

RETURNS OF THE CASHLESS POLICY IN NIGERIA

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Abstract: The introduction of the cashless policy in March 2012 aimed to drive development and advance payment systems in Nigeria. In addition, the policy aimed to reduce costs related to banking and facilitate the progression of monetary policy decisions and economic growth. To date, the extant literature has not directly evaluated the effectiveness of the system but only attempts to evaluate the benefits and adverse effects of the cashless policy in Nigeria. This study evaluates the impact of the cashless arrangement in Nigeria on different macroeconomic variables which are unemployment rate, GDP, FDI, corruption and money supply. The study uses data immediately before and post the introduction of the cashless policy in 2012. The analysis shows that the cashless policy has largely been valuable to Nigeria, considering the positive effects on GDP, unemployment rate and money supply.

Index Terms: Cashless Policy; Economic Growth; Money Supply

I. INTRODUCTION

In a cashless economy, transactions are settled using electronic communication rather than physical cash. Eventually this reduces the amount of currency in circulation. The cashless system has been preferred by most economies on the grounds that it ensures transactions are quickly settled. Governments also find this system lucrative because it facilitates taxation which raises tax revenue. There are other benefits of this system which include upgrades in the effectiveness of monetary policy and technological advancement especially in the Less Developed Countries (LDCs). This is particularly important in developing nations in Africa such as Botswana, Kenya, Nigeria and South Africa. The other benefit of the cash policy is reduction in the costs of printing and managing large sums of money. Large volumes of cash need intense security and transportation is often difficult since the probability of being robbed is high. With a cashless model, such adverse issues are reduced but not completely eliminated. The Central Bank of Nigeria (CBN) for example, postulated that the introduction of the cashless policy will significantly reduce corruption, money laundering and other cash-related unlawful activities (CBN, 2017). Even though the cashless policy appears to be viable, there are several hindrances to this modernization attempt especially in developing countries. Firstly, the cashless system is not free from online attacks and fraud. This means high technological development is essential and developing economies often find it difficult to cover expenditures to create a safe, secure, reliable and fast online payment system. The next challenge is that even though central and commercial banks try to sensitize their nations about the benefits of the cashless model, there are citizens who are still deeply attached to physical cash particularly the low income group. The low income group generally deals with physical cash and avoid electronic transactions which means they are always left behind in terms of the

technical knowledge of performing an electronic transaction. This means even though sensitization about the cashless policy may be carried out, there will still be some individuals who are entrenched to physical cash only.

This study examines the impact of the cashless policy in Nigeria which was enforced in March 2012. The study evaluates the effects of the cashless system on major economic variables namely: Gross Domestic Product (GDP); unemployment levels; Foreign Domestic Investment (FDI); corruption and transparency and money supply. This paper examines the period immediately before and after the introduction of the cashless policy in Nigeria and compares with other African nations namely: Zambia, Zimbabwe and South Africa. The study shows that the period post the cashless policy has generally been prosperous for Nigeria considering rapid economic growth, reduction in unemployment levels and the decline in the quantity of physical cash.

II. THE CASH-LESS NIGERIA PROJECT

In March 2012, CBN implemented an initiative to reduce the amount of currency in circulation. According to the CBN (2017), the policy stipulates a cash handling charge on daily cash withdrawals that exceed N500, 000 for individuals and N3, 000,000 for corporations. As indicated by the central bank, the main objective of this initiative was to reduce the amount of physical cash (coins and notes) circulating in the economy and to encourage the use of electronic payments for goods and services. The introduction of this policy was also brought to facilitate the development of Nigeria and booster the economy. According to CBN (2017) the primary reason for carrying out the policy include the following: (a) To drive development and modernization of the payment system in line with Nigeria's vision 2020 goal of being amongst the top 20 economies by the year 2020; (b) To reduce the cost of banking services (including the cost of credit) and drive financial

inclusion by providing more efficient transaction options and greater reach; (c) To improve the effectiveness of monetary policy in managing inflation and driving economic growth. The central bank (CBN, 2017) projected that the benefits of the cash policy will be as follows (1) *For consumers*: increased convenience; more service options; reduced risk of cash related crimes; cheaper access to banking services; access to credit and financial inclusion. (2) *For Corporations*: faster access to capital; reduced leakage and reduced cash handling costs. (3) *For the Government*: increased tax collections; greater financial inclusion; and increased economic development. The central bank aimed to reduce other negative tendencies that move parallel with cash. These include reducing inefficiency and corruption; an informal economy; high subsidy; high risk of using cash and the high cost of cash (CBN, 2017).

III. LITERATURE REVIEW

Marginal Benefits of a Cashless Policy

Studies on cashless economies focused more on the advantages and adverse effects of following the cashless regime. Odir and Banuso (2012) examined the implications of cashless banking with a view of exposing the possible challenges it poses to the Nigerian economy whilst employing the aggregated approach. The authors noted that most less Developed Countries (LDC's) like Nigeria are making radical changes in terms of their monetary payment systems as they are moving towards cashless societies. Despite the transition to cashless systems, many economies still rely on cash for payments and settlements of accounts such as Nigeria, Botswana and South Africa. Odir and Banuso (2012) highlighted that there are many shortcomings of carrying cash. The authors noted that carrying cash makes one vulnerable to attacks or robbery. However when using a cashless system, attacks are limited. The other disadvantage of cash is that there are high costs involved in printing and securing money (Odir and Banuso, 2012). Adurayemi (2016) stated that a cashless policy is important since it aims to curb some of the negative consequences associated with the high usage of physical cash in the economy.

While Adurayemi (2016) points the negatives of using cash, the author however addresses that a cashless economy does not mean total elimination of cash as money will continue to be used as a medium of exchange for goods and services. The positive effects as emphasized by Adurayemi (2016) include: prompt settlement of transactions; reduction in visits to banks; stimulation of the cashless policy; reduction in theft and robberies and reduction in cash management costs by banks. There are also benefits to businesses such as easy cash collection and increased sales. Research has shown that the use of a cashless system in businesses can boost sales by 20% (Ejiotor, and

Rasaki, 2012). Similarly Adurayemi (2016) further stressed that the government will benefit from the cashless policy. The author argues that governments with cashless policies can track and collect taxes easily resulting in greater financial inclusion.

Okoye and Avwokeni (2014) investigated whether a cashless economy is a solution to tax evasion by the self-employed. The study reported that tax evasion by the self-employed has reduced but the reduction cannot be entirely ascribed to the cashless system as significant tax payers are not aware of the ramifications of a cashless policy on tax evasion. Several authors agree that a cashless policy is favored since it eliminates bacterial spread through handling of notes and coins (Odir and Banuso, 2012; Ejiotor and Rasaki, 2012; Anyaegbunam, 2014). While the present literature notes several benefits of the cashless policy, there are also adverse effects relating to this progression. The next section of the literature review outlines marginal costs of the cashless policy.

Adverse Effects of A Cashless Policy

The benefits of a cashless policy are numerous as discussed above. However, cash is still the main way of settling accounts in developing countries. For instance in Nigeria cash remains the main mode of payment and a large percentage of the population is unbanked (Odir and Banuso, 2012). Adurayemi (2016) posits that negative consequences of a cashless policy include high unemployment due to the replacement of the workforce by machines. The author further notes that the public is likely to incur high costs for the use of e-banking machines. In the case of Nigeria, the cashless policy has also not been fully accepted on the basis of religious beliefs (Anyaegbunam, 2014).

Even though the cashless regime facilitates ease transfer of funds, Adurayemi (2016) cautioned that this may encourage excessive withdrawals and extravagance. The adverse effects of the cashless policy have also been revealed by Odi and Richard (2013). The author investigated the implications of electronic payment systems in Nigeria. The results of the study showed that checkless banking will lead to a significant decrease in deposit mobilization and credit extension by Nigerian banks. Odi and Richard (2013) suggested that the majority of Nigerians will have to be introduced to the system and be sensitized about it especially the low income group who are deeply rooted on the use of cash money and see it as the most convenient way for receiving and settling payments.

However, Ejiotor and Rasaki (2012) argued that in Nigeria the public is willing to welcome the new cashless system despite the glaring risks which goes with the territory. In summary of the above section, the literature focused only on the positive ramifications of a cashless economy as well as

adverse effects. The purpose of this paper is to determine the payoffs of the cash model in Nigeria since its inception in 2012. The next section provides a review of studies regarding the cashless model and the central banks.

The Economy, Central Bank Implications and New Insights

The use of a cashless system cannot be implemented without the central bank since the central bank is the mainstay of all payments within a country. Barbaroux(2007) nonetheless, highlights that central bank monetary aggregates play a miniature role in monetary policy deliberations.

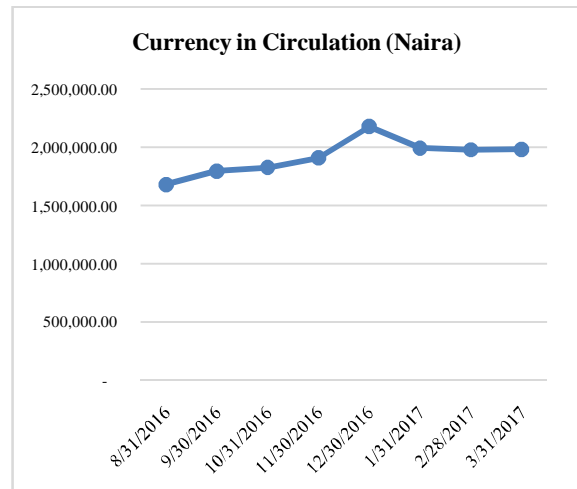
Maurer (2008)postulates that the transition to a cashless model leaves the operations of the monetary policy indifferent. According to Maurer (2008),central banks should approach the transition to a cashless economy with caution. The author noted that a central bank should steadily decrease its supply of cash to the economy rather than a drastic transition. Tee and Ong (2016)postulated that changes of payment systems will not immediately affect the economy. The authors stressed that the effects of policies that promote cashless payments will be evident more in the long run. Therefore it is important to make appropriate decisions as to whether a country should followthe cashless payment system or not, since there are ramifications to the economy.

IV. METHODS

This study focuses on the period before and after the introduction of the cashless policy to evaluate whether the policy has been productive to the Nigerian economy. The data was obtained from the Central Bank of Nigeria (<http://www.cbn.gov.ng/Paymentsystem/BVN.asp>) and World Bank websites (<http://data.worldbank.org/>). The study considers five macroeconomic variables which are: unemployment of the total labor force; Gross Domestic Product (GDP); corruption and transparency; Foreign Direct Investment (FDI) and currency in circulation.

Due to the short data span (annual data from 2005-2015) this paper does not use any statistical methodology, but rather critically analyses the trends before and after the introduction of the cash policy in March 2012. The objective was to use weekly or monthly data but data unavailability restricted the study to annual data only. Similarly, there was no statistics available for Nigeria on tax revenue. The study also provides a comparison between Nigeria's data with South Africa, Zimbabwe and Zambia's statistics. The next section provide analysis of the effects of the cashless policy using the different macroeconomic variables.

IV. EFFECTS OF THE CASHLESS POLICY MONEY SUPPLY: CURRENCY IN CIRCULATION



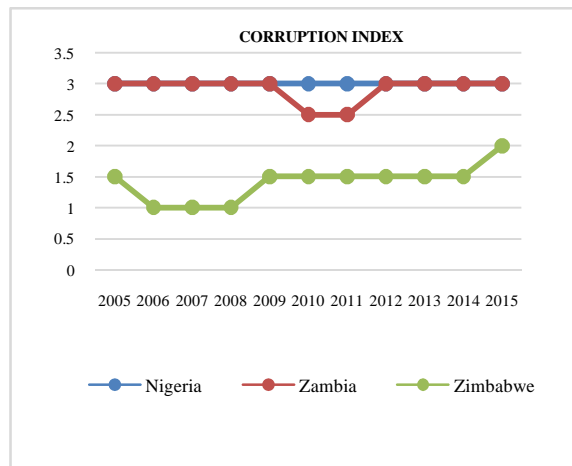
The graph shows the quantity of physical cash in circulation since August 31, 2016 to March 31, 2017. The graph shows that even though the cashless policy was introduced primarily to limit the amount of currency in circulation,there is an increasing trend in the quantity of Naira notes and coins from 31 August 2016 until it reaches the peak in December 2016 with Naira 2,179,174.00 in circulation. The amount of currency in circulation, dropped in January 2017 to reach a static state onwards.

V. ECONOMIC GROWTH



In terms of economic growth, Nigeria was generally showing an upward trend and rapid growth. The period after the introduction of the cashless system also shows rapid economic growth. South Africa's economic growth was rather declining starting from 2011. Nigeria's GDP reached its peak in 2014. Zambia and Zimbabwe's economic growth was generally stagnant from 2005 to 2015.

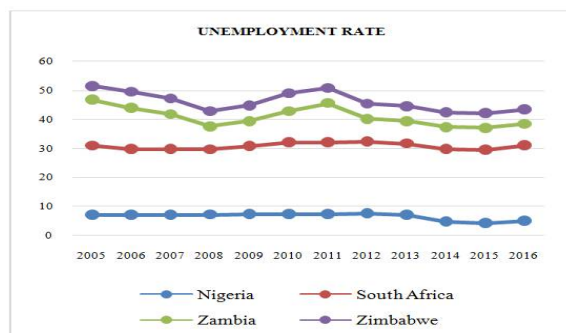
VI. CORRUPTION AND TRANSPARENCY



NB: Data for South Africa was not available

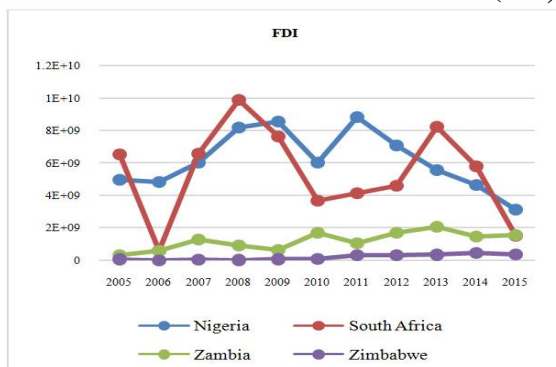
Nigeria's corruption index has been 3 from 2005 to 2015. There have not been any changes to the level of corruption after the introduction of the cashless policy in 2012. Zimbabwe's transparency was rising over the period 2005 to 2015 with the lowest index value of 1.

VII. UNEMPLOYMENT LEVELS



The percentage of the unemployed workforce in Nigeria after the introduction of the cashless policy is generally declining from 2012 to 2016. The highest record was 7.6% in 2012 and it decreased to 5% in 2016. South Africa's unemployment generally remained static while Zimbabwe and Zambia's unemployment levels registered a decline over the years 2012-2016.

VIII. FOREIGN DIRECT INVESTMENT (FDI)



Foreign direct investment in Nigeria registered a declining trend from 2011 to 2015 while South Africa's FDI declined starting from 2013 to 2015. Zambia's FDI generally registered an upward trend from 2012, with a decline in 2014. Zimbabwe's FDI was also increasing between 2012 and 2014 with a decline in 2015. In summary of the findings of this investigation, it is noted that even though the data span is short (2005-2015), the cashless policy has been beneficial to Nigeria. Nonetheless, the currency in circulation has not dropped significantly as anticipated, but that is not critical to the Nigerian economy since the central bank only intends to reduce but not eliminate completely the amount of currency in circulation. Nigeria's economic growth also has not been affected by the regime since the country has surpassed South Africa to become Africa's largest economy in 2014. Concomitantly, Nigeria's unemployment has been slowly decreasing between 2012 and 2015. This cannot be attributed to the cash policy directly but it is expected that since unemployment is decreasing, the national output will increase. There is no major concern in the macroeconomic variables, except the declining levels of the FDI since 2011. The corruption and transparency index has also been static through the decade.

DISCUSSION AND CONCLUSION

This paper aimed to determine the effects of the cashless system in Nigeria between the years 2012 and 2015. While the policy has not been introduced ages ago, it is important to know if it is effective and the benefits accrued. Though the literature mainly outlines the benefits of the cashless system and the adverse effects, this paper took the initiative of determining the impact of the cashless system on different macroeconomic factors which affect the Nigerian economy mainly: GDP, FDI, unemployment levels, corruption and transparency and currency in circulation. Additionally, this study compared Nigeria's data with other African countries statistics over the period 2005 to 2015 with the aim of determining the effects of the cashless policy since 2012. This analysis has showed that the currency in circulation has not reduced significantly as expected. The possible reason is explained by Adulmaliq and Yasino (2012). The authors postulated that despite the cashless regime, Nigeria remains largely a cash driven economy. In addition, the authors indicated that financial illiteracy, technical inadequacy, mistrust in the financial sector and internet fraud aggravate the situation. Maurer (2008) postulated that any transition to a cashless model should ensure that central banks steadily decrease money supply rather than drastically. However in the case of Nigeria, whether the currency in circulation decreases significantly or not is not particularly a concern as the central bank only intends to reduce the quantity of

physical cash in circulation, not to completely make the economy cashless (CBN, 2017). The results of this study have also shown that economic growth has not been adversely affected by the regime change. In comparison, Nigeria has been performing profoundly well in comparison to other African nations namely South Africa, Zambia and Zimbabwe. Furthermore, the unemployment rate of Nigeria has been declining which is likely to boost the economy in the long run perspective. There are however, two major macroeconomic variables of concern in the case of Nigeria. Firstly, the corruption and transparency index has not declined over the years. The Nigerian central bank anticipated that the cashless system will reduce corruption, leakages, money laundering and other cash-related fraudulent activities (CBN, 2017). The probability of the corruption index declining is insignificant given that the country's index has been constant since 2005. The other issue of concern is the declining trend in the FDI. While the FDI has been registering a significant decrease since 2011, Nigeria's overall economic growth has been increasing. This state of affairs may be explained by the declining unemployment levels in Nigeria as locals are taking more initiative to start investment projects in the country. In conclusion of this study, the cashless policy in Nigeria has proven to be productive considering the rise in GDP, the decline in unemployment levels and slow reduction in the quantity of physical cash in the economy.

RECOMMENDATIONS

The recommendations of the study are as follows. Firstly, the central bank and commercial banks should sensitize the public about the merits of the cashless policy. Odi and Richard (2013) argued that the cashless system would require, major reforms and a lot of effort and sensitization especially for the low income grow up who are deeply engrained in using cash and see it as a convenient and easy way of receiving and making payments.

The government also has to ensure accessibility of technical devices that will enable the public to use cashless services. This will include secured networks,

encryptions and quality bandwidths. The ramifications of the cashless policy will surface more in the long run than in the short run as stated by Tee and Ong (2016). The other recommendation is that the government should also put substantial effort in reducing the high corruption index. A high corruption index does not only tarnish the country's image, it directly affects foreign direct investment subsequently GDP and unemployment levels. Therefore it will be in the country's interests to alleviate the high corruption index. In conclusion of the study, the cashless policy is effective in Nigeria.

REFERENCES

- [1] Adulmaliq, A.A., and Yasino, A.O. (2012). Anatomy of cashless banking in Nigeria what matters? *Globafrique Consulting, Centre for Management Development and Policy Modelling (CMDPM)*, 1-20.
- [2] Adurayemi, A.C. (2016). Cashless policy and its effects on the Nigerian economy. *European Journal of Business, Economics and Accountancy*, 4(2), 81-88.
- [3] Anyaegbunam, F.N.C. (2014). Electronic alternatives to raw cash: The advent of cashless society. *International Journal of Engineering and Technology*, 3(2), 2365-2372.
- [4] Barbaroux, N. (2007). Woodford and Wicksell: A cash economy or moneyless economy framework? *History of Economics Society*, June 2007, Fairfax/Virginia, US.
- [5] CBN. (2017). Central Bank of Nigeria, Accessed 28 April 2017 <<https://www.cbn.gov.ng/IntOps/Debt%20Conversion.asp>>
- [6] Ejitor, V.E., and Rasaki, J.O. (2012). Realising the benefits of cashless economy in Nigeria: IT perspective. *International Journal of Advances in Computer Science and Technology*, 1(1), 7-13.
- [7] Maurer, R.W. (2008). The increasing leverage of central bank cash in transition to a cashless economy-A DGSEM analysis.
- [8] Odi, N., and Richard, E.O. (2013). Electronic payment in cashless economy of Nigeria: Problems and prospect. *Journal of Management Research*, 5(1), 138-151.
- [9] Odior, E. S., and Banuso, F.D. (2012). Cashless banking in Nigeria: challenges, benefits and policy implications. *European Scientific Journal*, 8(12), 289-316.
- [10] Okoye, E., and Avwokeni, A. (2014). Cashless economy, tax evasion and the behaviour of self-employed and professionals in Nigeria. *ICAN Journal of Accounting and Finance*, 3(1), 80-87.
- [11] Tee, H., and Ong, H. (2016). Cashless payment and economic growth. *Financial Innovation*, 2(4), 1-9.
- [12] World Bank. (2017). World Bank Open Data, Accessed 28 April 2017 <<http://data.worldbank.org/indicator/FP.CPI.TOTL.ZG>>

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