



## RESEARCH ARTICLE

### ANALYSIS OF THE IMPLICATIONS OF CASHLESS BANKING AND PAYMENTS SYSTEM IN NIGERIA

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#### ABSTRACT

This study investigates the effects of adopting cashless banking and electronic payment systems in Nigeria, identifying the primary challenges and opportunities for the national economy. Using an aggregated approach and descriptive statistical techniques, the research assesses the Central Bank of Nigeria's cashless policy and examines how electronic money innovations interact with existing economic structures. Findings indicate that while a move toward cashless transactions offers potential efficiency gains and cost savings, its success is constrained by infrastructure deficits (notably unreliable power supply), coordination gaps between fiscal and monetary authorities, and concerns about security and the equitable management of benefits. The paper recommends strengthening physical and digital infrastructure, aligning fiscal and monetary policies, routinely monitoring the performance of different cashless channels, and revising the monetary-policy framework to reflect the economy's current structure. With these measures—and ongoing attention to inflation management and system security the transition to a largely cashless economy in Nigeria could yield significant advantages despite the risks identified.

**Keywords:** Payments system, cashless Banking, Nigeria fiscal policy, monetary policy

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## **INTRODUCTION**

The payments system is the mechanism for the settlement of business and personal transactions, which involves the use of financial instruments and institutional arrangements. An efficient payments system therefore ensures that financial transactions are effected with minimum delay and cost to the economy. One of the primary functions of the payments system is that it facilitates the settlement of transactions in respect of goods and services as well as debts. The use of the various instruments of the payments system obviates the problems of barter, particularly the double coincidence of wants. In addition, recent developments in the instruments of the payments system have increased the speed and lowered the costs to users (Central Bank of Nigeria, 2021).

Another fundamental role of an efficient payments system is to ensure effective and smooth transfer of financial resources from surplus units of the economy to deficit units, thus allowing for optimal utilization of such resources. This is achieved through the institutional framework that encourages resource mobilization through savings and its disbursements in form of loans and advances to areas of need within the economy. The process of transfer is facilitated through the use of financial instruments that ensures convenience and minimizes cost of transactions. An efficient payments system oils the wheel of economic activities and provides the necessary momentum which increases the level of economic activities (Ojah & Kodongo, 2024).

By smoothening the flow of economic transactions, as well as minimizing delays in transaction time, it lowers the, overall cost of economic transactions. Such, savings in transaction cost replication in units of man hour gained are further re-injected automatically into the economic system. Thus, the more efficient the payments system is, the larger the savings in transaction costs that are re-injected into the economic system and the greater the volume of economic activities that are undertaken. Also, an efficient payments system, by bridging the sometimes wide locational gaps between economic agents, allows such agents to maximize the use of productive time, thus ensuring greater productivity and involvement in creative economic activities. This inevitably leads to economic growth (Jimoh, 2024).

## **CONCEPTUAL FRAMEWORK AND LITERATURE REVIEW**

### **Review of the Role of Central Bank of Nigeria**

At its inception in 1959, the Central Bank of Nigeria was preoccupied with the need to replace the WACB currency notes with the Nigerian pounds and thus started the process which has developed into a routine within the Nigerian financial system. The Bank is the only bank of issue in Nigeria, and currency constitutes an important payment instrument within the economy (Okanya and Paseda, 2019).



In the promotion of efficient payments system, the Bank established the first clearing house in 1961 to facilitate cheque clearing and promote the use of the instrument as a mechanism for effecting payments. At present there are 21 clearing houses in all the Central Bank locations in Nigeria. The Central Bank is responsible for the administration and funding of the clearing activities within the Nigerian banking system, hi its efforts | to further promote the efficiency in the use of cheques as a means of payments and to modernize the processing of cheques and other payment instruments, the Bank in co-operation with other operators in the financial system introduced in 1991 the Magnetic Ink Character Recognition (MICR), a payment instrument for computer based clearing system. Initially, the MICR was limited to the Lagos area but is now being extended to other parts of the country (Okonkwo, 2018).

The Central Bank has also contributed to the stability in the financial system through its efforts at addressing the distress problem which has affected the confidence of the public in the financial system's ability to meet maturing obligations. With the institutional reforms and sanitization of the financial system, the use of cheques and other payment instruments have been encouraged (Nordiana & Imo, 2019).

In the area of technology, the use of computerized innovations in financial services and introduction of -modern communication gadgets have been encouraged by the Bank to reduce time and locational constraints in effecting financial transactions. The Bank has promoted the use of advanced means of communication including SWIFT and other electronic transfers in effecting international payments and thus enhances efficiency in the financial system (Basdekis et al., 2022).

### **Perspectives on the Challenges of Commercial Banks**

Among the functions performed by commercial banks is the operation of the payments system. This involves facilitating the settlement of transactions through the use of cheques as well as providing liquidity to depositors by providing cash on demand as long as the account is funded or there is an agreed overdraft facility. Beyond domestic transactions, commercial banks participate actively in the settlement of international transactions through the use of instruments such as telegraphic transfers, opening of letters of credit and lending their names to bills of exchange.

### **Problems of the Nigerian Payments System**

In spite of the progress recorded in the development of a viable and reliable payments system in Nigeria, the system is still be devilled by several problems and constraints which have continued to mitigate against its optimal growth and development. These constraints include:

1. **The Tendency to Transact Business in Currency:** There is an established tendency by individuals and many private enterprises to effect payment for business transactions with



cash rather than other payment instruments. This is in spite of known risks and inconveniences associated with cash transactions such as armed robberies, use of currency counterfeits as well as the need to carry large quantities of currency notes (Pietrucha & Maciejewski, 2020).

2. **Currency Counterfeiting, Cheque Forgeries and Issuance of Dud Cheques:** The incidence of currency counterfeiting continues to pose a major problem to the confident usage of notes well as the incidence of bounced cheques continues to contaminate the efficient operations of the payment arrangements (Imandojemu, 2017).
3. **Delays in Clearing Time of Cheques:** The long delay in the clearance of cheques continues to be a worrisome issue. Even with the recent CBN guidelines, cheques take 4,10, and 14 working days to clear for local, intrastate and inter-state cheques, respectively (Imandojemu, 2017).
4. **Infrastructural Deficiencies:** The poor state of telecommunication, unreliable supply of electricity and other infrastructure have continued to inhibit the use of modern and more sophisticated electronic payment instruments such as automatic teller machines. Related to this is the incessant equipment failure in the operation of the Magnetic Ink Character Recognition scheme (Ngene & Aviara, 2014).
5. **Industrial Unrest by Bank Workers, Infidelity and Fraud:** The recurring and frequent incidence of industrial unrest by bank workers has often tended to undermine the payment arrangements especially the use of cheques while it encourages the holding of large cash balances. Similarly, banks' staff infidelity and fraud have remained a sore point in the system as there are rampant cases of their complicity in huge cheques and bank drafts frauds (Inyang et al., 2014).

## METHODOLOGY

This study employed a qualitative approach in assessing the salient implications of cashless banking and payment system in Nigeria. The authors used critical analysis of existing literature backed by quasi-quantitative perspective with a view to taking a stand on the policy dimensions and implications of cashless economy as practiced in Nigeria.

### Distress in the Financial Sector

The illiquidity and distress of many banks have greatly eroded public confidence in the banks and seriously jeopardized the smooth operations of the payments system. According to Ugoani et al. (2014), some of the programmes and efforts aimed at addressing these problems are succinctly presented in the discourses that follow:



- a. The introduction of MICE in 1991 with the aim of tackling the problem of delayed cheques and other payment system. Active steps are also being executed to ensure continual minimal equipment breakdown and failure.
- b. In order to arrest the high incidence of bounced cheques and encourage the wider use and acceptability of cheques, the Federal Government, on the recommendations of the CBN, promulgated the Dishonoured Cheques (Offences) Decree No. 44 of 1977 and the Bankruptcy Acts of 1979.
- c. The Failed Banks (Recovery of Debts) Decree No. 18 of 1994 was promulgated to deal with the problems of fraud and bad loans in failed banks. The decree is aimed at sanitizing the banking system and restoring public confidence in the system. Furthermore, the continued efforts being made by the authorities to resolve and halt the distress situation in the banking sector are expected, to have a salutary effect on the growth and development of the payment system.
- d. The establishment of the Nigerian Inter-Bank Settlement System (NIBSS), Plc which commenced operations in June 1994 is principally aimed at minimizing bottlenecks and settlement delays of the payments system by complementing the CBN clearing system.
- e. Decentralisation of Currency Processing: In order to eliminate the circulation of overused notes, adequate arrangements have been made so that banks would process and sort currencies to ensure that currencies that have been over-used are promptly withdrawn and destroyed by the CBN.

### **Rationale for Cashless Banking in Nigeria**

Unlike the previous studies examined which focus on 'cashless'<sup>1</sup> banking, this study dwells on 'cash-less' banking for two main reasons. First, Nigeria is still on the transition to a cashless economy wherein, no more study notes and coins are printed by the central bank. Secondly, cash-less banking is already in operation in Nigeria. Thus, it necessitates the evaluation of the existing cash-less policy as well as the potential implications of eventual cashless banking in Nigeria.

Cash-less banking may be defined as that banking system which aims at reducing, not eliminating the amount of physical cash (study notes and coins) circulating in the economy, whilst encouraging more electronic based transactions (payment for goods, services, transfers etc.). In other words, it is a combination of two e-banking and cash-based systems. In most developing countries, it represents a middle phase in the development of payment system as illustrated below





## **Cashless Economy**

The new 'cash-less' policy was introduced in April 2011 by the Central Bank of Nigeria. Some of the central rationales in context of this policy are succinctly explained thus:

To drive the 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. An efficient and modern payment system is positively correlated with economic development and is a key enabler of economic growth.

To reduce the cost of banking services: The services include cost of credit and drive financial inclusion by providing more efficient transaction options and greater reach.

To improve crises management: This includes improving the effectiveness of monetary policy in managing inflation and driving economic growth.

To curb the negative consequences associated with high cash usage, which has resulted to a number of challenges across the system. Example of challenges resulting from high-cash usage (not exhaustive) includes: corruption, robberies and cash-related crime, high cost of processing borne by every entity across the value chain (i.e. from CBN, to banks, to the operating entities as well (e.g. staff required to process cash transactions, and manual operating systems)), revenue leakage arising from significant handling of cash, inefficient treasury Management due to nature of cash processing, limitations of monetary policy due to high volumes of cash outside the formal economy and encourages money-laundering, and terrorist funding (CBN Website, 2011).

## **Expected benefits of the cashless policy**

In Alan Greenspan (2007) "The Age of Turbulence", if you wanted to cripple the U.S. economy and you take out the payment systems. Banks would be forced to fall back on inefficient physical transfers of money. Business would resort to barter and IOUs; the level of economic activity across the country could drop like a rock. This shows that efficient payment system is a prerequisite for the development of the national economy. The payment system is a significant national infrastructure and is critical to the growth of the national economy just like telecommunication, electrical power, and transportation infrastructures are.

Research has shown that 10% increase in the efficiency of the national payments system leads to 1% increase in the GDP

- i. Reducing the volume of cash kept outside the banking system ( $CIC = CIB + COB$ )
- ii. Providing banks with more liquidity for lending to the needy sectors of the economy, at attractive rates
- iii. Reducing corruption



iv. Reducing overall cost of banking and payments, thereby reducing bank charges

The Expected benefits of the new cashless policy in Nigeria various stakeholders include:

- i. For Customers: Increased convenience/access, more service options, reduced risk of cash-related crimes, cheaper access to (out -of-branch) banking services and access to credit.
- ii. For Corporations: Better access to capital due to shorter payment processing times, Increased efficiency of payment processes and accounting, Reduced revenue leakages and More efficient treasury management
- iii. For Government: Increased tax collections, greater financial inclusion and increased economic growth (positive correlation with increased payment efficiency)
- iv. For Banks: Efficiency through electronic payment processing, reduced cost of operations (cash handling) and Increased banking penetration (CBN, 2011).

Other merit of the cashless policy is that it will help reduce the risk of carrying cash around. Cash is expensive. It is expensive to print and move about from one location to another. It is also risky to carry about, even in short distances, because you become vulnerable to attacks or robbery. Cash is inefficient. Cash has a lot of problems. So, as a country, it is important that we reduce our dependence on cash. Nigerian society will be better-off with a cashless policy in place. Also cashless policy will help promote the usage of electronic products. IT companies will have the opportunity to produce debit cards, credit cards, recharge cards, chip and PIN card. These merits will be appreciated if all these products are launched into the market and the majority of people are utilizing it.

Cashless policy has the capacity to track down all major movement of money including terrorism financing, bribery and all attempts to compromise financial transparency.

The fear of being robbed of large sum of money would not be there again because the robbers know also that you don't carry cash". Transaction would be consummated faster as you do not need to pass through the apex bank to effect payment abroad in any international business transaction. It will also reduce cost of processing so much notes for CBN and for the commercial banks, it will reduce cash flow or movement of cash from one location to the other to effect customers' needs.

Other stakeholders are NIBSS (Nigerian Interbank Settlement Scheme), POS Manufacturers, telecom providers, Switch operators and definitely CBN. The various cashless banking instruments introduced are: EFT (Electronic Fund Transfer), ATMs, internet Banking, POS systems, Mobile payments and direct debits.



### **Challenges Facing the Cashless Policy in Nigeria**

The financial sector, which is the central nervous system of any economy, is important for the development of any nation. Globally, the relationship between the financial system and development remains very critical for any economy to realize its potentials. Though the banking system functions more efficiently and effectively when there is a robust and efficient payments systems infrastructure. As the Central Bank of Nigeria (CBN) prepares Nigerians for a rough transition into a cashless economy, there are a couple of concerns about the feasibility of the policy in Nigeria. Though the policy is as beautiful as it is faces great challenges. A few of these inherent challenges are listed below:

**Infrastructure deficit:** The financial infrastructure in Nigeria is not adequate to carry the load of a cashless society; ATM's, Point of Sales system, mobile banking and other mediums have to dramatically expand to touch at least 40 percent of the whole economy before any meaningful effect can be achieved.

**Power:** Power must be improved dramatically to accommodate for smooth operations of financial activities.

**Prevalence of E-fraud/ Consumer Protection:** Another major concern would be the risk involved, because if the process is rush and the economy losses confidence in the system due to high level of fraudulent activities it will be devastating to the Nigeria economy.

**Literacy levels ("Numeracy" venues literacy):** As noted in any developing country, the literacy rate in Nigeria is still very low especially in the Northern part of the country. Hence, the business men here prefer to keep their money in their own vault while there are banks scattered all over the country.

**Religious us beliefs:** Recently there has been psychological war in the country over the proposed Islamic bank by the CBN. The Muslims believe that the conventional banks are guilty of sinning against God by their interest charges. This has been one of the reasons why the achievement of the cashless Nigerian society is doubted.

**Availability of real data:** Proper and accurate identification of account holders must be maintain and shared when necessary by all financial institutions; also CBN must collaborate with all other government and private agency responsible for collection of Identification of individuals in Nigeria for reconciliation of any identification.

**Investments:** CBN must be ready to invest heavily to make these transitions possible; Technology is not cheap and ever changing at a very fast pace. Investments in billions of dollars made in infrastructure, training, marketing, security, maintaining it networks on soon





will be on a yearly basis for the years to come and should be a collaboration of efforts by all invested parties.

**Security:** As it relates to laws that are need to enforce new methods of transactions and a changing culture, the CBN must partner and work with the National Assembly to ensure proper legislation is been formulated. Enforcements of new legislation would be carried by the CBN and all other executive arms that are empowered such as the EFCC. They must commit to training of personnel and the judiciary must be prudent and up to the task.

**Communications:** Ability to guarantee network availability and quality at all times

**Lack of Trust and the Bounced-Cheque Syndrome:** Trust is lacking in Nigeria's business environment. As a result, business operatives believe in cash and carry. Bounced cheque issue is a very common thing in Nigeria. People place less trust on the use of Cheques too.

**Getting it right the first time:** Another major concern would be the risk involved, because if the process is rushed and the economy losses confidence in the system due to high level of fraudulent activities, it will be devastating to the Nigeria economy.

- i. Bank Charges / High fees on some electronic channels
- ii. Cash-less not cashless
- iii. Stakeholder engagement/Grass roots sensitization
- iv. Job-loss versus Job creation
- v. Purchase, installation, usage and security of critical application
- vi. Rise in money laundering before 2013

### Policy Implications of Cashless Banking in Nigeria

The introduction of cashless banking in Nigeria has several implications for policymakers. This subsection seeks to evaluate these significant implications particularly in regards to monetary policy. First, the development of e-money could lead to the decline in currency demand. However, currency notes are not perfect substitute for electronic money even in a pure cashless economy. This is because the demand for currency is part of demand for central banks' base money. Second, the operation of cashless banking implies a consequent decline in high-powered money (H), which connotes highly liquid form of money.

As illustrated below, high-powered money is a function of currency in circulation (C) and reserves (R).

$$H = f(C, R); \quad H = a_0 + f_1C + a_2R + p$$

$$\text{Where: } a_1 > 0; a_2 < 0.$$



This indicates for a cashless society that as C falls, H falls. On the contrary, if R falls, H rises. Thus, high-powered money has positive and negative relationship with C and R respectively. And there could be loss in CBN's monopoly power in currency issue as electronic money would be largely dominated by private institutions. However, this does not prevent CBN from performing its monetary policy function.

There exists a different approach to monetary policy conduct. This implies that instruments of monetary policy such as Open Market Operations and reserve requirements would be used more often than MPR for inflation-targeting in a cashless society. Another major policy implication is the introduction of more risk control measures by the relevant authorities, particular Basel Committee and CBN. Since the advent of e-money comes with technological risks, more regulations and supervision are being conducted.

The consistent usage of e-channels in financial transactions possibly leads to network congestion. In other words, there exist large probabilities that such cashless banking systems such as POS terminals and ATMs experience overload. The evaluation of cashless banking reveals that public revenue (in form of seignorage) may decline steadily because less currency notes are printed by CBN. However, this is also balanced with savings in printing costs and may not eventually reduce its revenue.

The cashless banking system also implies that there exists increased competition between financial and non-financial institutions such as telecommunication companies. Also, the implementation of cashless banking system implies growth of the financial sector as cash-handling costs is reduced significantly. However, it does not mean that financial sector's growth would automatically have a 'trickle-down effect'<sup>1</sup> on the real economy.

The plan of CBN in granting license to few POS manufacturers could yield an oligopolistic market and possibly a cartel, thereby subjecting Nigerians to possible exploitation. The CBN might have limited ability to raise funds, manage liquidity and control short-term interest rate in a pure cashless society. However, it depends on the extent to which the Treasury can supply potentially large amount of risk free securities to the central bank. Cashless banking has the possibility of stimulating trade and commercial activities as the velocity of circulation (rate at which money changes hands) is likely to increase in the long-run.

## **CONCLUSION AND RECOMMENDATIONS**

This study examined the new cashless banking policy in Nigeria with a view to ascertain the policy implications as well as to evaluate other policies of the Central Bank of Nigeria, it was motivated by a number of considerations. First, is that the financial sector has witnessed so many reforms without commensurate improvements in the standard of living of Nigerians. Secondly, there has been disagreement on what form of money should guarantee the



effectiveness of monetary policy. In order to achieve the objectives of this study, the method of simple descriptive analysis were performed.

The study also presented a review of literature on the research topic by ascertaining the strengths and criticisms of previous relevant studies. Here, most researchers took a one sided look by examining either the benefits or the costs of cashless banking while the others did not examine comprehensively the policy implications of cashless banking. However, this was able to fill that gap. The development of innovative cashless banking has the potential to transform economic activity and achieve developmental goals. If an effective cashless banking system can be developed and the above recommendations are carried out then it will have desired impact on the Nigerian economy.

Therefore, trusted central banks and governments must play a key role in promoting the development of popular forms of e-banking channels. This study concludes with a final observation about the central bank's role in the development of the payments system. Over the next decade, there would be progress towards a cashless or study-less society both in Nigeria and other countries. In the presence of these trends, the responsibility of central bankers is to anticipate such change and channel it in such a way to ensure the safety, efficiency and effectiveness of domestic and international banking system.

In outlining, the study major findings, the study shows that the Nigerian economy is predominantly a cash economy and over the last six years (February 2007 - February 2012), the Monetary Policy Rate had relative significant effect in stabilizing inflation rate. Also, there has been high volatility in the trend of Nigeria's base money or 'high-powered money'<sup>1</sup> and cashless banking leads to cost savings in the financial sector, but does not necessarily translate to real sector growth. There would be possible reduction in system liquidity and increased velocity of money circulation and possible limitations in the ability of CBN to manage liquidity and short-term interest rates.

For the cashless banking policy to have sustained socially desirable effects on the Nigerian economy, it is recommended that the following should be done:

- i. Adequate and well-functioning infrastructural facilities must be in place. More specifically, issue of electricity should be tackled by the government to facilitate the usage of electronic money.
- ii. Regular awareness campaign to educate the public on the cashless banking channels and security measures that protects the users from electronic theft.
- iii. Consistent and effective appraisal of cashless banking operations. Basically, such appraisals should be quantitative and qualitative in nature.
- iv. Effective regulatory measures should be continuously implemented at the domestic and international level, in other words, legal, regulatory and economic policy frameworks should evolve to cope with these new cashless banking products.



- v. The Central Bank of Nigeria should redesign its monetary policy framework in such a way to recognize the effects of reduced production of currency notes.
- vi. Individual and collective analysis should be made of the various e-banking channels to determine relative impact on the economy.
- vii. The aforementioned stakeholders as well as the law enforcement agencies should work co-operatively to give life to the 'cashless banking policy'. This is because they have significant individual roles to play.
- vii. Harmonization of monetary and fiscal policy, in essence, the federal government should not pursue contractionary/ expansionary fiscal policy while the CBN embarks on expansionary/ contractionary monetary policy.
- viii. Fair competition should be allowed in order to prevent 'monopoly-like behavior by the licensed POS manufacturers.
- ix. The execution of cashless policy should be carried out in stages. Alternatively, Nigeria can move first to 'cash-less' society before migrating to a pure 'cashless economy.
- x. There must be clear-cut intention of pursuing either inflation-targeting goals or economic growth and developmental goals.
- xi. To encourage Nigerians to patronize such cashless banking channels, the cost should not be too high as a larger percentage of the population experience poverty.

### Competing Interest

The authors have declared that no conflicting interest n this manuscript

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