of money has been described by different school of thought in their different opinions. For example, the modern classical schools of thought who are also called the monetarist are concerned with the explanation for the changes in price level. To them, a stable and equilibrating relation exists between the adjustments in the quantity of money and the price level. In other words, they refute any form of monetary influence on real output both in the short-and long-run.

For the less stringent monetarist, they agree that money influences output in the short-run, but only prices in the long-run. Nevertheless, irrespective of the path of adjustment, the monetarist all seem to concur that in order to reduce or curtail inflationary growth, money growth should be less than or equal to the growth in output.

The quantity theory of money is hinged on the Irvin Fisher equation of exchange that states that the quantum of money multiplied by the velocity of money is equal to the price level multiplied by the amount of goods sold. It is often replicated as MV= PQ, M is defined as the quantity of money, V is the velocity of money (the number of times in a year that a currency goes around to generate a currency worth of income), P represents the price level and Q is the quantity of real goods sold (real output). By definition, this equation is true. It becomes a theory based on the assumptions surrounding it.

The introduction of the modern banking system has to a great extent brought about the gradual elimination of cash based economy in most countries. In Nigeria for instance, most banks have adopted this cashless policy to form and gain a strong competitive ground over other banks. There have been several arguments for and against the use of ICT in the banking system. The arguments for the use of ICT in the banking system are as follows; (Humphrey et al, 2001) supports the fact that the introduction and use of electronic payment instruments holds the promise of broad benefit to both business and consumers in the form of reduced costs, greater convenience and more secure, reliable means of payment and settlement for a potentially vast range of goods and services offered worldwide over the internet or other electronic networks. One such benefit is that electronic payments enable bank customers to handle their daily financial transactions without having to visit their local bank branch. Electronic payments products could save merchants time and expense in handling cash (Appiah and Agyemang, 2006).

According to (Cobb, 2005), “electronic payments can thus lower transaction costs stimulate higher consumption and GDP, increase government efficiency, boost financial intermediation and improve financial transparency”. She further added that “Governments play a critically important role in creating an environment in which these benefits can be achieved in a way that is consistent with their own economic development plans”.

However, experts in the financial sector have stressed that unless something radically innovative, functional and savvy is introduced, which accounts for attitudes as well as the huge un-banked population, the country's dream of building a functionally cashless society in the shortest possible time could be elusive (Ackorlie, 2009).

2.2 Review of Related Empirical Literature

Summary of related empirical literature which was reviewed to provide evidence of studies on related areas is presented in Table 1.

Table 1. Summary of Empirical Literature

S/NO	TOPIC	AUTHOR	YEAR	OBJECTIVE	METHODOLOGY	FINDING/CONCLUSION
1.	An Appraisal of Cashless Economy Policy in Development of Nigerian Economy.	Okoye, P.V.C. and R. Ezejiofor	2013	To examine the significant benefits and essential elements of a cashless Economy, and to check the extent to which it can enhance the growth of financial stability in the country.	The data collected was subjected to face validity test, and was tested with ANOVA and chi – square (x2) technique was used to test the hypotheses	The Nigerian economy is in exciting but challenging times, the proper foundations have to be established as the CBN courageously transform the modes of operation of the Nigeria economy".
2.	The impact of cashless banking in Nigeria, its challenges, benefits and policy implications	Odior, E. S. and Fadiya . B. B	2013	To analyze the positive and negative policy implications of cash-less banking for the Nigerian economy, with a view to exposing the possible benefits and challenges posed on economy.	The data employed in the study was from secondary sources using descriptive analysis with the aid of graphs, tables, charts and trend analysis of cash system in Nigeria	The development of e-money could lead to the decline in currency demand; also the consistent usage of e-channels in financial transactions would lead to network congestion. And finally, the cashless banking system would imply the existence of increase in competition between financial and non-financial institutions such as telecommunication companies.
3.	The impact of electronic banking in Nigeria banking system	Olorunse, G	2010	To examine the impact of electronic Banking in Nigeria banking system on how different channels could enhance the delivery of consumers and retails products	The primary data were collected through the use of questionnaire while the secondary data were data collected from CBN electronic banking guideline, annual report of Unity Bank Plc. The study used both descriptive and inferential statistics in analyzing the data.	The electronic banking system in Nigeria has made banking transaction to be easier by bringing services closer to its customers.
4.	The effect of cashless banking on	Siyanbola, T	201	To discuss the various aspects of cashless banking channels, to	A descriptive research design was adopted with data gathered through questionnaire administered to	Dynamism in financial system is manifested by the nature and quality of

	Nigerian economy.		3	know where the real e-banking should be, the problems facing cashless banking, its advantages and disadvantages to Nigerians	respondents. Non-parametric tool of chi square was employed to analyze the data.	payment products paraded in the system".

Literatures reviewed provide indications that several studies have been conducted in related areas of our study. However the focus of previous studies has been on the history and importance of cashless system to Nigerian economy and its banking system using different methods of analysis. This study on assessment of impact of cashless policies of CBN in 2012 on banks' profitability provides a robust basis for argument in favor or otherwise of the cashless economic theory.

This research seeks to find out whether or not there has been increase in banks' profitability in the cashless system resultant from the changes made by CBN. Noteworthy, was the stopping of charges on customers using their ATM. The fee (which was N100) served as a source of income to these banks. But this was stopped by CBN. Can we say for instance that this has an adverse effect on banks profitability?

Also, Banks use to charge their customers a fine of N10.00 for services rendered to them which was a source of income to the banks. The CBN however reduced this amount to N3.00. Can it be said that this policy has impacted positively or negatively on the profitability of these banks? These are grey areas which were not captured by previous related studies in Nigeria. This research therefore seeks to find out the profitability of banks through the return on investment on these cashless products and their daily usage

2.3 An Over View of Payment System in Nigeria

The payment system plays a very crucial role in any economy. The banking system is the channel through which financial resources flow from one segment of the economy to another. It therefore represents the major foundation of the modern market economy (CBN, 2011).

In today's world, many people across the globe make payments electronically rather than in person or cash. It can then be said that the recent financial system is the product of centuries of innovation. This financial system started as a barter economy and has moved through various incarnations in response to limitations inherent in the evolving systems. Ajayi, S.I and Ojo, O.O. (2006). Changes will definitely continue to occur in response to social and technological advancements. This has led to a shift from the old cash handling system to cashless society, which is in vogue worldwide. To this end, the world has witnessed an upsurge of electronic payment instruments meant to facilitate trade and simplify payments. Before the introduction of electronic payment into the Nigerian banking system, customers had to walk into banking halls to carry out transactions of all kinds. They had to queue up and spend hours waiting to talk to a teller and/or make their transactions. The inconveniences

caused by these long queues discouraged most customers who sometimes renegade from the queues in annoyance. There was need for a change.

For many years, bankers, IT experts, entrepreneurs and others had advocated for the replacement of physical cash and the introduction of a more flexible, efficient and cost effective retail payment solution (Baddeley, M. (2004). Nigerian banks are making huge investments in technology to upgrade their infrastructure in order to provide new electronic information based services. Such services as online retail banking, Point of Sale terminals (POS), make it possible for individuals and corporate bodies to take advantage of new technologies at reasonable costs.

Before the emergence of a modern banking system, banking operations were manually done. The manual system which involved posting of transactions from one ledger to another without the aid of computer systems accounted for inefficiency in settlement of transactions. Computations done manually led to miscalculation due to human errors, and resulted in extension of closing hours when account were not balanced on time. The introduction of cashless system is therefore meant to ameliorate the sluggish nature of banking transactions. Vassiliou (2004) defines a cashless payment as a form of financial exchange that takes place between the buyer and seller facilitated by means of electronic communication. According to (Cobb, 2004), the value of electronic payment goes way beyond the immediate convenience and safety of cards to a greater sphere of contributing to overall economic development. Undoubtedly the last three decades have witnessed major advancement in payment technologies.

Today, Nigeria electronic payment (e-payment)landscape is on a new threshold with banks, switching and transaction companies, vendors of Automated Teller Machine (ATMs), Point of sale (POS) and third party companies all jostling to expand the scope of market .For instance according to CBN reports; The volume and value of electronic card (e-card) transactions has increased significantly from 195,525,568 and N1,072.9 billion in 2010 to 355,252,401 and N1,671.4 billion, in 2011 reflecting an increase of 81.5 and 55.8 per cent, respectively. The increase was attributed to enhanced public confidence in electronic card payments In addition, data on various e-payment channels from another CBN reports indicated that ATMs remained the most patronized, accounting for 97.8 per cent, followed by web payments, 1.0 per cent, Point-of-Sale (POS) terminals, and mobile payments, 0.6 per cent each. Similarly, in value terms, ATMs accounted for 93.4 per cent, web 3.5 per cent, POS 1.9 per cent and mobile payments, 1.2 per cent. The number of ATMs stood at 9,640, while the volume and value of transactions amounted to 347,569,999 and N1, 561.75 billion, at end-December 2011, respectively. These figures reflected increases of 86.7 and 63.7 per cent respectively over the volume and value of 186,153,142 and N954.04 billion, at end-December 2010. The volume and value of mobile payments increased by 215.6 and 185.8 per cent from 1,156,553 and N6.7 billion to 3,649,374 and N19.0 billion, respectively, at end-December 2011.The table below shows the market share in the e-payment market in Nigeria between 2008 to 2011

A report by financial research and consulting firm; Celent in India indicates that the value of retail e-payments in India is expected to reach between US$150 billion to US$180 billion by the end of 2010 (Thesis-Delali Kumaga). "More than two thirds of all non-cash transactions payments in the United States are made electronically, with the biggest increase in electronic payments occurring between 2003 and 2006 according to a US central bank (Thesis-Delali Kumaga). The central bank's non-cash payments study found that about 19 billion dollar of more electronic payments was made in 2006 than 2003". Basically, the cashless banking system cannot be discussed explicitly without looking at the theory of money. Money is the 'brain box' behind every successful transaction and the economy as a whole.

3. Methodology

The research employs Ordinary Least Square (OLS) method of log-linear multiple regression analysis to examine the effectiveness of cashless banking policies on return on assets of banks. Before carrying out the regression analysis, stationary test using ADF test was carried out on each of the variables to avoid spurious regression results. The estimation is conducted using the econometric computer software package, E-Views version 7.0

Data used for this study were obtained basically from secondary sources. The data was collected from Nigerian banks' annual financial reports and various issues of Fact books from Central Bank of Nigerian. The relevant variables comprise net profits, Return on Equity (ROE), number of ATM devices and volume of transaction on e-banking services of Banks. Quarterly series spanning 2006:q1 to 2013:q4 are adopted. This is to ensure enough data points to cater for loss of degree of freedom. This period is believed to be long enough to capture the long-run relationship among the return on asset on the cashless banking and in order to establish their impact on the profitability of the bank.

3.1 Model Specification

The econometric model to consider in this study takes ATM, POS, and WBT as the explanatory variable and ROE as dependent variable respectively. These variables are used at constant prices. This is used to obtain a reliable parameter estimates in the time series regression.

Following from the theoretical propositions explored in the theoretical framework, for the successful examination of the impact of ATM, POS, and WBT on the Nigerian bank performance, the following models needed to test the set hypotheses can be explicitly specified:

$$ROE = f(ATM, POS, WBT) \text{----------} 1$$

Specifying equation (1) in an exponential regression model, we have;

$$ROE = \alpha ATM^{\beta_1} POS^{\beta_2} WBT^{\beta_3} e^{\mu_t} \text{----------} 2$$

In this form, the coefficients $\beta_1, \beta_2, \beta_3$ can be directly estimated by applying log-linear regression techniques via logarithmic transformation; and those coefficients will be the elasticity. Taking natural logs of both sides of the equation, we have:

$$\log ROE = \log \alpha + \beta_1 \log ATM + \beta_2 \log POS + \beta_3 \log WBT + \mu_t \text{ ---------3}$$

We then differentiate partially with respect to the log of each variable to obtain elasticity of ROE and *a priori* sign expectation of equation (4);

$$\frac{\partial \log ROE}{\partial \log ATM_t} = \left(\frac{\partial ROE}{\partial ATM_t}\right)\left(\frac{ATM_t}{ROE_t}\right) = \beta_1 > 0 \text{ ----------4}$$

$$\frac{\partial \log ROE}{\partial \log POS_t} = \left(\frac{\partial ROE}{\partial POS_t}\right)\left(\frac{POS_t}{ROE_t}\right) = \beta_2 > 0 \text{ ----------5}$$

$$\frac{\partial \log ROE}{\partial \log WBT_t} = \left(\frac{\partial ROE}{\partial WBT_t}\right)\left(\frac{WBT_t}{ROE_t}\right) = \beta_3 > 0 \text{ ----------6}$$

4. Discussion and Analysis

4.1 Data Presentation

Table 2 presents data collected from CBN Annual Activity Report and Statistical Bulletin (2012). These data include the daily usage of ATMs, POSs, WBTs, and also, the Return on Equity of Money Deposit Banks ranging on a quarterly series spanning from 2006 to 2012.

Table 2. ATM usages, POS usages, WBT usages and ROE, 2006 (Quarter) 2012 (Quarter)

YEAR	QUARTERS	ATM USAGES (in volume)	POS USAGES (in volume)	WBT USAGES (in volume)	Return Of Equity (in Millions)
2006	1st Quarter	1,633,957.00	5,138.00	49,219.00	47,198.40
	2nd Quarter	1,974,065.00	14,633.00	51,563.00	109,037.00
	3rd Quarter	2,156,055.00	24,689.00	52,673.00	122,587.20
	4th Quarter	1,974,065.00	39,733.00	52,573.00	172,538.30
2007	1st Quarter	1,924,744.00	39,847.00	53,411.00	188,511.10
	2nd Quarter	2,840,723.00	51,311.00	168,126.00	302,380.00
	3rd Quarter	2,799,713.00	151,324.00	177,876.00	474,404.10
	4th Quarter	6,230,723.00	226,564.00	179,826.00	924,105.00
2008	1st Quarter	7,762,869.00	239,997.00	274,193.00	305,028.50
	2nd Quarter	11,192,073.00	295,379.00	311,770.00	398,210.00
	3rd Quarter	18,449,864.35	295,904.90	271,036.00	437,658.60
	4th Quarter	22,728,804.12	363,319.22	284,467.00	481,295.50
2009	1st Quarter	26,103,483.00	251,785.00	413,677.00	463,238.70
	2nd Quarter	29,947,212.00	238,387.00	474,180.00	1,358,276.10
	3rd Quarter	25,725,223.00	210,017.00	500,032.00	930,748.00
	4th Quarter	27,385,728.00	218,067.00	567,360.00	1,506,845.90
2010	1st Quarter	7,762,869.00	253,484.00	331,787.00	1,265,643.40
	2nd Quarter	11,192,073.00	237,435.00	353,120.00	1,296,356.90
	3rd Quarter	18,449,864.34	256,637.00	414,390.00	2,247,039.90
	4th Quarter	22,728,804.12	324,870.00	501,789.00	2,766,880.30
2011	1st Quarter	79,612,004.00	383,541.00	670,187.00	3,047,856.30
	2nd Quarter	85,143,051.00	425,574.00	532,849.00	3,753,277.80
	3rd Quarter	87,537,528.00	590,646.00	289,326.00	4,515,117.60
	4th Quarter	95,277,416.00	700,912.00	439,993.00	7,172,932.10
2012	1st Quarter	86,689,804.00	118,620.00	374,409.00	10,981,693.60
	2nd Quarter	91,802,445.00	485,173.00	723,755.00	15,919,559.80
	3rd Quarter	94,995,190.00	767,858.00	456,286.00	17,522,858.20
	4th Quarter	102,000,317.00	1,183,394.00	722,014.00	17,331,559.00

Sources: CBN Annual Activity Report, (2012); CBN Statistical Bulletin (2012)

The summary statistics for the variables: ROE, ATM, POS, and WBT are as shown in Table 3. The mean for ROE, ATM, POS, and WBT are different. This indicates that the variables exhibit significant variation in terms of magnitude, suggesting that estimation in levels will not introduce some bias in the results. The Jarque-Bera statistics for two of the variables (ROE and POS) are significant; hence we reject the null hypothesis and conclude that the two series are normally distributed (or have a normal distribution). However, those of ATM and WBT were found not to be significant (or abnormally distributed).

Table 3. Descriptive Statistics

	ROE	ATM	POS	WBT
Mean	3430101.	34786452	299794.3	346138.8
Median	1098196.	20589334	245891.0	342453.5
Maximum	17522858	1.02E+08	1183394.	723755.0
Minimum	47198.40	1633957.0	5138.000	49219.00
Std. Dev.	5341535.	37000918	261088.0	202559.6
Skewness	1.849943	0.809455	1.608112	0.122442
Kurtosis	4.996807	1.914819	6.006682	2.207571
Jarque-Bera	20.62245	4.431565	22.61494	0.802563
Probability	0.000033	0.109068	0.000012	0.669461
Sum	96042837	9.74E+08	8394239.	9691887.
Sum Sq. Dev.	7.70E+14	3.70E+16	1.84E+12	1.11E+12
Observations	28	28	28	28

Source: Author's computation, 2014 (Eview-7.0)

4.2 Model Estimation and Interpretation

Re-stating our regression model (see equation 3), we have:

$$\log ROE = \log \alpha + \beta_1 \log ATM + \beta_2 \log POS + \beta_3 \log WBT + \mu_t \text{ ---------7}$$

The regression result is presented in table 4.

Table 4. Regression Analysis Result

Dependent Variable: ROE				
Method: Least Squares				
Date: 06/06/14 Time: 11:12				
Sample: 2006Q1 2012Q4				
Included observations: 28				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-1130697.0	1170672.0	-0.965853	0.3438
ATM	0.091220	0.027361	3.333989	0.0028
POS	5.973324	3.713643	1.608481	0.1208
WBT	-1.164840	4.204962	-0.277015	0.7841
R-squared	0.719006	Mean dependent var		3430101.0
Adjusted R-squared	0.683882	S.D. dependent var		5341535.0
S.E. of regression	3003244.0	Akaike info criterion		32.79985
Sum squared resid	2.16E+14	Schwarz criterion		32.99016
Log likelihood	-455.1979	Hannan-Quinn criter.		32.85803
F-statistic	20.47038	Durbin-Watson stat		0.523129
Prob(F-statistic)	0.000001			

4.3 Discussion of Results

The regression model result in table 4.4 indicates that the R^2 (R-squared) approximately 71.90percent, and this shows a very good fit, meaning that there is a strong relationship between the variables used. Thus, it shows that 71.90 percent (71.90%) changes or variation in ROE is explained by ATM, POS and IBT, leaving 28.1 percent (29.1%) changes or variations in ROE to the (white noise) error term. The goodness of fit result thus shows that there is a strong positive impact of cashless banks profitability.

The F-statistics which measures the overall significance of the model shows that we cannot reject the alternative hypothesis. The F-statistics shows that the model is statistically significant, and as such, we state that cashless banking has a significant influence on banks profitability in Nigeria

From the above result it was observed that ATM and POS are positively related to ROE, while WBT related negatively with ROE. The ATM was also found to be statistically significant. This is because, with the introduction of cashless banking policy, a lot of transactions has been made with the use of ATM, and has contributed positively with the performance of banks in the country. An easy cash withdrawal promotes trading activities within the banking sector and had improved the ROE of the commercial banks in the country.

Even though POS was found to be positively related with ROE, it was however found to be statistically insignificant. This is because proper awareness has not been created on the use of POS. Most customers still rely on counter withdrawals and cash payments rather than use POS for all of such purposes.

Finally, the WBT was found to be negatively related to ROE of banks and also not statistically insignificant. This is as a result of high rates of bank charges on online deposits and as a result, customers do not patronize the product. Non-usage of the WBT for online deposits had created a negative impact on ROE of the banks.

5. Summary and Conclusion

This study reveals that the introduction of electronic banking in Nigeria has a strong influence on the development of the payment system in particular and the banking system in general. However, the introduction of the system, involves commitment of huge amount of financial resources on computer technology and telecommunication facilities, computer technology is a primary requirement for the proper functioning of electronic banking. The major problems hindering the effective operation of cashless banking in Nigeria are infrastructural deficiencies such as erratic power supply, lack of government support and high charge on payment terminals (POS, ATMS) e.t.c. These problems are only peculiar to Nigeria as it is known that in developed countries issues like power failure or failure links are not in existence. However, the introduction of electronic Banking System has also contributed significantly to bank income by way of fee or changes gotten from these services.

The C.B.N, other financial authorities and banks have a role to play in enhancing the system through effective banking and momentary policies, efficiency and stability are also ensured and promoted. Furthermore, to sustain the electronic payment system, certain strategic measures must be taken to reduce negative effects of the problems identified as obstacles to the smooth functioning of the system.

From the data collected and analyzed, it is safe to conclude that ICT is indeed a worthy venture to the banking sector, the government and even to customers. It is therefore only right that these beneficiaries join forces to ensure that E-banking stays for good in our country Nigeria. Some pertinent recommendations that would enhance ICT in the Nigerian banking sector are: **(i)** the banks should have proper and sufficient standby generators in case of power failure. This is to help cover the deficiency of power failure. **(ii)** In smooth functioning of the payment system the government have the major role to play, in aspect of financing the payment system which require a lot of capital to maintain and also in the aspect of creating awareness of these electronic products and their benefits to the public. **(iii)** Skilled manpower and computer wizard should be employed by every Bank, in other to stop, prevent fraudulent personal and hackers from having access and manipulating the Banks' data and stealing money from the Bank accounts of individuals.

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