

**IMPACT OF CASHLESS POLICY ON THE PROFITABILITY OF NIGERIA BANKING
INDUSTRY**

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JULY, 2019.

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**A RESEARCH WORK SUBMITTED TO THE DEPARTMENT OF ACCOUNTING AND
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IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE DEGREE OF
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CERTIFICATION

This is to certify that this project work was carried out by ISAIAH, KELECHI ESTHER, matric number 15020101008 in partial fulfillment of the requirements for the award of Bachelor of Science (B.sc) degree in Accounting at the Department of Accounting & Finance, College of Humanities and social science, Mountain Top University Ogun State, Nigeria.

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DEDICATION

This project is dedicated to Almighty God for His infinite mercy, protection and guidance throughout my stay in Mountain Top University. Also to my lovely and best parents, my brothers, and friends for their unquantifiable support and encouragement.

ISAIAH ESTHER KELECHI

Date

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That you once failed does not mean you are out of the track of success but an indication that with more effort success will be attained. I am most grateful to GOD Almighty for his blessing in my life. My profound gratitude goes to my parents Pastor & Mrs Ewurum, my brothers for their care and financial support. My sincere gratitude to my project supervisor Mr E.O. Olurin. Who gave out his time to ensure the success of this research work? To my humble and wonderful lecturers; Dr O.J. Akinyom, DR Onichabous Pius, Mr Taleatu, for all their support and teachings. My profound gratitude to my wonderful friends; Courage, Oluwatomisin, Toluwalase Pelumi, Olufunke, Blessing, Ruth, my lovely class rep Ejemuta and so many of them who in one way or the other supported me in my and academic life. I pray that Almighty God will reward you all Amen.

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LIST OF ABBREVIATIONS

ATMs	Automated Teller Machines
CBN	Central Bank of Nigeria
DIT	Diffusion Innovation Theory
DMBs	Deposit money banks
E-Banking	Electronic Banking
ECB	European Central Bank
GDP	Gross Domestic Product
ICT	Information and Communication Technology
IT	Information Technology
KYC	Know Your Customer
OTC	Over the counter
PDA	Personal Digital Assistant
PIN	Personal Identification Number
POS	Point of Sale
ROE	Return on Equity
ROA	Return on Assets
RTGS	Real Time Gross Settlement System
(SI)	Security indicators
SPSS	Statistical Package for Social Sciences
SMS	Short Message Service
TAM	Technology Acceptance Model

Abstract

These study examine the impact of cashless policy on the profitability on Nigerian Banking industry using selected deposit money banks in Nigeria from 2012-2018. This study investigated the Returns on Equity of Banks following the adoption of Cashless policy in Nigeria: 2012-2018. The research design used was ex post-fact. The data was sourced from the annual report of selected deposit money bank and Central Bank of Nigeria (CBN) annual report. Regression analysis was used to analyze the data. The analysis was carried out using in statistical Package for Social Sciences (SPSS). The empirical result revealed that there is no significant relationship between return on equity and POS transactions with a p-value of 0.840, also it revealed that there is no significant relationship between return on equity and automatic teller machine transactions with a p-value of 0.653. The study also revealed that there is no significance relationship between return on equity and web transactions in banks with p-value of 0.888. One of the findings of this work is that cashless policy has no significant impact on Return on equity. These study function shows that cashless terminals does not improve Returns on the Equity of deposit money bank. The study recommend that dealings charges ought to be more reviewed to a little or no charge at all, to encourage more patronage of e-payment platforms while CBN, Deposit money banks (DMBs), and alternative non-banks monetary establishments ought to give public enlightenment and awareness programs which will produce awareness and encourage the unbanked people into the banking industry particularly those within the informal sector in Nigeria.

Key Words:*Cashless policy, Deposit money banks, Profitability, Point of Sales, Web, Automated Teller Machine*

CHAPTER ONE

INTRODUCTION

1.1. Background of the Study

The coming of the current banking system has often caused the traditional banking system whereby people move around with money without Automated Teller Machine (ATM) Card more profitable and helpful. This is because queuing up in banks for hours before the service gets to the turn of the customer is now being replaced by the 21st-century method of banking operation which is today referred to as the introduction of cashless policy in Nigeria. Most developed countries in the world operate the cashless economy and Nigeria, as a developing country, has to catch up with the trend in order to compete favorably internationally especially with respect to the cashless policy. Taking under consideration the goal of discouraging money transactions the maximum amount as potential and to not discourage money holdings. The CBN set the daily cumulative withdrawal and deposit limits for both individuals and corporate entities to be N500,000 and N3 million respectively, with respective penalty fees of 3% and 5% to be charged per further N1000.

Humphrey, (2004) express that the policy is more evident in developed countries. This is aimed at reducing physical cash transaction and promote electronic means of making payments. A wide range of benefits is expected to be derived by stakeholders from an increased utilization of e-payment such as increased suitability, more service options, reduced risk of cash related crimes, cheaper access to out of branch banking services, access to credit and financial inclusion, faster access to capital, reduced revenue leakage, and reduced cash holding costs. Cashless policy contributes to the economy by reducing risks of cash related crimes and providing more

convenient, better and cheaper access to banking services. Addressing problems relating the advantages and challenges of a cashless economy in African country, Ikpefan and Ehimare in their paper, “Fast-tracking business through a cashless economy in Nigeria: Benefits and challenges”, estimates an over 70% of cash in circulation, in the Nigerian economy, existing outside the formal banking system.

The policy through the forward-thinking use of information technology enables fund transfer, thereby reducing time wasted in Bank(s). According to Akintaro, (2012). Wizzit, an invasive mobile banking concern in Republic of {SouthAfrica |African country|African nation} has over 300 thousand customers across South Africa. Likewise, M-PESA was introduced in Kenya as a small value electronic system that is accessible from ordinary mobile phones. It has toughened exceptional growth since its introduction by mobile operator (Safaricom) in Republic of Kenya in March 2007 and has already been adopted by 9 million customers, which is about 40% of Kenya’s adult population. Wizzit and different mobile monetary services together with MPESA in Republic of Kenya area unit serving to low-income Africans create monetary dealing across the long distance with their cellphones, thereby reducing their travel cost and eliminating the risks of carrying money and conjointly avoiding most banking charges. It is assumed that the proper implementation of mobile phones and other technologies can aid the implementation of cashless policy and hence, the growth of the cashless economy in Nigeria. Likewise, Cashless economy is not the total non-appearance of cash, it is an economic situation in which goods and services are bought and paid for through electronic media. According to Woodford (2003), Cashless economy is outlined together during which there square measure assumed to be no transactions frictions that may be reduced through the utilization of cash balances, and that accordingly provide a reason for holding such balances even when they earn rate of return. In a

cashless economy, how much cash in your wallet is practically irrelevant. According to Roth (2010), you can pay for your purchases by any one of the excesses of credit cards or bank transfer. In the nascent era, economic systems were trademarked by the barter system, in which goods were exchanged for goods. Barter system had the issue of double coincidence of wants, which resulted in a pointless delay before transactions are completed. Thus, Onoh (2007), argues that in a barter system there must be double coincidence before two people can trade – one must want precisely what the other has to offer, when and where it is offered so that the exchange can happen.

Cashless economy describes an economic situation whereby transactions are done without the compulsory movement of cash as a means of exchange or as a means of transaction but rather with the use of credit card or debit card payments. Several scholars have attempted to analysis this policy, but only a few of them presented a comprehensive evaluation of its implications in developing countries. This shortcoming of the barter system made it necessary to develop an acceptable medium of exchange that permits the value of goods to be assessed and services rendered in terms of the intermediary and a kind of cash wide accepted to shop for the other smart.As a result of economic development, the business relationship among people and for efficient economic functioning of an economy, a widely accepted medium of exchange emerged; this is no other medium than money. Money is something that acts as a medium of exchange. According to Acha, (2008a). Ajayi and Ojo (2006), In Nigeria the most common medium of exchange is cash (naira notes and coins) which is why Nigeria is seen as a cash-based economy (the authors further reinforced this statement when they opined that in Nigeria, cash is the main mode of payment and a large percentage of the populations are unbanked. Although cash as a means of payment confers certain benefits to economic agents, its cost to the economy is

colossal. Acha, (2008b) except for this, the use of cash has other hostile consequences such as frauds, robberies, corruption, leakage of funds, mismanagement of public funds and so many others. A German economist took a past approach to examine stages of monetary development and he argued that society would advance from barter (a state of the natural economy where goods were changed directly for product) to financial exchange before achieving its most elevated union in a very credit econoAchor and Anuforo (2013) maintained that Nigeria is a cash-based economy, considering the size of retail and commercial activities transacted in cash as well as the value of these transactions as a share of income per capita. Consequently, According to Central Bank of Nigeria (2012), in 2011, it was estimated that 99% of over 215 million customer transactions in Nigerian banks were cash-related (i.e.; through ATM and over-the-counter) and this was valued at about N2.1 trillion or 5% of GDP. Poor banking culture, lack of rural banking, and poor infrastructural facilities have led to an increase in the volume of cash transactions as a date. It is calculable that a mean Nigerian transacts regarding N65 in live of each N100 financial gain earned. This cash-based system is at an outstanding cost to the Nigerian economy. In April 2011, CBN introduced the cashless policy in Nigeria with a view to addressing some of the associated ills of cash-based economies. According to Ajayi and Ojo (2006), the precondition for the development of the national economy is to encourage a payment system that is safe, suitable, and cheap. The cashless ability is a substitute for cash transactions through electronic means using modern information and communications technology (ICT).

Ndifon and Okpa (2014) declare that the future of all business, particularly those in the service industry lies in information and communication technology. This technology the author further stressed that as far as cashless policy is concerned is not the only computer. Information communication technology for banks takes different dimensions namely; computerization of

customers' accounts and account information storage and retrieval; deposit and withdrawal through Automated Teller Machines (ATMs); and networking to facilitate access to accounts from any branch of the bank, bio-metrics, use of mobile phones to consummate transactions, internet, and websites. It also involves the use of credit cards, debit cards, mobile payments and many other methods of payment, but always only in digital ways, as paper currency does not come into play.

Babalola (2008) show seven completely different electronic payment channels in Federal Republic of Nigeria, Automated Teller Machines (ATM), points of sales terminals, mobile voice, web, inter-bank branch and kiosks. In another development, Ogbuji et al. (2012) noted that ATM permits a bank client to conduct his/her banking transactions from nearly each different ATM machine within the world. In this type of economy, the amount of cash in one's wallet is not relevant. One can pay for purchases by any one of the forms of transactions in a cashless economy which includes the use of credit cards or bank transfer. Cashless economy is enhanced by e-finance, e-money, e-brokering, and e-exchanges (Moses-Ashike, 2011). Central Bank of Federal Republic of Nigeria introduced purpose of sale and gave the rules in 2011 with most service commission of one.25% or a maximum of NGN2000 and limiting the role of connecting and maintaining POS devices only to licensed Payment Terminal Service Providers (PTSPs). These POS terminals serve like the Automatic Teller Machines (ATM) across commercial points in the country. At the completion of a transaction and the value discovered, the amount is entered into a POS terminal into which the electronic card has been slotted. The cash equivalent of the amount will be automatically transferred from the payer's account into the account of the payee's account. In Federal Republic of Nigeria these days, personal enterprise, spiritual bodies, academic establishments and different service suppliers like hotels, transport corporations, etc.

have embraced the POS option in their transactions. Hence, this study examines the impact of cashless policy on the profitability of the Nigeria banking industry.

1.2. Statement of the Problem

The issues relating to the adoption of cashless policy in Nigeria have remained topical issues being discussed at the various financial level. In an ideal situation, financial institutions are supposed to come up with an Information and Communication Technology (ICT) based banking transaction, thereby making it easier for customers to use various online medium such as the web, point of sales and better still the use of the Automated Teller Machine (ATM) for their various transactions; ranging from the payment of bills, recharging their phones, buying of goods and services using their ATMs and credit cards. This form of transaction is made possible through the cashless policy. Unfortunately, the actual situation after a preliminary investigation by the researcher shows that some banks are yet to key into the cashless policy that would make the banking industry more profitable. While some other banks that have since adopted this new trending banking complained of poor network service, the issue of fraud, as well as phishing among other things as responsible for bedeviling the cashless policy. It is against this backdrop that the study tends to examine the effect of cashless policy on profitability in Nigeria banking industry Lagos state.

1:3 Objectives of the Study

The main objective of the study was to examine the effect of cashless policy on the profitability of the Nigeria banking industry. The specific objectives of the study are to:

- i. determine the effect of point of sales (POS) transaction on the profitability of the banking industry in Nigeria.
- ii. evaluate the effect of Automated Teller Machine (ATM) transaction on banking industry profitability in Nigeria.
- iii. determine the impact of Web Transactions (Web) transaction on the profitability of the banking industry in Nigeria.

1.4 Research Questions

The following research questions guided the study

- i. What is the effect of point of sales (POS) transaction on the profitability of the banking industry in Nigeria?
- ii. What is the effect of Automated Teller Machine (ATM) transaction on profitability of banking industry in Nigeria?
- iii. To what extent does the Web Transactions (Web) affect the profitability of the banking industry in Nigeria?

1.5. Hypotheses

The following three null hypotheses have been formulated to serve as bases for this research; thus

- i. **H₀**: Point of sales (POS) transaction does not have a significant impact on the profitability of the banking industry in Nigeria.
- ii. **H₀**: Automated Teller Machine (ATM) transaction has no significant effect on banking industry profitability in Nigeria

- iii. **H₀:** Web Transactions (Web) does not affect the profitability of the banking industry in Nigeria

1.6 Significance of the Study

The following will benefit from the study, the deposit money banks, the researchers, policy makers and so on. The recommendations in the study will guide bank operators on how they could improve on profitability performance from the cashless policy. The study will provide a reference point for future researchers study in this area. Policy makers will find the recommendations in the study useful for policy formulation.

1.7 LIMITATION OF THE STUDY

Financial constraint- This study is limited to 4 out of 21 deposit money banks. Insufficient fund tends to impede the efficiency of the researcher in sourcing for the relevant materials, literature or information and in the process of data collection.

Time constraint- The researcher will simultaneously engage in this study with other academic work. This consequently will cut down on the time devoted for the research work.

1.8 Scope of the Study

The study will cover internet banking investments (POS channels, ATM channels, WEB channel) and profit after tax of the 5 deposit money bank. From 2012-2018. The study could not cover other banks due to inadequate disclosure on internet banking investments from these banks and time factor (limited time).

This study on the effect of cashless policy on profitability in Nigerian banking industry will cover the level of profit made by deposit money banks before after the implementation of the cashless policy in Nigeria

1.9Operational Definition of Terms

The following terms are defined as used in the context of this study alone.

Bank Industry: This is a sector where financial transactions relating to the deposit, withdrawal as well as the transfer of fund are kept for safety.

Cashless: This is a situation whereby transactions are done mostly online using channels such as the Automated Teller Machine (ATM), Point of Sale, website as well as another form of electronic banking.

Policy: This is a course or principle of action adopted or proposed by an organization or individual in order to achieve his/her goals.

Internet banking(web): is an electronic payment system that enables customers of a financial institution to conduct financial transactions on a website operated by the institution, such as a retail bank, virtual bank, credit union or building society. **Online banking** is also referred to as; inter net banking, e-banking, virtual banking, online banking.

CBN: Central Bank of Nigeria.

Profitability: the state or condition of yielding a financial gain. It is often measured by price to earnings ratio.

ATM: automated teller machine

POS: point of sales

Return on Equity (ROE): measures the rate of return for ownership interest (shareholders' equity) of common stock owners. It measures the efficiency of a firm at generating profits from each unit of shareholder equity, also known as net assets or assets minus liabilities.

Deposit money bank: This is a financial institution licensed by the regulatory authority to mobilize deposits and perform other financial service activities (CBN 2019).

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter gives a perception into different studies which have been carried out by outstanding researchers, as well as explained terminologies with regards to the effect of terminologies with regards to the effect of internet banking on bank profitability. This chapter also gives a summary of the history and present state of the problem described by a short review of previous studies into closely related problems. Three major areas examined include conceptual review, theoretical review and empirical review.

2.2 Conceptual Review

In recent times, Internet Banking has spread quickly all over the world. According to Onay et al, (2008), the increased adoption and penetration of internet has recently redefined the playground for retail banks. In Nigeria, all banks are making more use of e banking facilities to provide better services in order to excel in the competitive banking industry. The spread of internet has also hugely benefited the customer in general and the corporate world in particular. As a result,

e-banking has been the biggest challenge to the banking industry going by the sophistication and volume of fraudulent practices associated with this type of banking.

In the previous years, banking activities in Nigeria had hugely depended on the use of Information and Communication Technology. Customers' unsatiated need for economical services has forced monetary establishments to way to a lot of radical transformation of their business systems and models for clasp net (Ovia, 2001).

Internet appeal as well as its product developing is speedily growing, and the universal acceptance has strongly encouraged its penetration. The success of the internet is dependent upon reliable and adequate data communication infrastructure. For this purpose, it is efficient for banks to invest in online transactions by creating networks.

Banking has come a long way from the time of ledger cards and other manual filing systems to the electronic systems which most banks have today to handle their daily bulky tasks of information retrieval, storage and processing. Regardless of whether they are automated or not, banks by their nature are continually involved in all forms of information management on an uninterrupted basis.

The computer is of course a stable tool for achieving a competitive edge and optimal resource allocation. The most obvious application of computers in the banking industry is in the area of computer services, information management and control. Computerized banks respond quickly to requests from customers for statement of accounts, balance and account activity enquires. With signature and image verification systems, the time taken to offer typical cashier services like receiving and paying out of cash is minimized Awe, (2006). Also with the coming of Automated Teller Machines (ATMs), banks are able to serve customers outside the banking hall all round the clock.

As Claudia and Grauwe (2001) outline it, cashless society could be a regime within which currency issued by the financial organization has ceased to exist. All cash the money} is personal money issued by banks within the kind of deposits or some admirer e-money issued by establishments that aren't essentially banks.

According to Businessdictionary.com, electronic banking is the use of computers to carry out banking transactions, such as withdrawals through cash dispensers or transfer of funds at Point of Sales (POS). In alternative words, it is banking transactions conducted through computerized system, as electronic fund transfer by Automated Teller Machine, intended to speed operation and reduce cost. Electronic banking and cashless banking are closely related. Cashless banking is that banking system aimed toward reducing, however not eliminating, the degree of physical money current within the economy while encouraging a lot of electronic based mostly transactions. In other words, it is a combination of e-banking and cash-based system (Odior and Banuso, 2012). Ejiofor and Rosak (2013) see the cashless system as one with the ability to store money in an electronic purse on a card which is then used to purchase product at coin machine or at any purpose of sales terminal placed inside the business premises. Akhalumeh and Ohiokha (2012) see cashless economy as a system in which transactions are not done predominantly in exchange for actual cash. It is essentially a mobile payment system which allows users to make payment through GSM phones with or without internet facilities. This system increases convenience, create more service options, reduce cost of cash related crimes and provide cheaper access to credit (Okey, 2012; Obina, 2013).

2.3 Cashless Banking Channels

Some outstanding cashless banking channels known all over the world are mobile banking, internet banking, and telephone banking. They are explained below.

2.3.1 Mobile Banking

Mobile banking refers to the provision of banking and financial services with the help of mobile telecommunication devices. It is a system that allows customers of a financial institution to conduct a number of financial transactions through a mobile device such a mobile phone. It involves the use of mobile phone for settlement of financial transactions. Mobile banking is popular and exciting to the customers given the low infrastructure requirements and a rapidly increasing mobile phone penetration in Nigeria. Services covered by this product include account enquiry, funds transfer, phone vending, changing password, and bill payments (Siyanbola, 2013). Banks like First Bank, Eco bank, Guarantee Trust Bank, United Bank for Africa and others have begun using mobile banking to serve their customers. First Bank brand for mobile banking is Firstmonies. Some of the features of mobile banking are: the GSM phone number serves as the account number which is linked to the customer's account; it has a wallet which can be loaded just by moving cash from bank account.

2.3.2 Internet Banking

Internet banking is also referred to as online banking. It involves conducting banking transaction on the internet (www) using electronic tools such as the computer without visiting the banking hall. Internet banking, like mobile banking, uses the electronic card infrastructure for executing payment instructions and final settlement of goods and services over the internet between the merchant and the customers (Siyanbola, 2013).

2.3.3 Telephone Banking

This is an electronic banking product that allows customers to access banking services through a dedicated telephone line from the comfort of their homes, offices etc. Services rendered here include; balance transfer, change of pin, authorization of inter-branch money transfer, transaction alert (withdrawal or deposit) and enquiry (Adewuyi, 2011)

2.3.4 Automated Tellers Mechanics

(ATM), also known as Cash Point, Cash Machine, is a computerized telecommunications device that provides the clients of a financial.

2.3.5 Point of Sale Machines

Point of Sale (POS) also sometimes referred to as Point of Purchase (POP) checkout is the location where a transaction occurs. A "checkout" refers to a POS terminal or more generally to the hardware and software used for checkouts, the equivalent of an electronic cash register. An advanced payment system, which enables customers to use an ATM card to pay for goods and services, electronically debiting the cardholders account and crediting the account of the merchant (Rahman, 2006). A POS terminal manages the selling process by a sales person accessible interface. The same system allows the creation and printing of the receipt (Shittu, 2010). A POS uses a debit card to activate an Electronic Fund Transfer Process (Chorafas, 1988). Point-of-Sale Transfer Terminals allow consumers to pay for retail purchase with a check card, a new name for debit card.

2.3.6 National Central Switch

To ensure the interconnectivity among the various payment system, the Bank in 2010 directed all banks and private switch operator to connect to the National Central Switch by end December 2010.

2.4 An over View of Payment System in Nigeria

The payment system plays a very crucial role in any economy. The banking system is the channel through which financial resources flow from one segment of the economy to another. It therefore represents the major foundation of the modern market economy (CBN, 2011). In today's world, many people across the globe make payments electronically rather than in person or cash. It can then be said that the recent financial system is the product of centuries of innovation. This financial system started as a barter economy and has moved through various incarnations in response to limitations inherent in the evolving systems. Ajayi, S.I and Ojo, O.O. (2006). Changes will definitely continue to occur in response to social and technological advancements. This has led to a shift from the old cash handling system to cashless society, which is in vogue worldwide. To this end, the world has witnessed an upsurge of electronic payment instruments meant to facilitate trade and simplify payments. Before the introduction of electronic payment into the Nigerian banking system, customers had to walk into banking halls to carry out transactions of all kinds. They had to queue up and spend hours waiting to talk to a teller and/or make their transactions. The inconveniences caused by these long queues discouraged most customers who sometimes reneged from the queues in annoyance. There was need for a change. For many years, bankers, IT experts, entrepreneurs and others had advocated for the replacement of physical cash and the introduction of a more flexible, efficient and cost effective retail payment solution (Baddeley, M. (2004). Nigerian banks are making huge investments in technology to upgrade their infrastructure in order to provide new electronic

information based services. Such services as online retail banking, Point of Sale terminals (POS), make it possible for individuals and corporate bodies to take advantage of new technologies at reasonable costs. Before the emergence of a modern banking system, banking operations were manually done. The manual system which involved posting of transactions from one ledger to another without the aid of computer systems accounted for inefficiency in settlement of transactions. Computations done manually led to miscalculation due to human errors, and resulted in extension of closing hours when account were not balanced on time. The introduction of cashless system is therefore meant to ameliorate the sluggish nature of banking transactions. Vassiliou (2004) defines a cashless payment as a form of financial exchange that takes place between the buyer and seller facilitated by means of electronic communication. According to (Cobb, 2004), the value of electronic payment goes way beyond the immediate convenience and safety of cards to a greater sphere of contributing to overall economic development. Undoubtedly the last three decades have witnessed major advancement in payment technologies. Today, Nigeria electronic payment (e-payment) landscape is on a new threshold with banks, switching and transaction companies, vendors of Automated Teller Machine (ATMs), Point of sale (POS) and third party companies all jostling to expand the scope of market .For instance according to CBN reports; The volume and value of electronic card (e-card) transactions has increased significantly from 195,525,568 and N1,072.9 billion in 2010 to 355,252,401 and N1,671.4 billion, in 2011 reflecting an increase of 81.5 and 55.8 per cent, respectively. The increase was attributed to enhanced public confidence in electronic card payments In addition, data on various e-payment channels from another CBN reports indicated that ATMs remained the most patronized, accounting for 97.8 per cent, followed by web payments, 1.0 per cent, Point-of-Sale (POS) terminals, and mobile payments, 0.6 per cent each. Similarly, in value terms, ATMs

accounted for 93.4 per cent, web 3.5 per cent, POS 1.9 per cent and mobile payments, 1.2 per cent. The number of ATMs stood at 9,640, while the volume and value of transactions amounted to 347,569,999 and N1, 561.75 billion, at end-December 2011, respectively. These figures reflected increases of 86.7 and 63.7 percent respectively over the volume and value of 186,153,142 and N954.04 billion, at end-December 2010. The volume and value of mobile payments increased by 215.6 and 185.8 per cent from 1,156,553 and N6.7 billion to 3,649,374 and N19.0 billion, respectively, at end-December 2011. The table below shows the market share in the e-payment market in Nigeria Between 2008 to 2011. A report by financial research and consulting firm; Celent in India indicates that the value of retail e-payments in India is expected to reach between US\$150 billion to US\$180 billion by the end of 2010 (Thesis-DelaliKumaga). “More than two thirds of all non-cash transactions payments in the United States are made electronically, with the biggest increase in electronic payments occurring between 2003 and 2006 according to a US central bank (Thesis-DelaliKumaga). The central bank’s non-cash payments study found that about 19 billion dollar of more electronic payments was made in 2006 than 2003”. Basically, the cashless banking system cannot be discussed explicitly without looking at the theory of money. Money is the ‘brain box’ behind every successful transaction and the economy as a whole.

2.5 THE PAYMENT POLICY

In any country’s financial system, the payment system plays a very crucial role in the economy, being the channel through which financial resources flow from one segment of the economy to the other. It represents the major foundation of the modern market economy as it has important role in monetary policy, financial stability and overall economic activity of the nation.

Given the important role that a well-functioning payment system has on monetary policy, financial stability and overall economic activity, the CBN bank formulated a set of national payment systems policy objectives as a broad guideline and framework for all payment systems initiatives. The national payments system objectives clearly spelt out include:

1. Promotion of efficiency and effectiveness by being transparent, flexible and reliable, ensuring integration, interoperability of the sub-systems and speeding up exchange and settlement of funds and securities
2. Safety by protecting systematic risks through containing credit, legal, liquidity and operational risks, complying with international standards and recommendations (E.g. the ten core principles for Systemic Important Payment Systems) and complying with national standards and recommendations (E.g. cheque and electronic banking standards)
3. Migration to cash-less modes of payment, such as electronic debit/credit instruments, credit/debit cards, ATM-sharing and electronic Fund transfer at point of sales and real time gross settlement system(RTGS)
4. Transparency in the payment system as one of the factors militating against widespread usage of the formal payment systems is the concern of market participants about transparency.

The goal thus of the national payment systems (NPS) is to ensure that the system is available without interruption, meet as far as possible all users' needs, and operate at minimum risk and reasonable cost. The significant points of the policy were the decision to peg customer's daily withdrawal or deposits to a maximum of N150,000 per individual customer and N1 million naira for corporate clients. This was reviewed to N500,000 for individuals and N3,000,000 for

corporate in 2012 and again reviewed downwards to N60,000 for individuals in 2015. At the commencement of the policy, the CBN Governor Sanusi Lamido Sanusi, said the limit did not stop customers from withdrawing or depositing beyond the limit set by the apex bank, but such a customer should be ready to pay a penal fee of about 100 naira per 1,000 in bank charges to enjoy his desire. However, the recent downward review did not give room for the discretionary withdrawal with a penal fee.

The policy has other financial services ranging from customer accounts information and updates and transactions alerts which have been in existence but not widely subscribed to by account holders to payment of bills, person to person transaction and remittances in different forms. In achieving the goal of the payment system and the broad objectives enumerated, the apex bank in collaboration with the Bankers committee launched various initiatives to modernize the payment system ranging from the automation of the cheque clearing system and making it veritable platform for development of electronic payment channels, the use of POS, ATMs and mobile banking.

The policy has thus emphasized the use of; POS, ATMs and Internet banking.

The application of these products in the financial architecture of Nigeria requires enormous investments in power, telecommunication, financial infrastructures and security. The functionality and adequacy of these infrastructures is critical to the success of this policy.

According to Emecheta (2012), the implementation of the new procedures and rules based on MICR technology revolutionized the cheque clearing system thus, a centralized Automated Clearing process was established whereby with MICR Reader Sorters, necessary information on cheques are captured, built into clearing files and electronically transmitted to the clearing house,

from where the net settlement position of participating banks are automatically computed and also electronically transmitted to the apex bank for final settlement. This initiative reduced clearing cycle from 5days to 3days for local instrument and from 9days to 6 days in respect of up-country instrument.

2.7Cashless Policy in Nigeria

Cashless policy was initiated in 2012 by the former CBN Governor, LamidoSanusi. Its aim is to establish an environment where an increasing proportion of transactions are carried out through electronic platforms. The cashless policy is projected to provide mobile payments services, breakdown the traditional barriers holding the financial inclusion of most Nigerians, and bring low cost, secure and convenient financial practices to urban and rural areas across the country. Taking into account the goal of discouraging cash transactions as much as possible and not to discourage cash holdings, the CBN set the daily cumulative withdrawal and deposit limits for both individuals and corporate entities to be N500, 000 and N3 million respectively, with a respective penalty fees of 3% and 5% to be charged per extra N1000 (Ezumba, 2011, cited in Okoye& Raymond, These daily cumulative withdrawal and deposit limits does not imply that individual/corporations cannot hold cash in excess of N500, 000/N3million respectively at any single point in time but that their cumulative cash transactions with the bank must not exceed these limits over a period of one day. This policy on limits implies that an individual can actually have more than N500, 000 under his pillow at home, buys goods and services with it but must not pay more than N500, 000 into his bank account in one day without attracting a fine of 3% per N1000 for the excess. Nwankwo and Ezeexamining the flaws and advantages a cashless economy in Nigeria, establishes that the e-payment system has great implication on the Nigerian cashless economy but it will lead to significant decrease in the performance of deposit money

banks in the areas of deposit mobilization and credit allowances. In addition, they opined that there may be no going forward in the successful implementation of a cashless economy in Nigeria until adequate security and human capital, the minimum technical/equipment infrastructure required and other structural enablement are sufficiently addressed.

2:7 RECENT DEVELOPMENT IN NIGERIA'S PAYMENT SYSTEM

The recent development in Nigeria's payment system had been extensive as a result of the rapidly changing environment. In particular, the advancement in information and communication technology (ICT) and the increasing integration of the domestic payment system into international financial system. The Bank in collaboration with various stakeholders initiated modernization, upgrade, and introduction of new technologies, channels and regulations for the payment system. Notable among this was the CBN's collaboration with the banker's committee which initiated the shared policy programme to policy solution to the increased cost of service under the system. Under this programme, the two bodies formulated policy to enhance cash management, payment system transformation, improved information technology, increased IT standards and reduced back office operations. Other policies focused on the reduction in operational cost, increased access and financial inclusion. These objectives form the platform on which recent development in the Nigeria payments, system would be premised (CBN BRIEFS 2012-2013).

2.8 WHY THE CASH POLICY

The new cashless policy was introduced in April 2011 by the Central Bank of Nigeria. The justifications/reasons for this policy are to:

- Drive development and modernization of our payment system in line with Nigeria's vision 2020 goal of being amongst the top 20 economies by the year 2020. An efficient and modern payment system is positively correlated with economic development, and is key enabler for economic growth.
- Improve the effectiveness of monetary policy in managing inflation and driving economic growth.
- Reduce the cost of banking services (including cost of credit) and drive financial inclusion by providing more efficient transaction options and greater reach.

In addition, the cash policy aims to curb some negative consequence associated with the high usage of physical cash in the economy, including:

- High cost of cash: - There is a high cost of cash along the value chain from CBN and the banks to corporations and traders; everyone bears the high costs associated with volume of cash handling.
- High risk of using cash: Cash encourages robberies and other cash-related crimes. It also can lead to financial loss in the case of fire and flooding incidents.
- High subsidy: - CBN analysis showed that only 10% of daily banking transactions are ₦150, 000, but the 10% account for majority of the high value transactions. This suggests that the entire banking population subsidizes the costs that the few population of 10% incurs in terms of high usage.
- Informal economy: - High cash usage results in a lot of money outside the formal economy, thus limiting the effectiveness of monetary policy in managing inflation and encouraging economic growth.

- Inefficiency and corruption: - High cash usage enables corruption, leakages and money laundering amongst other cash related fraudulent activities.

2.9 E-banking product and services in modern day economy

- **Point of sale terminals:**This mode of e-banking handles Cheque verification, credit authorization, cash deposit and withdrawal, and cash payment. It enhances electronic fund transfer at the purpose of sales. Thus customers account would be debited straight off with the price of purchase in Associate in nursing outlet like a petroleum station or grocery. The implication of this is that customers can make payment for goods and services without necessarily coming in contact with physical cash as the purchase price would be debited on the buyer's card and credited on the seller's account.
- **PC banking:**The technology of e-banking has a universe of possible applications. Online banking for example provides the opportunity of paying bills and performing transactions of any kind. The availability of on-line info has provided banking and client with a strong vehicle for analysis.
- **GSM/Mobile banking:**This mode of e-banking primarily uses mobile phones as the electronic devices. Mobile phone gives customer the opportunity to operate their account with bank as long as their phones and network services provider support the short messaging service (SMS) which would enable the customer check account balance.
- **Automated teller machine (ATM):**ATM is a computer controlled device that dispenses and provides other services to customers who identify them with a personal identification number (PIN). The physical carriage of money further as frequent visit to the banks is being

reduced. The principal advantage of ATM is that it dispenses cash at any time of the day even as it needs not to be located within the banking premises but in stores, shopping malls, fuel stations etc., unlike the traditional method where customers have to queue for a very long period of time to withdraw cash or transfer funds. The ATM is that the hottest e-transaction answer in African country. ATM is popular because of its convenience. With ATM, it's a great deal easier to withdraw cash or to envision account balance. However, despite its popularity, the ATM has done very little in reducing the amount of cash in the economy. This is as a result of most Nigerians use ATM just for money withdrawal. Although ATM machines will perform alternative functions like fund/cash transfer, mobile phone credit recharge and bills payment, cash withdrawals and balance inquiry remain the most popular applications sort after by users in Nigeria. This is largely due to ignorance and the absence of merchants. Because ATM machines are chiefly used for money withdrawals, they do not go far enough in turning Nigeria into a cashless economy. ATM solely makes {more money|additionalcash|moremoney|extra cash} out there within the economy thanks to the benefit at that depositors will withdraw cash. To turn Nigeria into a cashless economy Nigerians need more than just ATM cards, Nigerians need credit/debit cards.

- **Bankers automated clearing services:**The automation focus of the instrument is to reduce the number of clearing days and improve on security arrangement in the course of settlement and collection of Cheque. This involves the use of magnetic ink character reader (MCR) for Cheque processing which makes it capable to encode, read and sort out changes even as request for Cheque books can be made via electronic devices.
- **Card System:**It is a unique electronic payment type which involves the use of smart cards. Smart cards are devices with embedded microcircuit being employed for settlement of monetary

obligations. It can be used as credit card, debit card and even ATM cards. The power of those cards lies in its sophistication and acceptableness to store and manipulate information further as handling of multiple applications on one card firmly. While ATM cards make cash withdrawal convenient (thereby contributing to the problem), Credit cards, debit cards and e-wallets (like mobile money) makes cashless shopping a lot more convenient. Hence to show the country to a cashless economy the drive ought to be towards credit cards, e-wallets and debit cards. While ATM cards need ATM machines to work, credit and debit cards require a Point of Sale (POS) terminal. POS terminals are situated at commissioned retail outlets (merchant). These merchants settle for credit and debit cards as means that of payment by customers. Credit and debit cards like Visa, InterSwitch and MasterCard may be wont to purchase from merchants on the web.

2.10 Challenges facing the cashless policy in Nigeria

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

I. Infrastructure deficit: The financial infrastructure in Nigeria is not adequate to carry the load of a cashless society; ATM's, Point of Sales system, mobile banking and other mediums have to dramatically expand to the touch a minimum of four-hundredth of the total economy before any purposeful result may be achieved.

ii. Power: Power should be improved dramatically to accommodate for swish operations of monetary activities.

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

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

v. spiritual beliefs: Recently there has been psychological war within the country over the projected monotheism bank by the CBN. The Muslims believe that the conventional banks are guilty of sinning against God by their interest charges. This has been one of the reasons why the achievement of the cashless Nigerian society is doubted.

vi. Availableness of real data: correct and correct identification of account holders should be maintain and shared once necessary by all monetary institutions; additionally CBN should collaborate with all alternative government and personal agency answerable for assortment of Identification of people in Federal Republic of Nigeria for reconciliation of any identification.

vii. Investments: CBN must be ready to invest heavily to make these transitions possible; Technology is not cheap and ever changing at a very fast pace. Investments in billions of dollars made in infrastructure, training, marketing, security, maintaining its networks will be on a yearly basis for the years to come and should be a collaboration of efforts by all invested parties.

2.11 Workability of the cash-less policy in Nigeria

Essentially, the regulative framework for mobile (electronic) payment services free by the CBN imposes some restrictions on the degree of transactions a client will liquidate every day. For the unbanked, for instance, who requires only his name and phone number to carry out transactions, the maximum limit of N3, 000.00 and daily limit of N30, 000.00 are stipulated. The semi-unbanked has a maximum transaction limit of N10, 000.00 and daily limit of N100, 000.00. However, in line with the CBN's Know Your Customer (KYC) policy, the customer would be required to present his phone number, name, photograph and biometrics. The third level, which requires the customer to have a full bank account, allows a maximum transaction limit of N100, 000.00 and daily limit of N1, 000,000.00. For the customer to be able to access his mobile money account there is a Personal Identification Number, (PIN) which his mobile money operator requires him to enter just like the ATM card. It was hardly surprising that at the take-off of the scheme, it was very obvious that it had many challenges to contend with. On the eve of the take-off, the CBN had announced that all charges associated with the emerging payment system be suspended till the end of the first quarter of the year (i.e. 2012) That was primarily geared toward making time for potential users of the payment system to realize higher understanding of how it works. Even when the pilot theme had commenced, most of the banks are nonetheless to satisfy customers' demand on the new payment systems. For instance, there are reports of some banks being overwhelmed by demands for ATM cards. Lack of awareness and education,

poor infrastructure, and insecurity within the computer network are problems that has got to be self-addressed to attain penetration within the adoption of the cashless policy. The low level of awareness and education on the payment system are responsible for the pilot scheme being limited to Lagos. Although the licensing and institution of payment agencies can produce jobs and new business opportunities, the hurdles before the cashless policy have raised considerations over however it's getting to work. This policy, as beautiful as it is, faces great challenges here in Nigeria. A few of these challenges are treated below. To begin with, there are challenges associated with illiteracy/computerization. As it is commonplace in any developing country, the literacy rate is still very low in Nigeria especially in the Northern part of the country. The business men/women here prefer to keep their money in their own vault while there are banks scattered all over the country. Also, laptop usage, skills and knowledge of Nigerians even among the educated is still poor. There is also the issue of lack of trust and the Bounced-Cheque Syndrome. Trust is lacking in Nigeria's business environment. As a result, business operatives believe in cash and carry business transactions. The bounced cheque issue is a very common thing in Nigeria and as a result people place less trust on the use of cheques too. More so, Concerns have continued to trail the level of 'pocket-friendliness' of the policy on the common man. In recent times, the welfare of the common man has become more relevant in Nigeria's decision making process, unlike the virtually complete neglect of the masses when decisions were taken in the past. The term, "anti-people" has also become mainstream language. With this development, the welfare of the common man needs to be considered in policy formulation and implementation. Many businesses in Nigeria make very little profit. In a very remarkable number of such cases, transactions are made with huge sums of capital input in both financial and non-financial terms, but the resultant profit is often disproportionate to the amount of capital invested.

Despite this, the common man continues to struggle to survive, desperately holding onto his lifeline in form of the very businesses he is involved in. This implies that charges on exceptional the 5 Hundred Thousand Nigerian monetary unit (N500, 000.00) set by the CBN for individual accounts and the Three Million Naira (N3 million) limit set for company accounts can naturally eat deep into any businessman's profit, and in some cases, not only wipe out such profit, but also dig into the financial capital as well, thus, inflicting gradual erosion of capital, creating a new class of poor people in the country. This occurrence can be described as "electronically-generated poverty" as the poverty comes through the application of electronic process in deducting commissions from the business man's account as well as through the non-usage of electronic substitutes for payment. The incidence may be delineate as "policy generated poverty", because the financial condition comes through the direct implementation of policy.

Apart from business people and money being transferred from one person to another for transactionary reasons, money can be transferred for personal, non-business and non-transactionary reasons as well, by both business persons and non-business persons alike. The price to pay for this is quite huge, as it will imply including the CBN's charges in one's budget, when transferring money for very personal reasons. In other words, the banking sector has a share of money (whether profits are made or not) in almost any transaction and any transfer of money which one undertakes.

It is simple to mention that if individuals don't wish to incur charges, then they must use electronic means to effect payment. How many individuals apprehend AN iota regarding electronic means that of payment? Among those that square measure electronically-literate, how many of them are brave enough to undertake this process, going by the huge loss of money due to fraud, encountered by some who have dared to do this in the past? Among the brave UN

agency have dared to undertake this method, how many of them can be careful enough to ensure they do not lose their media of cash holding, such as debit cards and credit cards or lose the privacy of their Personal Identification Number (PIN) to even someone as close as a family member, who needs just those few numbers to wreak havoc on the holder's bank account? PINs do not need to be stolen before being known by another person. A good number of people willingly hand over their PINs to others, literally begging such recipients to assist them in effecting the use of the PINs, as they, the PIN holders, are often not technologically exposed or savvy enough to use the PINs or otherwise seriously engaged at a pressing period. It goes without saying therefore that in addition to the probability of widening the poverty gap and increasing the incidence of poverty in the country, other challenges to the success of the cashless policy square measure ICT acquirement, conviction of service safety and greater client exposure to fraud as a result of service/instructional support seeking from third parties, and also, of entrusting the individual with all his cash, which he or she prefers to entrust to the care and safe-keeping of the bank. Functionality also comes into question. Many Automated Teller Machines (ATMs) do not function at all times. Either the bank complains of no network service, no electricity power and in some cases, no money in the machines. This short-circuits the customer's intention of using some of the available means of electronic-based transactions. Resorting to physical, over-the-counter means of financial payment attracts charges for the customer who will be, in essence, paying dearly for the inefficiency of the system. The cashless policy can however, promote the wide application of technology-enhanced business such as e-business and related web, internet and mobile phone/communication based businesses, but this will benefit only a restricted variety of individuals, as the vast majority of the populace are not endowed with such skills of using technological applications for business, and are either not yet

ready to acquire such skills, or aren't even in an exceedingly position to amass such skills. Despite these setbacks, the e-business community and other virtual platforms of transaction will undoubtedly receive a boost with the introduction of the cashless policy, no matter how little (Ndifon and Inah 2014)

2.12 From the Banks Point of View

- **Attracting High worth Customers:** - E-Banking typically attracts high profit customers with more than average financial gain and education levels that helps to extend the dimensions of revenue streams. For a retail bank, e-banking customers are thus of explicit interest, and such customers are probably to own the next demand for banking merchandise. Most of them are victimization on-line channels frequently for a range of functions, and for a few there's no would like for normal personal contacts with the bank's branch network, which is a chic channel for banks to run (Berger &Gensler, 2007). Some analysis suggests that adding the net delivery channel to associate degree existing portfolio of service delivery channels leads to nontrivial will increase in bank gain (Young, 2007).
- **Enhanced Image:** E-banking helps to reinforce the image of the organization as a client targeted innovative organization. This was very true in time period once solely the foremost innovative organizations were implementing this channel. Despite its common availability today, an attractive banking website with a large portfolio of innovative products still enhances a bank's image (Shah & Clarke 1997).
- **Increased Revenues:** Increased revenues because of offering e-channels are often reported, because of possible increases in the number of customers, retention of existing customers, and cross-selling opportunities. E banking has modified the normal retail

banking business model in some ways, as an example by creating it attainable for banks to permit the assembly and delivery of economic services to be separated into different businesses. This means that banks will sell and manage services offered by alternative banks (often-foreign banks) to extend their revenues. E banking has conjointly resulted in accumulated MasterCard disposition, because it may be a kind of transactional loan that's most simply deliverable over the net. Electronic bill payment is additionally on speedy rise (Young, 2007) that suggests that electronic bill payment and alternative connected capabilities of e-banking have a true impact on retail banking practices and rapidly expanded revenue streams.

- **Easier Expansion:** historically, once a bank wished to expand geographically it had to open new branches, thereby incurring high startup and maintenance costs. E-channels, like the net, have made this unnecessary in many circumstances.
- **Cost Reduction:** the most economic argument of E- banking to date has been reduction of overhead prices of alternative channels like branches, that need costly buildings and a employees presence. It conjointly looks that the value per dealing of e banking typically falls sooner than that of ancient banks once an essential mass of consumers is achieved. The research in this area is still inconclusive, and often-contradicting reports appear in different parts of the world.
- **Organizational Efficiency:** To implement e banking, organizations often have to reengineer their business processes, integrate systems and promote agile working practices. These steps, which are typically pushed to the highest of the agenda by the will to attain e banking, typically lead to bigger potency and legerity in organizations.

2.12.1 Benefits from the Customers' Point of View

Customers can enjoy a variety of services, especially services that are not provided by traditional bank branches (Pham 2010). E banking can bring about convenience and accessibility, which will have positive effects on customer satisfaction and loyalty (Pham 2010). In addition, customers can enjoy more benefits at lower cost levels by utilizing Ebanking (Mols 1998). It is contended by Turban (2008), that E-banking is really beneficial to customers in terms of cost savings, no limit on time and space, quick response to customer complaints, and better services or products.

The main advantages of e banking for corporate customers as per (BankAway! 2001; Gurău, 2002) are as follows:

- Reduced costs in accessing and using the banking services.
- Increased comfort and timesaving transactions can be made 24 hours a day, without requiring the physical interaction with the bank.
- Better money management: E-banking facilities speed up money cycle and will increase potency of business processes as massive kind of money management instruments is accessible on websites. For example, it is possible to manage company's short-term cash via internet banks (investments in over-night, short- and long term deposits, in commercial papers, in bonds and equities, in money market funds).
- Transaction can be made even after banking hour without the physical interaction of the bank 24 hours a day. This increase the productivity of both the bank and the company

2.13 Bank Profitability

Bank profitability simply implies whether a bank has fared well within its trading period to realize its trading objective. Usually, stock prices and its behavior are deemed to reflect the

performance of a firm. This is a market indicator and should not be reliable continuously. However, the size of the bank, the volume of deposit and its profitability could be considered to be a more accurate performance indicator. For the purpose of this study, Return on Equity capital (ROE). Another study by Onay and Ozsoz, (2012) used a panel data in 18 deposit banks in Turkey, in a period of time from 1990-2008 in the emerging market center. They wanted to test that internet adoption had a negative effect on profitability in the beginning of the adoption year, and the positive effect on the deposit and credit branch. In their model they are using some other basic variables as Interest Income, Non-interest income, Branch profit, Branch deposit, and Branch credit, per no as a log of the number of personnel per branch and net as dummy. They suspected for endogeneity thus they used four exogenous variables for Internet dummy as: Large if the banks' asset are in the fourth quartile, State if the bank is government owned, Foreign if the bank is foreign owned, listed if the bank is listed on the stock exchange. Their test was realized in 2SLS in a Profit model. The conclusion is that performance of banking sector in a rising market is totally different as in rising markets the adoption of on-line banking reduces the bank's profit. Another finding is that the web adoption includes a positive impact on branch profit, in deposit and loans as that is the second prove that they tested. The main issue is that the market has its own limit or ability, as in emerging market it is more difficult to adopt and increase the performance while in developed markets is easy and more effective. That is why in a rising market the physical network continues to be gift. According to Hernando and Nieto, (2006) they also used Instrumental Variable for Internet banking adoption dummy. Their study is completed in seventy two business banks of Kingdom of Spain from 1994 until 2000. They aim 1st to prove that net banking adoption, reduce the overhead expenses and the cost reduction results the increase of profitability's bank. The model is using the same variable as other study, but here we

have two equation first want to know the effect on performance variables and second they use branch's performance due to online banking adoption. Instrumental Variables for Internet dummy are seven exogenous variables as (HOUSEHOLD, URBAN, FINANCIAL_GROUP, LARGE, LISTED). The same Instrumental Variable is employed for the second model. In the model without Instrumental Variable they see that adoption of Online Banking is having a positive effect in terms of ROA and ROE also there is a lower staff price vital when a [*fr1] year of adoption in each estimation. But with the Instrumental Variable there seems to give more complete information as the expenditure is significantly decreasing over a period of 12 months or one year. There is proof of potency improvement normally expenses within the 1st model, whereas the second model appears to extend the amount of seven branches because of adoption of online banking in the first six months as it imply that internetadoption is more complementary issue and not fully substitute for physical branches.

2.14 Advantages of a Cashless Economy

Cashless is a word which literally means having no cash but in today's world, it refers to using digital form of payments instead of cash for payment instead of cash for payment of various expense or transactions done by the individual. In order to understand this term better let at advantages and disadvantage of cashless economy.

Advantages of cashless Economy

1. The first and foremost advantage of cashless economy is that an individual does not need to carry cash with him or her everywhere which in turn reduce the chance of thieving from case, reduces inconvenience because of carrying money, give freedom from problem of change when transaction is of odd amount, no risk of receiving counterfeit currency and so on.
2. Another benefit of cashless economy is that it is easier to track the black money and illegal transactions because if cash is used directly for doing transaction than it is not easy to track the transaction as the money does not come into the banking system however in case of digital transactions it is easy to track the transaction as all records are the with the banks which result in more transparent transactions which in turn leads to fall in corruption in the economy of the country.
3. Speed of transactions: transactions are going to be faster and the problems of long queues are going to be in extinct.
4. Improved hygiene: reduction in the carriage of cash (coins and notes) will generally reduce the spread of germs through these means.
5. Eradication of problem associated with the counting and sorting cash.
6. With the creation of numerous payment options, the process of cash collection will be made simple and the cost and risk associated with cash transfer and processing reduced.
7. It is beneficial to both banks and merchants as it increases customer coverage and satisfaction, as it notifies customers about recent activities carried out on their accounts, increases personalized relationship with customers, and faster documentation and tracking of transactions.

2.15 Fears of Cashless Economy in Nigeria

For the cashless economy to figure sure factors should be gift, and in the right quantity and quality. It is for this reason that several analysts question the readiness of Federal Republic of Nigeria for a cashless system. The drive by the CBN to form the Nigerian economy cashless, though pleasant, may be an undue haste to run without first crawling. For a prosperous running of a cashless economy, the issue of infrastructure must be deliberately tended to. The issue of security is additionally terribly serious; the vulnerability of the cashless system to numerous varieties of internet-related crimes should be addressed. Nigeria's low percentage of Sales (POS) thickness and poor walk network represent vast downsides to the accomplishment of this policy. The whole skepticism about Nigeria's preparedness is summed up in the following:

- What grounds exist in Federal Republic of Nigeria to facilitate the introduction of a cashless economy?
- Is that the acquirement level and level of acquaintance with info Communication Technology (ICT) among Nigerians high enough?
- How many Nigerians can use electronic banking services and what infrastructures are there to support electronic banking? Assuming most Nigerians are educated and ICT-compliant is it enough to flood the nooks and crannies with ATMs, with their vulnerability to fraud unresolved?
- . Will we tend to guarantee a sufficiently refined system on scale the hurdle of cyber-attacks that square measure capable of derailing the entire cashless system?Advantages of cashless Economy

1. The first and foremost advantage of cashless economy is that an individual does not need to carry cash with him or her everywhere which in turn reduce the chance of thieving from case,

reduces inconvenience because of carrying money give freedom from problem of change when transaction is of odd amount, no risk of receiving counterfeit currency and so on.

2. Another benefit of cashless economy is that it is easier to track the black money and illegal transactions because if cash is used directly for doing transaction than it is not easy to track the transaction as the money does not come into the banking system however in case of digital transactions it is easy to track the transaction as all records are the with the banks which result in more transparent transactions which in turn leads to fall in corruption in the economy of the country.

3. Speed of transactions: transactions are going to be faster and the problems of long queues are going to be in extinct.

4. Improved hygiene: reduction in the carriage of cash (coins and notes) will generally reduce the spread of germs through these means.

5. Eradication of problem associated with the counting and sorting cash.

6. With the creation of numerous payment options, the process of cash collection will be made simple and the cost and risk associated with cash transfer and processing reduced.

7. It is beneficial to both banks and merchants as it increases customer coverage and satisfaction, as it notifies customers about recent activities carried out on their accounts, increases personalized relationship with customers, and faster documentation and tracking of transactions.

2.16 Electronic Payment System

Payment systems area unit social infrastructures that support all economic activities, and also the money markets would force a lot of refined payment systems with bigger safety and potency.

However, fashionable technology has modified standard payment system into aa lot of

economical and effective system, void of 'cash and carry' syndrome. The easiness of transacting economic substances also as a safer and faster access to funds, among other factors, has placed e-payment system on a more glorified pace than cash based system. In this new era, e-payment system has become a medium through which monetary substance circulates conveniently and its evolution, as well as the convenience of e-money transactions has furthered the transition and also the argument of society into a cashless one. According to Nakajima (2012) the evolution of payment systems can ne'er stop.

2.17 Benefits of Internet

Rogers, (1995) states that the rate of adoption of a new innovation is associated to (perceived) relative advantage: the greater the perceived related advantage, the faster the adoption. Secondly, the desire to improve organizational performance is seen to be a provision for technological change: however, the advantages of internet banking includes a board range of functions, and includes; electronic mail improves communication between individuals and the bank, between banks and external parties, and between banks. Ovia, (2001) is of the view that online banking services have now become a birthright of the customer as the customer demands the flexibility of operating an account in a y branch of a bank irrespective of which branch the account was opened. With web banking, customers would relish sitting within the comfort of their homes and offices and with a private pc, log onto their bank's servers and interact banking activities.

2.17.1 Internet Banking Risks and Control

Every financial institution should have guidelines based on their scope and level of sophistication in the internet technology.

Characteristically, internet banking increases the exposure of banks, such as transaction, strategic, reputation and compliance risk amongst others. As information systems become more connected and interdependent, the risk of computer intrusion will increase.

Possibly, this is the most challenging aspect of the new electronic delivery system. Banks with weak physical and system security substantially increase their risk, many of which could bring to their collapse. Possible results include direct currency loss, change reputation, improper disclosure, and law suits or regulatory sanction. The consequence of any breakdown even momentarily and for whatever reasons, could be devastating. Okafor, (2006).

2.18 Theoretical framework

2.18.1 Technological Acceptance Model

Technological acceptance model which was propounded by Fred Davis in 1993. The theory of technological acceptance explains how individuals accept new technology and it leads to growth in an economy. In essence, it shows how a user of a proposed technology welcomes and adapts to a new technology. He stated that two beliefs determine the complete acceptance of a technology. These beliefs are perceived usefulness and perceived ease of use. Perceived Usefulness is a factor that affects user's acceptance because it is based on how capable the new technology will help improve job performance. The technology must be capable of producing an advantageous result and must also be able to generate a positive performance. As for perceived Ease of Use, Fred Davis defined it as how easy it is for users to make use of new technology. It means that the ability to employ the new technology should be effortless. Prior to the implementation of the cashless policy, Nigeria was a huge cash-based economy. In order to increase the effect of the policy on citizens, the people have to believe that the policy will be

easy to use and also result in positive performance thereby, leading to economic growth. E-Banking products must also be reengineered to make electronic payment effortless which will stir the country toward a cashless economy (Nwankwo and Eze, 2013). According to TAM, one's actual use of a technology system is influenced directly or indirectly by the user's behavioral intentions, attitude, perceived usefulness of the system, and perceived ease of the system.

2.18.2 New Keynesian Theory

The New-Keynesian model as laid out by Rotemberg and Woodford (1997) and Good friend and King (1997) and developed in detail by Woodford (2003) appears to be today's mainstream approach to monetary analysis. As pointed out by McCallum (2010), "it has become the bible for a generation of young scholars who will likely dominate monetary economics for the next couple of decades". Requiring only a small number of equations and variables, the model has proved very helpful in deriving certain important principles for the conduct of monetary policy. However, a notable feature of this model, which is highly debated, is that monetary aggregates play no direct role in the transmission of monetary policy to output and inflation. Thus, inflation is not any longer thought of to be "always and all over a financial phenomenon" in step with Friedman's noted dictum (Friedman, 1963, p.17).

2.18.3 Monetary Policy

Given that financial policy choices are unit created by most central banks with reference to the charge per unit, changes during this rate, by influencing mixture demand and also the gap

between actual output and its potential level, impact on inflation via the New-Keynesian Phillips curve. charge per unit policy, in spite of whether or not it's best or not, could also be therefore characterized with none relevancy financial aggregates. These area unit determined from the equilibrium condition within the securities industry because the stock of cash balances, that is enough to satisfy the demand for cash at a specific level of the charge per unit. The importance of financial policy has declined in financial institution follow. The FRS already de-emphasized the role of financial aggregates in its strategy within the early Nineteen Nineties, though arguably this was because of empirical issues that originated from factors like monetary innovation, currency substitution, divergent developments in financial gain and wealth etc. instead of new theories. Associate degree exception to the current trend is that the European financial institution (ECB), whose financial policy strategy is predicated on 2 analytical views observed because the "two pillars": the economic analysis and financial analysis.

2.18.4 The amount theory of cash is hinged on the Irvin Fisher equation of exchange that states that the quantum of cash increased by the speed of cash is up to the worth level increased by the number of products sold. It's usually replicated as $MV = PQ$, M is outlined because the amount of cash, V is that the speed of cash (the variety of times during a year that a currency goes around to come up with a currency value of income), P represents the worth level and letter is that the amount of real merchandise sold (real output). By definition, this equation is true. It becomes a theory supported the assumptions encompassing it.

2.18.5 Diffusion of Innovation Theory

This study could be anchored on the Roger's (1995) Diffusion of Innovation (DOI) theory is a fashionable model employed in system analysis to clarify user adoption of latest technologies.

Rogers defines diffusion because the method by that associate degree innovation is communicated through bound channels over time among the member of a social society'(Rogers, 1995).An innovation is a concept or object that is seemed to be new (Rogers, 1995). per Interior Department, the speed of diffusion is littered with associate degree innovation's relative advantage, complexity, compatibility, trial ability and observability.

Rogers (1995) defines relative advantage as a result of the degree to it associate innovation is seen as being superior to its predecessor; quality, that is admire TAM's perceived simple use construct, is that the degree to that associate degree innovation is seen by the potential parent as being comparatively troublesome to use and understand'. Compatibility refers to the degree to that associate degree innovation is seen to be commutable with existing values, beliefs, Diffusion of Innovation Theory Roger's (1995) Diffusion of Innovation (DOI) theory could be a fashionable model employed in system analysis to clarify user adoption of latest technologies. Rogers defines diffusion because the method by that associate degree innovation is communicated through bound channels over time among the member of a social society'(Rogers, 1995).An innovation is a concept or object that's appeared to be new (Rogers, 1995). per Interior Department, the speed of diffusion is littered with associate degree innovation's relative advantage, complexity, compatibility, trial ability and observability. Rogers (1995) defines relative advantage because the degree to that associate degree innovation is seen as being superior to its predecessor; quality, that is admire TAM's perceived simple use construct, is that the degree to that associate degree innovation is seen by the potential parent as being comparatively troublesome to use and understand'. Compatibility refers to the degree to it associate innovation is seen to be commutable with existing values, beliefs, experiences and

desires of adopters'. Trial ability is that the degree to that the results of associate degree innovation area unit visible (Rogers, 1995).

2.18.6 Schumpeterian Theory of Creative Disruption

Schumpeter (1939) who saw innovations as perpetual gales of creative destruction that were essential force driving growth rates in a capitalist system. Schumpeter's thinking evolved over his lifetime to the extent that some scholars have different aired his early thinking where innovation was largely dependent on exceptional individuals willing to take on exceptional hazards as an act of will, i.e., entrepreneurs, from his later thinking that recognized role of large corporations in organization and supporting innovation. This resulted in his emphasis on the role of oligopolies in innovation and which later was false viewed as the main contribution of his work. (Freeman,1994).

Schumpeter (1928) pointed to the discontinuous and unquiet nature of technological amendment in market economy that brings the indivisible combination of short-run insatiably and long growth. He was not a technological determinist but recognized the social and organization force that played the key roles in his cyclist process of industrial change. Schumpeter argued that entrepreneurs, who could be independent inventors or R&D engineers in large corporations, created the opportunity for a new profit with their innovations. In turn, teams of imitators attracted by super-profits would begin a wave of investment that will erode the gross margin for the innovation. However, before the economy could equilibrate a new innovation or set innovations, as Kondratievl cycles, would emerge to begin the business cycle over again.

For all his insight on the role of innovation, Schumpeter still did not really explain the source of innovation. He was able to point to its role in timing economic cycles but did not address its

source. This rather apparently allowed economic theory social science to argue that levels of investment were the reason behind innovation. It was not until the 1960s that economists would begin again to search for the source of innovation. The importance of innovation was highlighted by researchers like Abramovitz (1956) and Solow (1957) who were able to demonstrate how little neo classical economics was able to explain. Based on data on the United States economy from 1909-49, Solow showed that only 12.5 percent of the increase of per capita output.

2.19 Empirical review

Oyewole et al., (2013) examined electronic payment systems and its impact on economic growth in Nigeria, and their study found that e-payment system has a positive impact on economic growth in terms of real GDP and that the introduction.

Empirical studies on cashless policy are sparse because it is a newly implemented policy of the CBN. However, the following are worth mentioning. Echekeba and Ezu (2012) in a research carried out in Nigeria, observed that 68.2% of the respondent complained about long queues in the bank, 28.9% complained of bad attitude of teller officers (cashiers), while 2.89% complained of long distance of bank locations to their home or work places. Likewise in her 24th NCS national conference in December 2011, CBN data shows that 51% of withdrawal done in Nigeria was through ATM, while 33.6% was through over the counter (OTC) cash withdrawals and 13.6% through Cheque. Payment was also done through point of sales machine (POS) which accounted for 0.5% and web 1.3%. Therefore, if the introduction of ATM in Nigeria cash withdrawals system reduced OTC withdrawal; then it will imply that introduction of cashless policy supported by application of information technology can achieve more to reduce over dependent on cash payment in Nigeria economy system. Olatokun and Igbinedion (2009) used

DOI theory to investigate the adoption of ATM in Nigeria. They found out that constraint such as relative advantage, complexity, observability, compatibility and trial ability were positively related to attitude to the use of ATM cards in Nigeria. Olorunsegun (2010) used cluster sampling technique to study the impact of electronic banking in Nigerian banking system. He found out that a bank has an effective electronic banking system which has improved its customer's relationship and satisfaction. James (2012) used Statistical Package for Social Sciences (SPSS) to investigate the acceptance of e-banking in Nigeria. The result showed that acceptance of e-banking in Nigeria was significantly influenced by age, educational background, income, perceived benefits, perceived ease of use, perceived risk and perceived enjoyment. James (2013) used Rogers Diffusion of Innovation theory to investigate the determinants of the adoption of mobile banking in Nigeria. The study empirically showed that age, educational qualification, relative advantage, complexity, compatibility, observability and trial ability were important determinants of the adoption of mobile banking. This therefore makes it imperative for relevant stakeholders to make efforts to positively influence these independent variables so as to make mobile banking more popular. Morufu and Taibat (2012) used qualitative survey to ascertain banker's perceptions of electronic banking in Nigeria. The results suggest that bankers in Nigeria perceive electronic banking as a tool for minimizing inconvenience, reducing transaction costs, altering customers queuing pattern and saving customers banking time. Olajide (2012) used theories to investigate cashless banking in Nigeria and its implications on the economy. He found out that cashless banking will boost the economy on the long run. Egwali (2008) used consumer acceptance theory to investigate customers' perception of security indicators (SI) in online banking sites in Benin, Nigeria. He found out that SI were not very effective at alerting and shielding users from revealing sensitive information to fool e-banking sites in Nigeria.

Humphrey and Berger (1990) and Humphrey et al. (1996) suggests that the increased use of cashless payment system, that is money or scrip which is exchanged only electronically via computer networks has led to predictions of a cashless society. In a cashless society, consumers can make payments over the internet, payment at unmanned vending machine, manned point of sale (POS) using mobile phone device, personal digital assistant (PDA), smart cards and other electronic payment systems, including debit and credit cards. Ezeoha (2006) used descriptive survey to examine regulating internet banking in Nigeria, problem and challenges. He found out that Internet banking in Nigeria is slowly been embraced by customers because Internet practice in Nigeria has been abused by cyber fraudsters who use real and deceptive banking websites to fool users" and set their sensitive information and funds.

Kharwish and Al-sa'di, (2011) studied the effect of internet on bank profitability with evidence from Jordan. For banks that applied electronic services for less than two years, they found that there was no significant effect of these electronic services on the Return on Equity. The study however, showed that such services made significant effect on the profit margin of the banks involved. They also found that there was no significant effect of these services on banks profitability after two years of applying it in Jordan.

Siam, (2006) citing the works of Shuqair, (2008) on "Practical Internet Banking Services by Jordanian Banks", pointed out that one of the most important findings in that study is the high cost of internet banking services on the short run due to the training of employees, and the cost of the infrastructure. The implication of this discovery is that internet banking services will have an adverse effect on the bank's profitability in the short run.

Al-samadi and Al-wabel, (2011) while studying the effect of internet banking on the performance of Jordanian banks, found that the use of internet affects bank profitability negatively. In their opinion, they hold that internet may eventually become a very important factor affecting performance for many banks. In Nigeria, the impact of e-banking was analyzed by using data from commercial banks that retained their brand name and adopted e-banking. Between 1999-2010, estimations were done on the impact of e-banking on bank performance in terms of Return on Asset, Return on Equity. The result of the study shows that e-banking begins to contribute positively to bank performance after two years of adoption in ROA and NIM while a negative impact was observed in the first year. Electronic banking thus offers many benefits to banks as well as to customers. However, in global terms the majority of private bankers are still not using electronic banking channel. There exist multiple reasons for this. Foremost, customers need to have an access to the internet in order to utilize the service.

Gakure (2013) study on whether bank innovations influence profitability of commercial bank in Kenya and concluded that bank innovations had a statically significant influence on bank profitability. This means that the combined effect of the bank innovations in this research is statically significant in explaining the profit of commercial banks in Kenya. Bank in Kenya have achieved more than a decade of boosting their earning capability and controlling through adoption of innovations like the mobile internet banking and recently the agency banking.

Ajayi (2014) on his study 'Effect of cashless monetary policy on Nigerian banking industry: Issues, prospects and challenges' observed that the cashless policy has improved the performance of bankers in carrying out their duties, maximized the banks' profitability by the extended customers' base among others. However, the study observed that 'social infrastructures in Nigeria, technological infrastructures, security and limited numbers of electronic channels for

cashless transactions' continue to be major challenges and problems facing the cashless policy adoption in Nigeria. The challenges enumerated above were collaborated by Yaqub et al. (2013) who further added legal, Regulatory and Socio-Cultural issues as challenges confronting the policy in Nigeria. Their study only reviewed CBN reports without carrying out independent survey of citizenry who use the facilities to establish if the benefits intended by the CBN have been achieved. Similarly, Ajayi (2014) failed to relate the banks' performances with their financial statements to establish any upward trend in their financials.

CHAPTER THREE

RESEARCH METHODOLOGY

3.0 Introduction

This chapter presents research design and methodology for investigating the effect of cashless policy on the profitability of Nigerian banking industry in Lagos and its determinants by detailing Research design, population, Sample Design and sampling technique, Variable and Measurements, Data collection and Analysis, Model Specification

3.1 Research Design

The research design employed by the researcher is ex post-facto research which aims at determining or establishing or measuring the relationship between one variable and another or the impact of one variable on another (Onwumere, 2009). This study will apply the use of panel data for the period 2012-2018.

3.2 Population of the study

The population of this study consists of all deposit money banks in Nigeria. As at 31 September 2018, there are 21 deposit money banks licensed by CBN, who have international, national and regional authorization to carry on banking business. In Nigeria, there are 8 banks with international authorization, 10 banks with national authorization and 2 banks with regional authorization.

3.3 Sampling Technique

The selected sample for this study is gotten from the population using simple random sampling based on the availability of their annual reports and CBN statistical bulletin.

3.4 Sample Size Determination

A simple random sampling technique is to be adopted. A sample of 4 (four) out of 21 deposit banks listed by CBN will be selected using probabilistic sampling method. These banks will be selected based on the fact that their financial information can be reliably obtained from their annual report and CBN statistical bulletin for the period of 7 years, from 2012-2018.

3.5 Method of Data Collection

In this study, data was sourced using secondary method. Reports of all deposit money banks listed by CBN were collected from CBN statistical bulletin. Data on ATM, POS, and WEB were gotten from the annual reports of each bank.

3.6 Method of Data Analysis

Data collected for this study will be analyzed using regression analysis on Statistical Package for Social Science (SPSS). The regression analysis is a statistical process for estimating the relationships among variables (Maiga, 2017).

3.7 MODEL SPECIFICATION

This study is anchored on the Diffusion of Innovation which states how end users come to accept and use a new technology. In this study, the main aim is to determine the effect of cashless policy on the profitability of Nigerian banking industry. The model will try to capture the variables that give an indication of the effect of cashless policy on the profitability of Nigerian banking industry.

$$\text{ROE} = f(\text{ATM, POS, WEB})$$

$$ROE = \beta_0 + \beta_1 ATM + \beta_2 POS + \beta_3 WEB + \mu$$

Where: ROE = Return on Equity,

ATM= Automated Teller machine

β = regression coefficient,

POS = Point Of Sales Service

Web = Web Transactions

μ = error term.

3:8 Measurement of variable

Three independence variables were being used in the study: these are ATM, POS, WEB.

Profitability will be the dependent variables and will be measured by return on equity,

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS, INTERPRETATION AND DISCUSSION

4.1 Introduction

This study analyses the effect of cashless policy on the profitability in Nigerian banking industry. The period for the study is seven (7) years i.e. 2012 - 2018. In order to achieve the objective of the study, one general method is used in the empirical analysis of data.

Regression analysis method is used to empirically analyse the data and it is carried out the statistical package for social sciences (SPSS). The results are presented below:

4.2 Data Analysis and Interpretation

This section presents the analysis and statistics prepared from data gathered for the purpose of the study as well as interpretation of such analysis.

HYPOTHESES TESTING

OBJECTIVE:

HYPOTHESES ONE

H₀: Point of sales (POS) transaction does not have a significant relationship on the profitability of the banking industry in Nigerian.

H₁: Point of sales (POS) transaction has a significant relationship on the profitability of the banking industry in Nigerian.

Table 4.1.1: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.095 ^a	.009	-.189	.07257

a. Predictors: (Constant), lnPOS

Source: Researchers' computation, 2019

In Table 1 (a), R value is 0.095. This mean that the positive correlation between return on equity and POS is 9.5%. The R square value is 0.009 (0.9%) meaning that point of sale can only explain 0.9% variation of return on equity while holding other independent variables constant.

Table 4.1.2: ANOVA ^a

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	.000	1	.000	.045	.840 ^b
	Residual	.026	5	.005		
	Total	.027	6			

a. Dependent Variable: Return on equity

b. Predictors: (Constant), lnPOS

Source: Researchers' computation, 2019

Table 4.1.2 showed an F-statistics value of 0.045 with a p-value of 0.840. This is more than 0.05 (5%) the critical value. This suggest the adoption of H_0 of no significant relationship and the rejection of H_1 of significant relationship between return on equity and POS transactions.

Decision rule:

H_0 of no significant relationship is therefore accepted and H_1 of significant relationship is rejection

Table 4.1.3: Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
1 (Constant)	.752	.318		2.362	.065
InPOS	-.004	.018	-.095	-.213	.840

a. Dependent Variable: Return on equity

Source; Researchers computation, 2019

Hypotheses Two

H₀: Automated Teller Machine (ATM) transaction has no significant relationship on banking industry profitability in Nigerian

H₁: Automated Teller Machine (ATM) transaction has a significant relationship on banking industry profitability in Nigerian

Table 4.2.1: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.209 ^a	.044	-.148	.07129

a. Predictors: (Constant), lnATM

Source: Researchers computation, 2019

The model summary shows the predictive power of the model. R is the correlation coefficient between the dependent variable (observed) and the independent variable(s) (the predictor(s)). The sign of R indicates the direction of the relationship (positive or negative). The value of R ranges from -1 to 1. The absolute value of R indicates the strength, with larger absolute value indicating strong relationship.

In Table 4.2.1, R= 0.209. This means there is a positive relationship between the return on equity and Automatic Teller machine (ATM), while its value shows low relationship.

The R squared (coefficient of determination) show the degree of linear- correlation of variables (goodness of fit) in regression analysis. This is the proportion of variation in the dependent variable explained by the regression model. In other words, it shows the extent to which the independent variable(s) can explain the variance in the dependent variable. The sample R squared tends to be optimistically estimate how well the model fit the population.

Table 2, show R square of 0.044, which means that automatic teller machine transactions value can only explain 4.4% variation in the value of return on equity while holding other independent variables constant.

Adjusted R square only adjust for the number of variables in the regression model. Standard error of the estimate is the standard deviation of the residuals. It attempts to correct R squared to a more closely reflect the goodness of fit of the model. It is also R squared value adjusted for the number of variables in the regression model. The value of Adjusted R in this table is -0.148.

The standard error of estimates is the standard deviation of the residuals. As R squared increases, the standard error of the estimate decreases. In other words, a better fit leads to less estimate error. It is an important indicator of how precise an estimate of the population parameter the sample statistic is.

Table 4.2.2:

ANOVA^a

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	.001	1	.001	.228	.653 ^b
	Residual	.025	5	.005		
	Total	.027	6			

a. Dependent Variable: Return on equity

b. Predictors: (Constant), lnATM

c. Source: Researchers' computation, 2019

The ANOVA table tells us the overall significance of the model. The F-statistics is the regression mean square (MSR) divided by the residual mean square. F- Statistics determine whether the model is a good fit for the data based on its significance level. A significant value of F- statistics shows that the model is better at predicting the outcome value of the dependent variable than its average. If the significance value of the F-statistics is smaller than 0.05 then the independent variable(s) is significant to explaining the variation in the dependent variable and the null hypothesis is accepted. Table 2 show a value of 0.228 and a p-value of 0.653 which is more than 0.05. It suggests that there is no significant relationship between return on equity and automatic teller machine transactions. H_0 is therefore accepted and H_1 rejected.

Decision rule:

H_0 is therefore accepted and H_1 rejected.

Table 4.2.3:

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
1 (Constant)	.000	1.435		.000	1.000
lnATM	.034	.072	.209	.477	.653

a. Dependent Variable: Return on equity

b. Source: Researchers' computation, 2019

The standardized coefficients or beta is an attempt to make the regression coefficient more comparable. It provides a useful way of seeing what impact of changing the explanatory variable by one standard deviation it will have on the dependent variable. It is usually equal to the correlation coefficient between the variables.

Hypotheses Three

H₀: Web Transactions (Web) has no significant relationship on the profitability of the banking industry in Nigerian

H₁: Web Transactions (Web) has a significant relationship on the profitability of the banking industry in Nigerian

Table 4.3.1: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.066 ^a	.004	-.195	.07274

a. Predictors: (Constant), lnWEB

Source: Researchers' computation, 2019

Table 4.3.1 revealed R value of 0.066 (6.6%). A positive relationship exist between return on equity and web transactions among banks. A variation of 0.004 (0.4%) in return on equity can be explained by web transactions.

Table 4.3.2: ANOVA^a

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	.000	1	.000	.022	.888 ^b
	Residual	.026	5	.005		

Total	.027	6			
-------	------	---	--	--	--

a. Dependent Variable: Return on equity

b. Predictors: (Constant), lnWEB

Source; Researchers' computation, 2019 Table 4.3.2 revealed an F-statistics value of 0,022 with a corresponding p-value of 0.888. This value is more than the significance value of 005. This suggests that there is no significance relationship between return on equity and web transactions in banks. This imply that H_0 of no significant relationship is accepted, while H_1 of significant relationship rejected.

Decision rule:

H_0 of no significant relationship is accepted, while H_1 of significant relationship rejected.

Table 4.3.3: Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		

1	(Constant)	.623	.414		1.504	.193
	InWEB	.004	.026	.066	.148	.888

a. Dependent Variable: Return on equity

Source: Researchers computation, 2019

Overall Analysis

Table 4.4.1: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.924 ^a	.855	.709	.03589

a. Predictors: (Constant), InPOS, InATM, InWEB

Source: Researchers computation, 2019

Table 4.4.1 revealed the overall R and R squared of the model. The R value is 0.924, showing a high (92.4%) positive relationship between return on equity (a measure of financial performance)

And the independent variables jointly. The R squared value depict the variation of 0.855 (85.5%) in return on equity which can be explained by the three independent variables.

Table 4.4.2:**ANOVA^a**

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	.023	3	.008	5.876	.090 ^b
	Residual	.004	3	.001		
	Total	.027	6			

a. Dependent Variable: Return on equity

b. Predictors: (Constant), lnPOS, lnATM, lnWEB

Source: Researchers' computation, 2019.

Table 4.4.2 revealed an F- statistics value of 5.876 with a corresponding p-value of 0.090. This is more than the significance level of 0.05 (5%). This suggests the existence of no significant relationship between return on equity and the independent variables of POS, WEB and ATM jointly. This imply the adoption of H_0 and the rejection of H_1 .

Table 4.4.3:**Coefficients^a**

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
1 (Constant)	9.303	4.406		2.112	.125
lnWEB	.775	.263	13.429	2.943	.060
lnATM	-.720	.335	-4.397	-2.149	.121
lnPOS	-.383	.113	-9.321	-3.403	.042

a. Dependent Variable: Return on equity

Table 4.4.3 showed the overall significance level of each of the independent variables in the model.

Apart from POS that has a significant level (0.042), web transactions and automatic teller machine transactions has no significant level in the model.

Therefore:

$$\text{ROE} = 9.303 + 0.775 (\text{Web}) + (-0.720)(\text{ATM}) + (-0.383)(\text{POS}) + e_t$$

4.3 Discussion of Findings

The general objective of this study is to evaluate the impact of cashless policy on the profitability on Nigerian banking industry.

The result of this study is discussed in this section. It can be seen from hypothesis one, from Table 1 (a), R value is 0.095. This mean that the positive correlation between return on equity and POS is 9.5% and Table 4.1.2 showed an F-statistics value of 0.045 with a p-value of 0.840. This is more than 0.05 (5%) the critical value. This suggest that thereis no significant relationship between return on equity and POS transaction. However, it is compatible with Hernando and Nieto, (2007). However, it is incompatible with Onay et al, (2008) who reports a contradictory effect on return on equity and POS transaction.

It is also revealed from hypothesis two that, table 4.2.1, the model summary shows that there is a positive relationship between the return on equity and total debts to total equity, while its value show low relationship (20.9%). The model summary shows the predictive power of the model. Table 4.2. 2 shows a value of 0.228 and a p-value of 0.653 which is more than 0.05. It suggests that there is no significant relationship between return on equity and automatic teller machine transactions. However, it is compatible with Karimzadeh (2014). However, it is incompatible with Nawafleh (2015) who report that there is no relationship between ROE and ATM.

It is seen also in hypothesis three that, a positive relationship exist between return on equity and web transactions among banks. Itah and Emmanuel (2014) who said that there is no significant

relationship between web transaction and return on equity. However it is consistent with Adewoye (2013) who reveals that there is a significant relationship between web transaction and return on equity.

CHAPTER FIVE

SUMMARY OF FINDING, CONCLUSION AND RECOMMENDATION

5.1 Summary of Findings

1. Point of sales (POS) transaction does not have a significant relationship on the profitability of the banking industry in Nigerian.
2. Automated Teller Machine (ATM) transaction has no significant relationship on banking industry profitability in Nigerian
3. Web Transactions (Web) has no significant relationship on the profitability of the banking industry in Nigerian

5.2 Conclusion

This study investigated the returns on equity (ROE) on banks following the adoption of cashless policy banking in Nigeria. Nigeria is a developing country advancing in the use of electronic banking for its banking operations in comparison with other African countries. With high level of e-banking fraud, some customers feel discouraged with the use of Automated Teller Machines (ATM), Point of sales (POS), Web Transactions (Web) an electronic banking products.

This study has provided evidence that electronic banking has not improved returns on the equity on banks. As revealed by the empirical results, this study does not suggest that the adoption of e-banking is an investment in futility; rather it helps to satisfy customers' appetite for improved service delivery and convenience. The unimproved returns may have arisen from the high cost of maintenance of equipment, software and training of personnel.

Electronic banking is cost intensive and will improve on total profitability performance in future as incidence of banking fraud caused by electronic facilities reduces and as well as the assets get older. The study encourages the use of electronic banking system based on its enormous benefits to the bank management, customers and the regulatory authorities.

5.3 RECOMENDATIONS

After the critical examination of the banks' data's that are directly affected by the implementation of this policy and the various reviews of relevant literatures, the following recommendations are thereby made in order to achieve success of the policy in general.

- The banks should have proper and sufficient standby generators in case of power failure. This is to help cover the deficiency of power failure.
- In smooth functioning of the payment system the government have the major role to play, in aspect of financing the payment system which require a lot of capital to maintain and also in the aspect of creating awareness of these electronic products and their benefits to the public.
- Holders of banking transaction cards should be able to secure them by providing passwords that meet international encryption standards.
- The bank officials must be properly educated about the operations of the policy in order to be effective with the services rendered to the customers using this service and also in order to give answers to the questioning minds of the customers about the policy.
- The banks management should from time to time train customers with regard to electronic banking, its benefits, and risk exposure, physical and electronic security to

avoid financial loss in the hands of hackers.

- There is the need to intensify the public enlightenment programme about the cashless system so that everybody will be well acquainted with the system since it will affect everybody. Since there is a high rate of illiteracy, and all people must be brought into the system, the government should design special enlightenment programmes for the non-literates, using probably signs and symbols to educate this segment on how to operate the cashless system (post on sale vis-à-vis mobile phones)
- The banks management should from time to time train customers with regard to electronic banking, its benefits, and risk exposure, physical and electronic security to avoid financial loss in the hands of hackers.
- The bank staffs need to be assured of their job security because some still think that the adoption of this policy will cause them a loss of job. When they are assured of the security in their job, they will be fully committed to seeing that this policy is successful by contributing their quota to its success.
- There is the need to intensify the public enlightenment programmer about the cashless system so that everybody will be well acquainted with the system since it will affect everybody.

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Appendix:

ROE	ATM	POS	WEB	lnATM	lnPOS	lnWEB
0.78	375513154	2587595	2276464	19.74	14.77	14.64
0.64	295416724	9418427	2900473	19.5	16.06	14.88
0.67	400269140	20817423	5567436	19.81	16.85	15.53
0.63	433695748	33720933	7981361	19.89	17.33	15.89
0.65	590238934	63715203	14088247	20.2	17.97	16.46
0.64	800549099	146267156	28991097	20.5	18.8	17.18
0.78	875519307	295890167	50815901	20.59	19.51	17.74