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Cashless Policy and Economic Growth: The Nigeria Perspective

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Abstract

This study examined the impact of cashless policy on economic growth in Nigeria with the objective of finding out the effect of ATM, POS, RET and WEB on Real Gross Domestic Product in Nigeria. The study employed the ex-post facto and secondary date covering the period 2008 to 2018 gotten from CBN Statistical Bulletin was used for analysis with help of E-view 9 soft ware. Descriptive statistics and multiple regression of least square regression were carried out. This finding of the study showed that ATM, RET and WEB has no significant impact on real gross domestic product while POS was shown to be a significant determinant of real gross domestic product and the study concluded that cashless policy does not impact positively and significantly on economic growth in Nigeria. The study recommended that regulatory authorities should by way of constant supervision enforce implementation of cashless policy and the general public should be encouraged to embrace cashless policy by engaging the various channels in their day to day business transactions.

Keywords: Automatic teller machine; Point of sale; Remitta; Web banking; Real gross domestic product.

1. Introduction

The nascent advancement in technology touches all spheres of human endeavour. Hardest hit is the structure of communication machinery which has perplexed computer and turned the world into a worldwide rural community where people of different nationalities, etc can effectively interact Adeya, 2001, Dahawy, et al, 2005 as cited in Mieseigha and Ogbodo (2013).

Permit to say that one essential prerequisite for economic development is a secured, suitable and reasonably priced payment system (Ajayi and Ojo, 2006). Hence nations world over are gradually shifting from cash payment system toward electronic payment system (Humphrey, 2004).

However, the CBN estimated that the unswerving outlay of cash has arrived at a shocking sum of one hundred and ninety two billion naira in 2012. The challenges of cash payment system include robberies and other cash-related crime, returns leakage arising from too much of cash handling, inefficient treasury management due to nature of cash processing, high subsidy, high informal sector etc. The efficiencies above induced the CBN to introduce the cashless policy in April 2011 which aim at encouraging electronic payment channels.

Cashless economy is an economy system that encourages use of credit and debit cards for payment of goods and services. This policy is aimed at improving the financial system and enhanced naira management (Ejiro, 2012). The policy placed a withdrawal limit of one hundred and fifty thousand naira (N150, 000) for an individual and one million naira (N1, 000,000) for corporate bodies mainly in Lagos State commencing from March 30, 2012. It also stipulates that individuals and corporations that make cash transactions above the limits will be charged a service fee for amounts above the cumulative limits. Furthermore, 3rd party cheques above N150, 000 shall not be eligible for encashment over the counter with effect from January 1, 2012. Value for such cheques shall be received through the clearing house. The banks were expected to sworn into action in implementing these policies on January 1, 2012.

Various empirical studies exist regarding the relationship between cashless policy and the Nigerian economy since its inception but greater percentage is on its prospects and challenges. To the best of the researcher's knowledge, there are no studies cashless policy and economic growth and hence, the author sets out to contribute to the existing body of literature by empirically examining the relationship between the various aspects of cashless policy and economic growth in Nigeria.

1.1. Statement of the Problem

Nigeria as nation has been recognized by Goldman Sachs as having the latent for attaining universal competitiveness based on their economic and demographic settings and be among the topmost 20 economies of the world by 2020. But a major constraint to this attainment is the cash base system which nullifies the global trends. The apex Bank CBN in its attempt to salvage this designed a cashless economy with objective of achieving an environment where a higher proportion of transactions are done through the electronic channels.

Again, the impeding infrastructural decay, inefficient security system on financial information, the high rate of cyber crime etc impedes or limits efficient and effective electronic payment system which in turn will the negatively affect the attainment of objective of cashless policy in Nigeria.

The laudable nature of cashless policy is not questionable, but the inefficient nature of our network system in Nigeria is too poor to encourage electronic payment channels especially in rural areas where business activities are carried by petty traders in high volumes and there are no network for calls let alone transfers and other services. It is against this backdrop that this study is set to investigate the effect of cashless policy on economic growth in Nigeria.

2. Literature Review

In elementary economics, Money plays three important roles that includes (i) as a unit of account (ii) a medium-of-exchange, and (iii) a store-of-value. These three functions are very crucial. However, in a cashless economy, both the third and second roles are not really effcetive. Permit to say that cashless economy does mean non cash transactions at all but a system where cash base transaction is at the barest minimum (Marco and Bandiera, 2004; Roth, 2010; Woodford, 2003; Yaqub *et al.*, 2013) It is an economic system in which transactions are not done predominantly in exchange for actual cash (Daniel *et al.*, 2004). Amongst the qualities and features of a cashless economy are all the money used is issued by private financial institutions (banks, and possibly other firms). It is imaginable that the apex bank continues to function like other banks by issuing its own deposits usable as other bank's deposits are. However, in that case the central bank has no monopoly in the issue of Money. In a cashless society, the unit of account (e.g. Dollar, euro) remains a national affair and is provided by the state. The characteristics of cashless economy are e-finance, e-banking, e-money; e-brokering, e-exchanges, predominant use of debit and credit cards etc.

2.1. Benefits of Cashless Policy

The major benefits of cashless policy include the following:
1. Development and modernization: One core advantage of cashless policy is modernization and speedy development of the economy which is a manifestation of ease of commercial activities.
2. Cost of banking: one major feature of modern banking is reduced cost of banking services and operations because the system reduces workforce owing to its capital intensive nature.
3. Improved monetary policy: another important feature of cashless policy is that it improves how economic conditions are managed in a country (Cobb, 2004).

2.2. Challenges of Cashless Policy in Nigeria

Permit to say that Cashless policy, in spite of its numerous benefits comes with its own challenges even in the developed world. Some these challenges using Nigeria as a case study are
1. Behavioural constraints: the nature of our transaction before has made people to use to cash transactions than otherwise.
2. Banks attitudes: Banks inability to effectively engage very conservative, innovative products and marketing techniques.
3. Lack of confidence: The level of corruption in Nigeria has made that no one trusts each other and is a major challenge in the development of-cashless policy in Nigeria.
4. Inadequate internet services: steady fluctuation in internet and communication services is a heavy threat to e-payments and e-commerce.
5. Inefficient regulation: In Nigeria, there is no proper implementation of established regulations and this hinder proper functioning of the system
6. Lack of good banking system: Suffice to say that the banking system in existence is too shallow owing to poor regulatory framework.
7. Customers' inexperience: another hindrance which may impede cashless policy in Nigeria is lack know-how of the customers. At least the knowledge on how to operate the teller machine without much difficulty.
8. The expensive nature of internet services: The cost of data in Nigeria is very expensive and even the charges rate service it to costly hence, average Nigerian will find it difficult to dash into it.
9. Constant power interruption: Even though Nigeria as a nation supply power to other west African countries which has steady power supply, we do not have constant power and this will obstruct the proper functioning of the system.
10. Resistance to changes in technology among customers and staff due to: (a.) Lack of awareness on the benefits of new technologies (b.) Fear of risk (c.) Lack of trained personnel in key organizations (d.) Tendency to be content with the existing structures. (e.) People may be resistant to new payment mechanism (Adegbaju and Olokoyo, 2008; Adeyemi, 2006; Adu, 2016; Babalola, 2008; Obodo, 2012).

3. Theoretical Framework
3.1. Quantity Theory of Money (QTM)

This theory upholds that level of prices in the economy is a direct function of the volume of money in circulation in that economy. The theorists uphold that money supply affects the level of prices and that a unit change in money supply will invariably bring about a proportional change in price. This theory will be adopted in this study because one cogent reason that induced Central bank of Nigeria to introduce cashless policy was to reduce the

quantity of money and its cost. Furthermore, The QTM was adopted by Ibe and Odi (2018) in their study of this nature. This theory has a direct agreement the cashless policy which aims at reducing the quantity of money in circulation act also as a measure to control the prices of goods and services.

3.2. Empirical Reviews

Adu (2016), in his study which had no methodology but its focus was a discussion on origin of cashless policy and its effect both negatively and positively the economy and stakeholders. Among the recommendations made by the study are state's provision of steady electricity and adequate communication is necessary for proper functioning of cashless economy.

Yaqub *et al.* (2013), in their study examined the prospects and challenges of cashless policy in Nigeria. The study recommended that banks should engage extensive advertisement as to educate its customers on the essence of cashless economy.

Mieseigha and Ogbodo (2013) investigated empirical analysis of the benefits of cashless economy on Nigeria's economic development was examined with objective to expose the merits of the cashless economy to Nigeria populace. Considering a sample of 468 out of 520 persons which represent about 90% of the population found that cashless economy has a positive impact on economy development.

In 2014, Ezeamama, Ndubuisi, Marrie and Mgbodile examined the impact of central bank of Nigeria cashless policy in Nigeria economy. The objective was to find out if the central bank of Nigeria cashless policy impact positively on Nigeria economy. Survey research designed was adopted and the source of data was primary in which questionnaire was administered to respondents. A total of 500 respondents were selected for the study including traders and students in Lagos state Nigeria. However, this study failed to identify the number of years covered and never stated its major findings.

Ibe and Odi (2018), examined cashless policy models of economic growth: the Nigerian experience. The objective of the study was to find out the effect of cashless policy on Nigeria economy. The ex-post facto research design was adopted and source of data was Central Bank of Nigeria statistical Bulletin and the study covered the period 2009- 2016. The variables used for the study were Gross domestic product GDP as the dependent variable while Automated teller machine (ATM), mobile banking (MOBK) and point of sales (POS) were the independent variables. Group unit root tests of the variables: ATM, GDP, MOBK and POS using the Levin, Lin & Chu t, Im, Pesaran and Shin W-stat, ADF - Fisher Chi-square, and PP - Fisher Chi-square test statistics indicate the absence of unit roots among the variables. This suggests that they are jointly integrated since the respective probabilities were less than alpha 0.05.and thus we reject the hypotheses of no stationarity in all the cases. The findings of this study show the existence of a long run significant relationship between the variables of cashless policy and economic growth in Nigeria. Also, the ATM seems to be the best and most common means of effecting cashless policy based on the magnitude of its relationship with GDP. Therefore the need to create more awareness to entice the unbanked people into the banking system becomes imperative more so when a large percentage of the Nigerian population is unbanked.

Evidence from empirical studies has shown that there is no study in Nigeria that has investigated the effect of cashless policy on economic growth in Nigeria. More so, no previous study has covered a period up to 2018. The above gap accounts for a study of this nature.

4. Methodology

The research design for this study is ex-post facto. This design is consider appropriate by the researcher because data relating both the dependent and independent variable in this study already exist in literature. Secondary data extracted from Central Bank of Nigeria Statistical Bulletin covering a quarterly data from 2009-2018 were used. The study carried out a descriptive statistics and multiple regression analysis was carried out with aid of E- view 9 to establish the impact of cashless policy on economic growth. The independent variable cashless policy is measured by Remitta, point of sale, web banking, and Automatic teller machine while the dependent variable economic growth is measured with Real Gross Domestic Product (RGDP).

4.1. Model Specification

Model 1

$RGDP_{it} = f(POS_{it}, WB_{it}, RA_{it}, ATM_{it,})$ ………………………………………(2)

$RGDP_{it} = \beta_0 + \beta_1 POS + \beta_2 WB + \beta_3 RA + \beta_4 ATM4 + e_t$... (3)

Where RGDP= Real Gross Domestic Product, POS= point of sale, WB= web banking, RA= Remita.

4.2. Data Presentation and Interpretation

Table-4.1. Descriptive statistics

Variables	LRGDP	LATM	LPOS	LRET	LWEB
Mean	4.770686	1.764803	1.764803	1.646911	1.754157
Median	4.799205	1.799341	1.681241	1.707570	1.863323
Minimum	4.457314	1.556303	1.041393	1.000000	1.397940
Maximum	5.006421	1.991226	1.977724	1.959041	1.995635

Evidence from the table 4.1 above showed that ATM has a mean value of 1.764803, POS 1.764803, RET 1.646911 and WEB 1.754157. This indicates that all the independent variables in this study has a high percentage contribution to dependent variable hence implying that they have a high degree of influence or perhaps control on the dependent variable. Again, the variables are indicated to have a maximum statistical value of 5.006421 for ATM, 1.991226, 1.977724, 1.959041 and 1.995635 for POS, RET and WEB.

4.3. Test of Hypotheses

H0[1]: *impact of Automatic Teller Machine, Point of Sale, Web Banking and Remita on Real Gross Domestic Product in Nigeria is not significant*

Decision rule: Accept the null hypotheses if the probability value computed by means of E-view 9 is less than or equal to 0.05(i.e.$p \geq 0.05$)

Table-4.2. E-view result of the impact of Automatic teller machine, point of sale, web banking and Remita on Real Gross Domestic Product in Nigeria

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	3.952071	0.597838	6.610600	0.0006
LATM	-0.396352	0.410730	-0.964994	0.3718
LWEB	0.302063	0.183890	1.642626	0.1516
LPOS	0.579816	0.128526	4.511275	0.0041
LRET	0.041264	0.181870	0.226890	0.8280

R squared 0.795759
Adjusted R squared 0.659599
F-statistic 5.844282
Prob(F-statistic) 0.028859

5. Discussion of Result

Evidence from table 4.2 above indicated that automatic teller machine (ATM) has a co-efficient of regression value of -0.396352. This implies ATM is negative and not significant. This finding however contrasts the finding of Adu (2016). Though his study was in Nigeria it lacked methodology and he never tested any hypotheses, but this study adopted ex-post facto research design and secondary data used to test our hypotheses. Again, the reason could be that value of banking activities with ATM is too small.

Web banking (WEB) is shown to have co-efficient of regression value of 0.302063, indicating that WEB is positive but not significant. This means that WEB banking cannot influence Real Gross Domestic product in Nigeria. Our finding disagreed with the studies of Mieseigha and Ogbodo (2013). Their study though in Nigeria made use of primary data which is at the mercy of the researcher. More so, the tool of statistical analysis is very different and our study is more updated than theirs.

Statistical evidence from table 4.2 above point of sale has a co-efficient of regression value of 0.579816 and is significant at five percent level. This implies that POS is a significant determinant of Real Gross Domestic Product in Nigeria. Our finding corroborates the studies of Ibe and Odi (2018).

Remita from table 4.2 above is shown to have positive but insignificant relationship with Real Gross Domestic Product in Nigeria as indicated with co-efficient of regression value of 0.041264. This finding is in contrasts with the studies of Ibe and Odi (2018). This reason could be because our study covered more periods than theirs.

6. Conclusion and Recommendations

Based on the result of this study from the testes hypotheses, the study conclude that cashless policy is not a determinant of economic growth in Nigeria, hence make the following recommendations based on the conclusion of this study

-That regulatory authorities should by way of constant supervision ensure that the general public is encouraged to embrace cashless policy by engaging the various channels in their day to day business transactions.

-That banks should increase their cash limits of ATM as evidence in the result of automatic teller machine.

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