CENTRAL BANK OF NIGERIA

UNDERSTANDING
MONETARY POLICY SERIES
NO 6

THE NIGERIAN PAYMENTS SYSTEM

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ISBN: 978-978-51972-4-2

Central Bank of Nigeria
Understanding Monetary Policy
Series 6, June 2011

Aims and Scope

Understanding Monetary Policy Series are designed to improve monetary policy communication as well as economic literacy. The series attempt to bring the technical aspects of monetary policy closer to the critical stakeholders who may not have had formal training in Monetary Management. The contents of the publication are therefore, intended for general information only. While necessary care was taken to ensure the inclusion of information in the publication to aid proper understanding of the monetary policy process and concepts, the Bank would not be liable for the interpretation or application of any piece of information contained herein.

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Central Bank of Nigeria

Mandate

▪Ensure Monetary and Price Stability

▪Issue Legal Tender Currency in Nigeria

▪Maintain External Reserves to safeguard the international value of the Legal Tender Currency

▪Promote a Sound Financial System in Nigeria

▪Act as Banker and Provide Economic and Financial Advice to the Federal Government

Vision

"By 2015, be the Model Central Bank delivering Price and Financial System Stability and promoting Sustainable Economic Development"

Mission Statement

"To be proactive in providing a stable framework for the economic development of Nigeria through the effective, efficient and transparent implementation of monetary and exchange rate policy and management of the financial sector"

Core Values

- Meritocracy
- Leadership
- Learning
- Customer - Focus

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SECTION ONE

Introduction

In any modern society, the need for functional and efficient payments system is very obvious. Modern economies have developed or are developing multilateral payments systems in response to the sophistication in economic activities. This permits the settlement of financial obligations for economic operators, no matter where such transactions are made. For the payments system to function effectively, it is important that the financial system is properly developed and made efficient. An efficient payments system minimizes liquidity, settlement, systemic, credit and operational risks which are inherent in financial transactions.

For the effectiveness of monetary policy, central banks, world over, play a leading role in development of appropriate payments policies and instruments. Responding efficiently to current and future payment needs of economic units while, leveraging on new technological innovations reduces costs and increases the speed of settlement of funds and securities as well as value and volume of transactions.

SECTION TWO

The Concept of Payments System

Payments system refer to the established infrastructures (comprising institutions, people, set of instruments, rules, procedures, standards and computer networks) through which financial obligations are discharged by economic agents. Succinctly put, it entails the physical and organization structure that enables the transfer of monetary value between parties discharging mutual obligations. In other words, payments system refer to an arrangement in the financial system which supports the transfer of funds from suppliers/savers to the users/borrowers, and from payers to the payees, usually through exchange of debits and credits among financial institutions. It consists of a paper-based mechanism for handling cheques and drafts, and a paperless mechanism (such as electronic funds transfer) for handling electronic commerce transactions.

The ultimate goal of any payments system is to ensure that the financial system operates without interruption so that transactions are effected with minimum delay, risks and cost to the economy. Similarly, an efficient payments system reduces the cost of exchanging goods and services and is indispensable to the functioning of the inter-bank, money, and capital markets. It also underlies the optimal utilization of resources and enhances implementation of monetary policy to achieve price stability. In addition, it is a channel for settlement of all types of transactions including cross-border financial flows

An efficient payments system must be secure, reliable, accessible, prompt and cost effective to meet all users' needs. Its technical efficiency would determine the extent to which monetary transactions are consummated in any economy and the risks associated with its use. In contrast, a weak payments system may severely drag on the stability and developmental capacity of any economy, while its failures can result in inefficient use of financial resources.

2.1 The Role of the Payments System in an Economy

The payments system plays a crucial role in any economy as it remains the main channel for inter-sector, inter-industry, inter-company and interpersonal financial resources flow, thus promoting economic growth. It, therefore, represents the major foundation of the modern market economy. Essentially, there are four pivotal role for the payments system, namely:

a) Financial Intermediation

The Deposit Money Banks (DMBs) provide services as financial intermediaries by making funds available to all economic agents. The payments system facilitates intermediation through the transfer of value from a payer/depositor to the payee/receiver of the fund, in the process of exchange of goods and services. Thus, the system is the channel through which liquidity and credit are transferred from one participant to another in the financial system.

b) Facilitates Settlement of Transactions

The payments system helps to speed up exchange and settlement of funds and securities. In term of settlement techniques, the payments system can be grouped into two: Real Time Gross Settlement System (RTGS) and Deferred Settlement (Netting) System. RTGS are owned by central banks for high-value payments and do not bear any credit risk as payments are settled in real-time. It is a system that enable banks to settle payments immediately and in the full; however, liquidity issue could occur in the system which may requires credit extension. One way to reduce such a system's liquidity needs is by using deferred settlement system such as netting. In netting system, payment instructions are deferred until some designated time when banks exchange net amounts they owe or are owed. In other words, deferred net settlement system refers to an arrangement that effects the settlement of obligations or transfers between or among counterparties on a net basis at some later time.

c) Minimises Risks

An efficient payments system minimises liquidity, settlement, systemic, credit and operational risks involved in the transfer of monetary value that may arise from one or more economic units.

d) Provides the Necessary Framework for Monetary Stability

An efficient payments system is a precondition for the smooth functioning of the money/credit market and safe execution of monetary policy operations that can guarantee moderation of interest rates. In essence, an efficient payments system enhances the implementation of monetary policy and the maintenance of monetary and price stability.

SECTION THREE

Type of Payments System and Instruments

Different types of payments system are available through different platforms and these can be broadly categorised into two divisions: Retail/Small Value and Large Value/Wholesale payments system.

3.1 Retail or Small Payments System

An individual with a payment card of any kind is part of the retail payments system. At the retail level, most transactions involve cash, cheques, draft, cards and Automated Teller Machine (ATM), Automated Clearing House (ACH), bulk payments, etc. Retail processes are relatively small payments among consumers and businesses and are used primarily by non-bank public for making and receiving payments.

3.1.1 Instruments of Retail Payments

These payment instruments can be classified into four, namely: currency or cash; paper-based instruments; paperless or electronic instruments; and other instruments.

i. Currency or Cash

This instrument takes the form of bank notes and coins, and is the most preferred method for small payments in Nigeria because is without credit risk.

ii. Paper-based Instruments

These include cheques, bank drafts and travellers' cheques. In spite of the obvious advantage of these instruments over cash, their use is still very limited in Nigeria. This is due to the low level of trust and acceptability of the instruments in settlement for business transactions, predominance of peasantry in the real sector and informality in the trade sub-sector of the economy.

iii. Paperless or electronic instruments

Paperless or electronic instruments are essentially technology platforms such as automated teller machines (ATM), automated clearing house (ACHs), point-of-sale terminals (PoS), internet payments, mobile telephones and wire transfers.

iv. Other Payments Instruments

Other paper-based instruments include postal order, money orders, vouchers and pre-paid cards. The use of these instruments are diminishing over time due to poor postal system, preferred use of banking services especially bank drafts or certified cheque and increased use of electronic payments instruments in the country.

3.2 Large-Value Inter-bank Payments (LVP) or Wholesale Payments System

This system typically processes critical high-value payments. LVP are primarily used for corporate financial transactions. It enables payments to be made electronically within the country and transactions are settled in real time. Other advantages of the system are its speed, reliability, safety, convenience, cost effectiveness and accuracy. However, If this system fails, it could trigger disruptions and transmit shocks to financial markets, the domestic economy as well as at cross-border levels. The LVP system is privately run by the Nigeria Inter-bank Settlement System (NIBSS) Plc.

3.2.1 Instruments of Wholesale Payments System

i. The Real Time Gross Settlement (RTGS) System

RTGS systems are large-value funds transfer services that operate continuously during the business day to provide irrevocable settlement of payments obligations via the Central Bank. The most important feature of the RTGS system is that, it provides instant settlement with finality as soon as payment instructions are received, provided that sufficient funds are available in the settlement account of the authorising bank. In RTGS system, **settlement** refers to the actual transfer of funds from sending bank to a receiving bank. **Finality** refers to a settlement that is unconditional and irrevocable. On the other hand, **real time** means that payment instructions are executed continuously as they enter the system, while **gross settlement** means that for each payment instruction, the total gross amount of fund is transferred.

To increase the efficiency of payments, the CBN commenced the operations of the RTGS system on December 18, 2006 and was named the "CBN Inter-bank Funds Transfer System (CIFT)". The system interfaces with the Bank's core banking application (the T24 System) and has all DMBs and discount houses as direct participants. The System allows participants to perform electronically a number of transactions from their offices, using the Terminal Access Device. Notable among the transactions that can be effected are inter-bank transfer, third party fund transfer (transfer on behalf of Bank A's customer to the account of Bank B's customer), account balance inquiries, queue management, report generation and reconciliation.

The RTGS offers a number of other benefits which include a reduction of systemic risk, the elimination of settlement risks due to the irrevocability of payment messages and enhanced efficiency of the monetary policy implementation process. The system is also capable of providing Delivery Versus Payments (DVP) for securities settlement and Payments Versus Payments (PVP) for foreign exchange settlements to reduce their risks. Currently, all the DMBs in the country, non-interest banks (JAIZ) and discount houses use RTGS to make large value payments.

ii) Society for Worldwide Inter-bank Financial Telecommunication (SWIFT)

It is designed for international payments using messaging system. It facilitates international trade e.g. Letters of Credit; and its transfers are characterised by high transaction costs denominated in US dollars because the network is not domiciled in Nigeria.

SECTION FOUR

The Payments System in Nigeria

Nigeria's payments system is predominantly cash-based reflecting the preference of economic agents. This means that most payments for business transactions are made using cash rather than through other payment modes. Dependence on cash for transactions implies that much of it is held outside the banking system which otherwise would have been available to banks for lending to the more productive sectors of the economy. For instance, currency outside the banking system (COB) as a proportion of money stock (M2) accounts for a larger component of the currency in circulation (at an average 25.8 per cent in 1990 – 2000. It increased to 30.0 per cent in 2001 – 2012). This ratio is indeed high when compared with other emerging and industrialised countries.

Over the last 50 years, the CBN has put in place a number of measures to strengthen its internal capacity to cope with rapid developments in the payments system. These include regular issuance of relevant rules, regulations and guidelines which enables the Bank to exercise greater and more effective surveillance over the system. The four associated national institutional frameworks include: The National Payments System Committee (NPSC), The Payments System's Vision 2020, The National Payment System Working Groups (NPSWG) and The Payment Infrastructure and Strategy Committee (PISC).

To encourage the use of cheques, the CBN mounted a national campaign to promote the use of payment orders. Also, the Foreign Exchange (Monitoring and Miscellaneous Provision) Decree No. 17 of 1995 (section 21) was promulgated to prohibit the use of cash in paying for landed property, stocks, shares, debentures and all forms of negotiable instruments; and to encourage the use of bank transfers and cheques.

The Bank continues to focus on strengthening the institutional and regulatory frameworks that would facilitate financial inclusion of the unbanked and promote more usage of electronic payments as clearly enunciated in the Payments System Vision.

4.1 The Structure of the Nigeria Payments System

(a) Currency or Cash

The core of the payments system in Nigeria is the currency comprising notes and coins, and is highly prone to risks of loss, robbery, accident, counterfeiting, etc.

The currency structure, which hitherto consisted mainly of smaller denominations of 50k, N1, N2, N5 coins and N10, N20, N50 notes, has been restructured to include higher denominations of N100, N200, N500 and N1000 notes. This contributes in no small way to higher intermediation costs. As a result, banks have to employ more cashiers, construct large cash vaults, purchase bullion vans, cash sorting machines, etc in order to meet the cash requirements of their customers and other clientele.

The cash payments system in Nigeria coexists with non-cash payments scheme. However, cash remains the preferred payment instrument as opposed to account-based payment instruments.

(b) Non – Cash Payments System

Non-cash payments system available in the country includes the Bankers Clearing House (Inter-bank Clearing) System, Inter-bank Settlement System, the Securities Clearing System and other types of electronic payment systems.

i. Inter-Bank Clearing System (Bankers Clearing House System)

The CBN established the first clearing house in May 1961 to facilitate cheques clearing and to promote effective payments. Thereafter, as Central Bank branches were opened in state capitals, clearing houses were also opened in such branches. At end December 2012, there were twenty-one clearing houses in operations in State Capitals and the Federal Capital Territory, Abuja.

The Bank also introduced the implementation of the Magnetic Ink Character Recognition (MICR) programme in 1991 towards modernising the processing of cheques and other instruments. Members of the cheque clearing system in Nigeria include the CBN as superintendent and DMBs (clearing) as operators. The clearers (DMBs) deal in dual capacity, first on their own behalf and secondly, as agents to other DMBs that do not have direct access to clearing house facilities.

ii. The Nigeria Inter-Bank Settlement System (NIBSS)

In order to enhance the payment system, the Bankers' Committee established the Nigeria Inter-bank Settlement System (NIBSS) in 1993 and it commenced operations in 1994, as a non-profit intermediary between banks. It complements the Central Bank's clearing and settlement procedures in order to minimise payment bottlenecks and settlement delays as well as provide same-day clearing and settlement of high value inter-bank transfers. It is a fully computerised system delivering real time services to the banking system. Soon, NIBSS will commence the Tier One (T+1) settlement cycle for cheques and the scheme for Point of Sales (PoS) terminals. The NIBSS has an authorised share capital of N10.0 million, fully subscribed by DMBs. The CBN is not an equity participant but has a voting right and chairs the NIBSS as the apex financial sector regulatory institution.

iii. The Nigeria Automated Clearing System (NACS)

In collaboration with the Bankers Committee, the CBN launched the Nigerian Automated Clearing System (NACS) on October 21, 2002. This was in response to the challenges associated with the MICR implementation, in particular, clearing system delays. NACS facilitate the automated clearing and processing of cheques on-line using a combination of MICR and imaging technology. Under the system, cheques are captured and processed at high speed with the use of reader/sorter machine and state-of-the art computer technology. The NACS provides the anchor for electronic payments system in Nigeria. Since the deployment of NACS, the clearing cycles of local and upcountry instruments have been harmonised at T+2 (3 working days) since 2008.

Further, the Cheque Truncating and Conversion System (CTCS) has been introduced. The objective is to implement a paperless cheque clearing process, achieve a common day hold throughout the nation and increase the efficiency of the clearing and settlement process. In CTCS, the clearing of cheques is based on the image and Magnetic Ink Character Recognition (MICR) Codeline data of the cheque. In place of the physical cheque, the image and data of the cheque, such as the MICR field, date of presentation, presenting bank, etc., would be transmitted electronically throughout the clearing process. Thus, there will be no need to move the physical cheque from the collecting bank to the clearing houses and the paying bank. This would reduce the time required for clearing cheques.

iv. The New Settlement Framework

The CBN introduced this new settlement system framework in April, 2004, which was aimed at improving efficiency and eliminating settlement lag for high value and time-sensitive payments and to further minimise risks. Under this framework, a new settlement classification was introduced which segmented banks into settlement and non-settlement banks. While settlement banks maintain settlement accounts with the CBN, the non-settlement banks maintain only operational account for limited transactions in the CBN, basically foreign exchange and inter-bank fund transfer. Under the new arrangement, non-settlement banks were required to clear their cheques through settlement banks. It also involves an upward review of required clearing collateral to N15.00 billion for each bank that aspires to be a settlement bank.

Consequently, seven clearing banks that met the requirements for maintaining a clearing account, were appointed and designated "settlement Banks" in 2004.

The number of settlement banks was further increased to 12 in 2006. The arrangement under this new system has enabled the non-settlement banks to maintain agency arrangement with settlement banks.

The new clearing and settlement arrangement has reduced the various risk elements that were associated with the earlier arrangement. The distress problem and moral hazards usually associated with overdrawn positions of the banks, arising from cheque clearing have been eliminated and the self-regulatory nature of the scheme has imposed some measure of discipline on the banks.

v. The Nigeria Securities Clearing System (NSCS) and Central Securities Clearing System (CSCS)

This system concentrates on securities transfer, which involves debt service and money market instruments with the NSE acting as superintendent of the trading activities. The main participants in these markets are the dealing members of the NSE, banks and institutional investors (pension funds and insurance companies). Payments for securities are made through cheques, draft or same day inter-bank or electronic payments.

With the internationalization of the NSE, a Central Securities Clearing System (CSCS) evolved in 1997, to clear and settle all listed securities including FGN development stocks, industrial loan stocks, preference stocks and equities. The CSCS is an on-line automated securities trading system, which facilitates the electronic settlement of deals between stockbrokers and customers through the in-house clearing system and the NSE central computer via a communication network. Thus, a securities settlement system is the mechanism by which the purchase of a security is paid for and by which title is transferred from the seller to the buyer.

vi. The Nigeria Electronic Payments System

These are non-paper computer-based technology payments instruments of which the electronic payment is one. The electronic payments system is made possible by the existence of electronic money (e-money) which can be defined as a stored-value product in which a record of the funds or value available to the consumer for multipurpose use is stored on an electronic device held by the consumer. The electronic payments system is amenable to electronic platforms such as automated teller machines (ATM), point-of-sale (PoS) terminals, internet payment, plastic money (e.g e-purse, debit and credit cards), mobile payment and wire transfers, etc.

Debit cards are the dominant card mechanism in Nigeria, they are also known as ATM cards. ATM usage exceeds PoS transactions given the current limited deployment of PoS terminals. Other Electronic Funds Transfers (EFT) in the country are the Automated Clearing Houses (ACH), Nigeria Electronic Fund Transfer (NEFT), NIBSS Fast Funds, RTGS, and SWIFT. Their wider introduction and use in Nigeria could contribute significantly to the improvement of the payments system. Banks are increasingly deploying electronic money instruments to aid service delivery, given their significant cost effectiveness and operational efficiencies in payments system.

a) Electronic Cards

Electronic cards are physical plastic cards that uniquely identify the holder and carries monetary value that could be used as a means of settling financial obligations. There are three basic types of electronic card namely: E-purse, Debit Cards and Credit Cards.

i. **E-Purse:** Also called electronic wallet. An E-purse carries a pre-loaded monetary value and can be used as a means of payment for multiple small value purchases. E-Purse (e.g. ValueCard and SmartPay) are the most predominant types of plastic money in use in Nigeria.

ii. **Credit Cards:** A credit card indicates that the holder has been given line of credit by the card issuers. Credit cards are used to facilitate transactions without the movement of currency or cash. This allows the holder to make purchases and/or make withdrawals of cash up to the pre-arranged credit limit. The credit is settled either in part or in full within a specified period.

iii. **Debit Cards**: Debit cards enable the holders to have purchases and withdrawals charged directly to funds in their accounts. Examples of major debit cards include VISA, Eurocard, MasterCard, and American Express. In Nigeria, the only example of debit cards is the ATM card being issued by banks on the Inter-Switch network.

b) Internet Banking

Internet banking involves conducting banking transactions such as account enquiry, printing of statement of account, funds transfer, payments for goods and services, etc on the internet using electronic tools such as the computer without visiting the banking hall. E-commerce is greatly facilitated by internet banking and is mostly used to effect payments. Internet banking also uses the electronic card infrastructure for executing payment instructions and for final settlement of goods and services between the merchant and the customer. Currently, the most common internet banking is for bills payments, fund transfer and purchase of air ticket through the websites of the merchant.

c) Telephone Banking

These are banking services which a customer of a financial institution can access using a telephone line as a link to the financial institution's computer centre. Services rendered through telephone banking include account balance, fund transfer, change of pin and bills payment.

d) Mobile Banking

Mobile banking involves the use of the mobile phone for settlement of financial transactions. It supports person-to-person transfers with immediate availability of funds to the beneficiary. Mobile payments use card infrastructure for funds transfer as well as secure SMS messaging for confirmation of receipts (to beneficiaries) and payments (to account holders who have given payment instructions) of funds. It is used for low value transactions where speed of completing the transaction is important. The services covered under this product include account inquiry, fund transfer, recharging phones, changing passwords and bills payment which are offered by few institutions.

SECTION FIVE

Challenges and Constraints of the Nigerian Payments System

Remarkable strides have been made in the country to improve and develop a viable, secure and reliable payments system. However, the system is still bedeviled with several problems which have continued to militate against optimal operations, growth and development. Some identifiable challenges include:

a) Cash Transactions

The Nigerian economy is still basically a cash economy and the recurring distress in the financial system has accentuated the reliance on cash for business transactions by bank customers. Cash transactions continue to be predominant in spite of inherent danger, like armed robbery attacks, counterfeiting of currency notes and coins, and the inconvenience of carrying large amount of currency. All these increase the cost of currency management, encourage money laundering and leakages.

b) Infrastructural Deficiency

The poor state of infrastructural facilities for electronic communication and electric power supply hinder the growth of electronic payments. Notably, unreliable power supply and insecure wide area networks (WAN) have compelled financial institutions to incur high costs in satellite communications system and private power supply system investments.

c) Sharp Practices

The wide prevalence of sharp practices and fraudulent schemes in Nigeria undermine payment arrangements. The sharp practices include deliberate misdirection and wrong delivery of clearing instruments as well as presentation of spurious and cloned cheques to paying banks. These are associated with cases of insiders' complicity in cheques and bank draft frauds.

d) Distress in the Financial Sector

The recurrence of distress in the banking system negatively influences public confidence in banks and constitutes a serious threat to the smooth operations of the payments system.

Other challenges associated with e-payment system include:

a) **Low level of literacy:** electronic payments are a recent development in Nigeria. People find it difficult to operate because it is largely driven by knowledge-based information technology which they are not familiar with;

b) **Large scale fraud:** under the e-payment platform, users are prone to fraud and loss of funds especially from system security breach by criminals;

c) **High charges:** withdrawing from ATMs other than that of the card issuing bank (third-party ATM card withdrawal) attracts additional charges of N100 per transaction in Nigeria. There are also associated charges like VAT and commission incurred using internet banking for settlement of bills;

d) **Low level of banking habit:** for most people to use the e-payment platform, they must be bank account holders. Non-ownership of accounts hinders the effective use of e-payment;

e) **Poor service delivery:** this is one of the major challenges of e-payment in Nigeria. Examples of poor services are: insufficient funds in ATMs, network problem, dispensing error, some ATMs are not user friendly and old notes loaded in them make withdrawal difficult, poor human relations and very long response time when attending to customers' complaints.

f) **Lack of accessibility to e-payment platforms:** Most people do not have access to ATM services as the coverage is still limited to some areas within the country.

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