



IMPACT OF CASHLESS BANKING POLICY ON THE ECONOMIC GROWTH OF NIGERIA (2010-2018)

Ropheka. E. Bot

Department of Economics
Bingham University,
Karu-Abuja. Nigeria.

Miapkwap Kangrot Dorcas

Planning Department,
National Veterinary Research Institute,
Vom, Plateau State

Abstract

The battle for efficient and effective financial payment system in Nigeria dated back to 1894 when British Bank for West Africa (BBWA) successfully managed, circulated and distributed the British silver coins as a means of settlement of trade transaction and debts in the British West Africa colonies. Since then the system has undergone several changes with the hope to get it right. In December 2011 a cashless banking policy was implemented by the Central Bank of Nigeria (CBN). The policy aims at reducing the use of cash and encouraging more electronic based transaction with a view to meeting the requirements of Nigeria's vision 20:2020 transformation agenda. This study therefore was carried out to evaluate the impact of cashless banking on the economic growth of Nigeria. The research design adopted for this study is the ex-post facto research design. Analysis of data was done using ordinary least square (OLS) regression analysis. The results revealed that there is a significant relationship between internet banking and economic growth in Nigeria. The reason could be deduced from the fact that most Nigerian investors do use their telephone lines for transaction activities. This product has also experienced relatively high patronage due to adequate bank awareness and education of the customer on how to maximally use their phone to transact simple banking operations, and as a result has contributed immensely to Nigeria's banking sector growth. The study further revealed that there is a significant relationship between internet banking and economic growth in Nigeria. The reason could be attributed to the fact that most Nigerian investors make use of their telephone lines for transaction activities, and as a result has contributed immensely to Nigeria's banking sector growth. Therefore, it was recommended that the citizens and the government should be sensitized and educated periodically on the positive impact of the policy as well as encourage different methods on promoting cashless banking in Nigeria.

Keywords: Cashless policy, Economic growth, mobile banking, internet banking

INTRODUCTION

Since the inception of man, various payment methods have been used to purchase goods and services starting with the trade by barter. The introduction of money and coins was as a result of trade by barter to solve the problem of double coincidence of want and divisibility faced by the early men. The replacing of the barter system of trade with the money and coins solved a lot of challenges faced by the barter system, although the money and coins has its own challenges but can still be replaced with a better payment system- Cashless banking (Humphrey, D. B., 1990).

The battle for efficient and effective financial payment system in Nigeria dated back to 1894 when British Bank for West Africa (BBWA) successfully managed, circulated and distributed the British silver coins as a means of settlement of trade transaction and debts in the British West Africa colonies. Since then, the system has been changing baton and race with the hope of getting it right. While the effort towards effective payment mechanism is ongoing the system continues to expand the horizon of both local and foreign based financial products. Despite these developmental changes into the product and process mechanism, the continued "cash and carry" syndrome with volumes of cash in transit increased unabated. Cash management has been a serious problem to the Nigeria economy particularly in the area of cost. As a result of this, CBN (2012) revealed that the cost of cash management to the Nigerian financial system is high, putting the figure at about fifty billion naira in 2008 rising to a staggering one hundred and ninety-two billion Naira in 2012. This and other factors must have necessitated the Central Bank of Nigeria to introduce the cashless policy into the Nigerian economy in April, 1, 2012.

In view of being one of the best and biggest economies in 2020, the CBN has started implementing the cashless policy/banking in some major states/cities in Nigeria such as Lagos, Kano, Port-Harcourt and Onitsha. The CBN and Pro cashless policy activists have asserted reduction in crime rates, minimized risk associated with carrying huge sums of money, reduction in political corruption, reduction in banking cost, improvement on monetary policy in management of inflation and the overall growth and development of the economy of Nigeria as advantages associated with the implementation of the cashless policy. The Blueprint articulates Nigeria's economic growth and development strategies for the eleven-year period between 2009 and 2020. Nigeria's Vision 20:2020 seeks to position Nigeria as one of the top 20 economies in the world by the year 2020, able to consolidate its leadership role in Africa and establish itself as a significant player in the global economic and political arena.

Cashless banking policy as a technique of economic management to bring about sustainable economic growth and development through cashless policy and banking introduced by the Central bank of Nigeria (CBN) is not fully operational due to high rate of illiteracy, in-adequate sensitization/education of the benefits of the cashless policy, and in-adequate logistics (such as the provision of internet connections in commercial areas, computers and Point on Sale (POS) machines). Due to the political, social and economic conditions of the country, this policy is not without its constraints. The change from cash-based economy to cashless economy moved people away from their comfort zone. This discomfort and the lack of clarity and understanding, Central Bank of Nigeria (2015) said, had hampered the adoption and fuelled conspiracy theories amongst stakeholders. Akhalumeh and Ohiokha (2011) observed some challenges with the introduction of cashless policy and their findings showed that 34.0% of the respondents cited problem of internet fraud, 15.5% cited problem of limited POS/ATM, 19.6% cited problem of illiteracy and 30.9% stayed neutral. While in some quarters there was fear of unemployment, some believe it will create more jobs especially when companies manufacturing POS machine are sited in Nigeria.

Also, Yaqub et al. (2013) mentioned that “one of the problems of cashless banking policy is customer” resistance to change in technology due to lack of awareness on the benefits of new technologies, fear of risk, lack of trained personnel in key organisations, tendency to be content with the existing structures and resistance to the new payment mechanism.”

Nigeria as a developing country with a lot of rural areas where infrastructures or banks are almost non-existent. Cashless banking policy cannot be successful if implemented only urban areas where banks and enabling infrastructures exist while excluding the greater part of the country in the rural areas. It is against this backdrop that the study is germane.

The objective of this study is therefore to examine the impact of the cashless banking policy on the economy of Nigeria and how it affects economic growth. Consequently, the rest of the paper is organized as follows. Section two highlights brief review of the literature. In section three, the model is presented and whilst section four presents result of findings, section five concludes the paper with policy remarks.

LITERATURE REVIEW

Conceptual Framework

The concept of Cashless economy does not refer to an outright absence of cash transactions in the economic setting but one in which the amount of cash-based transactions are kept to the barest minimum (Yaqub, Bello, Adenuga and Ogundeji, 2013). According Adewale (2013) a cashless society rightly illustrates a gradual movement of the entire payment system of an economy from the use of physical cash for all levels of personal, corporate, governmental including local and international commercial settlement activities to a systemic adoption of other nonphysical cash mode payment in settlements of all types of transaction both in the public and private sectors of an economy.

However, as much as there is the need to change into a society where cash will no longer be dominant in the payment system, proponents of cash money have on the other hand claim that in the developing and the underdeveloped nations physical cash money is still the most convenient means of settlement of transactions as a result of illiteracy, and Nigeria is very guilty in this regard. In a Nation with over 150 Million inhabitants, the proponents of a cashless society in "Nigeria argued that it will aid in the drastic reduction in money laundering, terrorist financing and other economic and financial crimes (Soyemi, and Hammed, 2015). Others believe that a cashless society will encourage financial inclusion for most Nigerians since less than 30 per cent of bankable Nigerian adults own bank accounts. A larger percentage of the population rather keeps their money under their mattresses, in their pockets and probably in old cooking pots. Scholars also opined that a cashless Nigeria will promote and implement realistic monetary and fiscal policies that will reduce inflation and encourage investments.

Ejoh et al., (2014) noted that in the new cash policy, the Central Bank of Nigeria (CBN) recently pegged daily cash withdrawals and lodgments by individual to NGN 150,000.00 and corporate bodies NGN 1m respectively with effect from the 1st of June 2012. Other key reasons for introducing the cash policy include, driving development and modernization of our payment system in line with Nigeria's vision 2020 goal of being amongst the top 20 economies by the year 2020.

Empirical Review

Various studies on cashless policy and electronic payments and banking have been carried out since the inception of the policy in 2012. Muhammad (2012) in an article titled analysis of value creation of electronic banking in Nigeria examined trends of banking habit in Nigeria across banking regimes of regulation and deregulation hinged on historical perspective of banking development in Nigeria, from independence to 2012. His finding suggested a static behavior across the monetary policy regimes and thus cautioned rushing the cashless program until measures are in place to encourage and push fast the banking culture change for the success of the cashless Nigeria program.

Nwankwo and Eze (2013) ascertained the extent to which electronic payment affect cashless economy of Nigeria using a descriptive research design, indicated that the electronic system of payment has a great implication in cashless economy of Nigerian but that it will lead to significant decrease in deposit mobilization and credit extension by Nigerian deposit money banks. Yaqub, Bello, Adenuga and Ogundeji (2013) in their paper titled the cashless policy in Nigeria: prospects and challenges, posits that the move towards a cashless Nigeria brings with it numerous benefits but there is still the need to create more awareness to entice the numerous unbanked Nigerians into the banking system. Jatau and Dung (2014) in their paper titled the Central Bank of Nigeria's cashless policy, noted that the cashless policy involves adopting of electronic processes to documenting all payments (e-payment) thereby providing an effective data base for optimal revenue generation.

Okoye and Ezejiofor (2013) examined the significant benefits and essential elements of cashless policy using ANOVA. Their result showed that majority of Nigerians are already aware of the policy and majority agree that the policy will help fight against corruption/money laundering and reduce the risk of carrying cash. Ajayi (2014) examined the effect of cashless monetary policy on Nigerian banking industry using a sample 370 Guaranty Trust Bank (GTBank) staff in Ekiti State, Nigeria. He found out through the use of Chi-square that there are significant reasons and benefits inherent in the implementation of cashless policy as it facilitates ease of operations and reduces queue and congestion in the banking hall, among others. However, inadequate technological infrastructures, high rate of cybercrime and high rate of illiteracy, among others are hindering the full implementation and benefits of the policy during the period of the study. Alagh and Ene (2014) examined the impact of cashless banking on the profitability of banks in Nigeria using OLS. 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). 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.

Osazevbaru, Sakpaide, and Ibubune (2014) examined the impact of cashless policy on the profitability of Nigerian banks using content analysis comparing profits under cash-based policy with a cashless regime. The results revealed that cashless economic policy positively impact on banks' profit through reduction in cost of operations and banking the unbanked populace. Ejoh, Adebisi and Okpa (2014) examined the cash-less economic system so as to assess the relationship between Information and Communication Technology (ICT) and the implementation of cashless policy, using simple percentage procedure. Their study revealed that there exists a significant relationship between ICT and cash-less policy implementation in the Nigerian financial environment. Latifat and Alhassan (2015) embarked on a research to examine the pre-and post-

implementation period of cashless policy tools in Nigeria, using OLS. Their findings showed that not a single cashless policy tool has a significant relationship with currency in circulation outside banks mainly due to high collinearity between the tools of cashless policy.

Kehinde and Adelowo (2016) carried out a study to assess the level of Nigerians preparedness for e-commerce and cashless policy using the level of Information Communication Technology (ICT) adoption, usage and infrastructure available covering a space of 13 years. The paper concluded that ICT policy needs to be fully implemented and private and public sectors collaborations or partnership should be supported to facilitate the ecommerce and cashless policy. Taiwo, Kehinde, Afieroho and Agwu, (2016) carried out a study to appraise the implementation of the cashless policy since its introduction into the Nigerian Financial system, using one sample t-test. The results showed that the cashless policy will have the desired impact if a lot is done to ensure the implementation of an effective cashless policy system.

THEORETICAL FRAMEWORK

Merton and Bodie (1995) developed the modern theory of financial intermediation which comprises traditional theory and the changes in financial environment. The modern theory of financial intermediation emphasizes six core functions of financial intermediaries to include: provision of means for clearing and settling payments to facilitate exchange of goods and services; provision of mechanism for pooling resources; resources allocation; risk management; provision of price information to help in coordinating decentralized decision making in various sectors of the economy and provision of means to tackle the problem of moral hazard, physical hazard and information asymmetry. For the purpose of this study, the enumerated functions by Merton and Bodie (1995) could be expressed as resources accumulation, resource allocation, managing various risks and facilitation of exchange. It is by realizing these functions that banking sector financial intermediation contributes to economic growth. The growth theory states that well developed financial intermediation can promote economic growth through marginal productivity of capital, efficiency of channeling savings to investment, savings rate and technological innovations.

Buttressing further, Jatau (2014) confirmed that financial development promotes economic growth through channels of marginal productivity of capital, efficiency of channeling savings to investment, saving rate and technological innovation. Affecting economic growth through these channels is realized by functions of financial intermediaries. Well-developed financial markets have a significant positive impact on productivity, which translates into higher long-run growth. Merton (1995) citing King (1993) noted that in the absence of a financial system that can provide the means for transforming technical innovation into broad implementation, technological progress will not have significant and substantial impact on the economic development and growth.

METHODOLOGY

Sources of Data and Model specification

The quantitative design using ordinary least- square (OLS) method of multiple regression analysis was employed. The methodology is employed because of its relative importance and properties. The study used e-view statistical package to run the regression while excel worksheet was used to calculate the percentage growth. The secondary source used for this study was based

extensively on documentary sources which are textbooks, journals, articles, newspaper articles, paper presentations etc. Also, it involved Publications of Central Bank of Nigeria and monetary institutions such as CBN bulletins, presentations, slides, commercial bank bulletins etc.

The model for this research study is specified in the following functional form:

$$GDP = f(ATM, MOB, INTS) \text{-----} 3.1$$

Stating equation (3.1) above in the linear explicit econometrics form yields:

$$GDP = \beta_0 + \beta_1 ATM_t + \beta_2 MOB_t + \beta_3 INTS_t + \mu_t, \text{-----} 3.2$$

Where: GDP= Gross Domestic Product, ATM= Automated Teller Machine, MOB= Mobile Banking and INTS= Internet Banking. β_0 , β_1 , β_2 , and β_3 are the intercept and slope co-efficients to be estimated.

Method of Analysis

Unit Root Test

The stationarity test is carried out using the Augmented Dickey-Fuller (ADF) Unit Root Test. The decision rule for the ADF Unit root test states that the ADF Test statistic value must be greater than the Mackinnon Critical Value at absolute term for stationarity to be established at level and if otherwise, differencing occurs.

Co-integration Test

The co-integration test establishes whether a long-run equilibrium relationship exist among the ATM, INTS, MOB and GDP. Economically, variables are co-integrated if they have a long term, or equilibrium relationship between them. Johansen co-integration test will be used if the variables are found to stationary at first difference (that is at order 1(I)).

RESULT AND ANALYSIS

Unit Root result

Table 1: ADF Unit Test Result

Variables	ADF Test Statistic	Critical Values	Order of Integration
GDP	-3.741022	-3.520787**	I(1)
ATM	-6.363063	-4.192337*	I(1)
MOB	-3.453193	-3.191277***	I(1)
INTS	-6.694530	-4.252879*	I(1)

Notes: ***, ** and * significant at 10%, 5% and 1%, respectively

Source: Authors Computation, 2020 (Eviews-10)

From Table 1, it could be deduced that all the variables were stationary at first difference i.e. I(1) series. ATM and INTS were found stationary at 1%. This was captured by their ADF statistic values of -6.363063 and -6.694530 been greater than their respective critical values of -4.192337 and -4.252879. However, GDP and MB were found stationary at 5 and 10 % level respectively as captured in Table 1. The implication of this result is that applying regression analysis to these non-stationary variables in levels will generate spurious results. Thus, the analysis was carried out using these variables in first difference.

Co-integration Test Result

Table 2: Summary of Co-Integration Estimates

Date: 03/07/2020 Time: 19:54
 Sample (adjusted): 2010 2018
 Included observations: 9 after adjustments
 Trend assumption: Linear deterministic trend (restricted)
 Series: GDP ATM MOBINTS
 Lags interval (in first differences): 1 to 1

Unrestricted Co-integration Rank Test (Trace)

<i>Hypothesized No. of CE(s)</i>	<i>Eigenvalue</i>	<i>Trace Statistic</i>	<i>0.05 Critical Value</i>	<i>Prob.**</i>
<i>None</i>	0.419583	43.47330	63.87610	0.7158
<i>At most 1</i>	26.313606	24.97698	42.91525	0.0410
<i>At most 2</i>	0.187565	12.18265	25.87211	0.7992
<i>At most 3</i>	0.139803	5.120195	12.51798	0.5792

Trace test indicates one cointegration at the 0.05 level

** denotes rejection of the hypothesis at the 0.05 level*

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

Source: Authors Computation, 2020 (Eviews-10)

From the co-integration result in Table 2, the trace test indicates one co-integrating equation at 5% level. Thus, the model shows that there exists a long-run equilibrium relationship among the four variables used in the analysis. It shows that the variables move together in the long run. Therefore, cashless policy has a long run sustainable impact of economic performance.

Regression Result

Dependent Variable: LOG(RGDP)

Method: Least Squares

Date: 04/07/20 Time: 17:12

Sample (adjusted): 2010 2018

Included observations: 9 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	3.860534	1.349743	2.860200	0.0097
D(ATM)	0.032716	0.008173	-4.002931	0.0008
D(MOB)	0.766145	0.230496	3.323904	0.0036
D(INTS)	1.212919	0.284986	4.256073	0.0004
ECT(-1)*	-0.173951	0.030683	-5.669367	0.0000

<i>R-squared</i>	0.804546	<i>Mean dependent var</i>	9.134475
<i>Adjusted R-squared</i>	0.728064	<i>S.D. dependent var</i>	1.472413
<i>S.E. of regression</i>	0.764755	<i>Akaike info criterion</i>	2.452489
<i>Sum squared resid</i>	11.69700	<i>Schwarz criterion</i>	2.648831
<i>Log likelihood</i>	-25.42987	<i>Hannan-Quinn criter.</i>	2.504579
<i>F-statistic</i>	5.310371	<i>Durbin-Watson stat</i>	2.011282
<i>Prob(F-statistic)</i>	0.000002		

$$RGDP = 3.86 - 0.032ATM + 0.766MOB + 1.212INTS \text{ ----- (3)}$$

$$SEE = (1.34) (0.008) \quad (0.23) \quad (0.28)$$

$$t^* = 2.86 \quad -4.00 \quad 3.32 \quad 4.25$$

$$F^* = 5.310371$$

$$Prob(F\text{-statistic}) = 0.0000002; R^2 = 0.804546; \bar{R}^2 = 0.7282; D.W = 2.011$$

Findings from the analysis revealed that there is a significant relationship between ATM transactions and economic performance in Nigeria. It shows that, as usages of ATM for payment transaction increases, the economic performance in Nigeria. The results here is in line with the findings of Alagh and Ene (2014) who noted that there is a positive relationship between ATM transactions and economic growth in Nigeria. They went further to state that the introduction of ATM cards has seen business increase their businesses. More so, it was discovered that MOB transactions has a positive impact on economic performance in Nigeria. It showed that as the MOB usages increases, its contribution towards economic transaction improves the economic state of the country. The finding is in agreement with Alagh and Ene (2014) findings, which also revealed that INTS and ATM are positively related to economic growth in Nigeria.

Above all, the study revealed that there is a significant relationship between internet banking and economic growth in Nigeria. The reason could be deduced from the fact that most Nigerian investors does use their telephone lines for transaction activities. This product has also experienced relatively high patronage due to adequate bank awareness and education of the

customer on how to maximally use their phone to transact simple banking operations, and as a result has contributed immensely to Nigeria's banking sector growth.

CONCLUSION AND RECOMMENDATIONS

Based in the summary of the major findings the following conclusions are drawn: the adoption of cashless policy has enhanced economic growth in Nigeria economy by making it more productive and effective; cashless Banking also has a strong positive relationship on the overall banking performance by making workers performance more effective and efficiency; the adoption of cashless banking has enhanced economic transaction in the country. This is especially achieved through charges on the use of INTS, MOB and ATM withdrawal charges; the cashless banking has improved the bank customer relationship by rendering effective services throughout the day and night in every week. Lastly, the cashless policy has made banking transaction to be easier and has also enhance the economic exchanges between economic agents in the economy. The Nigeria economy has been significantly enhanced through cashless banking and transactions. Based on the findings, the following recommendations were made:

- i. More effort needs to be made by the deposit money banks in Nigeria to further encourage the use of cashless means of payment in the economy.
- ii. The deposit money banks management should periodically educate and sensitize customers with regard to cashless banking, its benefits, and risk exposure, among others.
- iii. Deposit money banks should sustain the creation of consumer awareness and acceptance of cashless policy especially as regards to mobile banking services. This is to enable customers use their telephone lines for banking transaction activities that could enhance growth in the banking sector and the economy in general.

REFERENCES

- Ajayi, S. I. & O. O. Ojo (2006), —Money and Banking: Analysis and Policy in the Nigerian Context, Second Edition, University of Ibadan, Daily Graphics Nigeria Ltd.
- Alagh, J. I. & Ene, E. E. (2014). Impact of cashless banking on banks' profitability (Evidence from Nigeria). *Asian Journal of Finance & Accounting*, 6(2), 362-376
- Alan Greenspan (2007).
- Adewale, A.A. (2013). Evaluating the systemic transition to a cashless economy in Nigeria. Social Science Research Network. *Social Science Electronic Publishing*
- Akhalumeh, P.B., & Ohiokha, F. (2011): Nigeria's Cashless Economy; The Imperatives. *International Journal of Management & Business Studies*. vol.2 pp. 12 - 17.
- Bank for International Settlements, (1996), —Implications for Central Banks of the Development of Electronic Money, Basel Committee, (1998), Risk Management for Electronic Banking and Electronic Money Activities, *Basel Committee Publications*, No. 35.
- Central Bank of Nigeria (2011), Money Market Indicators & Money and Credit Statistics, CBN Statistical Bulletin, CBN Publications.
- Central Bank of Nigeria Website (2011), —New Cash Policy, Presentation for the Interactive Engagement Session with Stakeholders on Cash-Less Lagos, Stakeholder Session - Supermarket Operators.

- Ejoh, N. O., Adebisi, A. W. & Okpa, I. B. (2014). Information and communication technology- an indispensable tool for the implementation of cash-less policy in Nigeria. *International Journal of Economics, Commerce and Management*, 11(10), 1-18.
- Gresvik, O. and G. Owre (2002): —Banks' Costs and Income in the Payment System in 2001 Norges Bank Economic Bulletin.
- Humphrey, D. B. and A. N. Berger (1990): —Market Failure and Resource Use: Economic Incentives to Use Different Payment Instrument, New York, *Monograph Series in Finance and Economics*.
- Jatau, V. S. & Dung, K. L. (2014). The Central Bank of Nigeria's Cashless Policy: A major Panacea for Eliminating Corruption and Enhancing Sustainable Development in Nigeria. *African Journals Online*, 8(4).
- Kehinde, O.O. & Adelowo, C.M (2016), Prospects of Nigeria's ICT Infrastructure for E-Commerce and Cashless Economy. *British Journal of Economics, Management and Trade*. 1-10. Retrieved from: <http://www.sciencedomain.org/abstract/14028>
- Latifat, M. & Alhassan, H. (2015). The Impact of Cashless Policy Tools on Money Circulating Outside Nigerian Banks. *International Journal of Business, Economics and Law*. 8(3), 47-52. Retrieved from: <http://ijbel.com/wp-content/uploads/2016/01/Econ-102.pdf>.
- Merton, R. C. & Z. Bodie. (1995). A conceptual framework for analyzing the financial environment, *The Global Financial System - A Functional Perspective (Harvard Business School Press)*.
- Muhammad A.H. (2012). Analysis of value creation of electronic banking in Nigeria. *International Journal of Advanced Research in IT and Engineering*, 1(2), 29-46.
- Nwankwo, O. & Eze, R. O. (2013). Electronic Payment in Cashless Economy of Nigeria: Problems and Prospects. *Journal of Management and Research*, 5(1).
- Olanipekun, W. D., Brimah, A. N. & Akanni, L. F. (2013). Integrating cashless economic policy in Nigeria: challenges and prospects. *International Journal of Business and Behavioral Sciences*, 3(5), 1-8.
- Osazevbaru, H.O., Sakpaide, E. J. & Ijubune, R.O. (2014). Cashless policy and banks' profitability in Nigeria. *European Journal of Accounting and Auditing and Finance Research*, 2(3), 1-12.
- Okoye, P. V. C. & Ezejiofor, R. (2013). An Appraisal of Cashless Economy Policy in Development of Nigerian Economy. *Research Journal of Finance and Accounting*, 4(7), 239-242.
- Soyemi, J., Hammed, M. & Babajide, S. O. (2015). Nigeria Cashless Culture: The Open Issues. *Journal of Engineering Sciences*, 4(4), 51-56.
- Taiwo, J. N., Kehinde, A. O., Afieroho, E. O., & Agwu, M. E. (2016). Appraisal of Cashless Policy on the Nigerian Financial System. *West African Journal of Industrial and Academic Research*, 16(1), 106-126.
- Yaqub, J.O., Bello, H.T. Adenuga, I.A. & Ogundeji, M.O. (2013). The Cashless-Policy in Nigeria: Prospects and Challenges. *International Journal of Humanities and Social Science*, 3(3), 200-212.