



CASHLESS POLICY AND VELOCITY OF MONEY IN NIGERIA: A QUANTITATIVE APPROACH

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Abstract

Like most other developing economies, the banking sector in Nigeria had been operating an outdated conventional and quite problematic system for a very long time. In response, modern methods such as the cashless policy and E-banking have been adopted in the country with some salient improvements. This research thus examines Nigeria's cashless policy and money velocity covering the period from 2012 to 2020. The study's specific goal is to look at the velocity of money in circulation and its positive and negative impacts on banking services in the country. The analysis relied on data from the CBN's quarterly Statistical Bulletin. To examine the cashless policy and the velocity of money in Nigeria, we used the Ordinary Least Square model. The model specified captured the money velocity in the Nigerian economy. Variables used were, Velocity of Money (MVELC) as dependent variable and Cheque value (CQVAL), ATM value (ATMVAL), POS value (POSVAL), internet (WEB) value (WEBVAL), Mobile payment value (MPVAL) and NIBSS instant payment value (NIPVAL) were used as independent variables. According to the findings, factors under consideration have a short-run link with the velocity of money in Nigeria. The findings showed that Nigeria's cashless policy has increased the velocity of money which in turn improves the level of investment in the economy without carrying bulk money at hand. Based on the result, we therefore recommend that government should put more efforts to gear up awareness programmes, make sure that providers of internet services provide frequent and steady internet services and ensure that offenders of cybercrime are prosecuted when caught. We also recommend that since the problems lie more with regulation and security as well as the manner offenders are handled in the society, the banks and their staff ought to be held more responsible for losing people's money in their watch to internet fraudsters as it is their duty to provide secured system for E-banking. We therefore conclude that awareness programmes should be actively encouraged to attain cashless policy to achieve economic growth and developments.

Keywords: Cashless Policy, Deposit Money Bank (DMBs), Technological Acceptance Model (TAM), Innovation Diffusion Theory (IDT).





Introduction

The intermediation role played by the financial sector is the most vital role performed by financial institutions of any economy. Mobilization of savings from the surplus unit and channelling such surpluses to the sector of the economy that is more productive and assisting the apex bank to implement policies is a major responsibility of money deposit banks and the rest financial institutions of any economy. The deposit money banks' modus operandi is to ensure effectiveness and control of the payment system. Odior and Banuso (2013) suggest that, like communications, electric power and transportation infrastructure, the payment system is a critical component of the overall economic growth of a country. Before the advent of the e-payment system globally in the 21st century, the Nigerian banking sectors' payments were either done on physical cash deposit or withdraw through cheque booklet or cash booklet, over the counter (OTC) transactions, Money Gram, etc.

Before the implementation of the cashless policy using monetary payment instruments such as POS, ATM machines etc., Christin the Bible portrayed a character of the future banking instruments by commanding his disciples to get money out of the mouth of a fish to offset their tax obligations, (Matthew 17:27). The advent of internet and advancement of information technology in Nigeria brought both local and international businesses to a state of the global village and as such the banking industry, in particular, is never left behind.

Financial institutions, acting as an intermediary for the Central Bank of Nigeria (CBN) in assisting with policy implementation, accepted the CBN's cashless policy in 2012. According to Ejoro (2012), the (CBN's) cashless economic policy initiative is a step toward broadening the financial landscape, but the program's long-term success is dependent on end-user acceptance and compliance. Bank customers can access their accounts and information about the bank's services





via cashless services such as online banking, ATM banking, telephone banking, or mobile banking via computers, mobile phones, or other intelligent devices.

Nigeria's new cashless policy aims at encouraging electronic-based transactions, reducing the quantity of physical currency in circulation, developing and modernizing Nigeria's payment system in accordance with the country's Vision 2020 aspirations of being among the world's top 20 economies by 2020. It follows therefore that the costs of banking services (including credit) should be reduced, monetary policy improved to better control inflation and stimulate economic growth, and physical cash reduced to lessen the negative consequences of its widespread use (CBN, 2011).

A snack can be purchased from a vending machine simply by dialling a phone number from one's phone account in some countries Ajayi (2014). Payments are made in raw cash in Nigeria, as they are in the majority of underdeveloped nations, according to Ajayi and Ojo (2006). The economy is heavily dependent on cash. Customers and businesses who desire a bank that will fulfil their specific demands (personalized banking) and support their business goals have become more aware of this policy as a result of banks embracing it. Through cashless banking policy, customers can easily check their balance online, transfer funds among accounts, find out their cheque status (if a cheque is cleared) and even transaction records can be downloaded into their own personal computers. Customers desire adequate attention and preferential treatment from their choice Bank. The study's specific goal therefore, is to look at the velocity of money in circulation and its positive and negative impacts on banking services in the country.

1.1 Statement of the Problem

The banking sector in Nigeria had been operating an outdated conventional system for a very long time and it was quite problematic. This orthodox banking method involved a lot of documentation





and required physical presence of customers before transactions could be made. It thus resulted in problem such as long queues, overcrowding, time wastage, and other inconveniences.

Of course, there have been significant improvements in the banking industry's service delivery as a result of the implementation of a cashless policy and an E-banking system. Queues in the banks have been greatly reduced, transactions are confirmed immediately, and the use of cash to settle payments has been reduced significantly.

However, despite the huge benefits recorded (reduction of customers' queue in the banking hall, easy transaction of funds at their comfort zone, ATM and POS withdrawal and deposits etc) by the banking industry with the gradual adoption of cashless policy, there are still some factors that are militating against the absolute achievement of the policy. Such challenges are illiteracy, lack of the needed infrastructure, lack of efficient internet facilities and its safety (security) by the network providers, electricity supply, etc.

In conclusion, the research work will solve the research question as follows:

Is there any link between cashless policies and money velocity in Nigeria?

2.0 Theoretical Framework

The process of finding comfortability and easy processes or methods of doing businesses has brought about significant changes in the monetary sector of all economies over the years. It has been a great concern for both monetary authorities and customers to make sure whatever material money is made of should be able to perform the role money plays in an economy and the features attributed to “good” money.

One would not forget to accentuate the proponents of theories of money. Keynes liquidity preference theory stressed that there are basically three reasons why people intend to hold money i.e. transaction, precautionary and speculation. King, (1994).

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In 1995, Merton and Bodie published their Modern Theory of Financial Intermediation. It lists six main roles for financial intermediaries, which are based on both conventional theory and changes in the financial world. These roles include: developing clearing and payment settlement systems to make it easier to trade goods and services; providing a mechanism for pooling resources; risk management; and providing price information to help people make decisions in a decentralised way.

For this study, the Theory of Technology Acceptance Model (TAM) by Fred Davis in 1985 and the Innovation Diffusion Theory (IDT) by Gabriel and Rogers (1962) in Ajayi (2014) ,are used .According to Ajayi (2014), in order to better understand how people use and adopt information technology, the Theory of Technology Acceptance model was made. It is now one of the most common theories used in Information systems research to model technology acceptance and adoption. TAM is a theory of information systems that forecasts how people would embrace and use technology that will help them develop their companies. The concept implies that when new technology is given, a variety of variables influencing how and when to adopt and utilize it impact consumers' decisions. There are two critical things to consider: Perceived Usefulness (PU) and Perceived Ease of Use (PEOU). TAM claims that the user's behavioural objectives, attitude, perceived system usefulness, and perceived system ease, all have an influence on one's use of a technology directly or indirectly.

The goal of Innovation Diffusion Theory (IDT) explains how, why, and how quickly new ideas and technologies move across cultures. Diffusion, according to this theory, is the process through which an invention is generally accepted over time among members of a social system through certain channels. Rogers described the diffusion of innovation as a process that is influenced by potential adopters' need to reduce their level of uncertainty during the introduction of technological breakthroughs. The six components of the Innovation Diffusion Theory are innovation

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characteristics, individual user characteristics, adopter distribution across time, diffusion networks, innovativeness and adopter categories, and the individual adoption process (IDT). The innovation's features are arguably the most popular of the six components of IDT. Moving away from the traditional economy to a modern drive economy, the modus operandi of financial houses is to make sure the three motives of holding money are maintained in the economy through TAM and DOI which could help implement the cashless policy of the CBN.

2.1 Literature Review

Financial analysts and other critics around the world, according to Jumoke, Olugbenga, and Mudasiru (2015), have claimed that the cost of generating and maintaining cash money in most nations has approached and often exceeded 0.5 percent of the whole Gross Domestic Product (GDP). They have also claimed that money has no intrinsic worth because it's merely a piece of paper issued by the government's authority authorizing the Central Bank; what matters is the trust placed in money, which provides it the capacity to compel acceptability in transaction settlement. "Change", they say is constant; a great evolution has been recorded in the monetary sector since the era of a trade by barter. With the advancement of ICT, one may be forced to believe or accept the fact that the recent cashless policy may be the end to the reform in the monetary sector, but monetary experts are working assiduously to obliterate the monetary authority's control over the demand for and supply of money and such is the recent Cryptocurrencies gradually creeping into the monetary sector across the globe. Claudia and De Grauwe (2001) suggested that in a cashless society, central banks lose their dominant position in the provision of liquidity, as well as their consequent small size, making it harder to regulate short-term interest rates.

In the opinion of Marco and Bandiera (2004), increasing the use of cashless banking instruments promotes the efficacy of monetary policy and the current level of e-money usage does not pose a





threat to the stability of the financial system. It concludes however, that if the government fails to pursue a sound fiscal strategy, central banks risk losing control over monetary policy.

Although, there are risks associated with the policy for the banking sector to operate e-banking most especially in developing countries like Nigeria., such risks are basically from internet hackers and fraudsters (Cybercrime. The Nigerian Deposit Insurance Company (NDIC) report of 2017 reveals that in the 2016 fiscal year, Nigerian Deposit Money Banks (DMBs) lost N2.19 billion to fraudsters via electronic channels), epileptic power supply, ATM vandalism, thieves, security issues, and so on. Besides, servicing cost of cashless banking instruments is a major factor that may deter the effectiveness of the policy.

Gresvik and Owre (2002) examined the expenses associated with the processing of various payment mechanisms by Norwegian banks. The study discovers that cash withdrawals made with ATM payment cards are significantly more expensive because they require cash replenishment, maintenance, and security charges. Also, they found that using checks was three times more expensive than using ATMs.

Cash and credit card costs in Iceland and Belgium were studied by De Grauwe et al. (2000). These countries were picked for their striking contrasts, with Iceland having one of the lowest cash usage rates in the world and Belgium at the other end of the spectrum. For the cash payment system in Iceland, the study estimates the Central Bank's cash production and distribution costs and subtracts revenue from interest foregone on cash in circulation. Whereas for the card payment system, they examined card companies, commercial and savings banks, cardholders, and merchants. From a social perspective, a card-based system has been shown to be much more efficient than a cash-based system for two reasons.





First, as cash is replaced by cards, diseconomies of scale in the cash supply increase, while card economies of scale improve. Second, the displacement relegates cash to smaller transactions, which must cover the cash system's fixed expenses. Using a cashless policy minimises the number of notes CBN and commercial banks have to process, which in turn reduces the flow of currency from one site to another, affecting customer demands (Odior and Banuso, 2013). Despite the cost implications and other challenges cashless policy may face, the policy cannot be jettisoned as there are several forms of cashless financial transactions that are already in operation.

According to the National Bureau of Statistics (2012) data, ATMs accounted for 98.09 percent of all electronic payment transactions, followed by web (0.72 percent) and mobile (0.72 percent). The Point of Sale (POS) terminal was the least used, accounting for 0.48 percent of all e-payment transactions.

Amu and Nwezeaku (2016) examined the relationship between electronic banking and the performance of Nigerian commercial banks using the OLS method and discovered that the growth series of savings deposits, time deposits, demand deposits, and the monthly value of POS transactions in Nigeria for the sample period positively impacted on the performance of the Nigerian banks. While the average growth rate of POS transaction value is the highest, that of time deposits is the lowest. Furthermore, the standard deviation of POS transactions is the highest, whereas the standard deviation of savings deposits is the lowest. The value of POS transactions is negatively skewed, with flat-tails, whereas the distribution of deposits in commercial banks is normally distributed.

Customer convenience was noted by Tijani (2013), who found that payment systems are easily accessible and measurable in terms of their dependability, transaction costs, and risks. According to Tijani and Ilugbemi (2015), the payment system's dependability may be increased if all parts of electronic payments' efficiency can be updated to avoid system failure and financial risks such as

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liquidity risk, credit risk, and systematic risk. Their study using primary data reveals that e-payment system is convenient, reliable and has contributed immensely to national development. Automated electronic payments, according to Ajayi (2014), help deepen bank deposits, increasing cash available for commercial loans, which are the lifeblood of all economic activity. Electronic payments that are efficient, secure, and easy have a wide variety of macroeconomic advantages.

Introducing electronic payments has the same effect as shifting gears on a bicycle. An economy swings into overdrive when an effective electronic payments system is implemented. When better-managed, consumer and commercial credit are factored in, then economic velocity skyrockets.

The CBN's cashless economy programme intends to provide e-payment services to Nigerians in urban, semi-urban, and rural areas, removing traditional barriers to financial inclusion and introducing low-cost, secure, and convenient financial services to them. Some elites, the poor, the ignorant, and traders, according to Eromosele and Obinna (2012), would regard the policy as a barrier.

Long bank queues were identified as a major problem by 68.2 percent of respondents in a study conducted by Echekeba and Ezu (2012) in Nigeria, while 28.9 percent complained of bad attitude from cashiers and 2.89 percent complained of a long distance between bank locations and their homes or work places. Ejoh, Adebisi, and Okpa (2014) investigated the cashless economy to see if there was a link between information and communication technology (ICT) and the acceptance of the cashless policy. The researchers used a structured questionnaire to collect data from 120 randomly selected respondents in order to meet the study's objectives. The data was analyzed using a simple percentage process and the chi-square technique. They discovered a substantial correlation between information and communications technology (ICT) and the implementation of cashless policies in the Nigerian financial sector. They advised that the federal government of Nigeria partner with all states' ICT centres and other private institutions to give comprehensive

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ICT education to computer illiterates, and that banks invest more in e-banking technology to support Nigeria's cashless economy.

Egwali (2008) used consumer acceptance theory to evaluate customers' views of security indicators (SI) at online banking sites in Benin, Nigeria. He discovered that SI was inefficient at identifying and safeguarding users from releasing sensitive information with the intent of defrauding Nigerian e-banking systems. Morufu and Taibat (2012) found that bankers in Nigeria view electronic banking as a tool for minimising discomfort, lowering transaction costs, reducing customers' queueing patterns, and saving clients banking time. Similarly, Olajide (2012) used theories to analyze cashless banking in Nigeria and its economic implications, suggesting that cashless banking will benefit the economy in the long-run.

3.0 Research Methodology

3.1 Sources of Data and Measurement of variables

The study adopted the Ordinary Least Square (OLS) method to analyze the data collected. A monthly data of seven variables were used namely; velocity of money (MVELC), cheque value (CQVAL), ATM value (ATMVAL), POS value (POSVAL), internet (WEB) value (WEBVAL), Mobile payment value (MPVAL) and NIBSS instant payment value (NIPVAL) from 2012 to 2020. The chosen period is predicted to the fact that the use of electronic/cashless operation started in the year 2012. The data were sourced from the CBN annual Statistical Bulletin of 2016 and Quarterly Financial Report of the CBN year 2019. The data were converted to monthly data in order to observe a robust time frame to enable the statistical software to accurately analyze the data. The statistical package E-views 9 was used to analyze the collected data set.



3.2 Model Specification

The objective of this study is to examine cashless policy and the velocity of money in Nigeria. The functional model specified is shown below in equation 1 & 3 and the regression equation is also specified in equation 2 & 4.

$$MVELC = f(CQVAL, ATMVAL, POSVAL, WEBVAL, MPVAL, NIPVAL) \quad (1)$$

$$MVEL = \hat{u} + \hat{u}_1 CQVAL + \hat{u}_2 ATMVAL + \hat{u}_3 POSVAL + \hat{u}_4 WEBVAL + \hat{u}_5 MPVAL + \hat{u}_6 NIPVAL + \hat{\omega}_t \quad (2)$$

Where MVEL is the dependent and is the money velocity within the economy, the values of cheque, automated teller machine, point on sales, internet transactions, mobile payment and NIBSS instant payment are the regressors which show the channels/tools of cashless policy in Nigeria and $\hat{\omega}_t$ is the stochastic term.

The a priori expectation of the slopes of CQVAL, ATMVAL, POSVAL, WEBVAL, MPVAL, and NIPVAL which are $\hat{u}_1, \hat{u}_2, \hat{u}_3, \hat{u}_4, \hat{u}_5$ and $\hat{u}_6$ are expected to be greater than zero (> 0) which implies the efficient circulation of currency in the Nigeria economy.

4.0 Presentation of Result and Discussion

The study adopted the econometrics technique by using E-views 9 software. We employed the unit root test to ascertain the stationarity status of each of the variables.

Table 4.1: Phillips-Perron Unit Root Test

Variable	Level/Prob.	1 st Diff/Prob.	2 nd Diff./Prob.	Integration Order
MVELC	-0.540401/0.08752	-7.038915/0.0000	-42.19540/0.0001	I(1)
CQVAL	-3.736572/0.0059	-19.08959/0.0000	-21.78278/0.0001	I(0)
ATMVAL	-0.650780/0.9900	-11.60374/0.0000	-46.71659/0.0001	I(1)
POSVAL	3.496711/1.0000	-5.998387/0.0000	-13.29145/0.0000	I(1)
WEBVAL	-0.363146/0.9082	-7.885441/0.0000	-26.18928/0.0001	I(1)
MPVAL	1.247024/0.9981	-12.67151/0.0000	-40.82025/0.0001	I(1)
NIPVAL	2.663795/1.0000	-8.943831/0.0000	-34.93458/0.0001	I(1)
VECM	-3.714496/0.0062	-7.548277/0.0000	-20.88832/0.0001	I(0)
Critical Values at 5% Level	-2.911730			

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The Phillip-Perron unit root test shows that the null hypothesis of non-stationarity for all the selected variables would be accepted. Therefore, differencing the non-stationarity series once resulted in their stationarity (that is they are I (0) and I (1) respectively).

Table 4.2: Johanson Cointegration Test

Date: 07/12/21 Time: 14:45
Sample (adjusted): 2016M03 2020M12
Included observations: 58 after adjustments
Trend assumption: Linear deterministic trend
Series: MVELC CQVAL ATMVAL POSVAL WEBVAL MPVAL NIPVAL
Lags interval (in first differences): 1 to 1

Unrestricted Cointegration Rank Test (Trace)

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**
None *	0.528106	149.7039	125.6154	0.0007
At most 1 *	0.406180	106.1458	95.75366	0.0080
At most 2 *	0.372281	75.91746	69.81889	0.0150
At most 3 *	0.271128	48.90904	47.85613	0.0397
At most 4 *	0.232655	30.56610	29.79707	0.0407
At most 5	0.210511	15.20661	15.49471	0.0552
At most 6	0.025483	1.497177	3.841466	0.2211

Trace test indicates 5 cointegratingeqn(s) at the 0.05 level

* denotes rejection of the hypothesis at the 0.05 level

**MacKinnon-Haug-Michelis (1999) p-values

The table 4.2 shows that there are five co-integrating equations at 5 percent level in the model. Therefore, to avoid spurious regression, we conducted the auxiliary regression of the non-stationary variables as presented in table 4.3 below.





Table 4.3: Auxiliary regression 3

Dependent Variable: MVELC

Method: Least Squares

Date: 07/13/21 Time: 01:42

Sample: 2016M01 2020M12

Included observations: 60

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	27.88102	5.585456	4.991718	0.0000
CQVAL	0.007059	0.008235	0.857160	0.3952
ATMVAL	0.068372	0.022323	3.062792	0.0034
POSVAL	-0.643324	0.140014	-4.594703	0.0000
WEBVAL	0.666889	0.449180	1.484682	0.1436
MPVAL	-0.121529	0.102852	-1.181592	0.2426
NIPVAL	0.004761	0.003149	1.511950	0.1365
R-squared	0.645241	Mean dependent var		41.79850
Adjusted R-squared	0.605080	S.D. dependent var		6.196629
S.E. of regression	3.894128	Akaike info criterion		5.666097
Sum squared resid	803.7043	Schwarz criterion		5.910437
Log likelihood	-162.9829	Hannan-Quinn criter.		5.761672
F-statistic	16.06620	Durbin-Watson stat		0.778578
Prob(F-statistic)	0.000000			

The result indicates two of the variables that are significant at 5 percent level considering the significant of the variables individually. The variable POS value (POSVAL) is negative in sign, indicating that the use of POS in the short run has not actually affected velocity of money. This could be the fact that the acceptance and use of the payment system has not been general or due to fear of customers losing their money etc. On the other hand, the payment tool ATM value (ATMVAL) is positive and significant. An increase of ATMVAL will lead to an increase in the velocity of money in the Nigerian economy. The overall variables from the result are significant and have the ability to affect the velocity of money.





Table 4.4: Unit root test of residual

Null Hypothesis: D(ECM,2) has a unit root

Exogenous: Constant

Bandwidth: 11 (Newey-West automatic) using Bartlett kernel

	Adj. t-Stat	Prob.*
Phillips-Perron test statistic	-20.88832	0.0001
Test critical values:		
1% level	-3.550396	
5% level	-2.913549	
10% level	-2.594521	

The residual unit root test was conducted based on the result of the auxiliary regression and it was found to be stationary at level. The Phillip-Perron test statistics of 20.88832 is significant at 5% level indicated by the Prob. value of 0.0001. This means that the variables can be used to run the error correction model since the issue of spurious or stationarity has been met.

Table 4.5: Short-run test (ECM)

Dependent Variable: D(MVELC)

Method: Least Squares

Date: 07/13/21 Time: 02:07

Sample (adjusted): 2016M02 2020M12

Included observations: 59 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.398208	0.355163	-1.121197	0.2674
D(NIPVAL)	0.005640	0.002881	1.957539	0.0557
D(MPVAL)	-0.007605	0.056339	-0.134988	0.8931
D(WEBVAL)	-0.120275	0.295805	-0.406601	0.6860
D(ATMVAL)	0.011662	0.014110	0.826562	0.4123
D(POSVAL)	-0.180655	0.110622	-1.633087	0.1085
ECM(-1)	-0.239850	0.089954	-2.666365	0.0102
R-squared	0.220073	Mean dependent var		-0.251174
Adjusted R-squared	0.130081	S.D. dependent var		2.496087
S.E. of regression	2.328086	Akaike info criterion		4.638965
Sum squared resid	281.8393	Schwarz criterion		4.885452
Log likelihood	-129.8495	Hannan-Quinn criter.		4.735183
F-statistic	2.445478	Durbin-Watson stat		1.562275
Prob(F-statistic)	0.037030			

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A short-run error correction model was specified. The sign of the coefficient of the error correction term was negative and significant. The result shows that in the short run, the variables were able to make an adjustment of 23.98 percent per month. Also, from the result, the adjusted R^2 of the estimated model reveals that 13% of the estimated MVELC is explained by the combined effects of all the determinants, while the F-statistics value of 2.45 shows that the overall regression is significant at 5% level between the periods 2012 to 2020. The equation's standard error of 2.33 signifies that in about two-thirds of the time, the predicted value of MVELC would be within 233 per cent of the actual value. The Durbin-Watson value is 1.562275, approximately 2.00 falls within the region of no serial correlation indicating that there exists no serial correlation.

5.0 Summary, Recommendations and Conclusion

An empirical and quantitative study on cashless policy in Nigeria is scarce as most available studies are more of qualitative. The research looked at Nigeria's cashless policy and money velocity. The study also presented a review of the literature on the research topic to ascertain critiques and strength from previous studies. From our analysis, we discovered that the use of Mobile Payment Value (MPVAL), Internet (web) Value (WEBVAL) and POS value (POSVAL) contributed negatively to money velocity. It is an indication that the acceptability and safety of transactions using these payment systems have not been effective and efficient. Challenges such as cybercrime, frequent fluctuation of internet services and fraudulent activities of insiders may be an impediment for the effective and efficient use of these payment systems. The coefficient of POSVAL is negative but significant, telling us the general populace is gradually accepting the introduction and use of the payment system.

Therefore, for the cashless economy to be attained, we first, recommend that government should put more efforts to gear up awareness and educative programs to enlighten the general populace. Second, the government should make sure that internet service providers are providing frequent





and steady internet services to enable these payment systems function accurately. Again, the government should prosecute those engaging in cybercrime activities. Lastly, but not the least, government should make sure that there is a steady power supply to enable drive the payment system.

Finally, the Nigerian economy has experienced significant advances in payment technology, and the country's electronic payment (e-payment) environment has reached a new level. Deposit money banks, transaction firms, ATM suppliers, POS vendors, and third-party companies migrating to transact are all vying to increase the market's reach. Findings from the study further indicate that the introduction and adoption of the cashless policy in Nigeria have enhanced banks earning per share.

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