

CHAPTER 1

INTRODUCTION

1.1 BACKGROUND TO THE STUDY

The rapid progression in recent years in the area of Information and Communication Technology has impacted different phases of human existence, systems and, a business of which the banking business is not left out. According to McArthur J., the banking effect of ICT has been so profound “from the way banks work to how consumers access various banking facilities, all aspect of banking has been affected. For depositing or cashing a cheque, the days of getting to wait are over. Information in a much reliable and accessible manner is now also transported and stored.” Thus the banking industry all over the world has passed through various phases of development while the nation of Nigeria is also struggling to carry on with the phase of development to meet up with the global standard.

Since formal banking has been introduced into the Nigerian economic system by the colonial masters, the institution has undergone a lot of reforms and transformations that are performed using regulations and monetary policies through the Nigerian Central Bank, the apex bank in the nation. These reforms have been followed by attending economic effects. Between 2004 and 2009, major reforms and changes were implemented, ranging from recapitalization orders and banking automation that has enhanced returns. (Udoidem & Acha, 2012).

In trying to catch up with global trends, the year 2012 witnessed a major policy initiated by the regulatory bank, the Cashless policy. This policy was introduced as a system that allows financial transactions to be carried out without the use of banknotes. The system requires debit and credit card payments and automatic payments to be used in financial transactions. This policy, the execution of which was piloted in Lagos in 2012, spread throughout the country between 2013 and 2014. The cashless regime incorporated charges for withdrawals and deposits above allowable cash transaction limits. The revenues produced from the transaction fees charged are to be allocated between the CBN and the banks in the proportion of 40:60. To impose the execution of the policy, the Central Bank in a circular dated April 2011, specified that “a regular combined quota of N150,000 and N1,000,000 on unlimited withdrawing of cash and

lodgings by individuals and corporate customers with deposit money banks shall be enforced as of 1 June 2012.” The limits were later reviewed to the daily withdrawing of cash and deposit a maximum of N500,000 for individuals and from N1,000,000 to N3,000,000 for corporate accounts.

The Nigerian Central Bank listed the reasons for introducing the cashless policy to include the efforts at driving the nation growth and industrialization of our payment scheme in compliance with the Nigerian aim of vision 2020 to be among the top 20 economies by 2020. According to the CBN, “An efficient and modern payment system is closely linked to economic advancement and a key factor for economic growth lowering the price of bank facilities (including loan costs) and promote financial inclusion by delivering more efficient transaction choices and greater scope and enhancement of monetary policy effectiveness in inflation control and driving economic growth. Furthermore, the cash policy seeks to minimize some of the adverse effects related to the high need for physical cash in the economy, along with high cash costs, high cash risks, high subsidies, informal economy and ineffectiveness, and corruption” (CBN Website, 2011).

The cashless policy as projected has brought about many benefits to the banking sector and the banking clients in diverse ways. Cobb (2004) posited that the benefits of using an electronic system of payment apart from providing convenience and safety to customers also go a wide margin in contributing to the nation's overall development. According to Asenge *et al* (2019), using e-cards, online banking facilitates the simplicity and convenience of managing transactions. Increasing the expertise and capacity to handle online banking banks and ATMs also opens up the opportunity for more independent bank account holders to no longer need bank employees.

However, considering the huge investments made by deposit money banks on infrastructures like internet facility, computer systems, and power, it is essential to analyze the effects of the cashless policy on DMBs in terms of performance on return on assets (ROA). It is against this backdrop that this work is conducted.

1.2 STATEMENT OF THE PROBLEM

The restraint limiting the effect of the CBN effort to achieve prices and the stability of the economy is due to the estimation that around 65% of the money in circulation in Nigeria's economy is not inside the banking system. Also, in deposits forms, the sum of money available to banks for more money to be created is reduced.

The profitability level of banks therefore depends essentially on the amount of money at their disposal for borrowing, which is influenced by a large portion of the informal sector. The breakthrough and regular developments in Information Communication Technology (ICT) has resulted in the revolutionalization of human areas in many areas like communication, efficiency in processes, and the exchange of goods and services.

The Nigerian Central bank, the apex bank in alliance with the Committee on Bankers' developed and launched the cashless policy for the provision of mobile payment services and to clear the roadblocks hindering millions of Nigerians who are not financially included and to render convenient financial services nationwide. The cashless strategy adopted by the CBN aimed at reducing cash-based transactions to the minimum of the barest.

It is hoped that the system would not only benefit the customers in terms of speed of banking and financial inclusion of the unbanked but also to the government and corporations as this will reduce high cash expenses and also reduce the hazards associated with transporting cash.

It is, however, relevant to evaluate the impact of the policy as it pertains to the level of performance given banks return on assets considering the high cost of digital devices and other infrastructure put in place to implement the cashless policy.

This research seeks to identify if or not there has been an increase in banks' performance in the cashless scheme resultant from the charges made by the CBN.

This research explores the effect of the cashless policy on the performance of all Nigeria's deposit money banks. Figures and values gotten from cashless services, like Point of Sale, Automated Teller Machine (ATM), and Web-Based Transactions (WBT) to ascertain the effect of the cashless policy on the performance (ROA) of the Nigerian deposit money banks .

1.3 OBJECTIVES OF THE STUDY

1. To ascertain the significant relationship between Point of Sale (POS) transactions and the Return of Assets of Deposit Money Banks in Nigeria.
2. To ascertain the significant relationship between Automated Teller Machine (ATM) transactions and the Return of Assets of Deposit Money Banks in Nigeria.
3. To ascertain the significant relationship between Web-Based Transactions (WBT) and the Return of Assets of Deposit Money Banks in Nigeria.

1.4 RESEARCH QUESTIONS

1. What is the significant relationship between Point of Sale (POS) transactions and the Return of Assets of Deposit Money Banks in Nigeria?
2. What is the significant relationship between Automated Teller Machine (ATM) transactions and the Return of Assets of Deposit Money Banks in Nigeria?
3. What is the significant relationship between Web-Based Transactions (WBT) and the Return of Assets of Deposit Money Banks in Nigeria?

1.5 RESEARCH HYPOTHESES

1. Ho: There is no significant relationship between Point of Sale (POS) transactions and the Return of Assets of Deposit Money Banks in Nigeria.
2. Ho: There is no significant relationship between Automated Teller Machine (ATM) transactions and the Return of Assets of Deposit Money Banks in Nigeria.
3. Ho: There is no significant relationship between Web-Based Transactions (WBT) and the Return of Assets of Deposit Money Banks in Nigeria.

1.6 SIGNIFICANCE OF THE STUDY

The following marks the significance of this study:

1. This research will serve as a resource guide to other scholars, students, and other researchers that are interested in undertaking future research in this area. Though a few studies have been performed in this area, this research will serve as an up-to-date study in the field and also add to the knowledge base already available.

2. The outcome of this investigation is going to create insight for stakeholders in the banking sector to know the effect of cashless policy on deposit money banks' performances in Nigeria.

1.7 SCOPE OF THE STUDY

In line with the goal of this study, this research aims to perform an analytical inquiry into the implementation of a cashless policy on deposit banks in Nigeria. The study scope includes all of Nigerian 21 deposit money banks in the gathering of data related to cashless policy. The geographical area covered is Nigeria. The period covered by the research is from 2012-2018. The duration of the research is for one year. To investigate the effect on deposit money banks' aggregate return on assets (ROA) in Nigeria, the report used representatives for cashless transactions such as ATM, POS, and WBT.

1.8 LIMITATIONS OF THE STUDY

Time Restraint – The researcher is restraint with time since he simultaneously engages in this investigation with other academic work. This can consequently cut down on the devoted time for the research work.

Financial restraint – Lack of sufficient funds to carry out the research will limit the researcher in sourcing for the necessary materials like the literature and the information needed during data collection (annual reports, internet, etc.), so the researcher has to make adequate preparation for and sourcing of funds.

1.9 OPERATIONAL DEFINITION OF TERMS

Cashless: It is the designing of financial transactions that are treated by debit or credit cards, bank transfers, cheques, or any other electronic methods rather than the use of cash.

Point of Sale (POS): It is a computer-based platform that is operated by the central virtual system and attached to multiple checkout terminals. It is the location where a commodity is moved from the vendor to the consumer in a store (Collins dictionary).

E-banking: It is a method of banking that enables clients to perform banking activities at home or anywhere electronically through the internet.

ATM (Automated Teller Machine): This is a platform for online banking that enables customers to perform or complete transactions without the presence of a delegate of the branch or bank teller. When a cardholder uses a credit card, it is a machine that dispenses cash or other banking facilities.

Wire transfers: It is the transfer of funds directly from the payer's account in a bank to the payee's account in another bank electronically.

Mobile Money: It is a product that helps users to conduct fund transfers, make payments, and receive their balance enquiries on their phones. This word is also for the larger realm of electronic commerce; it can refer to using a mobile device to procure items, either physical or electronic.

E-Transfers: They are electronic transfers that can be affected through the internet using laptops and other mobile devices. Bank customers who use internet banking can also do basic banking transacting through the web.

Transfers of NIBSS Funds: The Nigerian Interbank Settlement Scheme is an online value swap platform for banks. It allows interbank transactions such as NEFT and NIBSS to be carried out directly by exchanging funds between banks for individual or multiple recipients for individual sums not surpassing N10million. It is an account-number based, online-real-time Inter-Bank payment solution developed in the year 2011 by NIBSS.

NEFT Transfers (National Electronic Funds Transfer): Once it has been effected, it acts with the next available CBN clearance session and is collected into the beneficiary's account that day or the next day of work, but the instant payments of NIBSS are immediate, a nation-wide payment mechanism that enables the movement of one-to-one funds. Under this system, individuals can transfer funds electronically from any branch of a bank to a person with an account with any other bank division in the country engaging in the Scheme.

Web-Based Transactions: This is a collection of URLs that have been into one full operation. A typical online transaction are where a customer signs in to a member's page, makes an order on a retail platform, fills in an online form and submits it, and completes various web page and webbing request transactions.

Return on Assets: Return on assets (ROA) is a financial calculation that illustrates a company's amount of benefit in comparison to its total capital. It is usually well-defined as net income divided by total assets.

CHAPTER TWO

LITERATURE REVIEW

2.0 PREAMBLE

The CBN has widespread powers to regulate matters concerning Nigeria's fiscal and monetary policies. Section 47(2) and (3) of the Legislation (the 'Act') of the Central Bank of Nigeria (Establishment) empowers the CBN to encourage and support the development of reliable and appropriate structures for the establishment of those systems for settlement transactions (including electronic payment systems development). The CBN is also authorized to administer laws and regulations for all clearing and settlement processes to function efficiently.

The CBN was not as technically prepared as it is today to manage and monitor Nigeria's electronic payment schemes until a few years ago and, as a consequence, most of the activities in the sector were unregulated. Then, in Nigeria, the CBN merely issued letters of permission to businesses seeking to run payment systems. In search of its objective, however, to meet up with the international standard and in becoming one of the top 20 markets and world economies by 2020, the Nigerian Central Bank released the Payment Systems Vision 2020 blueprint in 2007 as a key first step to creating a payment Systems infrastructure that is nationally utilized and internationally recognized.

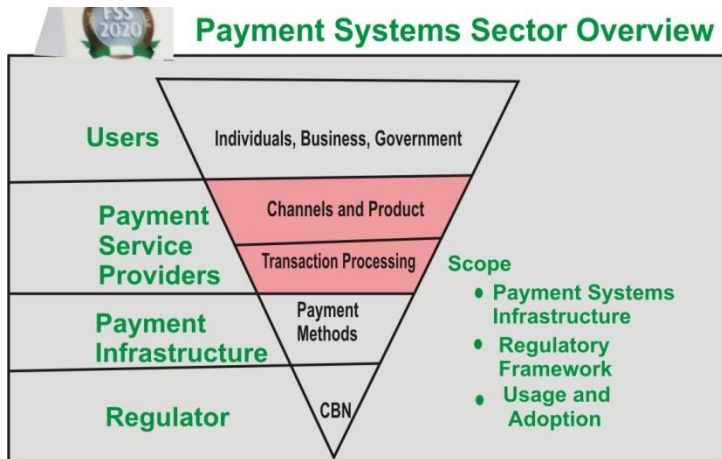
The Payment Systems Vision 2020 of Nigeria was highlighted as follows:

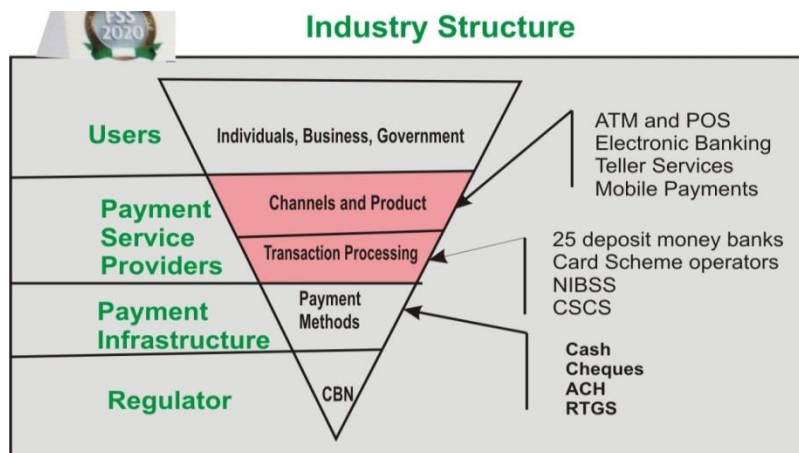
- To facilitate economic activities by providing secure and effective processes to make and accept payments
- With the smallest possible risks to the central bank, contributors to payment service and end-users
- Outspreading the accessibility and usability to all segments and geographies, either unbanked or banked
- And keeping up with regulatory, technological, and operating requirements that are universally agreed upon.

In following up with the Vision 2020 goal, the apex bank has engaged in various policies to upgrade the banking system. Part of this policy led to the merger and acquisitions among the banks, a step directed at providing a formidable capital base to the streamlined banks to enable them to get by with the infrastructure requirements of upgrading to the electronic payment system.

Moreover, to carry on with trends in the international world and also give the banking division in Nigeria a global outlook, the CBN governor, Lamido Sanusi announced the cashless policy in 2011, with Lagos state as the first point of implementation. Although the policy does not connote the entire removal of cash transactions, penalties in form of charges were imposed on certain limits of cash transactions exceeded.

CENTRAL BANK OF NIGERIA’S FINANCIAL SYSTEMS STRATEGY 2020





Source: CBN's website

2.1 CONCEPTUAL FRAMEWORK

The cashless environment is not the utter absence of cash, but one where cash-based transactions are held to a minimum. It is an economic world in which, via electronic channels, goods and services are purchased and paid for. According to Woodford (2003), the cashless environment is characterized as one in which no volatility in transactions that can be minimized by using money reserves is believed to occur, and that therefore offers a basis for keeping those balances even though they earn a return rate. In a cashless system, any of a multitude of credit cards or bank account payments will pay for your transactions regardless of how much cash is physically present with you. (Roth, 2010).

Since the introduction of commercial banks, otherwise known as Deposit Money Banks (DMBs) to the Nigerian nation, a lot of reforms have been introduced into the system with the attendant economic effects. Between 2004 and 2009, major initiatives and reforms were introduced ranging from recapitalization orders and banking automation which enhances banking returns. The cashless policy programme was launched by the Nigerian Central Bank in the year 2012 as a system that allows financial dealings to be carried out without the use of banknotes. The policy, the execution of which was piloted in Lagos in 2012, spread throughout the country between 2013 and 2014. The cashless policy instituted charges for withdrawals and deposits above allowable cash transaction limits. The revenue generated from the transaction fees paid is to be divided into the 40:60 ratios between the CBN and the banks. Ejiro, (2012) affirms that the Central Bank of Nigeria's (CBN) cashless economic policy plan is a step to boost the financial

scenery, but it also assumes that the long-term viability of the policy will be a result of end-user endorsement and implementation.

The goal of the cashless society is to lessen the quantity of visible cash moving in the economy of Nigeria and thereby facilitate more transactions dependent on electronics. According to the Central Bank of Nigeria (CBN, 2011), after its complete introduction in Nigeria, the program is projected to reduce the expense of sustaining the cash-based environment by 90 percent. (Omotunde *et al*, 2013).

2.1.1 The Policy

It is estimated that about 65 percent of the cash in circulation in the Nigerian environment is outside the banking system, thus significantly restricting the price and economic stability effect of the CBN's efforts. (CBN, 2011). Resultantly, in the manner of savings, the sum of money available to banks for the creation of more money is reduced. Therefore, the viability of banks, which depends to a large degree on the volume of capital available to them for lending, is influenced by the large scale of this informal sector (Alagh & Ene, 2014). This situation among other reasons urged the Nigerian Central Bank in conjunction with the Bankers Committee to introduce the cashless policy, built to provide mobile payment services intended to break down conventional barriers to the financial inclusion of millions of Nigerians, to protect and provide metropolitan, semi-urban and rural areas around the nation with convenient financial services.⁴

Effective from March 30, 2012, the CBN cash policy set down a regular combined cap of N150,000 and N1,000,000 for automatic cash withdrawing and lodging by persons and business customers in Lagos State, respectively. A processing fee on sums above the total cap would be paid to persons and private organisations that make cash purchases above the cap. Also, with effect from 1 January 2012, 3rd party cheques over N150,000 shall not be available for redemption over the counter. It was anticipated that all Nigerian banks should cease cash-in-transit merchant-customer lodging services provided from January 1, 2012. According to Nigeria's Central Bank (CBN, 2011), Lagos state was chosen as the first port of implementation because the state of Lagos accounted for 85% of POS and 66% of cheque transactions in Nigeria (Muotolu & Nwadiolor, 2019).

2.1.2 The objectives of Cashless Policy:

As stated by the CBN, the main objectives of introducing the cashless policy are:

To accelerate the growth and transformation of our payment systems in compliance with vision 2020; to lessen the rate of services of banks corruption, and increased cost of cash processing, cash-related crimes, and activities of the informal economy; to initiate financial participation by taking in the unbanked into the financial industry; to improve monetary reform efficacy, and to properly allocate the cost of processing cash to heavy cash users. (Muotolu & Nwadiolor, 2019).

2.1.3 The policy content:

Optimum regular cash withdrawals to individual account holders of N500,000; total daily cash withdrawals for business account holders of N3,000,000.00; banks are not authorized to sell their customers Cash-in-Transit (CIT) services. This service is intended specifically for registered CIT companies such as Bankers' Warehouse etc. A minor party cheque over N150,000 cannot be cashed from across the counter, they must be requested for account transfer through the clearinghouse or account; The N500,000 and N3 M caps for individuals and companies are cumulative and involve withdrawals from ATMs, while the cap applies to all accounts held by the same client.

2.1.4 Penalties for non-compliance:

For actual accounts, 3% on sums withdrawn beyond the fixed limit of N500,000 (e.g., withdrawing N600,000 would incur a 3% fee on N100,000, which converts to N3,000); 5% on sums withdrawn for corporate accounts above the fixed amount of N3M (e.g., withdrawing N3.5M would incur a 5% tax on the surplus of N500,000 that converts to N25,000); CBN to discipline banks that do not apply a levy for withdrawal in excess; CBN to discipline banks that defy the CIT directive; dealings made through the 36 States and FCT are subject to charges from 1 July 2014.

2.1.5 Mode of operating the policy:

For the pilot process that began on January 1, 2012, Lagos state was used to kick-start. On July 1, 2013, the policy was enlarged to Abia, Anambra, Kano, Ogun, Rivers, and FCT. As of January

1, 2012, CIT services have stopped. About July 1, 2014, the national take-off in the remaining 30 states applied exclusively to Naira purchases. There is an exclusion for international currency.

2.1.6 The policy exclusions:

Exemption for microfinance banks and PMIs; Ministries, Departments, and Agencies (MDAs); Embassies, Diplomatic Missions, and Nigerian Multilateral and Aid Donor Organizations.

2.1.7 The anticipated advantages of the policy:

Comfort and simplicity of settlement for services and products, lower risk of criminality connected with cash, low-priced banking service prices and easy access to credits, and increased economic development, tax collection, and greater financial inclusion.

2.1.8 Cashless banking channels

Below are some electronic payment channels in Nigeria:

- ATM
- POS Terminals
- NIP
- NIBSS(Nigerian Interbank Settlement Scheme)
- NEFT
- Internet(WEB)
- Mobile Money

ATM (Automated Teller Machine): This is a digital banking machine that dispenses cash and also allows customers to carry out various functions such as balance inquiry, funds transfer, bills payment, and recharge functions. Each customer is assigned a unique identification number (PIN) that is unique to the individual and has to be inputted into the ATM along with the ATM card before dealings can be made. With the automated teller machine, the customers can complete their transactions without the usage of the representative of a branch or bank teller. ATM is the most popular e-transaction solution in Nigeria. This is because of its convenience of use. There is usually a fee charged as income to the banks after three transactions of an ATM

card used on another bank's ATM. Up to 2019, this charge was N65 but this amount has been reviewed downwards to between N30 and N35. (Muotolu & Nwadiolor, 2019).

POS Terminal (Point of Sale Terminal)

A POS terminal is an electronic interface used to enable card payments at retail stores. Usually, a POS terminal does the following:

Read a user's credit or debit card details; Checks if the money is sufficient in the bank account of a customer;

- Moves the funds from the user's account to the seller's account (or at least, accounts for the transfer with the credit card network).
- Records the transaction and generates a receipt (<https://www.techopedia.com>).
- POS terminals are usually located at accredited retail shops (merchants) like supermarkets, retail stores, shops, restaurants, fast food joints, filling stations, hotels, etc. These merchants accept debit and credit cards as means of payment by customers. A charge known as Support Fee for Retailers or Merchant Service Charge (MSC) is charged on all transactions done on POS terminals; this charge is borne by the merchants who transfer the charges to the clients.

The Nigerian Central Bank introduced Point of sale and gave the guidelines in 2011 with a maximum service commission of 1.25% or a maximum of NGN2000 and restricting the task of linking and managing POS machines to only approved Payment Terminal Service Providers (PTSPs). These POS terminals perform like the ATMs across commercial places in the country. After a transaction and the value calculated, the sum is entered into the POS terminal into which the electronic card has been inserted. The cash relative of the amount will be automatically transferred from the account of the payer into the payee's account. In Nigeria today, private businesses, religious denominations, educational institutions, and other service operators such as hotels, transport, companies, etc., has followed the POS alternative in their dealings. (Akhalumeh & Ohiokha, 2012). POS can be used to pay for school fees, shopping bills, utility bills, and other bills.

Mobile Money: It is a product that helps users to conduct fund transfers, make payments, and receive their balance enquiries on their phones. This word is also for the larger realm of electronic commerce; it can refer to using a mobile device to procure items, either physical or electronic.

E-Transfers: They are electronic transfers that can be affected through the internet using laptops and other mobile devices. Bank customers who use internet banking can also do basic banking transacting through the web.

Internet Banking: It is an online payment mechanism that helps a bank or other financial institution's clients to carry out a series of financial dealings through the web page of the financial institution via electronic devices like cell phones, Ipads, Personal computers, Desktops, etc. right at the ease of their houses, offices, etc. In Siyanbola (2013), like the POS, internet banking uses the electronic card infrastructure for the execution of payment orders and final settlement between the dealer and the consumers of services and products over the internet. Internet banking offers clients the ability, from the convenience of their homes and offices, to enjoy banking services. This implies that by placing orders from the web, consumers can purchase merchandise, tell their banks to pay the seller the invoice sum involved, and the items are delivered to the destination where the buyer wants.

Examples of networks of Internet fund transfer are the Real Time Gross Settlement Scheme (RTGS) of the Nigerian Central Bank, Western Union Money Transfer, Bluepay, GTpay, Mastercard Internet Gateway Service (MIGs), Zenith GLOBAL PAY, and so on. NEFT and NIP The Nigeria Interbank Settlement System Electronic Fund Transfer (NEFT) and Nigeria Interbank Settlement System Instant Payment (NIP) are examples of electronic funds transfer.

Nigeria Interbank Settlement System Electronic (NEFT) and the Nigeria Interbank Settlement System Instant Payment (NIP) Funds Transfer: Transfer of funds is when you use a transfer platform to send money to people or individuals from your bank account. Fund transfer can either be done manually through the branch of a bank or through the cashless system - electronic fund transfer. Examples of electronic transfer of funds include the NEFT and the NIP. They are unalterable funds transfer instruction. NEFT and NIP are payment systems operated by

the NIBSS and they are payment systems used through electronic payment platforms like Bank branch, Internet banking, Mobile banking, USSD, and Agent Networks by the banking public. NIBSS uses the e-bills Pay collection platform to promote the payment of various bills, fees, levies, premiums, airtime, and subscriptions by various customers. Customers who use the NEFT/NIP include Banks and OFIs, PSSPs, FMCGs and MMOs, Service and Utilities Companies, Government/MDAs, Religious, and Education Enterprises.

How it works

The user of NEFT or NIP needs to have a bank account so as to enable their users to move funds. An individual can move monies with NEFT by using the following steps:

- Log into the bank's internet banking platform using the ID and password.
- Then you go to the fund transfer tab and choose to add recipient (receiver's bank). Choose recipient type, for example, other bank transfer, and then insert the beneficiary's account number.
- Click on send.

The bank will debit your account first to guarantee that the funds are set aside. Then your instructions (along with other customers' instructions) are transferred to NIBSS by a customer's bank as a digital document for processing ahead. For NIP, login to your bank's internet banking site if you are making use of your private computer. To extend, press the account transfer tab. Tap on the move (instant) to the other bank. If you are using the mobile money android program, choose NIP. When you first use it, activate it with your token. Then select a new request. Click on add new beneficiary to add the bank account details of the recipient. Fill in all the information you need and input the code from your token device. Then send. Transfers to other banks would incur charges. The NEFT and NIP options are both laid out in the banks' fund transfer forms. Therefore, by entering your bank and performing the transfer of money, you can execute either of these, suggesting NEFT or NIP as your desired method of transfer (Adegbesan, 2017).

2.1.9 Return on Assets

ROA and ROE are two essential elements in banking for calculating the performance of a business. The ROA indicates the percentage of how lucrative the assets of a business are in

revenue generation. The ROA of a company is determined as the ratio of its net income in a specific time to the total value of its assets. While ROE allows investors to determine how income is derived from their investments, ROA helps measure how the management uses its assets or resources to generate more income (investopedia.com). Return on assets is a form of Return on Investment (ROI) measurement that calculates a company's profitability to its overall assets. This ratio illustrates how well a corporation performs by measuring the profit it earns (net income) to the invested capital in assets. In utilizing economic resources, the greater the yield, the more efficient and productive management is.

ROA = Net profit / Total assets.

Where net profit is the net amount earned by a corporation after all the costs of operating a business in a given time have been deducted. It covers all interest paid on debt, government-related income tax, and all non-operational and operational costs. Operating costs include the sale cost of goods (COGS), production overhead, admin and marketing expenses, amortization, and depreciation of equipment and property.

This research uses the ROA as the performance index for assessing a bank's performance.

Ekwe & Duru (2012) opines that ROA was used as a dependent variable because it is an indicator of managerial efficacy.

2.2 THEORETICAL REVIEW

The Stakeholders Theory

The Stakeholder theory is an organizational management and corporate ethics philosophy that accounts for various constituencies caused by business organizations such as workers, vendors, local societies, creditors, and others (Wikipedia). R. Edward Freeman, an American philosopher, and Professor of Business Administration at the Darden School of the University of Virginia have been widely cited as the father of the Stakeholders theory propounded in 1984. Before the emergence of this theory, most corporations' managements were based on the shareholders' theory which views only the owners or the shareholders of the company as the first set of people to put their needs first. In contrast, the stakeholders' theory debates that there are other parties concerned which include workers, customers, suppliers, financiers, societies, statutory bodies,

political organizations, trade associations, and trade unions and competitors. A stakeholder is a “member of communities in a company without whose participation the entity will stop existing” (Freeman, 1983). Two kinds of stakeholders: These are **Primary stakeholders and secondary stakeholders**: Primary stakeholders are typically internal stakeholders, and they are people that participate with the organization in commercial transactions. Examples of primary kinds of stakeholders are stockholders, customers, suppliers, creditors, and employees. Secondary stakeholders are external stakeholders. These are those who, while they do not participate in direct commercial trade with the business, are influenced by its operations or can impact them. Examples include the general populace, communities, advocacy groups, and support groups for companies and the media.

For an organization to be more productive and achieve its ultimate goal of profit-making, there it is essential for the organization's management to be conscious of the stakeholders, to consider their interests and aspirations, to understand their behaviour, and to know how to prioritize the general population to focus the organization's scarce resources on the most significant stakeholders. In implementing the cashless policy by the CBN, all stakeholders' interests must be put into consideration. The apex bank in enacting this system of banking enumerated the benefits that will accrue to the stakeholders that include the banking population regarded as customers, the deposit money banks, the government, and the CBN as the intermediary body.

Yaqub *et al*, (2013) highlighted various benefits expected to be derived by various stakeholders from the operation of the cashless policy as enumerated by the CBN to include: increased convenience of transactions, more services, decreased risk of cash-related criminalities, and cheaper accessibility to banking services, financial inclusion and credit access for the consumers. To the corporations; faster access to capital, reduce revenue leakages and reduced cost of handling cash and to the government; increased tax collection, greater financial inclusion and increased economic development.

2.3 EMPIRICAL REVIEW

Since the cashless policy was introduced into the Nigerian economy, many researchers have come up with various forms of research studies on several aspects of the policy. While some considered the impact of the policy on the economy, others investigated the possibilities and

challenges that are attached to it. Several studies have also been carried out on the effect of the cashless policy on banks' performance using the ROE and ROA as proxies for performance.

Ighoroje & Okoroyibo, (2020) examined “Cashless Policy and the Performance of Deposit Money Banks in Nigeria”. The study was descriptive and adopted an *ex post facto* research design. Secondary data were used, and the CBN data browser website and TheGlobalEconomy.com were the main sources of data collection. Other techniques used were Augmented Dicker Fuller and Philip Perron Checks for Unit Roots and the Autoregressive Distributed Lags (ARDL) for coefficient analysis and cointegration. ATM, POS, Mobile Banking and, Internet banking were used as proxies for cashless policy while ROE was used as the measure of performance for banks. The study result showed that ATM and Internet Banking both had a positive and significant ROE. POS had a positive but insignificant effect on return on equity, while Mobile Banking (MB) had a negative and statistically significant effect on ROE. The study finalised that Nigerian deposit money banks' performance has been affected positively by the cashless policy. The study recommended that the government should provide continuous electricity supply and sufficient contact links while banks should be able to fund shortfalls through back-up plans to power backup generators in the incident of a power outage.

Muotolu & Nwadiolor, (2019) examined “*Cashless Policy and Financial Performance of Deposit Money Banks in Nigeria*”. The study adopted *ex post facto* research. The study used secondary data as the main source of information and data were sourced from the annual report and accounts of banks and CBN payment statistics. Panel data were used to assemble bank samples. The study adopted the linear regression model. The study used Descriptive Statistic Analysis, Multicollinearity test, Correlation testing, and Herteroskadaticity testing for diagnostic testing. ROA was used as a representation for bank performance while the value transactions that are performed through the ATM, POS, Internet Banking, NIP, and NEFT platforms (E-banking Products) were used to represent cashless policy. It was shown that ATMV had a positive and significant effect on ROA of Nigerian banks while, POSV, WEBV, NIPV, and NEFV were shown to have a positive but insignificant effect on ROA of quoted Nigerian banks. The research finalised that E-banking products as a representative for the cashless policy have a positive effect on the financial performance of DMBs in Nigeria. It was recommended among

others that the management of banks should give more attentiveness to the activities that will improve the ATM services if they wish to increase the ROA.

Andabai & Bina, (2019) examined “*The Impact of Cashless Policy on Deposit Money Banks Performance in Nigeria*”. The study adopted an *ex post facto* research design to assemble essential information. Secondary data used were extracted from the CBN statistical bulletin. The study used ATM, POS, and Mobile Banking (MB) as the expounding variables to measure cashless policy; whereas, ROA of DMBs was the representative for DMB performance and used as the dependent variable. Hypotheses were formulated and tested using Ordinary Least Square (OLS). The study showed that ATM transactions, POS terminal, and Electronic mobile payment each had a significant impact on the ROA of DMBs in Nigeria. The coefficient of determination indicated that about 47% of the variations in banks’ profitability can be elucidated by changes in cashless policy variables (ATM, POS, MB) in Nigeria. The study finalised that the cashless policy has a significant impact on Nigerian deposit money banks’ performance. The study recommended that the policymakers should ensure the effective deployment of information technology due to its sophistication since the technology with relative perceived advantage. Policymakers and regulatory authorities should be capable of providing security physically and electronically to check the incidence of hacking by fraudsters.

Asenge *et al*, (2019) examined the “Effect of Cashless Policy on Customer Satisfaction in the Nigerian Banking Industry”. The variables used were POS, mobile banking, and internet banking. A survey research design was implemented for this study and the Questionnaire was the data collection tool. The sample sizes were selected through the convenience sampling technique. Hypotheses were tested using multiple regression with the assistance of the Statistical Package for Social Sciences (SPSS 21). It was revealed that internet banking and mobile banking had significant effects on customer satisfaction in the Nigerian banking industry. The study however indicated that the POS Terminal had no significant effect on customer satisfaction in the Nigerian banking industry. The study concluded that cashless policy has minimized stress in banking activities, thereby affecting customers positively. It was recommended that Nigeria’s government and bank management should put in place measures to reduce cases associated with internet banking and other cybercrimes.

Chison & Mike, (2018) examined “*Cashless Policy and Commercial Banks’ Profitability in Nigeria*”. The study adopted the *Ex Post Facto* research design. Data were gotten from several secondary sources. By using ATM and POS as a representative for the adoption of cashless policy and ROA and ROE as a representative for profitability and using the Ordinary least Square multiple regression analysis, it was discovered that there was a high positive correlation between the adoption of cashless policy and profitability of DMBs in Nigeria. The multiple regression analysis also revealed that the use of cashless policy instruments particularly ATMs and POS increased the ROA and ROE of the banks. Augmented Dickey-Fuller unit root test and Johansen co-integration test of research design were also adopted in the study. It was recommended that the cashless policy should be strengthened and all bottlenecks like poor power supply and all loopholes that could lead to fraudulent exposure be tactically proactively tackled.

Omotunde *et al*, (2013) examined “*The Impact of Cashless Economy in Nigeria*” using the survey method. The questionnaire was used as a data collection instrument. The accidental sampling method was employed in gathering data. The major statistical technique used in the study was descriptive. It was finalised that cashless policy will not only increase employment but also lessen the rate of banking services, reduce corruption related to cash, and bringing more overseas investors to the country. Therefore, it was discovered that introducing a cashless environment in Nigeria can be seen as a move in the right direction. Its impact is expected to be felt in the modernization of Nigeria's payment system, the reduction of the cost of services of banks, the reduction in safety risks and high security, and the curbing of corruption related to banking.

Alagh & Ene, (2014) investigated the “*Impact of Cashless Banking on Banks’ Profitability (Evidence from Nigeria)*”. The study employed the *Ex Post Facto* research design. Data were gotten basically from secondary sources which were the data collected from Nigerian banks' annual financial reports and various issues of fact books from the CBN. To investigate its impact on the aggregate ROE of DMBs in Nigeria, the study used cashless banking proxies such as the ATM, POS, and Web-Based Transactions (WBT) through an OLS of log-linear multiple regression method of analysis. ADF test was carried out on each of the variables. The study investigation revealed that ATM and POS were positively associated with ROE, and WBT was negatively related to ROE due to high bank fee rates for online deposits, which make many

customers unwilling to patronize the product. Non-usage of the WBT for depositing online had created a negative impact on the profitability of Nigerian banks. Recommendations were given among which were that banks should make available sufficient backup generators that could be used in the occurrence of power failure, to provide adequate ICT infrastructure and management system, and to enlighten the public about the significance of using ICT banking products.

Yaqub *et al*, (2013) examined “*The Cashless Policy in Nigeria: Prospects and Challenges*”. The descriptive analysis was used. The data used were gotten from a secondary source which was the CBN’s annual report. The proxies used for cashless policy were ATM, Web, POS, and Mobile Banking. It was observed that the Nigerian problem, being a heavily cash-based economy has made the cost of cash to the Nigerian financial system high and increasing. The researchers posited that while the step into a cashless Nigeria carries various advantages with it, more knowledge also needs to be generated to draw the numerous finally excluded Nigerians into the banking system.

Ernest & Fadiya, (2012) in “*Cashless Banking in Nigeria: Challenges, Benefits, and Policy Implications*” carried out the implications of their investigations of cashless banking to unveil the potential challenges and prospects for the Nigerian economy while employing an aggregate approach. The study employed the *Ex Post Facto* research design. The data used were gotten from a secondary source which was the CBN's statistics. The study used descriptive analysis and examined predominantly the cash economy. The Cash related transactions used were ATM Withdrawals, Cash withdrawals (Over-The-Counter), POS Terminals, Cheques, and WEB.

The study was premised on increasing concerns regarding the effectiveness of different economic policies in realizing Nigeria's development goals and the questions that the recent development of electronic cash poses to policymakers all over the world. The study evaluated the CBN’s policies and offered useful recommendations on cashless banking implementation in Nigeria. The significant recommendations presented by the study were: availability of adequate and infrastructural facilities that are well-functioning (particularly electricity), harmonization of monetary and fiscal policy, periodic evaluation of the performance of cashless banking channels (individually and jointly), considering the existing state and structure of the economy, redesigning the framework of the monetary policy and increased economic growth efforts whilst

controlling inflation and concerns regarding the protection and management of cost savings arising from its implementation.

Alao & Sorinola, (2015) investigated “*Cashless Policy and Customers' Satisfaction: A Study of Commercial Banks in Ogun State, Nigeria*”. The research used survey method. Data were gotten from primary and secondary sources. For Primary data, the random sampling method was employed in gathering data, and data were collected with a questionnaire and analyzed with descriptive statistics, while the formulated hypotheses were tested with correlation co-efficient. Secondary data were gotten from journals, handbooks, and related textbooks. The study results showed that the cashless policy contributed significantly to customers' satisfaction in Ogun State. The report also showed that the cashless strategy greatly added to the loyalty of consumers across electronic networks. Lastly, the researchers concluded that consumer-friendly and progressive is the cashless policy. Therefore, amongst others, it was recommended that infrastructure should be improved upon to guarantee the easy execution of the policy in Ogun State.

Uzonwanne & Ezenekwe (2017), carried out their study on “*Financial Illiteracy and Cashless System in Nigeria*”. The study adopted a survey method. The questionnaire was the data collection instrument. A random sampling method was employed in gathering data. Descriptive statistics were used in analyzing the data. The Chi-square and the F-distribution with stipulations of ANOVA and SPSS were used in testing the data. The variables used to measure the literacy of the cashless system were ATM, POS, Mobile money, and Internet banking. It was found that financial illiteracy's impact on the cashless policy strategy has a significant influence on the Nigerian economy. The study recommended that the CBN need to increase the level of mass education/enlightenment on finance management so that the populace can achieve the most from the latest developments in the cashless structure.

Ejoh *et al*, (2014) investigated “*Information and Communication Technology - An Indispensable Tool for the Implementation of Cashless Policy in Nigeria*”. The study employed the survey method using the random sampling method to gather data. Questionnaires were used as data collection instruments. A simple percentage procedure was used in analyzing the data gathered, and the chi-square technique used in testing the collated data. The research revealed that ICT has a significant relationship with the implementation of cashless policy in the financial environment

of Nigeria. It was recommended based on the results that the Nigerian federal government should partner with all the ICT centers in all states and government should partner and other commercial institutions to provide computer illiterates with mass ICT education, and there should be more investment by banks in e-banking technologies to raise public awareness, which will, in turn, encourage cashless economy in Nigeria.

Acha, Kanu & Agu, (2017) presented a study on “*Cashless Policy in Nigeria: The Mechanics, Benefits and Problems*”. The study employed both the *Ex-Post Facto* and the survey method. In the study of results, descriptive statistics were adopted and the outcome showed a growing acceptance by Nigerians of cashless options. Data used were sourced from both primary and secondary sources. Secondary data came from CBN Statistical Bulletins, and the primary data was the result of a survey. The respondents were purposively chosen and given structured questionnaires. The study was carried out using tables, simple percentages, and relative mean scores. The Electronics Transactions used include ATM, POS, Web (Internet), Mobile payment, NIBSS Instant Payment, and NEFT. The findings showed that despite many established advantages, several variables nevertheless militate against the success of this policy. The lack of an enabling climate, particularly power infrastructure, is part of the main challenges facing the cashless policy. Therefore, it was suggested that attention should be given to stabilizing the country's power supply.

Osazevbaru *et al*, (2014) in their study “*Cashless Policy and Banks’s Profitability in Nigeria*” investigated the effects of cashless policy on the viability of Nigerian banks, against the backdrop that, even in the face of associated high operating costs, these banks in a cash-driven economy are known for their huge profits and the issue of how banks will still make as much profits as they use to make in the cashless regime. The study adopted the *Ex Post Facto* research design. Secondary data were used in this study and collected from various publications by the CBN and analyzed using content analysis to compare revenues under a cash-based scheme with a cashless regime. ATM withdrawals, OTC cash withdrawals, cheques, POS, and WEB were used as proxies to measure banks' income. It was shown that cashless policy of the economy had a positive influence on banks’ earnings by reducing operating costs and banking the financially excluded population. The study recommended that implicitly, future economic and financial policies targeted at the financial sector of the economy should build on the electronic banking

platform to give room for its development and subsequent entrenchment into societal banking practice.

Kket & Egu, (2016) in their study *“Evaluating Nigeria Cashless Policy Implementation”* investigated through questionnaires if the cashless policy is a myth or reality. The survey research method was employed in this study. A Likert scale questionnaire was used to gather data. The study was analyzed with the use simple percentages and the Relative Important Index (R.I.I). The research wanted to know majorly the availability of adequate ATMs and their functionality in localities. The study revealed that social infrastructures in power and telecommunications need improvement and expansion and the need to generate more awareness to encourage the unbanked to embrace banking culture. The study proposed robust investments in cyber infrastructure, improving banks' internet protocols and controls, and enacting applicable cybercrime prevention legislation.

Nweze *et al*, (2017) in their study *“Empirical Analysis of the Effect of Cashless Policy on the Performance of Banking Industry in Nigeria”* employed *Ex Post Facto* research design to compare two periods, before and after the adoption of the cashless policy in 2012. The data nature used was secondary and sourced from the yearly reports of selected Nigerian deposit money banks. A Purposive (non-probabilistic) sampling technique was used to gather data. In testing the hypotheses, the study employed the parametric statistical pooled variance/ paired sample t-test, model. The study adopted the ROA, ROE, and earnings per share (EPS) as measures for bank performance. Findings from the study suggested that the cashless policy implementation by Nigeria's Central Bank had not enhanced the ROA and ROE of the banks operating in Nigeria but had enhanced banks' EPS. Given the study findings, the study noted that the cashless policy is not a policy targeted towards enhancing bank performance in the aspect of profitability specifically. The study recommended that banks in Nigeria should take advantage of cashless policy benefits and participate in competent financial intermediation to boost bank performance and bank profitability in particular.

Shittu & Yusuf, (2014) examined *“An Assessment of E-Payment Infrastructures towards an Efficient Cashless Policy in Nigeria: A Case Study of Bauchi State”*. The research adopted the descriptive survey method and it was based on the administration of questionnaires. Tables and percentages were used to make analyses while the chi-square statistical method was used to test

the hypothesis. The E-Payment transactions analyzed were POS, ATM transactions, Mobile Banking, and Internet Banking. It was finalised that effective e-payment infrastructure is an important instrument for achieving an effective cashless policy in Nigeria. It is important to deploy more POS terminals; ATMs should be properly managed and government agencies should ensure effective delivery of telecommunication services.

Agu & Agu, (2020) in their study “*Cashless Policy and the Nigerian Economy: A Disaggregated Approach*” examined the impact of cashless policy on economic growth in Nigeria. The investigation implemented quarterly time series data using the technique of ordinary least squares (OLS). Data used were gotten from secondary sources. The data were gotten from the CBN Statistical Bulletin, World Bank Development indicator, Annual Report, and Statement of Account for the year 2019. The data was subjected to tests of Unit Root, Cointegration, and Granger causality. It was shown that Cashless Policy has been a true weapon in affecting economic performance, especially with ATM transactions and payment patterns for POS.

Based on the results, it was proposed that there should be more investment in Information Communication Technology (ICT) to enhance the efficiency of e-payment systems as this will enhance the revenue of banks in the long-run and improve Nigeria’s economic growth. Public awareness should also be given by the Nigerian Central Bank to enlighten the general public more on the nitty-gritty of the cashless method particularly regarding web payment and cheque transactions. This is supposed to increase public consciousness and reduce the banking population's potential resistance so that the economy can be well-positioned to reap the gains of the cashless policy.

Amu & Nathaniel, (2016) examined “*E-Banking and Commercial Bank Performance in Nigeria: A Cointegration and Causality Approach*”. The data used were obtained from a secondary source which was the CBN statistical bulletin. The proxy used for electronic banking was the value of Point-of-Sale purchases, whereas the proxy used for the performance of commercial banking was the deposits of customers. The study was analyzed using the Engle-Granger cointegration model. The results showed that POS was not cointegrated with both the time savings and deposits but was cointegrated with demand deposits. The study recommended that financial institutions and commercial banks should embark on an all-inclusive enlightenment drive for the banking

community on the advantages, ease, and importance of embracing e-banking platforms while completing their transactions.

Ikpefan *et al*, (2018) examined “*Electronic Banking and Cashless Policy in Nigeria*” The study was evaluated using the ordinary least square method. Data were sourced from the NIBSS website and the CBN annual report. ATM, POS, Mobile banking, and WEB were used as e-banking tools to assess the effect on the circulated currency and the gross domestic product. The key results of this investigation indicated that electronic banking instruments have no significant impact on the circulated currency. The study recommended that to promote further usage of e-payment platforms and CBN, transaction fees should be further updated at a slight (single digit) or zero charge also DMBs and other non-bank financial institutions should deliver public education and awareness programs that would generate awareness and draw unbanked individuals into the banking society particularly those in Nigeria’s informal sector.

2.3.1 REVIEW OF EMPIRICAL STUDIES

Author & Year	Title	Method of Data	Variables Used	Findings(Results)
Ighoroje and Okoroyibo, (2020)	Cashless Policy and the Performance of Deposit Money Banks in Nigeria	Method of Data: Descriptive study, <i>Ex Post Facto</i> research design. Source of Data: CBN data browser website and TheGlobalEconomy.com. Data Techniques: Augmented Dicker Fuller and Philip Perron Tests for Unit Roots and the Autoregressive Distributed Lags (ARDL)	Independent: ATM, POS, Mobile banking and Internet banking. Dependent: Return on Equity	It was revealed that ATM and Internet Banking each had a positive and significant effect on ROE. POS had a positive but insignificant effect on return on equity, while Mobile Banking had a negative and statistically significant effect on ROE.

		for cointegration and coefficient analysis.		
Muotolu and Nwadiolor, (2019)	Cashless Policy and Financial Performance of Deposit Money Banks in Nigeria.	Sources and method of Data: <i>Ex Post Facto</i> research. Panel data was used to collect samples from the banks. Linear regression model was adapted. Data Techniques: Descriptive Statistic Analysis, Multicollinearity test, Correlation testing, and Herteroskadaticity testing were used for diagnostic testing.	Independent: ATM, POS, Internet Banking, NIP and NEFT platforms. Dependent: Return on Assets.	Findings from the study revealed that that ATMV had a positive and significant effect on ROA of banks in Nigeria while , POSV, WEBV, NIPV and NEFV were found to have a positive but insignificant effect on ROA of quoted banks in Nigeria.
Andabai and Bina, (2019)	The Impact of Cashless Policy on Deposit Money Banks Performance in Nigeria.	Sources and method of data: <i>Ex Post Facto</i> research design, Secondary data were used and collected from Central Bank of Nigeria Statistical Bulletin. Data Technique: Ordinary Least Square was used for data testing.	Independent: ATM, POS, and Mobile Banking (MB) Dependent: ROA.	It was revealed that ATM, POS and Electronic mobile payment transactions each had a significant impact on ROA of deposit money banks in Nigeria.
Asenge, <i>et al</i> , (2019)	Effect of Cashless Policy on Customer Satisfaction in the Nigerian Banking	Sources and Method of Data: Survey research design, Questionnaires. Data Techniques: Multiple regression with	Independent: POS, mobile banking and internet banking Dependent:	The study showed that Mobile banking and internet banking had a significant effect on customer satisfaction in the Nigerian banking industry. POS

	Industry	the aid of Statistical Package for Social Sciences (SPSS 21).	Customer satisfaction	Terminal had no significant effect on customer satisfaction in Nigerian banking industry.
Chison and Mike, (2018)	Cashless Policy and Commercial Banks' Profitability in Nigeria	Sources of Data: Secondary sources. Data Techniques: <i>Ex Post Facto</i> research design, Ordinary least Square multiple regression analysis, multiple regression analysis, Augmented Dickey Fuller unit root test and Johansen co-integration test of research design.	Independent: ATM, POS. Dependent: Return on Asset and Return on Equity	The study revealed that ATMs and POS increased the ROA and ROE of the banks.
Omotunde, <i>et al</i> , (2013)	The Impact of Cashless Economy in Nigeria	Sources and Method of Data: Survey method, Accidental sampling method. Data Technique: Descriptive analysis.	Cashless policy transactions	The study showed that the introduction of cashless economy in Nigeria can be seen as a step in the right direction.
Alagh and Eneh, (2014)	Impact of Cashless Banking on Banks' Profitability (Evidence from Nigeria)	Sources of Data: Secondary sources, Data Techniques: <i>Ex Post Facto</i> research design, ordinary least square (OLS) of log-linear multiple regression analysis.	Independent: ATM, POS, WBT. Dependent: Return on Equity	It was revealed that ATM and POS were positively related to ROE, while WBT related negatively to ROE due to high rates of bank charges on online deposits which make many customers unwilling to patronize the product.
Yaqub, <i>et</i>	The Cashless	Sources of Data:	Independent:	It was observed that the

<i>al</i> , (2013)	Policy in Nigeria: Prospects and Challenges	Secondary sources, Data Technique: Descriptive analysis.	ATM, WEB, POS and Mobile banking. Dependent: The Nigerian financial system	problem of Nigeria being a heavily cash-based economy has made the cost of cash to the Nigeria financial system high and increasing.
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2.4 SUMMARY OF EMPIRICAL STUDIES

Reviews of various kinds of literature relating to the cashless policy initiation into the Nigerian banking and economic system have shown the different dimensions of the policy's effects on the various segments of the banking system, the customers, government, and other stakeholders in the policy implementation.

The present study seeks to provide an additional resource and up-to-date contribution to this existing body of research works.

CHAPTER THREE

METHODOLOGY

3.0 PREAMBLE

The term methodology is used to describe all activities involved in the collection of the necessary information required for this research work. This chapter describes the study design by indicating the techniques and procedures used for the research and the accumulation of data for the study. It comprises the narrative of the research design, population, sample and sampling techniques, sources and method of data, data collection instrument, model specification, data analysis and techniques, and *a-priori* expectations.

3.1 RESEARCH DESIGN

For this study, the *Ex Post Facto* research design will be adopted. This is a research design category in which the investigation begins after the fact has happened without the researcher intervening. Kerlinger (1973) & Onwumere (2009) defined an *ex post facto* study design as a formal analytical investigation involving the use of variables in which, in the process of the exercise, the researcher does not modify its condition or direction. The current research uses cashless policy variables such as POS, ATM, and Web-Based Transactions to obtain the information used to measure the effect of CBN's cashless policy on deposit money banks' performance in Nigeria to return on assets.

3.2 POPULATION

The study population consists of all the Nigerian DMBs totaling 21 each of the banks having their branches spread across the country.

3.3 SAMPLE SIZE AND SAMPLING TECHNIQUE

The sample size consists of all the 21 Nigerian deposit money banks. In all a sample of 7 years (2012-2018) CBN statistics report of all the banks' performances in their various respective

cashless policy transactions was used in collecting the information needed, consisting of their transactions in their value (N).

For this study the sampling method used for making statistical inferences is the probability sampling method which involves random choice, permitting you to make mathematical inferences about the entire group. The sampling technique used in choosing the sample size is the Random sampling technique where the banks in the defined population have equal chances of being selected for the sample.

3.4 SOURCES AND METHOD OF DATA COLLECTION

For this study, secondary sources of data were used in collecting data and gathering information. The secondary source of data was obtained from various publications of the Nigerian Central Bank and other related journals.

3.5 INSTRUMENT FOR DATA COLLECTION

For this study, the CBN statistical bulletin was the main instrument used to collect secondary data for cashless policy transactions. It was used to gather information including the ready-made information given by the CBN. Data from the CBN statistical bulletin, publications from the Nigerian Central Bank, and other related journals constitute the secondary source of data for the research study due to its versatility in collecting opinions, data, and intentions.

3.6 METHOD OF DATA ANALYSIS

For data analysis, both the descriptive and inferential statistics will be used. The descriptive statistics include mean and standard deviation. The inferential statistics include correlation and simple linear regression. The correlation is used to measure the association between the variables while regression is used to evaluate the relationship between the variable.

3.7 MODEL SPECIFICATION

The model derived from the study is as shown below:

$$DBPER = \beta_0 + \beta_1 POS + \beta_2 ATM + \beta_3 WBT + \varepsilon$$

Where;

DBPER = Deposit Money Banks Performance using Return on Assets

β_0 = Intercept

$\beta_1 - \beta_3$ = Regression/Slope of coefficient

POS = Point of Sales Transactions

ATM = Automated Teller Machine Transactions

WBT = Web Based Transactions

ε = error term

3.8 DATA ANALYSIS TECHNIQUE

In testing the hypothesis the study deals with techniques for analyzed data collected. The technique used in analyzing the data is the Regression Analysis in determining the effect of CBN's Cashless policy on DMBs performance, which will also be used to reject or accept the various hypotheses. The study results were shown in tables using Statistical Package for Social Sciences (SPSS) for easier presentation of analysis result.

$$Y = a + bx$$

Decision rule: if T calculated is higher than T tabulated accept H1 and reject H0

Also if T calculated is lower than T tabulated reject H1 and accept H0

3.9 APRIORI EXPECTATION

$a > 0$

$b > 0$

Which assumes that the parameter estimates of a and b are theoretically meaningful and that a direct relationship between dependent variables and the independent variable exists.

CHAPTER FOUR

DATA ANALYSIS AND RESULTS

4.0 PREAMBLE

This chapter presents the analyses and results of the study as laid out in the research methodology. The study findings were presented to establish the effect of cashless policy on the performance of DMBs in Nigeria. Secondary sources were used in collecting data and gathering information. The data was gathered entirely from the CBN statistical bulletin as the research instrument. Other sections of the data analysis were performed in congruence with the research objectives.

4.1. DATA ANALYSIS AND RESULTS

4.1.1 Descriptive Analysis

Table 4.1: Descriptive Statistics

	No of years	Minimum	Maximum	Mean	Std. Deviation	Skewness	Kurtosis
Return on Assets (%)	7	2.23	4.82	3.0686	.96639	1.235	0.528
POS Bill (₦' Billion)	7	48.01	2383.11	788.790	838.08434	1.384	1.346
ATM (₦' Billion)	7	1984.66	6480.09	4338.50	1722.56244	.115	-1.333
WBT(₦' Billion)	7	31.57	404.60	138.010	128.50087	1.840	3.625
Observations	7	7	7	7	7	7	7

Source: Researcher's Analysis, 2020

From Table 4.1 above, the maximum values, minimum values, the mean (average), standard deviation, Skewness, and Kurtosis Statistics were shown. The results expressed in Table 4.1 helps to provide some insight into the description of the Nigerian deposit money banks used in the study. First, it can be observed that on average, in a 7-year period (2012-2018), the sampled DMBs used for this research were characterized by positive ROA = 3.0686. This is an indication that most Nigerian quoted banks have a positive Return on Assets (ROA). Similarly, the table also shows that on average during the period under study that value of the transaction for POS Bill was ₦788.790 Billion, the maximum value stood at ₦2,383.11 Billion while the minimum value stood at ₦48.01 Billion, thus showing a large difference between the minimum and maximum values of the POS Bill Value, meaning that a large amount of Nigeria bank customers are using more POS facilities in most of their transactions that involve cash transactions.

Furthermore, the table also shows that on the average during the period covered by this study, the value of transaction for ATM was ₦4,338.50 Billion, the maximum value stood at ₦6,480.09 Billion while the minimum value stood at ₦1,984.66 Billion, thus showing a large difference between the minimum and maximum values of the ATM transactions, meaning that large number of Nigeria bank customers also adopted the use of ATM facilities in most of their cash transactions.

Also, the table shows that on average during the period under study that value of the transaction for web-based transactions was ₦138.010 Billion, the maximum value stood at ₦404.60 Billion while the minimum value stood at ₦31.57 Billion, thus showing a large difference between the minimum and maximum values of web-based transactions, meaning that a large number of Nigeria bank customers are also using WBT facilities in most of their transactions that involves cash transactions.

4.2. TEST OF HYPOTHESES AND DISCUSSION

4.2.1 Test of Hypothesis One

H₀: There is no significant relationship between POS transactions and the Return on Assets of Deposit Money Banks in Nigeria.

H₁: There is a significant relationship between POS transactions and the Return on Assets of Deposit Money Banks in Nigeria.

Table 4.2: Linear Regression Analysis between POS Transactions and Return on Assets

Table 4.2.1: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.896 ^a	0.803	0.763	0.47046

a. Predictors: (Constant), POS Transactions (N⁷ Billion)

Source: Researcher's Analysis, 2020

Table 4.2.1 above shows that POS Transactions and ROA have a moderate correlation (coefficient R) of 0.896 indicating that there is a positive relationship between the two variables while the increasing degree in POS Transactions will increase Return on Assets by 89.6%. Analysis in table 4.2.1 also shows that the coefficient of determination (the percentage variation in the dependent variable being explained by the changes in the independent variables) R square equals 0.763, that is, POS Transactions explains 76.3% of the observed change in Return on Assets.

Table 4.2.2: ANOVA^a

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	4.497	1	4.497	20.317	.006 ^b
	Residual	1.107	5	.221		
	Total	5.603	6			

a. Dependent Variable: Return on Assets (%)

b. Predictors: (Constant), POS Transactions (N' Billion)

Source: Researcher's Analysis, 2020

The Analysis of Variance (ANOVA) was used to check how well the model is compatible with the data. Moreover, the change statistics shows that the research model and variables are fit ($p < 0.05$). The ANOVA results showed that at a 0.006 level of significance, there existed enough evidence to conclude that POS Transactions were useful for predicting the Return of Assets of DMBs in Nigeria. It can be finalised that there exists a direct relationship between the dependent variable and the independent. It also shows that the F-value which is the mean square model divided by the mean square residual yielded $F=20.317$.

Table 4.2.3: Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.254	.254		8.888	.000
	POS Transactions (N' Billion)	.001	.000	.896	4.507	.006

a. Dependent Variable: Return on Assets (%)

Model 1 for (H₀1) is stated as $\beta_0 + \beta_1 \text{POS} + \epsilon = 2.254 + 0.896 + \epsilon$

Source: Researcher's Analysis, 2020

From the regression result, model 1 shows that POS Transactions have a significance level of 0.006 ($p < 0.05$). This finding hence accepts the alternate hypothesis H₁ that POS Transactions has a significant relationship with Return of Assets of DMBs in Nigeria and rejects the null hypothesis H₀ that POS Transactions has no significant relationship with Return of Assets of DMBs in Nigeria.

4.2.2 Test of Hypothesis Two

H₀: There is no significant relationship between ATM transactions and the Return on Assets of Deposit Money Banks in Nigeria.

H₁: There is a significant relationship between ATM transactions and the Return on Assets of Deposit Money Banks in Nigeria.

Table 4.3: Linear Regression Analysis between ATM Transactions and Return on Assets

Table 4.3.1 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.718 ^a	.515	.419	.73690

a. Predictors: (Constant), ATM (N' Billion)

Source: Researcher's Analysis, 2020

Table 4.3.1 above shows that ATM Transactions and ROA have a moderate correlation (coefficient R) of 0.718 indicating that there exists a positive relationship between the two variables while the increasing degree in ATM Transactions will increase Return on Assets by 71.8%. Analysis in table 4.3.1 also shows that the coefficient of determination (the percentage variation in the dependent variable being explained by the changes in the independent variables) R square equals 0.419, that is, ATM Transactions explains 41.9% of the observed change in Return on Assets.

Table 4.3.2 ANOVA^a

Model		Sum of Squares	D _f	Mean Square	F	Sig.
1	Regression	2.888	1	2.888	5.319	0.069 ^b
	Residual	2.715	5	0.543		
	Total	5.603	6			

a. Dependent Variable: Return on Assets (%)

b. Predictors: (Constant), ATM (N' Billion)

Source: Researcher's Analysis, 2020

The Analysis of Variance (ANOVA) was used to check how well the model is compatible with the data. Moreover, the change statistics shows that the research model and variables are not fit ($p > 0.05$). The ANOVA results showed that at a 0.069 level of significance, there was not enough

evidence to conclude that ATM Transactions was useful for predicting the Return of Assets of deposit money banks. It can be finalised that there exists no linear relationship between the dependent variable and the independent variable. It also shows that the F-value which is the mean square model divided by the mean square residual yielded $F=5.319$

Table 4.3.3 Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.321	0.807		1.636	0.163
	ATM (N' Billion)	0.00	0.00	0.718	2.306	0.069

a. Dependent Variable: Return on Assets (%)

Model 2 for (H₀₂) is stated as $\beta_0 + \beta_2 \text{ATM} + \epsilon = 1.321 + 0.718 + \epsilon$

Source: Researcher's Analysis, 2020

From the regression result, model 2 shows that ATM Transactions has a significance level of 0.069 ($p > 0.05$). This finding hence rejects the alternate hypothesis H₁ that ATM Transactions has a significant relationship with Return of Assets of DMBs in Nigeria and accepts the null hypothesis H₀ that ATM Transactions has no significant relationship with Return of Assets of DMBs in Nigeria.

4.2.3 Test of Hypothesis Three

H₀: There is no significant relationship between Web-Based Transactions and the Return on Assets of Deposit Money Banks in Nigeria.

H₁: There is a significant relationship between Web-Based Transactions and the Return on Assets of Deposit Money Banks in Nigeria.

Table 4.4: Linear Regression Analysis between Web Based Transactions and Return on Assets

Table 4.4.1 Model Summary

Model	R	R Square	Adjusted Square	RStd. Error of the Estimate
1	0.872 ^a	0.761	0.713	0.51743

a. Predictors: (Constant), WBT(N' Billion)

Source: Researcher's Analysis, 2020

Table 4.4.1 above shows that Web-Based Transactions and Return on Assets have a moderate correlation (coefficient R) of 0.87 indicating that there is a positive relationship between the two variables while the increasing degree in Web-Based Transactions will increase Return on Assets by 87.2%. Analysis in table 4.4.1 also shows that the coefficient of determination (the percentage variation in the dependent variable being explained by the changes in the independent variables) R square equals 0.761, that is, Web-Based Transactions explains 76.1% of the observed change in Return on Assets.

Table 4.4.2 ANOVA^a

Model		Sum of Squares	D _f	Mean Square	F	Sig.
1	Regression	4.265	1	4.265	15.929	0.010 ^b
	Residual	1.339	5	0.268		
	Total	5.603	6			

a. Dependent Variable: Return on Assets (%)

b. Predictors: (Constant), WBT(N' Billion)

Source: Researcher's Analysis, 2020

The Analysis of Variance (ANOVA) was used to check how well the model is compatible with the data. Moreover, the change statistics shows that the research model and variables are fit ($p < 0.05$). The ANOVA results showed that at a 0.010 level of significance, there is enough evidence to conclude that Web-Based Transactions was useful for predicting the Return of Assets of DMBs in Nigeria. It can be concluded that there is a linear relationship between the dependent variable and the independent variable. It also shows that the F-value which is the mean square model divided by the mean square residual yielded $F = 15.929$

Table 4.4.3 Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.163	.300		7.222	.001
	WBT(N' Billion)	.007	.002	.872	3.991	.010

a. Dependent Variable: Return on Assets (%)

Model 3 for (H₀₃) is stated as $\beta_0 + \beta_3 \text{WBT} + \varepsilon = 2.163 + 0.872 + \varepsilon$

Source: Researcher's Analysis, 2020

From the regression result, model 3 shows that Web-Based Transactions have a significance level of 0.010 ($p < 0.05$). This finding hence accepts the alternate hypothesis H₁ that Web Based Transactions has a significant relationship with Return of Assets of Deposit Money Banks in Nigeria and rejects the null hypothesis H₀ that Web-Based Transactions has no significant relationship with Return of Assets of Deposit Money Banks in Nigeria.

4.2.1.1. Discussion of Findings

This study examined the effect of cashless policy on the performance of deposit money banks in Nigeria. The data generated were subjected to both descriptive and inferential statistics. The descriptive statistics revealed the individual characteristics of the variables used in this study while the inferential statistics tested the hypotheses using the simple linear regression analysis.

The test of hypothesis one was to ascertain whether a significant relationship exists between POS transactions and the ROA of Deposit Money banks in Nigeria. The results show that there is a

significant relationship between POS transactions and the ROA of Deposit Money Banks in Nigeria with a significance level of 0.006 ($p < 0.05$). Therefore, the null hypothesis H_0 is rejected and the alternate hypothesis H_1 is accepted. This finding is in line with Okafor, (2020) who indicated that POS transactions have a positive and significant effect on ROA. This result however negates the findings of Agwu *et al*, (2014). He posited that point-of-sale transactions have negative and insignificant effect on deposit money banks' performance in Nigeria.

The test of hypothesis two was to ascertain whether a significant relationship exists between ATM transactions and the ROA of Deposit Money Banks' in Nigeria. The findings indicate that there is no significant relationship between ATM transactions and the ROA of Deposit Money banks in Nigeria significant since the P-value is 0.069 which is more than a 5% significance level. This result, therefore suggests that the researcher should accept the null hypothesis H_0 and reject the alternative hypothesis H_1 . This means that more attentiveness should be given by management to the activities that will improve the ATM services of their banks if they wish to increase the ROA value of their banks as this will result in high customer satisfaction and patronage. This finding is in contrast with the work of Adu, (2016). He observed that the ATM has a positive effect on the performance of DMBs in Nigeria.

The third hypothesis was to determine whether a significant relationship exists between Web-Based Transactions and the ROA of Deposit Money banks in Nigeria. The findings from this result suggest that an alternate hypothesis should be accepted which states that Web-Based Transactions has a significant relationship with Return of Assets of Deposit Money Banks in Nigeria with a significance level of 0.010 ($p < 0.05$). This means that in Nigeria, there is a great level of usage of internet banking by customers of the Nigerian DMBs and this high usage level of bank's web-based transactions influences the ROA of the banks positively, thus, leading to the

banks enhanced performance. This result is consistent with Asidok & Michael, (2018) which revealed that mobile banking has a significant effect on the performance of DMBs in Nigeria.

However, a summary of the models from the three hypotheses and their results are shown in Table 4.5 below:

Table 4.5: Summary of models and hypotheses results

S/N	Models	Hypothesis Results (0.05 significance level)
1	2.254+0.896+ ϵ	p=0.006: H ₀ 1 is rejected
2	1.321+0.718+ ϵ	p=0.069: H ₀ 1 is accepted
3	2.163+0.872+ ϵ	p=0.010: H ₀ 1 is rejected

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.0 PREAMBLE

In this section of the study, the researcher provides a summary of the findings derived from the study, the conclusion of the study, and recommendation for the study.

5.1 SUMMARY OF THE STUDY

Since the introduction of commercial banks, otherwise known as Deposit Money Banks (DMBs) to the Nigerian nation, a lot of reforms have been introduced into the system with the attendant economic effects. The cashless policy programme was launched in the year 2012 as a system that allows financial transactions to be carried out without the use of banknotes. The goal of the cashless society is to lessen the quantity of visible cash moving in the economy of Nigeria and thereby facilitate more transactions dependent on electronics. Some Nigerian electronic payment platforms include; Automated Teller Machines (ATM), Point of Sales Terminals (POS), Web-based transactions, NIBSS(Nigerian Interbank Settlement Scheme), etc.

This research was established to determine the effect of Cashless Policy on the Performance of Deposit Money Banks in Nigeria. The research results were discussed in detail and the objectives of the study were linked to the current findings of the research. Secondary sources of data were used in collecting data and gathering information. The secondary source of data was obtained from the CBN Statistical Bulletin and other related journals. This study used an *Ex Post Facto* research design to gather data from 2012 through 2018 from 21 DMBs in Nigeria which was extracted from the CBN statistical bulletin.

The study focused on three explanatory variables as proxies for the independent variable (cashless policy); Point of Sale Transactions, Automated Teller Machine Transactions and Web-Based Transactions, and one dependent variable which is financial performance (Return on Assets).

This study is grounded in the stakeholders' theory. This is an organizational management and corporate ethics philosophy that accounts for various constituencies caused by business organizations such as workers, customers, suppliers, financiers, societies, statutory bodies, political organizations, trade associations, trade unions, and competitors. For an organization to be more productive and achieve its ultimate goal of profit-making, it is essential for the organization's management to be conscious of the stakeholders, to consider their interests and aspirations, to understand their behaviour, and to know how to prioritize the general population to focus the organization's scarce resources on the most significant stakeholders. In implementing the cashless policy by the CBN, all stakeholders' interests must be put into consideration. The apex bank in enacting this system of banking enumerated the benefits that will accrue to the stakeholders which include the banking population regarded as customers, the deposit money banks, the government, and the CBN as the intermediary body.

In testing the research hypothesis, Simple Linear Regression Analysis was used. The probability level was set up at 0.05 significance. Major empirical findings and result of hypotheses testing are outlined thus:

- a. POS transactions have a significant relationship with the ROA of Deposit Money Banks in Nigeria ($p=0.006<0.05$). This finding agrees with Okafor, (2020) who indicated that POS transactions have a positive and significant effect on ROA.
- b. ATM transactions have no significant relationship with the ROA of Deposit Money Banks in Nigeria ($p=0.069>0.05$). This finding is in contrast with the work of Adu, (2016). He observed that the automated teller machine has a positive effect on the performance of DMBs in Nigeria.
- c. Web-based transactions have a significant relationship with the ROA of Deposit Money Banks in Nigeria ($p=0.010<0.05$). This result is consistent with Asidok & Michael, (2018) which revealed that mobile banking has a significant effect on the deposit money banks' performance in Nigeria.

5.2 CONCLUSION

Based on the study findings the following conclusions were made:

The cost of operation in a cashless environment will reduce substantially, thereby resulting in a rise in the income of banks. The adoption and execution of the cashless policy will improve banks' efficiency by making them more productive and effective.

The electronic payment channels are reliable, although their services may sometimes be disturbed by a power outage. The problem of capacity utilization is a cankerworm disturbing every business in Nigeria. As a result of the reliability of these channels in assisting customers in processing transactions, the E-payments channels have indeed contributed a lot to the country's development.

The study, therefore, concludes that cashless policy has a significant effect on DMBs performance in Nigeria.

5.3 RECOMMENDATIONS

The following recommendations have been made based on the research results:

More attentiveness should be given by the management to the activities that will improve the ATM services of their banks if they wish to increase the ROA value of their banks as this will lead to high customer satisfaction and patronage. Also, training should be held for bank staff to accustom them to modern developments of sophisticated technology.

The Government and regulatory authorities should be able to make available security both physically and electronically to prevent the occurrence of hacking by fraudsters. The management of banks should enlighten customers on the ease and significance of using mobile

banking channels to complete their transactions and also provide them with adequate information on how to avoid fraudsters from gaining entry to their accounts.

Furthermore, more variables affecting deposit money banks' performance should be implemented in further studies. These variables other than the cashless policy will further inform the study as it will explore all the possible factors affecting the performance of DMBs in Nigeria. Also, this research studied for 7 years (2012-2018). Further research should therefore be conducted to analyze the changes over a longer time.

REFERENCES

- Acha, I.A. (2012). Microfinance banking in Nigeria: Problems and prospects. *International Journal of Finance and Accounting*, 1(5), 106-111.
- Acha, I.A., Kanu, C., & Agu, G.A. (2017). Cashless policy in Nigeria: The Mechanics, Benefits and Problems. *Innovative Journal of Economics and Financial Studies*, 1(1), 28-38.
- Adegbesan, E. (2017). Nigerians grumble as banks commence cashless charges' vanguard newspaper. Retrieved from: <http://www.vanguardngr.com/2017/04/nigerians-grumble-banks-commence-cashless-charges>.
- Adu, C.A. (2016). Cashless Policy and its Effects on the Nigerian Economy: *European Journal of Business, Economics and Accountancy*, 4(2), 81-88.
- Agu, A.O., & Agu, S.V. (2020). Cashless Policy and the Nigerian Economy: A Disaggregated Approach. *International Journal of Humanities Social Sciences and Education*, 7(4), 21-30.
- Agwu, M.E., *et al.*, (2014). Impediments to e-banking services marketing in developing economies – a study of Nigerian banks. *European Journal of Business and Social Sciences*, 5(3), 2-25.
- Akhalumeh, P.I.B., & Ohiokha, F. (2012). Nigeria's Cashless Economy: The Imperatives. *International Journal of Management and Business Studies*, 2(2), 31-36.
- 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.

- Alao, A., & Sorinola, O.O. (2015). Cashless Policy and Customers' Satisfaction: A Study of Commercial Banks in Ogun State, Nigeria. *Research Journal of Finance and Accounting*, 6(2), 37-47.
- Amu, C.U., & Nathaniel, C.N. (2016). E-Banking and Commercial Bank Performance in Nigeria: A Cointegration and Causality Approach. *International Journal of e-Education, e-Business, e-Management and e-Learning*, 6(3), 175-185.
- Andabai, P.W., & Bina, P.A. (2019). Impact of Cashless Policy on Deposit Money Banks Performance in Nigeria. *Global Journal of Education, Humanities and Management Sciences*, 1(2), 1-10.
- Asenge, E.L., *et al.*, (2019). Effect of Cashless Policy on Customer Satisfaction in the Nigerian Banking Industry. *International Journal of Current Aspects on Innovations and Research*, 3(1), 1-11.
- Asidok, N. O. & Michael, A. A. (2018). Mobile Banking Transactions and Bank Profitability in Nigeria: *International Journal of Economics, Commerce and Management United Kingdom*, 6(6), 5-9.
- Central Bank of Nigeria (2011). Money Market Indicators & Money and Credit Statistics, CBN Statistical Bulletin, CBN Publications.
- Central Bank of Nigeria (2011). New cash policy. Retrieved from www.cenbank.org.
- Central Bank of Nigeria (2011): Annual Report.
- Central Bank of Nigeria, (2011). Payment systems. Retrieved from: <http://www.cbn.gov.ng/Paymentsystem>.
- Chison, K.A., & Mike, O.A. (2018). Cashless Policy and Commercial Banks' Profitability in Nigeria. *Advances in Social Sciences Research Journal*, 5(3), 395-406.
- Cobb, A. (2004). Efficient Retrieved from: <http://www.ameinfo.com/50050.html>.

- Ejiro, O. (2012). What Nigerians think of the cashless economy policy. *Nigerian Journal of Economy*, 4(6), 97 – 102.
- Ejoh, N.O., *et al.*, (2014). Information and Communication Technology- An Indispensable Tool for the Implementation of Cash-less Policy in Nigeria. *International Journal of Economics, Commerce and Management*, 2(10), 1-18.
- Ernest, S.O., & Fadiya, B.B. (2012). Cashless Banking in Nigeria: Challenges, Benefits and Policy Implications. *European Scientific Journal*, 8(12), 289-316.
- Freeman, R.E (1983). Stockholders and Stakeholders: A New Perspective on Corporate Governance. *California Management Review*, 25(3), 88 – 106.
- Ighoroje, E.J., & Okoroyibo, E.E. (2020). Cashless Policy and the Performance of Deposit Money Banks in Nigeria. *European Journal of Accounting, Auditing and Finance Research*, 8(5), 85-104.
- Ikpefan, O.A., *et al.*, (2018). Electronic Banking and Cashless Policy in Nigeria. *International Journal of Civil Engineering and Technology*, 9(10), 718-731.
- Kerlinger, F. N. (1973). *Foundations of Behavioural Research*. 2nd Edition. Holt, Rinehart and Winston.
- Kket, E.E., & Egu, U.I. (2016). Evaluating Nigeria Cashless Policy Implementation. *International Journal of Business and Social Research*, 6(5), 17-27.
- Muotolu, P.C., & Nwadiolor, E.O. (2019). Cashless Policy and Financial Performance of Deposit Money Banks in Nigeria. *International Journal of Trend in Scientific Research and Development*, 3(4), 465-476.
- Nweze, U., *et al.*, (2017). Empirical Analysis of the Effect of Cashless Policy on the Performance of Banking Industry in Nigeria. *IDOSR Journal of Humanities and Social Sciences*, 2(2), 93 – 110.

- Okafor, C.A. (2020). Cashless Policy for Business Purpose and the Performance of Deposit Money Banks in Nigeria. *International Journal of Innovative Finance and Economics Research*, 8(3), 1-13.
- Omotunde, M., *et al.*, (2013). Impact of Cashless Economy in Nigeria. *Greener Journal of Internet, Information and Communication Systems*, 1(2), 40-43.
- Onwumere, J.U.J. (2009). *Business and Economic Research Methods*. Enugu: Vougasen Publishers.
- Osazevbaru, H.O., *et al.*, (2014). Cashless Policy and Banks' Profitability in Nigeria. *European Journal of Accounting and Auditing and Finance Research*, 2(10), 1-12.
- Roth, B. L. (2010). The Future of Money: The Cashless Economy – Part 1. Retrieved from: <https://www.x.com/.../future-money-cashless-economy—part-i>.
- See: <https://www.technopedia.com>.
- Shittu, O.I., & Yusuf B.M. (2014). An Assessment of E-payment Infrastructures towards an Efficient Cashless Policy in Nigeria: A Case Study of Bauchi State. *IOSR Journal of Economics and Finance*, 5(4), 18-24.
- Siyanbola, T.T. (2013). The effect of cashless banking on Nigerian economy. *Canadian Journal of Accounting and Finance*, 1(2), 9-19.
- Uzonwanne, C., & Ezenekwe, U. (2017). Financial Illiteracy and Cashless System in Nigeria. *Journal of Economics and Sustainable Development*, 8(9), 123-139.
- Woodford M. (2003). *Interest & Price: Foundation of a Theory of Monetary Policy*. Princeton University Press.
- Yaqub, J.O., *et al.*, (2013). The Cashless Policy in Nigeria: Prospects and Challenges. *International Journal of Humanities and Social Science*, 3(3), 200-212.

APPENDIX

YEAR	Return on Assets (%)	POS Bill (N' Billion)	ATM (N' Billion)	WBT(N' Billion)
2012	2.62	48.01	1,984.66	31.57
2013	2.81	161.02	2,828.94	47.32
2014	2.23	312.07	3,679.88	74.04
2015	2.81	448.51	3,970.25	91.58
2016	2.23	759.00	4,988.13	132.36
2017	3.96	1,409.81	6,437.59	184.60
2018	4.82	2,383.11	6,480.09	404.60

The Effect of Cashless Policy on the Performance of Deposit Money Banks in Nigeria 2012-2018.

Source: Central Bank of Nigeria Statistical Bulletin, 2019