

## **Chapter One**

### **Introduction**

#### **1.1 Background to the Study**

The principle of financial inclusion has assumed a greater level of importance in recent times due to its perceived importance as a driver of economic growth. Giving access to the hundreds of millions of men and women (all over the world) who are presently excluded from financial services would provide the possibilities for the creation of a large depository of savings, investable funds, investment, and therefore global wealth generation. In other words, access to financial services that are well suited for low-income earners promotes enormous capital accumulation, credit creation, and investment boom. Usually, the low-income earners constitute the largest proportion of the population and so control an enormous chunk of the economy's idle fund albeit held in small amounts in the hands of each of the several million members of this group. Harnessing and accumulating these resources provides a huge source of cheap long-term investable capital<sup>1</sup>.

Financial Inclusion is wide concept. It includes banking as well as service-related products such as loan, equity, insurance products, etc. It supports the economic and social upliftment of the country by increasing the standard of living of poor's, underprivileged and women of the country with the aim of making them self-reliant and self-independent<sup>2</sup>.

Access to financial services will help the poor to save money and helps them to mitigate the risks they face during the economic shocks. Hence, providing access to financial services is increasingly becoming an area of concern for every policymaker for the obvious reason that it has far-reaching economic and social implications. Financial inclusion has therefore become an explicit strategy for accelerated economic growth and is critical for achieving inclusive growth in a country. This realization, in the recent past, was the major impetus for the

adoption of policies and measures aimed at growing global financial inclusion as a means of promoting world economic prosperity. Notwithstanding this global consensus, achieving pervasive financial inclusion has remained a global challenge with as much as 54.0 percent of adults worldwide being financially excluded (without access to financial services)<sup>1,2</sup>. The situation is even worse in the developing economies where some countries have as much as 70.0 percent financial exclusion levels. The 2010 financial survey by the Consultative Group to Assist the Poor (CGAP/World Bank), shows that the figures in almost all economies in Sub-Saharan Africa were below this world average, while high-income countries were above it. Sub-Saharan Africa and South Asia are the regions with the lowest share of banked households. The report also indicated that the percentage of households having deposit accounts in a formal financial institution varies greatly across countries, ranging from below 1.0 percent in the Democratic Republic of Congo and Afghanistan to about 100 percent in Japan. This worrisome level of access to finance, especially in the developing countries poses a serious challenge not only to the different local economies-, but also to the global economic growth at large and thus, necessitating the pragmatic efforts by policymakers to remove barriers like education, gender, age, and irregular income to enhance access<sup>2</sup>.

In the developed economies, specific legal and policy pronouncements have been made to encourage actions that ensure continuous broadening and sustained financial inclusion. The United Kingdom was one of the first countries to realize the importance of financial inclusion. It published its strategy of financial inclusion “Promoting Financial Inclusion” alongside the Pre-Budget Report of 2004<sup>3</sup>.

Financial services play a key role in most people’s lives. The vast majority rely on bank accounts to pay their bills and receive their salaries. Products such as mortgages and pensions enable them to purchase their homes and save for their retirement. Yet, a minority lack access to even the most basic financial products and services, incurring significant costs as a result.

Many governments have identified the need for financial literacy, education, sensitization, and a basic understanding of financial concepts as critical success factors in the efforts at ensuring increased financial inclusion. To achieve this, the government worked with potential providers to develop proposals for delivering a significant increase in free face-to-face money advice, targeted in areas of high financial exclusion<sup>4</sup>.

## **1.2 Statement of the Problem**

The critical role played by World Bank Group in advancing financial inclusion in the world cannot be over-emphasized, since it can leverage its financial sector expertise, country engagement and dialogue, financing and risk-sharing instruments, unique datasets, and research capacity, and influence with standard-setting bodies and the G20. The World Bank Group's works on financial inclusion also underpin the institution's efforts in other development areas, including shifting social transfer payments from cash to digital, support to SMEs and agriculture, and the World Bank Group's Identity for Development (ID4D) initiative<sup>5,6</sup>. It is also interwoven into other institutional initiatives, including:

The Women Entrepreneurs Finance Initiative (We-Fi) focuses on removing financial and non-financial constraints for women small-business owners. This initiative is with the mission of believing women are change agents and they are driving economic growth. The World Bank support women to unlock the potential of women entrepreneurs in developing economies. The We-Fi gave avenue to women entrepreneurs by scaling up access to financial products, and services, building capacity, expanding networks, offering mentors, and providing opportunities to link with domestic and global markets<sup>5</sup>. The Digital Economy for Africa (DE4A) Initiative supports Africa's efforts toward building inclusive and sustainable digital economies. This initiative aims to ensure that every individual, business, and

government in Africa will be digitally enabled by 2030 in support of the African Union “Digital Transformation Strategy for Africa”<sup>7</sup>.

Also, work in IDA countries as part of the IDA18 framework on women’s financial inclusion. The Bank responding to heightened global ambitions and escalating risks, IDA18 presents a paradigm shift in how it mobilizes finance to help IDA clients achieve their development goals. However, to be successful in achieving financial inclusion, a country needs to have a strong political commitment and coordination across the relevant public and private stakeholders and be able to create an enabling environment and wide-reaching policies that promote responsible financial access, financial capability, innovative products, and delivery mechanisms, and high-quality data to inform policy-making<sup>8</sup>.

Also, the critical role played by the Deposit Money Banks (DMBs) in the promotion of financial inclusion in a developing economy like Nigeria cannot be over-emphasized as well. Although, the rural micro-financing is yet to lead to meaningful transformation because of the inability of the rural dwellers to have access to micro-financing from formal financial institutions especially Nigerian Deposit Money Banks (DMBs). However, the role of rural micro-financing in the promotion of financial inclusion in Nigeria has not been sufficiently analysed. In fact, studies in this area are still evolving in Nigeria which requires an in-depth empirical study of this type. The empirical work on rural micro-financing is available in the Less Developed Countries (LDCs) including Nigeria<sup>9</sup>.

The government in Nigeria in its quest to ameliorate the situation as well as improve the living standards, particularly in the rural areas implemented various micro-financing programmes. Such programmes include the Rural Banking scheme, the people’s bank of Nigeria, Community Banks (now Microfinance Banks), National Poverty Eradication programme (NAPEP), among others<sup>10</sup>. However, most of these programmes were poorly

administered and the schemes were discontinued due to widespread criticism of the programmes and did not achieve their objectives<sup>11</sup>. In addition, due to weak performance and poor funding, the financial condition of these banks deteriorated and consequently resulted in liquidation.

There is a plethora of studies in the areas of financial inclusion and financial performance. But studies that link the interconnectivity between the two are few. Early studies on financial inclusion focused on macroeconomic variables, which do not clearly show the specific industry dynamics of financial inclusion and the important financial intermediation role of deposit money banks in financial inclusion activities. The focus on Nigeria is instructive because of the rising rate of small and medium-sized enterprises' financial exclusion which small and medium-sized enterprises areas are more disproportionately excluded from financial services, compared with the other medium and large enterprises in urban areas<sup>12</sup>. Also, in the last few decades, there has been substantial interest amongst central bankers and policymakers in developing countries on how to deepen inquiry on micro-finance in the face of the high level of financial exclusion. The need for this study, therefore, is not far-fetched because financial inclusion becomes visible only when the small and marginal businesses have unhindered access to financial services<sup>13</sup>.

Although there are pockets of studies in the areas of financial inclusion and banks' financial performance, studies in this area are few and this vacuum has not been exhaustively explored. Against this backdrop, the study investigates the impact of financial inclusion on the financial performance of deposit money banks in Nigeria.

### **1.3 Aim and Objectives of the Study**

The aim of the study is to examine the impact of financial inclusion on the financial performance of deposit money banks in Nigeria. The specific objectives of the study are:

- i. examine the impact of rural financing on the financial performance of Deposit Money Banks in Nigeria
- ii. investigate the influence of pricing of banking services on the financial performance of Deposit Money Banks in Nigeria
- iii. assess how small and medium-sized enterprises' financing affects the financial performance of Deposit Money Banks in Nigeria.

#### **1.4 Research Questions**

The purpose of this study is to examine the effect of financial inclusion on the financial performance of deposit money banks in Nigeria. To accomplish the stated objectives, this study will answer the following research questions.

1. how does rural financing impact the financial performance of listed Deposit Money Banks in Nigeria?
2. to what extent does pricing banking services influence the financial performance of listed Deposit Money Banks in Nigeria?
3. in what way can small and medium-sized enterprises' financing affect the financial performance of listed Deposit Money Banks in Nigeria?

#### **1.5 Hypotheses**

The study hypothesized that.

H<sub>01</sub>: There will be no significant impact of rural financing on the financial performance of listed Deposit Money Banks in Nigeria.

H<sub>02</sub>: There will be no significant influence of Pricing of Banking Services on the financial performance listed Deposit Money Banks in Nigeria.

H<sub>03</sub>: There will be no significant effect of small and medium-sized enterprises financing on the financial performance of listed Deposit Money Banks in Nigeria.

## 1.6 Significance of the Study

The importance of Financial Inclusion includes access to financial services to enable the poorest and most vulnerable in society to step out of poverty and reduce inequality in society.

Financial inclusion not only helps individuals and families but collectively it develops entire communities and can help drive economic growth.

Financial inclusion is about enabling and empowering people and communities: Enabling people to have the ability and tools to manage and save their money as well as empowering people with the skills and knowledge to make the right financial decisions.

Participation within the financial system leads to all kinds of individual benefits, including:

Ability to start and grow a business, which gives people an opportunity through micro-financing schemes for example to better long-term prospects. Being able to pay for an education for children, which in turn enables a new generation of educated and informed individuals and the ability to handle uncertainties that require ad hoc and unexpected payments or 'financial shocks.

Financial inclusion through access to an account, savings, and a payment system (whatever that may be) enables potential and empowers men, women, and whole communities. This, in turn, promotes: Investment within the community to provide jobs and again research shows that employment boosts status, income, and one's outlook on life. Collectively this helps to invigorate economies and equality both within the community and within families.

Given the importance of financial inclusion above, the study would be important to various stakeholder groups such as the government, financial sector players, monetary authorities, policymakers, and academicians.

This study would be important to the government because at this time of economic development when their efforts are being made to reposition the financial system to enable it to play a more strategic role in economic development in Nigeria. It would also help the financial sector in benchmarking the effectiveness of the various policies implemented in the banking sector geared towards the development of the financial sector players in Nigeria. Furthermore, it would help the monetary authority in measuring the effectiveness of the various policies implemented in the country's financial sector geared towards the development and inclusive of the banking sub-sector in line with what is done in other climes. The study would equally mirror the activities of banks as regards their financial inclusive role as it is the key issue in the inclusive of the financial sector of the economy.

The result of this study would serve as a springboard for other researchers to do more episodic studies on the issue of financial inclusion and bank performance as well as economic development. It would also add to the existing body of knowledge on the subject. The public will also find the result of the work invigorating and possibly extend the frontiers of their knowledge on financial inclusion and bank profitability. It would also lead to further cultivation of the equity culture in Nigeria as their interests would be revived in capital formation and investment generally.

## **1.7 Scope of the Study**

The study on financial inclusion in Nigeria's banking sector has a long pedigree and has evolved in some stages. Firstly, the stage of the unguided laissez-faire phase (1930-1959); secondly, the control regime of 1960-1985 which was a period of financial

repression;thirdly, the stage of the Structural Adjustment Programme (SAP) of 1984- 2004, which was the neo-liberal philosophy of free entry and exit. The fourth stage is the era of consolidation which started in 2004 with major emphasis on recapitalization and proactive regulation based on risk-based focusing on the framework. The scope of the study lapsed between the post-structural adjustment programme period and the consolidation period. These periods lapsed between 1992 and 2020. The focus will be on rural financing, Banking Services Pricing, and small and medium-sized enterprises.

### **1.8 Limitation of the Study**

This researcher encountered some constraints in several ways while writing this research. There were difficulties in accessing relevant data, some important documents, and articles to the field of study for proper studying were not easy to access. Where they are available, they could not be borrowed or taken away to study. Most of these documents were thus used at the premises and searched for online.

However, the above limitations did not in any way affect the integrity and completion of this study, and the resources available were sufficient to arrive at the conclusion.

### **1.9 Operational Definition of Terms**

**Deposit Money Banks:** Deposit money banks are monetary institutions owned by either the government or private businessmen for the purpose of profit. In pursuit of profit, the bank undertakes several functions.

**Financial Inclusion:**Financial inclusion is the way financially excluded and underserved people in a society have access to a range of available financial services without any discrimination.

**Financial Performance:** The concept of performance refers to the benefits stemming from the effective functioning and operations of an entity.

**Pricing of Banking Services:** The price of services is an important element of the marketing mix, being an important income source for the organization. The settlement of a correct price, both for the market and the competition, is a significant element for the sector of financial – banking services. Therefore, pricing of services is the strategy put in place by the banks to price out their services to be profitable and fair to their customers.

**Rural Financing:** Rural finances are concerned with a variety of financing services including not only agricultural lending but lending to farm households for non-agricultural production and consumption purposes, loans made to non-farm rural firms, rural savings deposit services, and other financial services such as insurance.

**SME Financing:** SME finance is the funding of small and medium-sized enterprises, and represents a major function of the general business finance market – in which capital for different types of firms are supplied, acquired, and cost or priced.

## Endnotes

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## **Chapter Two**

### **Literature Review**

The chapter addressed a review of literature pointing out areas of agreement and disagreement of the scholars. Hence, a gap in knowledge is created where this study is interested, to fill Financial Inclusion and Financial Performance of Listed Deposit Money Banks in Nigeria.

This chapter is classified into:

- 2.1 Conceptual Review
- 2.2 Theoretical Framework
- 2.3 Review of Empirical Studies
- 2.4 Conceptual Model
- 2.5 Summary of Gap in Literature Reviewed

#### **2.1 Conceptual Review**

##### **2.1.1 Nigerian Banking Industry**

The Banking industry plays a very key role in the economy of any nation, through financial intermediation, robust but seamless credit and payment systems, this was juxtaposed by those who asserted that the viability of any nation's economy, therefore, depends often on how healthy the banking sector fairs<sup>1</sup>. Subsequently, governments all over the world attempt to establish an efficient and effective banking system to promote economic growth and enhance the financial performance of the banking sector through supervision, regulations, and reforms<sup>2</sup>. Deposit Money Banks provide the platform and delivery vehicle for financial inclusion activities in the payment-credit systems and more financial inclusion could bring more people into the banking nets, which could radiate positively into the financial

performance of banks through increased services patronage and broader clientele services. This study is thus necessitated by concerns on the current state of financial inclusion and its implications on the financial performance of Deposit Money Banks (DMBs) in Nigeria. This is premised on the fact that it is the banks that provide, in the main, the platform, delivery vehicle, and the operating environment for the financial inclusion activities<sup>2</sup>. The financial performance of Deposit Money Banks (DMBs) plays a pivotal role in the growth and development of a nation. This is because they have to manage a huge volume of transactions.

Accordingly, investors, capital market participants, and other stakeholders need to understand the financial performance of DMBs: granting credit facilities and other financial services. Naturally, the ability of DMBs to meet their existing financial obligations, operating efficiency, and financial performance are associated with some financial risks. Some financial performance evaluating tools of profitability, return on assets and economic value added are considered appropriate for Deposit Money Banks for the stakeholders' interest<sup>3</sup>. Financial risk threatens the financial stability and performance of the financial sector. Financial risk is defined as all risks which would generate volatility in a bank's reserves, expenses, and the value of its business. If the financial risk is not addressed systematically it can result in inconsistent performance and earnings for the stakeholders and impact banks' revenues and net worth sometimes with disastrous systemic consequences as demonstrated by scholars<sup>3</sup>.

It was contending that financial inclusion is a subject of growing interest and one of the major socio-economic challenges on the agenda of international institutions, development-oriented agencies, policymakers and governments, central banks, and other financial institutions. Its importance stems from the promise it holds as a tool for economic development, particularly in the areas of improving welfare and general standard of living through wealth creation, employment generation, and reduction of poverty<sup>4</sup>.

### **2.1.2 Financial Inclusion**

Financial inclusion has continued to assume increasing recognition across the globe among policymakers, researchers, and development-oriented agencies. Its importance derives from the promise it holds as a tool for economic development, particularly in the areas of poverty reduction, employment generation, wealth creation, and improving welfare and general standard of living. A survey conducted in Nigeria in 2008 by a development finance organization, Enhancing Financial Innovation and Access revealed that about 53.0% of adults were excluded from financial services. The global pursuit of financial inclusion as a vehicle for economic development had a positive effect in Nigeria as the exclusion rate reduced from 53.0 % in 2008 to 46.3 % in 2010<sup>5</sup>. Encouraged by the positive development, the Central Bank of Nigeria in collaboration with stakeholders launched the National Financial Inclusion Strategy on October 23, 2012, aimed at further reducing the exclusion rate to 20% by 2020. Specifically, adult Nigerians with access to payment services are to increase from 21.6% in 2010 to 70% in 2020, while those with access to savings should increase from 24.0% to 60%; and Credit from 2% to 40%, Insurance from 1% to 40% and Pensions from 5% to 40%, within the same period<sup>5,6</sup>.

The channels for delivering the above financial services were equally targeted to improve, with deposit money bank branches targeted to increase from 6.8 units per 100,000 adults in 2010 to 7.6 units per 100,000 adults in 2020, microfinance bank branches to increase from 2.9 units to 5.5 units; ATMs from 11.8 units to 203.6 units, POSs from 13.3 units to 850 units, Mobile agents from 0 to 62 units, all per 100,000 adults between 2010 and 2020<sup>5</sup>.

The targets were based on benchmarking exercises carried out with peer countries, while also taking into consideration critical growth factors in the Nigerian environment<sup>7</sup>. The increasing

importance of financial inclusion as a catalyst for economic growth and development has been well documented in the literature. Financial inclusion is today widely considered as a right of all citizens to social inclusion, a better quality of life, and a tool for strengthening the economic capacity and capabilities of the poor in a nation. Policymakers have thus viewed financial inclusion as basic access for all citizens, highlighting its non-excludability and its non-rivalness. Considering that financial inclusion meets these two criteria, a scholar concluded that though, the degree of “publicness” in “financial inclusion” may be different from a typical public good like defense, there should be no doubt that financial inclusion meets the two features of public good and thus, can be regarded as a “quasi-public good”<sup>7,8</sup>.

The concept of financial inclusion has attracted different definitions and is measured differently by various researchers and stakeholders depending on their institutional settings and objectives, hence, disallowing uniformity in standard and cross-country comparisons<sup>9</sup>.

Thus, definitions provided by various authors and researchers focused on different peculiarities such as country exigencies and geographies, the level of social, economic, and financial development, and priorities of social concerns, among others. Broadly, financial inclusion means access to finance and financial services for all in a fair, transparent, and equitable manner at an affordable cost. More concisely, it can be defined as the delivery of basic banking services at an affordable cost to all sections of society, especially the vast sections of disadvantaged and low-income groups who tend to be excluded<sup>10</sup>. According to a United Nations Report, financial inclusion is the sustainable provision of affordable financial services that bring the poor into the formal economy, focused on different peculiarities such as country exigencies and geographies, the level of social, economic, and financial development and priorities of social concerns, among others. Broadly, financial inclusion means access to finance and financial services for all in a fair, transparent, and equitable manner at an affordable cost<sup>11</sup>. More concisely, it can be defined as the delivery of basic banking services at

an affordable cost to all sections of the society, especially the vast sections of disadvantaged and low-income groups who tend to be excluded. It is focused on different peculiarities such as country exigencies and geographies, the level of social, economic, and financial development and priorities of social concerns, among others. Broadly, financial inclusion means access to finance and financial services for all in a fair, transparent, and equitable manner at an affordable cost<sup>12</sup>. More concisely, it can be defined as the delivery of basic banking services at an affordable cost to all sections of society, especially the vast sections of disadvantaged and low-income groups who tend to be excluded.

In a study, financial inclusion is defined as the way financially excluded and underserved people in a society have access to a range of available financial services without any discrimination. Financial inclusion is a process of making available an array of financial services, at a fair price and at the right place without any form of discrimination to all members of society by the service provider<sup>13</sup>. Financial inclusion is defined as access to formal financial services such as credit, savings, and insurance opportunities. They stated that lack of financial inclusion is a multifaceted socio-economic phenomenon that results from various factors such as geography, culture, history, religion, socio-economic inequality, the structure of the economy, and economic policy. They however noted that financial inclusion is a huge source of economic growth and development, adding that it is a strong and significant correlation of a country's total factor productivity and, therefore, possesses the ability to create capital. They concluded that financial inclusion has the potential to increase the financial sector savings portfolio, the efficiency of financial intermediation, and allows for the tapping of new business opportunities<sup>14</sup>.

Financial inclusion is defined as a process or situation which allows for ease of access to, or availability of, and usage of formal financial systems by members of the economy. It describes a process where all members of the economy do not have difficulty in opening a

bank account; can afford to access credit; and can conveniently, easily, and consistently use financial system products and facilities without difficulty. It is the process that ensures that a person's incoming money is maximized, out-going is controlled, and can exercise informed choices through access to basic financial services<sup>15</sup>.

A Committee of researchers saw financial inclusion as the process of ensuring access to financial services and timely and adequate credit were needed by vulnerable groups such as the weaker sections and low-income groups at an affordable cost. This definition focuses on the vulnerable members the society and ease of access to credit<sup>16</sup>. Along similar lines, another researcher defined financial inclusion as extending the benefits of banking to the have-nots. Simply put, it means that banks will offer a basic account to anyone who wants to have one<sup>17</sup>. Financial inclusion from the point of view of access, fairness, equity, and safety in a financial system. The study defined financial inclusion as a coordinated effort by a national or sub-national government to deepen financial services among many customers while providing appropriate low-cost, fair and safe financial products and services or instruments. These services or instruments may include bank accounts, affordable credit, financial assets, savings schemes, insurance products and services, payments, and remittance facilities as well as money advice from mainstream providers to all<sup>18</sup>. Similar views have been expressed by a scholar whom financial inclusion means the provision of affordable financial services (viz. access to payments and remittance facilities, savings, loans, and insurance services) by the formal financial system to those who tend to be excluded.

In what is new and what is not, to the understanding of financial inclusion, the researchersays that it requires substantial efforts in understanding the needs of the customer, counseling, financial literacy, screening, and monitoring<sup>19</sup>. In broadening the scope of financial inclusion by emphasizing the role of new institutional partners like microfinance institutions. The researcher observed that financial inclusion should not only focus on financial services like

credit and savings, but also on an increase in productivity and sustainability of vulnerable groups in society<sup>20</sup>. Another scholar has also expressed a similar view<sup>20</sup>. This focused on empowering vulnerable members of society and not merely granting them access to saving accounts in banks. The researcher opined that financial inclusion should be about going beyond savings bank accounts and consumer credit, to devising/delivering financial products that can help in overcoming market imperfections and facilitate risk management by (and for) the poor in the context of their fragile livelihoods and the vicious cycle of poverty, often caused by structural weaknesses and other factors<sup>20</sup>. It is therefore obvious from the definitions of financial inclusion in this section that availability and accessibility are two important aspects of financial inclusion. Other aspects include fairness, equity, economy, safety, and quality.

Financial inclusion and financial stability are two sides of the same coin, especially when viewed in the context of overall economic inclusion has the ability to improve the financial status and standards of living of the poor and the vulnerable class of the society. He added that access to basic financial services would lead to increased economic activities and employment opportunities for rural households. He noted that this has a multiplier effect on the economy, as it would lead to higher disposable income for the rural households which will, in turn, lead to more savings and a robust deposit base for banks and other financial institutions<sup>21</sup>.

He further stated that financial inclusion ensures greater involvement by different segments of society in the formal financial sector, thus, increasing the effectiveness of the monetary policy. He noted that an impact negatively on the transmission of monetary policy due to financial decisions taken by a significant segment of financially excluded households and small businesses that are independent of and unaffected by, the monetary policy actions of the central bank. Thus, as the share of the formal financial sector increases through greater

financial inclusion, it brings about a significant positive externality by making monetary policy transmission more effective<sup>22</sup>.

Population density is more important for financial development and inclusive rural financial system in developing countries. Ironically, it is also evident that a large percentage of the people in developing countries live in rural areas without access to financial services. Among other things, lack of finance is one of the fundamental problems hampering the production, productivity, and income of rural farm households<sup>23</sup>.

### **2.1.3 Financial Exclusion and Inclusion**

The term 'financial exclusion' is used in different ways but is most often defined as a broad concept describing a lack of access to, and use of, a range of financial services. While 'financial inclusion is a state in which all people have access to appropriate, desired financial products and services to manage their money effectively. It is achieved by financial literacy and financial capability on the part of the consumer, and access on the part of financial products, services, and advice suppliers<sup>24</sup>.

Financially excluded people typically exhibit one or more of the following characteristics:

- i. A lack of a bank account and financial services that come with it.
- ii. A reliance on alternative forms of credit such as doorstep lenders and pawnbrokers.
- iii. A lack of other key financial products such as insurance, savings products, and pensions.

Those who are unable to access basic financial services pay more to manage their money, find it difficult to plan, and are more likely to become over-indebted.

Financial exclusion can be the result of several factors including financial products that do not meet the needs of low-income consumers, high-interest rates and other charges, lack of

information, self-exclusion, disability, geographical factors, and cultural barriers. Financial exclusion is closely associated with poverty and social exclusion and imposes significant costs on individuals. It often means paying more for basic financial transactions. Financial inclusion on the other hand means that individuals and businesses have access to useful and affordable financial products and services that meet their needs – transactions, payments, savings, credit, and insurance – delivered in a responsible and sustainable way<sup>24</sup>.

Being able to have access to a transaction account is the first step toward broader financial inclusion since a transaction account allows people to store money, and send and receive payments. A transaction account serves as a gateway to other financial services, which is why ensuring that people worldwide can have access to a transaction account is the focus of the World Bank Group's Universal Financial Access 2020 initiative.

Financial access facilitates day-to-day living and helps families and businesses plan for everything from long-term goals to unexpected emergencies. As accountholders, people are more likely to use other financial services, such as credit and insurance, to start and expand businesses, invest in education or health, manage risk, and weather financial shocks, which can improve the overall quality of their lives<sup>25</sup>. Great strides have been made toward financial inclusion and 1.2 billion adults worldwide have gotten access to an account since 2011. Today, 69% of adults have an account<sup>26</sup>. Moving from access to account usage is the next step for countries where 80% or more of the population have accounts (China, Kenya, India, Thailand). These countries relied on reforms, private sector innovation, and a push to open low-cost accounts, including mobile and digitally enabled payments<sup>26,27</sup>.

However, close to one-third of adults – 1.7 billion – are still unbanked, according to the latest Findex data. About half of unbanked people include women in poor households in rural areas or out of the workforce. The gender gap in account ownership remains stuck at 9

percentage points in developing countries, hindering women from being able to effectively control their financial lives. Countries with high mobile money account ownership have less gender inequality<sup>28</sup>.

- i. Financial inclusion has been identified as an enabler for 7 of the 17 Sustainable Development Goals.
- ii. The G20 committed to advance financial inclusion worldwide and reaffirmed its commitment to implement the G20 High-Level Principles for Digital Financial Inclusion.
- iii. The World Bank Group considers financial inclusion a key enabler to reduce extreme poverty and boost shared prosperity and has put forward an ambitious global goal to reach Universal Financial Access (UFA) by 2020.

Since 2010, more than 55 countries have made commitments to financial inclusion, and more than 60 have either launched or are developing a national strategy.

In Asia's financial inclusion has lifted millions out of poverty although there is deteriorating income inequality in recent years. Financial inclusion is critical as it increases the poor's access to financial services and hence an effective tool to help reduce poverty and lower-income inequality through increasing access to credit (loans) and cost-effective services. Over decades, financial intermediation has been undergoing a transformation, owing to changes in the global financial system. The banking system has evolved through major financial innovations in the past decade promoting financial inclusion. This has been through the globalization of financial systems, deregulation, and great advances in technologies<sup>29</sup>.

In Africa, the recent global financial inclusion Index shows that less than a quarter of the bankable adult population has an account with formal financial institutions<sup>30</sup>. This further confirms the high rate of financial exclusion, as a scholar asserts that most of the African

Adults in many African countries appear to be financially excluded and perhaps use informal methods to save or borrow funds outside the banking systems<sup>30</sup>.

In the case of Nigeria, financial inclusion provides an avenue for bringing the savings of the poor into the formal financial intermediation system and channeling same to investment, adding that many low-cost deposits will offer banks an opportunity to reduce their dependence on bulk deposits and help them manage both liquidity risks and asset-liability imbalances more efficiently. The Central Bank of Nigeria worked on the framework for consumer protection and set up a Financial Inclusion Secretariat to coordinate the implementation of the Strategy<sup>19</sup>. The Strategy was being pilot tested in Borno State in collaboration with the State Government and other stakeholders. Meanwhile, some key stakeholders took advantage of the opportunities it offers to roll out products and innovation to actualize their corporate aims and objectives<sup>30</sup>.

The implementation of the Strategy was impacting positively on the rate of access to financial services. The adult exclusion rate reduced from 46.3% in 2010 to 39.7% in 2012. All the geopolitical zones in Nigeria equally recorded improvements with exclusion rate declining between 2010 and 2012 as follows: North East, 68.3% to 59.5%, North West, 68.1% to 63.8%, North Central, 44.2% to 32.4%, South East, 31.9% to 25.6%, South West, 33.1% to 24.8% and SouthSouth, 36.4% to 30.1%<sup>31</sup>. The National Financial Inclusion Strategy, which was launched on October 23, 2012, specified that a Financial Inclusion Secretariat shall be established in the Central Bank of Nigeria to coordinate the activities of stakeholders towards implementation, and to gather and analyze data to inform the public on the progress made<sup>31,32</sup>.

The Secretariat provides support and is the Secretary of the Financial Inclusion Steering Committee (FISC) and the Financial Inclusion Technical Committee (FITC). The Financial Inclusion Steering Committee (FISC) was inaugurated on January 29, 2015. The Committee

provides overall strategic/policy direction to the implementation of the Strategy. The Governor of the Central Bank of Nigeria acts as the Chairman and the Head of the Financial Inclusion Secretariat is the Secretary. The Committee meets biannually to review progress and provide strategic direction for the stakeholders<sup>33</sup>.

The Financial Inclusion Technical Committee (FITC) was inaugurated on January 21, 2015. The Committee is chaired by the Deputy Governor, Financial System Stability while the Head, Financial Inclusion Secretariat is the Secretary. It comprises Directors of relevant Departments in the CBN and their equivalents in relevant Government Ministries, Departments, and Agencies. Currently, the activities of the Technical Committee are being executed through four Working Groups namely: the Financial Inclusion Channels Working Group; the Financial Literacy Working Group; the Financial Inclusion Products Working Group, and the Financial Inclusion Special Interventions (Youth, Women and People Living with Disabilities) Working Group. The Working Groups address issues related to the implementation in their assigned areas and report on progress to the Steering and Technical Committees<sup>32</sup>.

The financial inclusion secretariat is charged with the following specific functions: educate stakeholders on regulatory provisions; promote pilots to demonstrate the business case for financial inclusion; create awareness among stakeholders on their roles and responsibilities and coordinate the implementation of the strategy; ensure that appropriate arrangements are made for financial inclusion data gathering and publishing; maintain a database for financial inclusion in Nigeria; track and monitor progress on financial inclusion<sup>33</sup>.

#### **2.1.4 Deposit Money Banks Performance**

The concept of performance refers to the benefits stemming from the effective functioning and operations of an entity. Performance measurement systems are important for evaluating

the accomplishments of firm goals, constructing strategies for development, making decisions for investments, and compensating managers. The efficiency of the banking system has been one of the major issues in the new monetary and financial environment which cannot easily be measured since their products and services are of an intangible nature. Size affects the efficiency of banks. Previous research, especially in the United States, indicated that scale economies appear in small banks and not in large ones. More recent research showed that the levels of size for existence of scale economies are higher due to economic development and market liberalization. Larger and more profitable banks have higher levels of technical efficiency. At the same time, larger banks are more likely to operate under decreasing returns whether or not the ranking of Performance index, as enforced by the performance characteristics such as Management efficiency, profitability, Liquidity Ratio, Capital adequacy, Asset Quality, Growth, and Market Value enhanced the performance of banks and reduced distress in Nigeria<sup>34</sup>.

In literature, performance is of two variants – financial and non-financial performance; this study is based on financial performance variants of deposit money banks. The financial performance variant assesses performance based on operations that can be measured in economic or monetary terms. Financial performance is a subjective measure of how well a firm can use assets from its primary mode of business and generate revenues. The term is also used as a general measure of a firm's overall financial health over a given period, that is, the benchmark employed in determining the general well-being of a given entity<sup>35</sup>. A company's financial performance tells investors about its general well-being. It is a snapshot of its economic health and the job its management is doing, providing insight into the future: whether its operations and profits are on track to grow, and the outlook for its stock. Financial performance indicators, also known as key performance indicators (KPIs), are quantifiable measurements used to determine, track, and project the economic well-being

of a business. They act as tools for both corporate insiders (like management and board members) and outsiders (like research analysts and investors) to analyze how well the company is doing, especially regarding competitors, and identify where strengths and weaknesses lie<sup>36</sup>.

In view of this, performance of deposit money banks can be measured using variables like Total assets, Assets quality, Capital adequacy, Liquidity, return on investments, return on equity, return on assets, earnings yield, Tobin's Q among others.

Consequently, a good performing deposit money bank is deemed to have enhanced asset and liquidity levels, returns on investment, equity, earnings. Generally, the performance of a deposit money bank are ascertained via the use of ratios that express relationships between variables. Research suggests that financial inclusion and performance are highly dependent on accounting-based or market-based measurements<sup>37</sup>.

Accounting-based measurement is considered as an effective dynamic of performance compared to benchmark rate of return equal to risk-adjusted weighted average cost of capital. The market-based measurement is characterized by its forward-looking aspect and reflection of expectations of shareholders regarding future performance, which has its basis on either prior or current performance<sup>38</sup>. In view of the aforementioned, this study focused on accounting-based measurements of total asset and liquidity performance in assessing the link between financial inclusion and Nigeria DMBs performance.

#### **2.1.4.1 Total Assets**

Assets constituting a sizable portion of any bank resources with which banking activities are done, the return generated by such assets can help improve performance and banking sector growth knowing the impact of factors determining how the assets are utilized will lead to the implementation of good policies in favour of these factors that significantly improve assets

performance. Bank assets include cash balances, banks balances, loans and advances, financial assets, assets pledged as collateral, investment in subsidiaries and associates, investment properties, property plant and equipment, and other assets.

However, assets performance of banks has been generally below expectation despite the increase in the assets base of banks after the recapitalization exercise raises questions in terms of performance improvement in managing these assets on the account of multiple factors ranging from bank-specific and macroeconomic factors. This poor performance of banks' assets has, in general, affected negatively the banking industry viability and the well-being of the economy as banks are unable to meet other sectors' needs for funds without detailed analysis of bank-specific and macroeconomic factors that are crucial in the determination of assets performance of banks<sup>39</sup>.

#### **2.1.4.2 Assets Quality**

Asset quality is an aspect of bank management that entails the evaluation of a firm asset to facilitate the measurement of the level and size of credit risk associated with its operation. It relates to the left-hand side of a bank balance sheet and focused on the quality of loans that provides earnings for a bank. Asset quality and loan quality are two terms with basically the same meaning while its management is considered extremely important by the banking sector<sup>19</sup>. According to the Basel Committee on Banking Supervision, the core principles for effective banking supervision comprised twenty-five core principles out of which seven are designed to address the relevant issues of bank asset quality or credit risk management. This implied that asset quality is of general concern to financial supervisory authorities in every country throughout the world. Past researchers specified that the problems of asset quality may become the future time bomb for banks, just as the standards for safety and soundness which was established by the United States Federal Reserve Board, became effective in 1995

which required U.S. financial institutions to set up asset quality monitoring systems for identifying possible emerging problems of bank asset quality, and demanding banks to regularly present the asset quality reports to the board of directors to evaluate the risks associated with asset quality deterioration. This deterioration in bank asset quality affects its operating and financial performance as well as the general soundness of the financial system in which it is an entity<sup>40</sup>.

#### **2.1.4.3 Capital Adequacy**

Capital is an essential requirement for the efficient and effective operation of any business enterprise including banks. The banking sector is critical due to the vital role it plays in the growth and development of an economy. The banking sector facilitates the utilization of idle funds, promotes growth, creates jobs, generates wealth, eradicates poverty, entrepreneurial activity, and increases Gross Domestic Product (GDP)<sup>41</sup>.

The stability of banks, therefore, is of utmost importance to the regulatory body to strengthen the economy which will eventually aid the growth and development of a nation. To bring about this stability in the banking sector, the apex authority which is the Central Bank of Nigeria (CBN) continuously regulates the minimum paid-up capital of banking organizations. This is because deposits solicited from customers are different from paid-up capital and as such are not as dependable as the bank's capital requirement and so cannot be used for long-term planning<sup>42</sup>.

From the perspective of the Basel Committee on Bank Supervision, the Capital adequacy ratio measures a bank's capital in relation to its risk-weighted assets. Therefore, it is a measure of the amount of a bank's capital expressed as a percentage of its risk-weighted credit exposures. According to the Central Bank of Nigeria, 2014 the Capital Adequacy Ratio (CAR) is the proportion of the bank's tier 1 & tier 2 equity (Qualifying capital or Equity) as a

proportion of its risk-weighted assets (loans). It is the proportion of a bank's own equity in relation to its risk exposure. Capital Adequacy Ratio (CAR) also known as Capital to Risk (Weighted) Assets Ratio (CRAR), is the ratio of a bank's capital to its risk. National regulators track a bank's CAR to ensure that it can absorb a reasonable amount of loss and complies with statutory Capital requirements<sup>42</sup>. The Reserve Bank of New Zealand, 2004, says that measure of a bank's capital expressed as a percentage of its risk-weight credit exposures. This ratio is used to protect depositors and promote stability and efficiency of financial systems around the world. Two types of capital are measured: tier one capital, which can absorb losses without a bank being required to cease trading, and tier two capital, which can absorb losses in the event of a bank winding-up and so provides a lesser degree of protection to depositors. Capital adequacy is a conception that results from the idea of rearranging the existing capital structure of banks in order to restructure the banking industry against widespread distress<sup>43</sup>.

Capital adequacy in the financial sector and for banks, in particular, is a central issue of prudential regulation. This is so because the banking public is not in a position to judge the safety and soundness of a bank or financial institution due to imperfect information and agency problems associated with the nature of the financial intermediation business. Hence, capital adequacy is aimed at ensuring that the banks are financially sound. Bank's capital may be defined as the value of its net assets (total assets minus total liabilities). Thus, capital is the sum of the paid-up share capital and its accumulated capital reserves. Capital is crucial for the protection of bank depositors and the building and maintenance of public confidence in banks' operations, and their long-term stability and growth. Capital adequacy involves setting minimum capital requirements for market risk in the books of banks and investment companies<sup>44</sup>. Adequate capital creates an opportunity for a better standard in any business establishment. It spurs business exertion and great performance. Adequate capital aids

recapitalization in that it emerges to meet the need of individual banks in form of increasing the minimum paid-up capital so that banks can carry out their operation efficiently with their customers. This is a way of correcting the widespread distress of the banking sector. Recapitalization according to past researchers is the act of beefing up the long-term capital of a bank to the level at least required by the monetary authorities and to ensure the security of shareholders' funds<sup>45</sup>.

#### **2.1.4.4 Liquidity**

Most often than not, the influence of liquidity on the performance of banks is undermined. This stems from the notion held by the traditional asset pricing models which a that the financial market is without frictions and therefore liquidity is assumed not play assert any roles at all<sup>46</sup>. In the context of the traditional asset pricing model, the financial intermediaries were assumed to be stable because they had access to readily available funds and they obtain these funds at low cost. This notion was popular among financial analysts prior to the outbreak of the Global Financial Crisis (GFC). However, the importance of liquidity in the banking industry came to the fore with the happenings since the outbreak of the global financial crisis of 2008/2009. The banks became endangered species as they were faced with huge distress simply because they undermined the importance of liquidity to the system and therefore did not manage it efficiently<sup>47</sup>. It cannot go without noticing that the rapid downward trend in market conditions helped to explain how quickly liquidity can disappear. More shocking, as evidenced by the Global Financial Crisis, is the fact that illiquidity can drain already earned profits. This is because the financial institutions are either forced to sell accumulated assets below their market value or they are forced to borrow at interest rates that are well above their return on assets (performance)<sup>48</sup>.

Corporate liquidity connotes firms' ability to wither the storm when the need arises for it possesses the cash and near-cash equivalents that could meet up with its challenges, especially the short-term obligations. To this extent, liquidity is very critical for the survival of any organization, especially the financial institution whose primary assignment entails keeping the deposits. Banks' liquidity is simply the ability of the bank to maintain sufficient funds to pay for its maturing obligations. It is the bank's ability to immediately meet cash, cheques, other withdrawal obligations, and legitimate new loan demand while abiding by existing reserve requirements<sup>49</sup>.

Liquidity problems may adversely affect the financial performance of a bank as well as its solvency. Some studies have shown a significant positive relationship between bank profits and liquidity while others have shown a weak positive relationship. According to Banking Supervision Report, 2013 Deposits Money Bank in Nigeria registered strong performance in 2013, exceeding the overall country economic growth. The banking sector in Nigeria was rated strongly in 2013 using the capital adequacy, asset quality, management quality, earnings, and liquidity rating system. Although, studies have it that lack of adequate liquidity in a bank is often characterized by the inability to meet daily financial obligations. At times, it may have the risk of losing deposits which erodes its supply of cash and thus forces the institution into disposal of its more liquid assets<sup>50</sup>.

#### **2.1.4.5 Returns**

Profitability is vital for a bank to maintain its operational activities and for its investors to obtain fair returns, which is the most reason why bank capital will have to comply with the CBN figure. Earnings refer to the amount of money a company has earned during a given period, usually a quarter or year, as reported based on proper accounting standards. Earnings help to measure a company's profitability. Earnings are important to investors because it

indicates the company's expected future dividends and its potential for growth and capital appreciation. Bank profitability is an important ingredient of financial development, its relevance spans from banking firm performance to macroeconomic stability. At the firm level, a higher return to a large extent reduces bank fragility. At the macro level, increased profitability makes for a sustainable banking sector that can finance economic growth and development<sup>18</sup>.

The measures of bank profitability usually considered in this study are the return on investment (ROI), return on assets (ROA) and return on equity (ROE).

Return on investment (ROI) is a performance measure used to evaluate the efficiency or profitability of an investment or compare the efficiency of a number of different investments. ROI tries to directly measure the amount of return on a particular investment, relative to the investment's cost. It is a profitability metric used to evaluate how well an investment has performed. Although does not take into account the holding period or passage of time, and so it can miss opportunity costs of investing elsewhere but can be used to make apples-to-apples comparisons and rank investments in different projects or assets<sup>50,51</sup>.

Return on assets (ROA) is a profitability ratio that provides how much profit a company is able to generate from its assets. In other words, return on assets measures how efficient a company's management is in generating earnings from their economic resources or assets on their balance sheet. ROA is shown as a percentage, and the higher the number, the more efficient a company's management is at managing its balance sheet to generate profits. Return on Assets is the productivity proportion that educates us regarding the benefit an organization can create from its Assets. It estimates the effectiveness of the organization's administration framework. It's worth is displayed as a rate. The higher the rate, the higher is the proficiency

of the organization's administration as far as dealing with the monetary record and the benefit produced by the organization on their Assets<sup>51</sup>.

Return on equity (ROE) is a measure of financial performance calculated by dividing net income by shareholders' equity. Because shareholders' equity is equal to a company's assets minus its debt, ROE is considered the return on net assets. ROE is considered a gauge of a corporation's profitability and how efficient it is in generating profits.

#### **2.1.4.6 Earnings Yield**

The Earnings Yield is the 12-month earnings divided by the share price. Earnings yield is the inverse of the P/E ratio. Earnings yield is one indication of value; a low ratio may indicate an overvalued stock, or a high value may indicate an undervalued stock. The growth prospects for a company are a critical consideration when using earnings yield. Stocks with high growth potential are typically valued higher and may have a low earning yield even as their stock price rises<sup>52</sup>. Earning yield is the quotient of earnings per share (E), divided by the share price (P), giving E/P. It is the reciprocal of the P/E ratio. The earning yield is quoted as a percentage, and therefore allows immediate comparison to prevail long-term interest rates.

#### **2.1.4.7 Tobin Q**

The **Tobin's Q ratio** is a measure of firm assets in relation to a firm's market value. The formula for Tobin's Q is:  $= \text{Total Market Value of Firm} / \text{Total Asset Value of Firm}$ .

When Tobin's Q ratio is between 0 and 1, it costs more to replace a firm's assets than the firm is worth. A Tobin's Q above 1 means that the firm is worth more than the cost of its assets. Because Tobin's premise is that firms should be worth what their assets are worth, anything above 1.0 theoretically indicates that a company is overvalued<sup>53</sup>.

### **2.1.5 Factors Affecting Bank Performance in Nigeria**

The basic reason for bank regulation and supervision is to forestall bank failure. If banks were not regulated and supervised, their power to create money will be unchecked and on one hand, might result in excessive monetary creation and hence inflation. On the other hand, excessive money creation may lead to bank distress through loan defaults and thereby halting further lending and jeopardizing the payment system. Central banks often manipulate money supply through market operations and its supervisory power over commercial banks to reinforce the efficacy of monetary policy. Also, the need for regulation and supervision of banks for prudential reasons arises to ensure that public confidence in the banking system is maintained, particularly in relation to total convertibility of deposits without capital loss and the certainty that receipts and payments will be made for and on behalf of customers with no loss and at low cost. In the light of this, the Central Bank of Nigeria's (CBN) examination process involves a frequent on-site examination of bank operations to ascertain that the bank is operating in a sound manner, to determine the accuracy of financial reports to the regulator and the public, and to ascertain compliance with the law and regulations. Bank examinations are usually conducted on a surprise basis (without prior notice) and at random, on either selected branches or aspects of the operations of the bank. The examination could either be routine inspection or special in-depth investigation to uncover fraud or risk exposure<sup>54</sup>.

Most bank examination activities involve,

- i. Determining the financial position of the bank and quality of operations
- ii. Assessing management quality
- iii. Ascertaining compliance with laws and regulations
- iv. Testing accuracy of books, accounts, and records
- v. Verifying asset quality
- vi. Assessing bank solvency.

The Central Bank of Nigeria (CBN) and Nigeria Deposit Insurance Corporation (NDIC) examining banks to evaluate the financial health and resilience of each bank and banking system. Bank examinations are primarily concerned with the strength of the bank's balance sheet and include a review of its regulatory compliance and internal controls.

Furthermore, the Central Bank of Nigeria (CBN) and Nigeria Deposit Insurance Corporation (NDIC) collaborative study on distress in Nigerian financial institutions in 1995 revealed that factors such as bad loans and advances, fraudulent practices, undercapitalization, rapid changes in government policies, bad management, lack of adequate supervision, undue reliance on foreign exchange, economic depression, political crisis, bad credit policy and undue interference from board members are factors responsible for banks and other financial institutions distress. A scholar grouped these factors into institutional, economic, and political factors; including supervisory measures. The institutional factors are endogenous factors that are largely within the control of the owners and management of the banks. The collaborative study of the CBN/NDIC submitted that most of the financial institutions surveyed attributed the distressing conditions to institutional factors. The general institutional factors that led to the identified factors on the banking system can be discussed as insider's abuse, weak corporate governance, weak risk asset management, and inadequacy of capital. Economic and political factors as well as regulatory and supervisory measures will also be discussed in brief<sup>55</sup>.

#### **2.1.5.1 Insiders Abuse**

With the current incidents of bank liquidation globally, it is timely to discuss bank safety in Nigeria hence the basis for this discourse on the need and how to ensure safe and sound banking practices in Nigeria. The crisis generally involved defaults on the part of insiders and their dealings. The Nigerian banking system was seriously undermined by this, and a host of

insider workings by the banks' management and directors that borders on fraud and abuse. Fortunately, the Failed Banks Act was the only serious regulation that provided a sound enabling environment to stem the erosion of confidence in the banking system. Prior to this, some laws existed, but they lacked the teeth to ensure a safe and sound banking environment. The banking industry is still heavily regulated by the government and the CBN is used as an instrument for government monetary policies. These are manifesting in the rising cases of unwholesome practices being recorded. Many banks engage in some sharp and unorthodox practices to achieve compliance with some regulatory requirements. Many banks' returns provide inaccurate/misleading financial reports thereby preventing timely detection of emerging problems by the supervisor<sup>56</sup>.

Insider abuses include failure to disclose their interests that borrow from the institution or otherwise have business dealings with the institution; diverting assets and income for their use; misuse of position by approving questionable transactions for relatives, friends, and/or business associates; abuse of expense accounts; acceptance of bribes and gratuities; and other questionable dealings related to their positions at the institution. Insider abuse undermines confidence in institutions and often leads to failure<sup>56</sup>.

The Government-owned banks suffered from incessant/frequent changes in board membership and many appointments were made based on political affiliation rather than expertise consideration. On the side of the privately-owned banks, shareholders can constitute a problem. The owner-managers regarded banking as an extension of their operations by appointing their relatives or friends to key positions instead of relying solely on professional managers. Thus, board appointees are more like mere loyalists who cared for the interests of their masters rather than the business itself. Shareholders quarrel and boardroom squabbles can be common among banks such that management attention can be distracted due to unnecessary squabbles. In some banks where harmony seemed to exist, another type of

insider abuse took the form of the owners and directors misusing their privileged positions to obtain unsecured loans which in some cases were in excess of their banks' statutory lending limits in violation of the provisions of the Banks and other Financial Institutions Act (BOFIA) of 1991 as amended<sup>57</sup>. In addition, some of these owners and directors granted interest waivers on non-performing insider credits without obtaining the CBN's prior approval as required by BOFIA. Their conversions of bank resources to service their other business interest such as allocation of foreign exchange without naira cover to insiders, later crystallized as hardcore debts. They also indulge in compelling their banks to directly finance trading activities either through the banks or other proxy companies, the benefits of which did not accrue to the banks<sup>58</sup>.

The effect of insider abuse majorly in the financial environment is bank based capital deterioration, loss of public confidence, and financial and economic distress.

#### **2.1.5.2 Poor/Weak Corporate Governance**

Corporate governance is the collection of mechanisms, processes, and relations used by various parties to control and operate a corporation. Governance structures and principles identify the distribution of rights and responsibilities among different participants in the corporation (such as the board of directors, managers, shareholders, creditors, auditors, regulators, and other stakeholders) and include the rules and procedures for making decisions in corporate affairs. Corporate governance is necessary because of the possibility of conflicts of interests between stakeholders and primarily between shareholders and upper management or among shareholders<sup>59</sup>. Corporate governance includes the processes through which corporations' objectives are set and pursued in the context of the social, regulatory, and market environment. These include monitoring the actions, policies, practices, and

decisions of corporations, their agents, and affected stakeholders. Corporate governance practices can be seen as attempts to align the interests of stakeholders.

Interest in the corporate governance practices of modern corporations, particularly in relation to accountability, increased following the high-profile collapses of a number of large corporations in 2001–2002, many of which involved accounting fraud; and then again after the financial crisis in 2008<sup>60</sup>. As a result of insiders' abuse of recruiting inexperienced and incompetent personnel to hold key positions in the bank, deterioration of management culture and weak internal control system instigated by the squabbles among the top management decision-making team, and non-compliance with laws and prudential standards, mismanagement seemed to play a major role in bank failure in Nigeria. Bank losses increased and management resorted to hiding the losses in order to buy time and remain in control. Many banks granted loans with no collateral or with little or no regard to the ability of the borrowers to repay the loans. In this regard, a scholar noted that the proportion of non-performing loans in the distressed banks had during the period 1989-2000, been consistently high, reaching about 80 percent of their loan portfolio. This ratio has significantly exceeded the prudential maximum ratio of 20 percent<sup>60,61</sup>.

Poor or weak corporate governance practices expose the financial institutions, banks in particular to several risks which may include:

- i. One stakeholder group benefit unfairly at the expense of other stakeholder groups due to weaknesses in a company's control systems.
- ii. Managers make poor investment decisions that benefit them but are detrimental to the company's shareholders.
- iii. A company's exposure to legal, regulatory, and reputational risks could become heightened. For instance, a company may be subject to an investigation by a

regulatory authority due to a violation of laws and regulations. The company could also receive lawsuits from one of its stakeholders, due to some form of impropriety. These could potentially damage the reputation of the company and lead to significant legal costs.

- iv. A company's ability to honour its debt obligation may become hindered. This exposes it to bankruptcy risk if its creditors decide to take legal action against it<sup>61</sup>.

### **2.1.5.3 Weak Risk Asset Management and Inadequacy of Capital**

A risk asset is any asset that carries a degree of risk. Risk asset generally refers to assets that have a significant degree of price volatility, such as equities, commodities, high-yield bonds, real estate, and currencies. Specifically, in the banking context, a risk asset refers to an asset owned by a bank or financial institution whose value may fluctuate due to changes in interest rates, credit quality, repayment risk, and so on, such as loans and advances, other assets to mention but a few<sup>62</sup>.

A number of banks had poor credit policies upon which loans are granted without collateral (for example, with securities) and/or the ability of the borrowers to pay back. It is not uncommon to find securities being overvalued and sometimes funds are disbursed without securities<sup>63</sup>. A scholar pointed out that the major factors responsible for the precarious financial condition of banks were huge uncollectible loans and advances. In this observation, Ajani (1992) explained that this maladministration of a credit portfolio is one of the major lapses that can make a high-flyer manager lose everything overnight.

Capital adequacy is often referred to in the markets as a firm's Regulatory Capital requirement. Regulators endeavor to ensure that financial institutions, banks, and investment firms have enough capital to ensure their businesses remain stable. This measure not only protects depositors within the industry but also the larger economy as failures of institutions,

such as banks, can have wider-scale repercussions. Capital adequacy is therefore the statutory minimum capital reserve that a financial institution or investment firm must have available and regulatory capital adequacy provisions thus require relevant firms to maintain these minimum levels of capital. Capital inadequacy on the other hand occurs when a firm or bank did not meet statutory minimum capital reserve or required and/or capital levels were inadequate to support their significant exposure to risk assets.

Capital inadequacy has been recurrent in the banking system to the extent that from time to time the CBN continues to articulate the increase of the capital base of banks in Nigeria. For instance, the 25 billion Naira recapitalization exercise in 2004 was meant to beef up the ailing bank's capital base<sup>29</sup>.

#### **2.1.5.4 Economic Condition**

Banks have always played a crucial role in the overall growth and development of any country. They play a decisive role and fuel the growth of any economy. Be it any sector, the entire fate of trade and commerce is dependent on the banking industry, and thus banks are regarded as the backbone of any economy. They not only act as the custodian of wealth but also as resources of the country that are necessary for the overall economic development of a nation. For the economy to thrive, money needs to be in constant circulation. It is what makes the world go around, funding various projects and livelihoods so that everyone can live in harmony. It is the fuel that everyone needs, and banks act as the stoic middle ground that keeps everyone's finances safe and secure.

Consequently, it is worth asking the question; how does banking affect the economy? Banks affect the economy by creating jobs, accepting deposits, and creating loans and advances that are lending to customers<sup>41</sup>.

#### **2.1.5.5 Jobs**

Banks employ people. There are numerous people out there who work in and for these places and depend on them for their main source of income. Of course, employment is a big indicator of how viable the economy truly is, so without banks, significant portions of the workforce would suddenly be desolated and abandoned. When people have salaries, they are going to spend! The money will all go elsewhere; to shops and businesses, to stocks and shares, etc. Once again, it is that great circulation and exchange of goods that keep the economy ticking along healthily. However, job losses in the banking sector would surely put a significant dent in that synergy.

#### **2.1.5.6 Deposits**

The fact that people can open accounts is of great benefit to them financially, and thus to the economy too. Savings or any other form of accounts allow people to safely deposit their money in an account where it can build interest over time. For people who would be otherwise struggling with their money, it is these services that can change lives for the better.

In a sense, the bank serves as a financial lifeline for many people out there. It allows them to keep their head above water even in the most turbulent of economic times. While they might not be spending much during a down period in the economy, they will be perfectly poised to do so when things get better. Put simply, banks help safeguard money as well as import and export it, which will pay off for the economy in the long run.

#### **2.1.5.7 Lending**

If a business cannot secure the funding they require to run, then it will cease to run. Many up-and-coming start-ups depend greatly on the generosity of banks to find their feet and hit the ground running. Whether it is getting their start or a last-ditch effort to save a waning

business, sometimes that one crucial loan was all a company needed to experience a significant surge in growth.

Businesses are also another great pillar of the economy. Most of their key strides are made with backing from a bank. A key link in the economic chain, flourishing businesses are what attracts investors and people with money to any given country, thereby pooling in more resources from foreign areas. Still, while there are alternative routes to take like securing a bad credit loan from Likely Loans, the bank is the main hub where all financial help is sought after.

However, the banking industry being the nerve centre of the economy is invariably affected by the economic and political environment/conditions of the country. For instance, the Structural Adjustment Programme (SAP) introduced in 1986 led to a wide range of economic reforms that affected the banking system. Also, a political situation like the political crisis resulting from the aborted attempt at returning the country to democratic rule in 1993, led to massive withdrawal of funds that adversely affected banks (especially) those around Lagos.

Regardless of the country, a bank is situated in, where certain factors influence its activities and success or failure. The following five factors have been categorized as crucial factors that may affect banks in every part of the world.

- i. **The income of the country and its economic level always affects the banking sector.** It goes without saying that banks thrive under economic boom as compared to recession times. Income flows in a country affect banks in terms of the amount of capital they can access and clients that are ready to bank with them. Income also determines spending and borrowing limits hence is a crucial factor within the banking sector. In a country with enough income, banks that face economic hurdles can be salvaged by their respective governments.

- ii. **Inflation Rates.** When inflation is high, banks tend to suffer. This is because inflation tends to affect the value of the currency and this often has a ripple effect in the banking sector. Apart from liquidity structures and processes, inflation causes instability in currencies. It also erodes client confidence especially foreign investors who can choose whether or not to use a particular country's currency.
- iii. **Economic policies. Macroeconomic policies can have far-reaching impacts on the banking sector.** If a country makes unfavorable policies, the banking sector is bound to lose while sound macroeconomic policies can make all the difference and enable a country's banks to actually grow.
- iv. **Exchange Rates across the world.** Exchange rates across the world also affect banks all over the globe. Strong currencies such as the US Dollar, British Pound, Japanese Yen, European Euro, and Canadian Dollar amongst others have a cross-cutting impact on other currencies and financial markets in the world. When the exchange rates for these currencies fall the banking sector can experience problems.
- v. **Laws and regulations.** Every country has in place a specific regulatory framework for financial institutions to either provide guidance, supervisory, or monitoring roles for these institutions. These laws are important in determining major decisions such as interest rates, banking services, loan regulations, and even minor aspects of banking such as opening and closing hours. A country with stringent laws and regulations for the banking sector can curtail business. Nevertheless, a liberal regulator is also quite dangerous because some banks can easily lose focus in the bid to make higher profits. It is therefore important to maintain a logical regulatory framework that addresses the needs of both the bank and its consumers<sup>16</sup>.

### 2.1.6 Regulatory and Supervisory Measures

An effective financial system is admittedly a necessity though not a sufficient condition for a well-functioning economy. For the financial system of every economy to be efficient, it must be adequately regulated, supervised, and coordinated. Regulations and supervision is necessary to protect depositors especially the small and ignorant ones, with neither the required knowledge nor access to sufficient information needed to evaluate the safety and soundness of the financial institutions. Regulation is undertaken to ensure monetary stability by protecting the payment system from the business down to other micro-economic shocks. In addition, financial markets are regulated because of the failure of the market system to recognize the social rationality of the banking system<sup>40</sup>.

The adequacy of a regulatory framework must be assessed not only in terms of the sufficiency of the regulatory structure but also in terms of the effectiveness of the regulatory measure. The measure which is usually rules of agreed behavior either imposed by the government within the industry has the effect of limiting the business activities of banking institutions. It is for the fact of noticing the roles of the regulatory bodies that Nigeria Deposit Insurance Corporation (NDIC) was established in 1998 as an additional supervisory institution in the nation's banking system to see to the following functions, issue bank deposits, contribute to banking policies and ensure a safe and sound banking system in the country<sup>48</sup>.

Also, the role the Central Bank of Nigeria (CBN) has played in the failure resolution. The CBN brief of 1995 has noted that one of the principal objectives of the Central Bank of Nigeria is to promote monetary stability and soundness of the banking system. To achieve this, the CBN conducts regulatory, supervisions, and examinations of banks as a means of maintaining surveillance on banking laws and other directives stipulated by the monetary authorities. This helps to promote high-level and quality banking services. The functions of the CBN are Off-Site supervision while the examination division of the Federal Ministry of

Finance handles On-Site scrutinizing of banks. This arrangement lasted till the end of 1965, the CBN supervision and examination in 1966, based on the awareness that adequate and proper supervision would be better accomplished by a specialized institution which would bring together an experienced team of banks and other related professionals to facilitate the exercise of banks supervision. This gave rise to the establishment of NDIC<sup>31</sup>. It is a well-known dictum, that an efficient banking system is necessary, though not a sufficient condition for a stable economy. For a banking system to be efficient, it requires adequate supervision and regulation<sup>43</sup>.

More so, the regulatory and supervisory measures of the CBN/NDIC were unable to keep pace with the rapid changes in the banking industry. The CBN brief of 1999 noted that the ability of the CBN to perform its regulatory role had in the past been affected by inadequate manpower both in terms of quality and quantity. NDIC (1995) in discussing the challenges of bank liquidation and deposit payoff, noted that closing a bank is a specialized job requiring services of technically skilled people in banking, accounting, legal, quantity surveying, estate management, information management, and technology as well as facility support and also noted that manpower constituted a problem to its supervisory function<sup>44</sup>.

Despite the presence of the regulatory and the supervisory institutions in the banking system (CBN and NDIC), the banking system is still not stable, why? This is where we have to take a look at the problems of the regulatory and supervisory bodies, which are the following according to NDIC 1997 Annual Report:

- i. Continuous dissolution of Boards which gives rise to the instability of supervisory operations, as each Board that comes in, tends to alter the system regulation. This, therefore, pushes a bank to be distressed allowing bank to operate the way they want.

- ii. The examination bodies have not embarked on supervisory oversight or if they have, it is not improved inadequate supervisory oversight allows banks to grow and increase in size necessarily without being monitored. This way, they neglect the regulatory instructions and directives, and when they are finally examined by the examination bodies, they get distressed and liquidate.
- iii. Another reason why banks today are still being distressed is the fact that the regulatory and supervisory environment has found it hard to be able to detect the banks that come up illegally.
- iv. The ability of the researchers' Department to effectively take control of Off-site monitoring on a continuous basis of the activities and performance of the insured banks. And also, inability to assess the premium liabilities payable by insured banks. Another reason for this department's deficiency is the fact that it has only 20 employees.

These and others that could not be reached are the problems of the supervisory and regulatory institutions that affect that banks and their systems in the country<sup>45</sup>.

## **2.2 Theoretical Framework**

This study considered a number of theories. These theories include:

### **2.2.1 The McKinnon/Shaw Theory (Theory of Financial Liberalization)**

The McKinnon/Shaw theory was propounded by Ronald I. McKinnon and Edward S. Shaw in 1973. The McKinnon-Shaw theory is the ability of interest rates to signal information about relative scarcities which permits an improved allocation of resources following liberalization. It discusses the literature on equilibrium when markets are incomplete, information is asymmetric and there is money<sup>46</sup>.

The theoretical specification of the financial deepening equation draws on the literature of finance and development which postulates a symbiotic relationship between the evolution of the financial system and the development of the real economy. The literature on this relationship predicts that financial deepening depends on real income and real interest rates. This is predicted by both the McKinnon and Shaw models and in the endogenous growth literature.

McKinnon argues that financial liberalization is a necessary ingredient in the generation of high saving rates and investment. Shaw further argues that the subsequent real growth in the financial institutions provides domestic investors with the incentive to borrow and save, thus enabling them to accumulate more equity thereby lowering the cost of borrowing. The same view was echoed by a scholar who argue that financial liberalization is necessary for financial markets to operate efficiently and to provide new opportunities for financing in the existing economy. McKinnon and Shaw approach was based on the assumption that any distortion and limitation on the financial system, such as interest rate controls, reserve, and liquidity requirement, and government rationing of available credit to so-called priority sectors, inhibit financial development mainly by depressing the interest rate<sup>48</sup>. The deficiency in the amount of savings due to such repressive measures thwarts economic development through the perverse effects on the volume and the quantity of investment. Thus, the main argument of McKinnon and Shaw is that financial repression has a detrimental effect on financial development, hence on the performance of financial institutions<sup>47</sup>.

They believe that financial repression needs to end in emerging countries and advocate for financial liberalization. They opined that countries need to develop their financial sphere to increase their real growth. Financial repression implies a series of constraints: the necessity for financial institutions to have no remunerated reserves in the central banks, too low-interest rates for savers that are so strong that the financial sphere cannot be developed. For

this, economists are of the opinion that financial repression leads domestic agents to prefer having unproductive assets or no monetary assets rather than depositing assets in financial institutions. Based on this reason there are not enough funds to be lent to the economy, which creates an obstacle for investment and thus for growth<sup>49</sup>. Consequently, only free markets can ensure an optimal savings allocation. They also argued that financial repression was imposing major costs on the countries that practiced it in the sense that the submarket real interest rate would tend to repress the level of savings and thereby investment.

In addition, the failure to ration credit by price would result in an inefficient allocation of what savings were. Growth would suffer on both counts: too little would be allocated to those uses promoting the best return, and thus would not contribute as much as potentially possible to the rate of growth. The policy prescription for the financially repressed economy in Mckinnon and Shaw models is to raise institutional interest rates or reduce inflation. They suggested that if a monetary reform (a partial liberalization) can mobilize domestic savings and allocate them to efficient uses, as it has been claimed; full financial liberalization may produce the optimal result of maximizing investment and further raising the average efficiency of capital. The belief of scholars was that restrictions on capital movements shelter financial intermediaries from foreign competition<sup>50,51</sup>. It weakens the market discipline on policymakers, vest additional power with bureaucrats who may be even less capable than markets at delivering an efficient allocation of resources, open the door to rent-seeking and resource dissipation by interest groups seeking privileged access to foreign capital. In a study, the researchers do not regard all forms of government intervention as financial repression needing to be liberalized. They suggest a better understanding of how financial markets in developing countries operate, and which aspects of the financial markets are pertinent<sup>52</sup>.

Furthermore, a scholar asserted that alleviating financial restrictions in developing countries by allowing market forces to determine real interest rates can exert a positive effect on

growth rates as interest rates rise to its competitive market equilibrium. Thus, they questioned the applicability of the neo-classical approach to developing countries, arguing that low interest rates crowd out high-yielding investments, create a preference for capital intensive projects, discourage future savings and thereby reduce both the quality and quantity of investments in an economy. This theory argues that money and capital are complements, rather than substitutes<sup>53</sup>. Expanded financial intermediation between savers and investors increases the incentive to save and invest, improving the efficiency of investments. In other words, a low real deposit rate of interest shrinks the liability of the financial system consequently impeding the supply of investment finance. Thus, rising interest rates to equilibrium levels should increase the rate of economic growth<sup>53,54</sup>.

In support of this hypothesis, a scholar emphasized that a high interest rate policy will stimulate savings and investment which will lead to financial deepening and ultimately economic growth. Furthermore, in tandem with McKinnon/Shaw hypothesis, a scholar opined that increased savings and improved efficiency with which resources are allocated among alternative investment projects enhances deepening of the financial sector<sup>55</sup>. There have been some concerns that have been raised by researchers about the effects of financial liberalization. For example, a scholar utilises data set for 21 countries ranging from 1887 to 1997, and they find weak evidence that financial liberalization leads to growth<sup>56</sup>. While another scholar warned that the liberalization of domestic interest rates could lead to excessive borrowing, which may jeopardize profitable investment opportunities<sup>57</sup>. Also, a researcher dissects the effects of financial liberalization into direct and indirect effects. The direct effects are the benefits that arise in terms of the removal of frictions in the markets, thus leading to lower borrowing costs. The indirect effects are the negative impacts leading to crises. Although they find that the probability of crises occurring is two percentage points, the

net effect, which combines the direct and indirect effects, leads to positive economic growth<sup>57,58</sup>.

McKinnon/Shaw hypothesis was challenged and criticized by scholars and contended that financial liberalization might nurture financial crisis. They also contended that the policy of low-interest rates was considered an important avenue for promoting investment by keeping interest costs low. They however showed that the policy of controlled or administered interest rates was tantamount to financial repression which is a general distortion in financial prices like interest rates that reduces the real value of financial assets. Thus, the overall volume of savings decreases and investment is naturally and adversely affected<sup>59</sup>.

Another major criticism of McKinnon/Shaw hypothesis is that financial market is liable to market failures and financial liberalization could lead to a fall in output and growth leading to financial instability in the economy, thereby affecting financial deepening negatively. Also, the postulation of McKinnon/ Shaw hypothesis is hinged primarily on the formal financial sector of the economy. However, with the presence of the formal financial sector, funds will be channeled away from the informal sector to the formal sector. This may lead to reduction of total supply of credits to the private sectors which in turn has a negative effect on deepening of the financial sector entirely.

In relevance to this study, the hypothesis opined that financial deepening depends on real income and real interest rate. Also, the hypothesis emphasized that productive investment and capital accumulation occurs because large real money stock makes greater amount of loanable funds available to borrowers which in turn enhances financial deepening.

### **2.2.2 Supply Leading Hypothesis**

This theory was propounded by Schumpeter in 1911. Schumpeter believes a well-functioning financial sector is necessary to facilitate growth in the real sector which resultantly

leads to economic growth. In other words, economic growth is reliant on how well the financial sector is deepened or developed. As the financial sector deepens, there is increase in the supply of financial services. The route through which financial deepening promotes economic growth is explained in the supply-leading hypothesis. The hypothesis is alternatively referred to as “finance-led growth hypothesis”<sup>14</sup>. The existence of well-developed financial sector enhances the creation of financial services as well as accessibility to them in anticipation to their demand by participants in the real sector of the economy. The supply-leading hypothesis presumes that the economy responds to growth in the real sector facilitated by financial development.

The Supply Leading Hypothesis posts a causal relationship from financial development to economic growth, which means, strong financial markets and institutions increase the supply of financial services thus leads to real economic growth. In this regard, many economists are of the school of thought that financial development is important and causes economic growth and are of the school of thought that creation and strengthening of financial institutions and markets could augment the supply of financial services. This is because the financial sector increases saving and apportions them to investments that are more productive. The Theory suggests that financial deepening fuels growth. The existence and development of the financial markets brings about a higher level of savings and investment and enhance the efficiency of capital accumulation. The contention of this hypothesis is that, well-functioning financial institutions can promote overall economic efficiency, create and expand capital accumulation, transfer resources from traditional (non-growth) sectors to the modern growth inducing sectors and also promote a competent entrepreneurial response in these modern sectors of the economy<sup>49</sup>.

The theory assumes that if transaction, information and monitoring costs are sufficiently high, then, no exchange among economic agents is necessary. These desires led to the emergence

of financial institutions and markets that make up the financial sector. Early economists like Schumpeter and Shaw have strongly supported the view of finance led caused relationship between finance and economic growth<sup>58</sup>. These authors are of the opinion that causality proceeds from financial to economic development, it is only at a later stage that financial development leads on to growth.

In support of the supply leading hypothesis, the scholar noted that financial deepening leads to growth, which implies that an improvement in the efficiency of capital accumulation or an increase in the rate of savings enhances financial deepening which thereby leads to economic growth. Specifically, the supporters of supply leading hypothesis opined that as entrepreneurs have new access to the supply leading funds, their expectation increases and new opportunities/horizon materializes which fuels economic growth due to access to private sector credit which is an important indicator of deepening of the financial sector<sup>56,57</sup>. Also a scholar argued that the supply-leading hypothesis centers on the assumption that well-functioning financial institutions have the capacity of driving total economic efficiency, create and expand liquidity, mobilize savings, enhance capital accumulation, transfer resources from non-growth sectors to the more modern growth inducing sectors, and also promote a competent entrepreneur response in these modern sectors of the economy<sup>58</sup>. Additionally, the key proposition of the supply leading hypothesis is that financial deepening is a predictor of economic growth and based on this, financial sector development is perceived as a precursor of optimal allocation of financial resources<sup>59</sup>. This hypothesis is primarily built on the assumption that causal relationship between financial development and economic growth actually runs from the former to the latter. A scholar was of the view that an efficient financial sector tends to reduce transaction and monitoring costs and asymmetric information with benefits of improved financial intermediation<sup>60</sup>. Overall, the supply leading hypothesis has it that growth in the real sector is largely determined by the extent of financial

development. Hence, financing deepening is expected to great opportunities for rapid and sustained growth of the overall economy.

The supply leading hypothesis criticized by a scholar on the basis that financial deepening does not exert significant impact on economic growth but rather when economy grows, more financial institutions, financial product and innovation come into the market in response to higher demand of financial services. Furthermore, one major criticism of the supply leading hypothesis is based on the possibility that the development of the financial sector may result to an impediment to growth when it induces volatility and discourages risk unenthusiastic investors from investing. Specifically, financial innovation allows risk reduction and may low precautionary savings and investment thus slow down growth<sup>61</sup>.

In relation to the study, a well-developed financial intermediary facilitates the development of the economy through mobilization of savings, facilitation of trading and the diversification of risks. These important services lead to efficient allocation of resources; a more rapid accumulation of physical and human capital; and a faster technological innovation which eventually leads to a faster and long-term economic growth. Hence, this theory is relevant to this study as it shows the link between financial sector development, financial performance and economic growth<sup>62</sup>.

### **2.2.3 Financial Intermediation Theory**

The work of Raymond Goldsmith in 1969 was the basis of the financial intermediation theory. In work, Goldsmith gave wide-ranging facts related to the financial structure and the economic development. It was determined that in the course of economic development of a nation, the financial system develops faster than the wealth of the nation. Determining of the size of the financial system in a country is the division of the role of saving and investment

among the various units in the economy<sup>63</sup>. The observation made in the 1960s is still relevant to the modern-day format of financial intermediation.

The financial deepening theory was developed by Leland and Pyle in 1977. The theory emphasized the roles of the financial intermediaries in the financial systems. The theory establishes that the contribution of intermediaries is to ensure steady flow of the funds from the surplus unit to the deficit units. The role of financial intermediaries is essential in that it ensures the growth of the economy through supply of financial commodities<sup>64</sup>. The financial intermediaries ensure the creation of a platform that enables transaction of different commodities. The financial intermediaries exist due to the market imperfections. As such, in perfect market situation, with no transaction or information costs, financial intermediaries would not have existed. Numerous financial markets are characterized by informational differences between buyers and sellers<sup>64</sup>.

Furthermore, the financial intermediary theory analyzes the functions and roles of financial intermediaries in the economy, the way in which the financial intermediation influences the economy on the whole and the effects of government policies on financial intermediaries. Most of the studies performed highlight their roles in achieving a durable economic growth, and the impact of regulations on financial intermediation, accentuating the role of regulatory authorities in the supervision and control of financial intermediaries<sup>65</sup>.

The financial intermediation theory is based on the assumption of the presence of informational asymmetry and the agency theory. In principle, the existence of financial intermediaries is explained by the existence of the following categories of factors: high cost of transaction, lack of complete information in useful time; and the method of regulation. In financial markets, information asymmetries are particularly pronounced. Investors tend to borrow with the collateral and entrepreneurs have inside information about their own

investment seeking financing. It explains the importance of intermediation process of financial intermediaries in the economy as a whole<sup>66</sup>.

In support of the financial intermediary theory, emphasized that intermediaries eliminate (or reduce) the need for self-financing of investments. In particular, by providing liquidity, financial institutions permit risk adverse savers to hold deposits rather than liquid (but unproductive) assets. The funds obtained by the financial institutions are then available for investment in productive capital. Hence, financial institutions should finance any positive net present value project if the cost of investment is below the expected returns<sup>67</sup>.

The financial intermediation theory is criticized on the ground that it is heavily focused on the functions of financial institutions that are no longer crucial in mature financial systems. Also, the emphasis of financial intermediation theory on the role of intermediaries as reducing the frictions of transaction costs and asymmetric information is too strong; while these factors may once have been central to the role of intermediaries, they are increasingly less relevant<sup>68</sup>. A scholar suggested a view on financial intermediaries that centers on two roles. First, they are the facilitators of risk transfer and deal with an increasingly complex maze of financial instruments and markets. The key area of intermediary activity therefore has become risk management, whereas traditional intermediation theory offers little to explain why institutions should perform this function<sup>69</sup>.

The modern theory of financial intermediation believes that the financial intermediaries are active because market imperfections prevent savers and investors from trading directly with each other in an optimal way. The most important market imperfections are the informational asymmetries between savers and investors. Financial intermediaries, banks specifically, fill – as agents and as delegated monitors – information gaps between ultimate savers and investors. This is because they have a comparative informational advantage over ultimate savers and

investors. They screen and monitor investors on behalf of savers. This is their basic function, which justifies the transaction costs they charge to parties. They also bridge the maturity mismatch between savers and investors and facilitate payments between economic parties by providing a payment, settlement and clearing system. Consequently, they engage in qualitative asset transformation activities. To ensure the sustainability of financial intermediation, safety and soundness regulation has to be put in place. Regulation also provides the basis for the intermediaries to enact in the production of their monetary services<sup>70</sup>.

The contemporary society has continued to appreciate the role played by financial intermediation in development of the economy according to study<sup>71</sup>. Theoretical and empirical researchers have shown that financial intermediation plays an important role in the growth of the economy. The study establishes that one of the reasons for financial exclusion is low income and assets among some people in the society. With financial intermediation, there is an efficient allocation of capital within the economy with the aim of ensuring that economic growth. Another factor mentioned to contribute to financial exclusion is limited information related to certain financial aspects. Financial intermediation provides information to the owners of capital and the borrowers of capital. The financial intermediation process brings together the deficit and surplus units in an environment not known to them<sup>72</sup>. The banks through financial intermediation ensure that there is financial inclusion. In the process of ensuring that there is access to information, financial literacy and efficient allocation of the resources in the country, there is a risk that the banks take on behalf of the different players in the economy<sup>73</sup>. The risk taken during the financial intermediation process has to cover the financial institution through the charging of the interest rate. This part of financial intermediation is critical to the study since it highlights the fact that financial institutions can earn through their role of financial intermediation hence improving their financial

performance. The elements of financial intermediation have proven critical in ensuring financial inclusion, meaning that research of this nature would want to determine whether the financial inclusion results to profits for the financial institutions that offer intermediation services<sup>74</sup>.

The financial intermediation theory is relevant to this study as it emphasizes the functions of the financial intermediaries in mobilizing, channeling, pooling savings and increasing investment levels in the economy, thus improving their efficiency and expanding their functions contributes immensely to the growth of the economy.

#### **2.2.4 Theoretical Framework**

This study reviewed three theories in the literature. These theories are McKinnon/Shaw Theory, Supply Leading Hypothesis, and Financial intermediation theory. Considering financial deepening and profitability of listed Deposit Money Banks in Nigeria, this study focused on Supply Leading Hypothesis and Financial Intermediation Theory.

The researcher employs these two theories because, the later (Financial Intermediation Theory) was looking at the financial intermediaries as platforms that enable transactions of different commodities. This implies that the role of financial intermediaries is essential because it ensures the growth of the economy through supply of financial commodities<sup>75</sup>. The financial intermediation theory is based on the assumption of the presence of informational asymmetry and the agency theory. While the Supply Leading Hypothesis on the other hand, presumes that the economy responds to growth in the real sector facilitated by financial development. Supply Leading Hypothesis believes that, strong financial markets or institutions increase the supply of financial services thus leads to real economic growth. This occurs because the financial sector increases savings and apportions them to investments that are more productive. The theory suggests that financial deepening fuels growth. Therefore,

the Financial Intermediation Theory assumes as a main platform that enable transactions of different commodities in the banking sector while the Supply Leading Hypothesis assumes that the financial deepening will lead to economic growth when there are strong financial markets or institutions<sup>75</sup>.

In addition, these theories are of the opinion that a well-developed financial intermediary facilitates the development of the economy through mobilization of savings, facilitation of trading and the diversification of risks. These important services lead to efficient allocation of resources; a more rapid accumulation of physical and human capital; and a faster technological innovation which eventually leads to a faster and long-term economic growth. Therefore, the theories postulate that deepening of the financial sector enhances financial performance thereby improving the growth process in any economy<sup>75,76</sup>.

## **2.3 Review of Empirical Studies**

### **2.3.1 Rural Financing and Deposit Money Banks Performance in Nigeria**

The impact of financial inclusion on financial performance of listed Deposit Money Banks (DMBs) in Nigeria, in the measurement of the financial inclusion using Micro, Small and Medium Enterprises Financing, Rural Financing, Number of branches of DMBs, Pricing and Usage of banking services, while performance was measured with return on assets (ROA). The researcher adopted ex-post facto research design. The population of the study comprised of the 14 listed deposit money banks on the Nigerian Stock Exchange for the period of 2005-2018. The study censured all the 14 listed DMBs as the sample size. The study collected secondary data from Central Bank of Nigeria statistical bulletin and financial reports of the sampled banks. Panel multiple regression analysis was utilized to analyse the data and Hausman specification test revealed that fixed effect model was more appropriate to random effect model. Test for adequacy were performed on the residuals and the result indicated that

the residuals were homoscedastic and had no serial correlation, suggesting that the model is good. The study found that rural financing and number of branches of deposit money banks have statistically significant effects on profitability of DMBs in Nigeria. The study concluded that financial inclusion improves profitability of DMBs in Nigeria. Based on the findings, this study recommended that DMBs should increase the amount of loan and advances given to rural areas and Micro, Small and Medium Enterprises as this will strengthen profitability of DMBs in Nigeria<sup>77</sup>.

The impact of SME's financing on bank profitability in Ghana, using regression model anchored on fixed effect model. The researchers found out that SME financing has a significant positive impact on banks financial performance in Ghana. The study offered a fresh perspective on the SME financing and bank profitability. The effect of the financial inclusion on financial performance of firms in countries with low financial development, using firm-level data panel for a sample of 26 countries. The investigators found that there is a significant positive impact of financial inclusion on firms' performance. The researchers highlighted access to funds by SMEs as a very important financial inclusion variable<sup>78</sup>.

In the same manner, an investigation on the impact of loans to SMEs and banks profitability in Iran, using panel data regression model based on GMM. The investigators concluded that SMEs financing has a negative significant impact on profitability of banks in Iran as banks considered SME financing a highly risky business venture<sup>79</sup>.

The impact of financial inclusion on financial performance of microfinance institutions in CilemEjoheza, Rwanda, using a combined technique of primary and secondary data anchored on a regression model. It was concluded that a positive correlation existed between customers' deposits and financial performance of banks. The researcher highlighted financial inclusion variable on rural areas deposits mobilized by banks<sup>80</sup>.

Financial inclusion, bank concentration and firm performance research, using a firm level data of 55,596 firms in 79 countries. The experience drew was that the usage and distribution of banking and financial services across firms has a positive impact on financial performance of firms<sup>81</sup>.

A case of Equity Bank Limited on the effects of deposit mobilization on financial performance in commercial banks in Rwanda adopting a combination of primary and secondary data analysis tools. The researchers found nexus between a rise in deposits and financial performance of banks<sup>82</sup>. Considering the impact of financial inclusion on banks' profitability in Karachi, Pakistan, using correlation statistics and linear regression model for the data analysis of the study. It was found that usage of banking services has no significant relationship between on financial performance of banks as a result of the fact that banks do not pursue financial inclusion as a corporate strategy to the depressed population who were excluded from usage of financial services/products in a study<sup>83</sup>.

Observing the effect of level of deposits on financial performance of commercial banks in Kenya, based on regression model to find the nexus between deposits level and profitability of banks. It was observed that there is a positive significant relationship between deposits level and financial performance of banks. The study was precise in using the appropriate research method in data analysis considered to be very reliable<sup>84</sup>. Investigating the effect of mobile banking on financial performance of banks in Kenya, based on multiple regression models. The study found that usage of banking services via mobile banking has a positive effect on Financial Performance of Kenyan commercial banks.

The impact of usage of banking services (internet banking) on financial performance of commercial banks studied. Sample includes all community banks with asset size less than 1 billion dollars in Iowa, Minnesota, Montana, North Dakota, and South Dakota. In total 1183

community banks were identified in these 5 States in United States of America. The investigator found that usage of online banking services impacted positively on the financial performance of banks. The study demonstrated a positive correlation between usage of banking services and financial performance of banks<sup>85</sup>.

The impact of interest rate policy and financial performance of Deposit Money Banks in Nigeria, using a combination of regression and correlation methods to find and analyze the nexus between interest rate and bank performance. The study found that bank interest rate has no significant impact on profitability and efficiency of banks. An elaborate methodology to analyze data during the consolidation era was used<sup>86</sup>.

An investigation on the effect of interest rate on the financial performance in Kenyan deposit taking commercial banks, using a multiple linear regression technique. The study found that lending interest rate has a positive significant effect on financial performance of banks in Kenya<sup>87</sup>.

The financial inclusion impact on Banks' profitability in Karachi, Pakistan, the examiners used correlation statistics and linear regression model for the data analysis of the study. They found out that the pricing of banking services has no significant impact on financial performance of banks<sup>88</sup>.

Equally on the evaluation of the impact of interest rate on financial performance of banks in Pakistan, using a regression model. The researchers found that interest rate has a significant impact on profitability of banks in Pakistan<sup>89</sup>.

The effect of lending interest rate on financial performance of deposit taking microfinance institutions in Kenya, using multivariate regression model. The study found that there is a strong relationship between lending interest rate and financial performance of deposit taking

microfinance institutions. The study offered an incisive multivariate analysis. However, the investigation was limited by scope which was restricted to microfinance institutions<sup>90</sup>.

In the same manner, the impact of interest rate policy and financial performance of deposit money banks in Nigeria, using a combination of regression and correlation methods to find and analyze the nexus between interest rate and bank performance. The researcher posits that interest rate of banks may not necessarily be a sufficient tool for financial stability for sustainable development and he advised the banks that interest rate in the financial market must be market driven to allow for efficient process<sup>91</sup>.

The impact of interest income on the performance of DMBs in Nigeria. The study employed data from the annual reports and accounts covering the period 2012-2017 of fifteen (15) selected interest charging DMBs out of the twenty-one (21) listed banks on the Nigerian Stock Exchange as on December 31, 2018. The results obtained from the random effect model indicate that interest income and capital adequacy contribute and significantly drive the profitability of the Nigerian DMBs. The study therefore recommends that DMBs should maintain an adequate level of capital and a stable interest income through effective management of loans and advances in order to increase the income generated from lending and consequently improve their profitability for the benefit of their shareholders<sup>92</sup>.

In the role of institutional quality in promoting financial inclusion, where the role institutions play in fostering inclusion across countries were observed. The study using panel data corresponding to 125 countries for the period 2004-2015, the study sought to understand the country institutional characteristics associated with the ownership of deposit accounts. A standard regression model is estimated using fixed effects panel data techniques along a financial inclusion proxy and three measures of institutional quality. We provide the first empirical justification for the hypothesis that financial inclusion is non-negligibly driven by

the institutional context. Specifically, rule of law is crucial in enhancing financial inclusiveness, more so in sub-Saharan Africa (SSA) where it has a stronger positive effect relative to other regions. In view of the fact that formal finance can be used as a means of boosting economic growth and combating social exclusion, increasing transparency of the legal framework, having fair judicial proceedings and good administration are essential ingredients for raising financial inclusiveness. The evidence presented in the paper may therefore help with the sequencing of institutional reforms that could promote financial inclusion<sup>93</sup>.

Investigation of the relationship between lending interest rate and financial performance of commercial banks in Kenya, using a linear regression model. The investigator concluded that the lending rate affects the financial performance of commercial banks in Kenya. The study considered pricing of banking services as related to financial performance of commercial banks<sup>94</sup>.

The branch expansion and the performance of banks studied in Indonesia, using path analysis to link the causal relationship between number of branches of banks and financial performance. The study found that there is no significant impact of number of branches on the financial performance of banks<sup>95</sup>.

The evidence drawn from the investigation carried out in the Saudi Arabia Banks on the effect of banking expansion on the profit efficiency, using a secondary data spanning a period of 1988 to 2007, was that network of branches has positive effect on profit efficiency<sup>96</sup>.

The impact of number of U.S. bank branches on overall financial performance of institutions, using a pooled regression model to analyze data. The study found that no significant relationship exists between number of branches and banks financial performance<sup>97</sup>.

The relationship between bank branches spread and overall financial performance of big banks in Europe, adopting a complimentary non-parametric technique evaluated. The study found nexus between bank branch offices and overall financial performance of banks and that, banks can increase their financial performance of its branch network<sup>98</sup>.

Branch profitability, insight from rural financing banking industry in Ghana, using a multiple regression model. The study found a negative statistically significant impact of rural financing on bank profitability<sup>99</sup>.

The study by investigated the effect of financial performance of rural banks in Ghana, using a regression model to establish nexus between rural financing and banks profitability. The study found as positive significant effect of rural financing on financial performance of banks<sup>100</sup>.

The paper investigates the determinants of bank profitability in the light of bank specific variables, industry related factors and macroeconomic influences, using a panel of selected banks that account for over 60% of total bank assets in Nigeria. Findings show that bank profitability is largely determined by credit risk and other factors that relate to the internal organization of banking firms. Market concentration was significant as a determinant of bank profitability. There was no evidence of structure-conduct-performance hypothesis, however empirical results show that there is no collusive behavior amongst banks. Exchange rate is significant as a determinant of bank profitability through return on equity and non-interest margin, but not significant to return on asset as a measure of profitability<sup>101</sup>.

Likewise, in the nexus between rural financing and bank profitability in Ghana, using a panel data regression model. The researchers found that rural financing has a positive significant effect on financial performance on rural banks<sup>102</sup>.

The relationship between financial inclusion and performance of rural co-operative banks in Gujarat in India, using qualitative and quantitative data obtained from Ambasan, Jotana and Khadalpur villages and rural banks studied in Gujarat<sup>103</sup>. The study examined the financial inclusion in rural areas, reasons for low inclusion, satisfaction level of the rural people toward banking services and to assess the performance of the banks which are working in the rural areas which mainly include the co-operative banks and regional rural banks. Structured questionnaire designed on the basis of literature review was used to collect data from 200 people. The study found that there is no significant relationship between rural financing and profitability of banks in Gujarat, India as a result of high rate of non-performing loans.

The relationship between financial development and inclusive rural financial system in Nigeria, using Vector Error Correction Model, Johansen co-integration test and impulse response function methods of analysis<sup>104</sup>. The study concluded that access to financial markets is still limited in the rural areas as a result of lack of inclusive rural financial system in Nigeria. Therefore, the study recommended among others that it is necessary to increase the efficiency of rural financial institutions which may promote inclusive rural financial system for effective financial development.

### **2.3.2 Pricing of Banking Services and Deposit Money Banks Performance in Nigeria**

The role of deposit money banks (DMBs) as a critical component of the financial intermediary component of the financial systems for the benefit of their shareholders and the economy at large has become more pronounced in recent times. Banks help link both the surplus spending unit and the deficit spending unit for a fee which is interest income. Interest income is generated from the traditional activities of banks as a reward for their intermediation<sup>105</sup>. It was observed that the adequate performance of financial institutions is of crucial importance to their customers in an assessment of the measuring performance of

banks. The prices and quality of their products are determined by efficiency and competition. Since efficiency and competition cannot be observed directly, various indirect measures in the form of simple indicators or complex models have been devised and used both in theory and in practice. The article demonstrates that measuring the performance of banks was hard and that indicators differ strongly in quality. It investigates which methods were to be preferred and how by combining certain indicators stronger measures may be developed. These measures were subjected to a predictive validity test<sup>106</sup>.

In the monetary policy and financial performance of deposit money banks investigated in Nigeria<sup>107</sup>. The study considered the influence of monetary policy on the financial performance of deposit money banks in Nigeria. The study engaged the use of a time series data for 35 years, from the period 1984 to 2018; all deposit money banks as captured by the Central Bank of Nigeria Statistical Bulletin (2015) were considered. The effect of liquidity ratio, lending rate, loan to deposit ratio and cash reserve ratio were examined on the financial performance of deposit money banks measured by their net worth and total credits. The data was analyzed using descriptive and inferential statistics. Based on the result of stationarity test, the ordinary least square method and the Autoregressive Distributed Lag method were employed. A short run model of net worth and long run model for both the log of net worth and the log of total credits were estimated. The results revealed that the mean of net worth and total credits are #5,455.27 and #79,608.63 respectively. In the long run, monetary policy variables including liquidity ratio, lending rate, loans to deposit ratio and cash reserve ratio had no significant effect on the log of net worth. However in the short run, variations in the liquidity ratio, loans to deposit ratio and the cash reserve ratio for previous years had significant effect on the log of net worth in the current year. When financial performance is measured as total credits, the liquidity ratio and loans to deposit ratio had positive significant effect in the long run. The cash reserve ratio had a negative significant effect in the long run.

The log of lending rate was insignificant in both the long and short run. The study concluded that monetary policy significantly explains the financial performance of deposit money banks both in the short and long run<sup>108</sup>.

In a study on the effect of monetary policy on banking sector performance in Nigeria; findings ascertain the factors that influence the banking sector performance using bank's deposit liabilities as proxy for bank performance. The study period covers 36 years from 1970 to 2006, using selected indicator and employing the OLS regression technique. We tested the null hypothesis of no significant relationship between bank deposit liabilities and chosen indices of banking performance, namely Exchange Rate (EXR), Deposit Rate (DR) and Minimum Discount Rate (MDR). Results showed that overall; monetary policy has a significant effect on the banks deposit liabilities<sup>109</sup>. Main while, on individual basis, the study discovered that Deposit Rate (DR) and Minimum Discount Rate (MDR) had a negative influence on the banks deposit liabilities in Nigeria, whereas Exchange Rate (EXR) had a positive and significant influence on the banks deposit liabilities in Nigeria. The study concluded therefore that monetary policy plays a vital role in determining the volume of bank's deposit liabilities in Nigeria. The study recommended that government and its monetary authorities should strive to create a conducive environment for banking sectors to grow in the country by packaging appropriate monetary policies that would guarantee and enhance growth and development of the banking sectors in Nigeria<sup>109</sup>.

In the financial performance of rural banks studied in Ghana, using a multiple regression model<sup>110</sup>. The researchers found that a significant relationship exists between rural financing and financial performance of Naara Rural Bank in Ghana. The study was relevant and good reference point in rural financing and financial performance of bank. However, it was a case study of Naara Rural Bank of Ghana, which could hardly be generalized for the entire industry.

In the impact of electronic banking on financial inclusion examined in Nigeria<sup>111</sup>. It was noticed that the concept of financial inclusion has continued to gain global acceptance since it was identified as one of the key drivers of inclusive economic growth and development. Financial inclusion is one of the objectives of the Central Bank of Nigeria's cashless policy introduced in Nigeria in the year 2011. In the light of this, the research seeks to examine the impact of electronic banking on financial inclusion in Nigeria. The study used the total number of automated teller machines and point-of-sale devices in Nigeria as proxies for electronic banking and the proportion of banked adult population to total bankable adult population in Nigeria as proxy for financial inclusion. The study adopted correlational and ex-post facto research designs with the aid of computer-based multiple regression analysis. It was observed that automated teller machines do not significantly impact financial inclusion while point-of-sale devices significantly impact financial inclusion in Nigeria. In line with the findings of the study, it is recommended that deposit money banks should remove the bottlenecks associated with the use of their automated teller machines and strive to meet international best practice. Also, more point-of-sale devices should be readily available and easily accessible by customers<sup>112</sup>.

Electronic banking on the profitability of commercial banks in Nigeria. The study sought to examine the relationship between different e-banking channels and the profitability of commercial banks in Nigeria. Four e-banking channels (automatic teller machines, electronic mobile banking, internet banking transactions, and point of sales services) were identified and regress against the profit before tax of commercial banks operating in Nigeria between 2006 and 2014. The study used the confirmed ECM model (via residual diagnosis) to test the formulated hypotheses. The results revealed that the over impact of electronic banking on the profitability of commercial banks was significant; whereas, the impact of the individual channels was varied. The study recommends, amongst others that, commercial banks should

intensify effort to deploy more ATM delivery points and also make them more effective and efficient and that the regulatory authorities should also collaborate with the banks to put in place an enabling operating environment and regulatory framework to bring out optimal deployment of these services to customers. This is especially with respect to addressing the issue of failed transactions<sup>113</sup>.

Presenting a simple model showing the impact of financial inclusion on monetary policy in Nigeria between 1980 and 2012. The result of the study supports the notion that growing financial inclusion would improve the effectiveness of monetary policy. However, the coefficient of the number of bank branches has the wrong sign and this is explained by the fact that, in opening branches, banks mainly pursue profits but not financial inclusion which is a policy objective, so that there are clusters of branches which are under-utilized while numerous locations which are considered not favourable for balance sheets are under-branched<sup>114</sup>.

Examining the determinants of assets performance of deposit money banks (DMBs) in Nigeria after the banking reforms of 2004 through 2005. A sample of sixteen (16) banks consisting of ten DMBs with international business licenses and six DMBs with licenses to operate only locally were selected, with data on internal determinants (Size, Liquidity, and diversification) obtained from individual audited annual financial report of the selected banks while that macroeconomic variables (real Gross Domestic Product growth rate and inflation rate) were sourced from Central Bank of Nigeria official website and regressed on assets performance denoted by ROA for the period of thirteen years (13), from 2004 to 2016. The study employed descriptive statistics, correlation analysis, and panel generalized least square (cross-section random effect). The results revealed that size, liquidity measured by total loans, and advances to total deposits as well as real GDP growth rate were significant determinants of the performance of the asset of DMBs in Nigeria. Also, diversification measured by non-

interest incomes to total assets and inflation rate were found not to have a significant impact on the performance of the asset of deposit money banks in Nigeria. The study, therefore, recommended that bank managers should institute a sound, efficient, and sustainable assets management framework to ensure that the income generation capacity of banks is widened, and regulatory agencies should review existing regulations and make new policies that would encourage deposit money banks in Nigeria<sup>115</sup>.

An empirical explanation on the impact of financial inclusion instruments on performance of Nigerian banks. Data were collected from World Bank database, Central Bank of Nigeria Statistical Bulletin, and annual reports of deposit money banks. The data were analysed with Fixed Effect Regression Model. The Regression analysis was conducted after carrying out the Breusch-Pagan Lagrangian Multiplier (BP-LM) test to determine the suitability of either the fixed effect or random effect model. The findings revealed positive and significant impact of Automated Teller Machines, Bank embranchment, and point of sale terminals on bank performance at both 1% and 5% levels of significance. However, the result on the number of bank account is not significant. The study concludes that improvement in the quality of financial services will attract more customers to the bank and boost their performance. It is thus recommended that more ATMs, POS and Branches be put in place for better inclusive finance<sup>116</sup>.

An analysis of the profit efficiency of the Saudi Arabia Commercial banks during the period 1998-2007. The results of his study indicated that availability of phone banking, number of ATMs and number of branches had a positive effect on profit efficiency of Saudi banks. On the contrary, the study found that the number of point of sale terminals (POSs), availability of PC banking and availability of mobile banking did not improve profit efficiency<sup>117</sup>.

Studying another dimension of financial inclusion, in order to investigate whether branch network expansions/bank embranchment by Japanese regional banks influence their management performances positively at a time when management environments surrounding regional financial institutions have become increasingly severe due to the population decreases and shrinkage of regional economies. Thus, from the panel data analysis, it is deduced that establishing more branches is effective in increasing the total sum of loans and bills discounted by each bank because regional banks with many branches can make contact with more customers which in turn increase their profitability<sup>118</sup>.

From Africa perspective, a study focused on use of technology such as Automatic Teller Machines (ATMs), mobile phone banking internet banking and agency banking and its impact on financial performance of commercial banks in Kenya and how these inclusion innovations have moved them closer to branchless banking. The target population of the study was 42 commercial banks licensed in Kenya by 2010. The study used time series data from central bank of Kenya (CBK) and Kenya bankers' association (KBA) annual bank supervisory reports (2010-2016). Through multiple regressions and correlation analysis the study found out that there is a strong positive relationship between financial inclusion strategies and financial performance<sup>119</sup>.

Conducting an investigation on the effect of increased proliferation of bank branch spread, ATMs and mobile banking services on the financial performance of listed banks in Kenya. The study adopted a descriptive research design and the study population included management and operational level employees of the 11 banks listed on the Nairobi Securities Exchange. The study found that bank branch spread, proliferation of ATMs and mobile banking services had positive but weak effect on financial performance of banks<sup>120</sup>.

In the Nigeria, a study was principally based on primary data collected from users of the ATMs and a total of 1,141 users of ATM were sampled. The study used weighted scores of the responses to success factors identified in the literature that were analysed using the factor analysis simulation model. The study concluded that the provision of adequate infrastructure such as power is critical for effective integration of the Nigerian banking system to the global network of electronic payment via ATMs<sup>121</sup>.

Assessing the implications of the contribution of the branches to banks performance. The study used the whole banks in Nigeria during the period 1981 and 2013 using a pooled data analysis on ordinary least square (OLS). The variables used include the total number of banks branches in rural and urban area and those domiciled abroad regarded as foreign branches, while the growth in Total Asset is proxied as the dependent variable. Findings showed that there is a positive but no systematic relationship between number of banks and asset growth perhaps because banking organizations optimize the size of their branch network operations as part of an overall strategy involving both branch-based and non-branch-based activities<sup>122</sup>.

A specific investigation on the effect of Automated Teller Machine (ATM), Point of Sale (POS) and Mobile Payment (MPAY) on the profitability of commercial banks in Nigeria. A total sample of five (5) banks was considered for the period 2009 to 2015 and the study adopted the Panel Least Squares (PLS) estimation technique as the analytical tool. From the data collected from the Central Bank of Nigeria (CBN) Statistical Bulletin and Annual Reports and Statements of Accounts of the five banks used in the study, findings revealed that Automated Teller Machine (ATM) and Mobile Phone payment have significant effect on the profitability of commercial banks in Nigeria. However, Point of Sale (POS) has an insignificant effect on commercial banks' profitability in Nigeria<sup>123</sup>.

An investigation that adopted Panel unit root and SURE model estimation technique, to conduct quantitative analysis of the impact of mobile banking transactions on bank profitability among four selected old and new generation banks in Nigeria. The results of the study were analyzed using economic a priori criteria, statistical criteria and econometric criteria. The positive and statistically significant relationship between automated teller machine of old and new generation banks in Nigeria indicates that automated teller machine is a major factor that contributes to old and new banks performance in Nigeria. The positive and statistically significant relationship between point of sale of old and new generation bank in Nigeria indicates that point of sale is a major factor that contributes to old and new banks performance in Nigeria<sup>124</sup>.

An examination on the effect of financial derivatives on the profitability of selected deposit money banks in Nigeria. Panel regression model was used by collecting data from the annual financial report of all the eight (8) banks with international authorization status in Nigeria and covers a period of five years between 2012 and 2017. The independent variable, financial derivative was proxies using financial derivative liabilities (FDL) and financial derivative assets (FDA) with loan and advances to customers (LTC) as a controlling variable. Pooled Ordinary Least Square (OLS), fixed effects and random effects tests were conducted on the variables and were also subjected to the Hausman test to choose the preferred estimator. The result indicates that the model is positive and significant. FDA and LTC have positive and significant effect on the profitability of deposit money banks in Nigeria while FDL is negative and insignificant. The study therefore concludes that financial derivative has positive and significant effect on the profitability of deposit money banks in Nigeria. Based on the findings, the study recommends that deposit money banks should increase their loan asset to better improve their profit. Limit their financial derivative liabilities and ensure that financial derivative assets are better utilized<sup>125</sup>.

Presenting an investigation into financial inclusion innovations adopted by commercial banks in Kenya. The study majored on use of technology such as Automatic Teller Machines (ATMs), mobile phone banking internet banking and agency banking and its impact on financial performance of commercial banks in Kenya and how these inclusion innovations have moved us closer to branchless banking. Through multiple regressions and correlation analysis the study found out that there is a strong positive relationship between financial inclusion strategies and financial performance. Based on these results, the study recommends that financial inclusion innovations should be emphasized in the financial sector through regulatory and advisory bodies since it leads to improved financial efficiency. In addition, the study also recommends that financial institutions to embrace agency, internet banking and ATM banking to include the excluded people in financial services and products throughout the country since they proved significant in influencing financial performance. The study recommends further research on financial inclusion on microfinance institutions in Kenya and their impact on micro and small business organizations<sup>126</sup>.

The effect of liquidity on financial performance of deposit money banks studied in Nigeria<sup>127</sup>. The study appraised effect of liquidity on financial performance of deposit money banks in Nigeria. A sample of five (5) banks was used for the study. Secondary data were collected from the firms for ten years period, 2007 - 2016. The data were analyzed using multiple regression analysis. Results show that Liquidity has positive and significant effect on banks' profitability ratios and that liquidity also has positive and significant effect on Return on Capital Employed. The study recommends that there is need to replace being practiced in the advance economies of the world. Investing on human capital may be beyond just employees but also frequently creating an interactive forum where bank clients could be sensitized on a variety of activities they indulge in that are capable of hindering effective liquidity management, need to invest on human capital by banks as it offers the highest returns in

terms of increasing performance and it also enhances the level of competence of the employee and that the regulatory authorities should put in place appropriate policy with compliance measures to check high volume cash transaction and cash hoarding prevalent in the economy. The Central Bank of Nigeria must critically review and follow-up or monitor the effectiveness of liquidity policy tools in banks and where necessary, appropriate sanctions placed on erring banks to ensure effective implementation of these policy tools in an attempt to achieve desired liquidity level<sup>128</sup>.

An analysis of relationship between liquidity and performance of Deposit Money Banks in Nigeria. Specifically, the study investigated the effect of loan-to-deposit ratio and interest rate on return on equity of DMBs in Nigeria. Loan-to-deposit ratio and interest rate served as the explanatory variables. On the other hand, return on equity served as the dependent variable and served as a measure of performance in the DMBs. The study covered the period 2005 to 2015 and data were collected from the Annual reports of First Bank Plc and Fidelity Bank Plc. The study employed the Pooled (Panel) Least Squares (PLS) technique in order to investigate the 'aggregate effect' of liquidity on the selected Deposit Money Banks (DMBs) in Nigeria. Findings showed that liquidity has a negative and insignificant relationship with DMBs performance in Nigeria while interest rate has a positive and significant effect on DMBs performance in Nigeria. The study recommends that policy makers should formulate and implement policies that would curb unnecessary risk taking in the banking industry so as to prevent the banks from overshooting that threshold at which the loan-to-deposit ratio increases rather than decrease banks' performance<sup>129</sup>.

Banks' Characteristics and Earnings of Deposit Money Banks studied in Nigeria, looked at relevance of banking sector in an economy as defensible for the fact that it is the foremost channel of savings and its allocations to various economic units. Banks are characterized by some unavoidable variables, for the study, they are capital, loans and advances and liquidity.

It was therefore assumed that banking business, especially the deposit money banks in Nigeria cannot financially perform satisfactory without these variables in place. The objective of the study was to examine the impact of these characteristics on profitability. The researchers adopt ex-post facto research design and secondary source data drawn from the financial statements of the selected banks were used. Regression analysis was adopted in analyzing the data. The findings of the study show that bank capital, loan and advance have a significant relationship with earnings but liquidity is not during the period of study. The researchers recommends that the Nigerian banks' regulatory authorities should focus and continue to regulate banks' capitals as necessary with a view to improving the profitability of deposit money banks in Nigeria, the management of deposit money banks, should develop credits policies that will always be in agreement with the CBN's policies on credits and CBN should review the liquidity requirements with a view to investing idle liquidity to encourage earnings<sup>130</sup>.

The earnings management and financial performance of Deposit Money Banks in Nigeria, was aimed at assessing the influence of accrual-based earning management on financial reports of deposit money banks in Nigeria. The research was motivated by the corporate collapse and failures experienced in the banking sector amidst the clean audit reports. The methodology adopted was ex-post facto. Using descriptive and inferential statistics, a sample of ten (10) deposit money banks (DMBs) were judgmentally selected for a period of eight (8) years, which resulted in eighty (80) data points. The data were obtained basically from published annual reports of accounts and accompanied notes to the financial statements. The results of Pearson Product-Moment Correlation and Linear multiple regression, revealed that discretionary accruals exerted significant negative relationship on the returns on asset of deposit money banks in Nigeria in pre (  $p = .004$ ) and post (  $p = .005$ ) International Financial Reporting Standards (IFRS) era. The results also showed that there existed relationships

between accrual-based earnings management and financial performance of DMBs. Findings from the study revealed that earnings management existed in the DMBs. Based on the results; it was recommended that proper and adequate measures should be put in place for the evaluation, examination, and scrutiny of financial statements of DMBs<sup>131</sup>.

The investigation of the asset quality and bank performance: a research of commercial banks in Nigeria. The study examined and evaluates banks asset quality and performance in Nigeria using secondary data obtained from the annual reports and accounts of the six largest banks listed on the Nigeria Stock Exchange based on market capitalization with a sample interval of fifteen-year period from 1999 to 2013. The investigator adopted the use of ratios as a measure of bank performance and asset quality since it is a verifiable means for gauging the firms' level of activities while the data were analysed using the Pearson correlation and regression tool of the SPSS. The findings revealed that asset quality had a statistically relationship and influence on bank performance. Based on the findings the study recommends policies that would encourage revenue diversification, minimize credit risk, and encourage banks to minimize their liquidity holdings. Further research on factors influencing the liquidity of commercial banks in the country could add value to the profitability of banks and academic literature<sup>132</sup>.

In a similar research which considered that the banking crisis, whether in form financial distress or outright failure emanates from poor asset quality and unusual combination of economic conditions. Hence, the study examines the effect of asset quality on the performance of deposit money banks in Nigeria. The study appraised the relationship between the ratio of non-performing loan which serves as a proxy for asset quality, liquidity, size, capital adequacy and management efficiency and returns on equity (ROE) which serves as the variable to measure bank performance. The study uses a sample of fifteen (15) deposit money banks in the Nigerian Stock Exchange. The study used secondary data obtained from

Audited Annual Reports of Nigerian listed deposit money banks for a period of eleven years (2006- 2016). Prior studies in Nigeria used Pearson correlation, Ordinary least square, t-test statistics; however the study used a dynamic estimation technique (Generalized Method of Moments (GMM) via Stata (ver.13) statistical package. The study reveals that asset quality was negatively and significantly related to ROE while management efficiency and Bank size are positively and significantly related to ROE. However, capital adequacy and liquidity were not significantly related to ROE. Thus, it was recommended that banks improve their quality of assets by diversifying their loan portfolio and ensure that their assets were more of performing rather than non-performing assets by lending to the productive sector of the economy. It was also recommended that Nigerian banks should improve their capability in managing credit and supervisory authorities should improve their ability to detect early non-compliance of banks with prudential requirements<sup>133</sup>.

An examination of the effect of financial risks on performance of Deposit Money Banks (DMBs) using the identified explanatory variables of financial risks, viz: Credit risks, Insolvency risks, Liquidity risks and Market risks covering a period of 12 years (2007- 2018). The methodology of the study employed was panel regression models estimated using Unobserved Effects Model (UEM), while the result of the Hausman test indicated between fixed effect model and random effect model at 5% inference. The study findings showed that Credit Risk was negative and statistically significant to deposit money banks' performance [ $\beta = - 13.0495$ ; Pval = 0.013]. The result also shows that Liquidity Risk is inversely and insignificantly related to banks' profitability [ $\beta = - 0.156$ ; Pval = 0.6703] and Insolvency Risk (INSRK) have negative signs that are statistically insignificant to banks profitability [ $\beta = - 0.016$ ; Pval = 0.745]. Market Risk has insignificant and positive effect on Profitability (NPBIT) [ $\beta = 0.038$ ; Pval = 0.5720] at 0.05 level. Also, Credit Risk (CR) was found to be negative and statistically significant at Economic Value Added [ $\beta = - 7.0789$ ; Pval = 0.006].

On the contrary, the result also shows that Liquidity Risk (LIQR) [ $\beta = 0.0264$ ; Pval = 0.961] and Market Risk [ $\beta = 0.0369$ ; Pval = 0.747] have positive signs that are statistically insignificant to Economic Value Added. On its part, Credit Risk (CR) established a negative and significant effect on Return on Assets [ $\beta = -0.9647$ ; Pval = 0.0421]. Liquidity Risk [ $\beta = -0.0018$ ; Pval = 0.8471] and Insolvency Risk [ $\beta = 0.0008$ ; Pval = 0.7719] have negative and positive signs that are statistically insignificant to Return on Assets. In relation to the findings of the study, the study recommended amongst others that it is fundamental for DMBs in Nigeria to practice scientific credit risk management, improve their efficacy in credit analysis and loan management to secure as much as possible their assets, and minimize the high incidence of non-performing loans and their negative effects on financial performance<sup>134</sup>.

Professionalism in banking is violated when ethical or legal fundamentals are breached or blatantly disregarded<sup>135</sup>. Ethics is a strong code of morality, which for an occupation such as banking, plays an important role in the well-being of individuals, businesses, national and international economies. Unethical conduct manifests itself in various ways, including insider abuse, fraudulent dealings; irregularity/inaccuracy in rendition of reports, these are problems bordering on business ethics as evident in the Nigerian banking crisis. A multiple regression analysis was used and from the summary of the finding, we can infer that the consequences of insider dealing and problem of business ethics can be disastrous and could result in loss of confidence and trust in the industry, loss of business for the institutions, shareholders, board/management disputes, operational losses, distress of the sector, and liquidation of institutions, capital flight, and stagnation of the economy<sup>135</sup>.

### **2.3.3 Small and Medium-Sized Enterprises (SMSE) and the effect of SMSE Financing on Deposit Money Banks Performance**

There is no doubt that access to finance is of crucial importance for the ongoing and sustainable growth and profitability of small and medium enterprises sector (SMEs) through its role in facilitating the creation of new businesses and nurturing the innovation process as well as promoting the growth and development of existing businesses, which in turn, boost national economic growth. Small and Medium-Sized Enterprises financing significantly differ from large firms in terms of their financial decisions and behaviour. This paper reviewed the literature on the various financing sources of SMEs considering the effects of both SME characteristics and those of the owner–managers on SME financial behaviour. The study concluded that the increasing importance of economic contributions made by SMEs sector necessitates better understanding of financial behaviour and practices of SMEs<sup>136</sup>.

In the same vein, an examination of the effect of Small and Medium Scale Enterprises (SMEs) on economic growth in Nigeria using data between 1986 and 2018. Vector Auto-regression (VAR) technique was employed in analysing the data collected. The results of the estimation indicated that SMEs output growth rate has a significant positive effect on gross domestic product (GDP) growth rate (a proxy for economic growth). Furthermore, it was found that SMEs contribute 61% of the growth in GDP. Thus, the study concluded that economic growth in Nigeria is driven by SMEs. The research recommended that the Central Bank of Nigeria should ensure that SMEs have increased access to funding at a reduced cost to boost their growth. Also, the federal as well as state governments in Nigeria should ensure that the economy is business/investment friendly for SMEs by adjusting key economic policies such as reduction in tax rate/granting of tax waivers, provision of incentives/grants to SMEs in their domain to help them grow. The recommendation was necessary because the growth of SMEs triggers the growth of the economy<sup>137</sup>.

The Economic and Social Commission for Asian and the Pacific (ESCAP), the paper stated that stable access to appropriate funding sources is an important factor for the survival and

growth of potential SMEs. However, most SMEs face poor access to finance in the region's bank-dominant system. This implies that further policy support for bank loans for SME finance was needed. However, such policy support alone was not sufficient to provide long-term financing to growth-oriented SMEs because of the nature of the banking sector's short term credit in the region and rigid banking regulations. Furthermore, the bank-dominant system makes SMEs more vulnerable to financial shocks because these firms do not have an opportunity to diversify their funding during crises. The diversification of financing modalities beyond conventional bank lending can provide an alternative platform for the financing needs of SMEs and expand their financial access. In this context, the paper analyzes the SME financing landscape by examining the banking sector, nonbank financial institutions and capital market financing for SMEs and provides policy considerations for improving access of SMEs to finance<sup>138</sup>.

In similar research in the Pakistan noticed that the small and medium enterprises (SMEs) are the very significant for the development of economy of the country, grasp the attention of government and policy makers in developed as well as in developing countries. SMEs in Pakistan have their vital role in economic growth. Therefore, it is essential that SMEs have right to use sources of finance. The study used the quantitative approach that was accomplished by survey questionnaires. Two hundred SMEs and seventy bank branches were selected in Faisalabad region in Pakistan, to get response on questionnaires about their financing patterns and effects of Islamic financing as moderator in their fixed assets, set up and current assets financing. The study showed that fixed assets, set up and current asset financing have positive relation with the growth of SMEs and Islamic modes of financing was not behaved as moderator in Faisalabad city in Pakistan<sup>139</sup>.

An analysis of the financing of small and medium-sized enterprises observed the important of small and medium-sized enterprises (SMEs) in economic growth and employment, although,

they face numerous obstacles in accessing external finance. The article reviewed recent developments in the availability of financing for SMEs in Brazil, focusing on the greater use of equity and debt for SMEs. In assessing the barriers to external financing, the study focus on the role of bank characteristics, market structure and variations of interest rate spreads across banks and time. Moreover, as banks retreat from SME financing, the researchers examine the potential for SMEs to seek new sources of financing from private equity and venture capital funds. They examine the changes in the availability of bank loans between 2014 and 2016. By considering demand, they estimate the SME loan gap based on Central Bank and publicly available data. The results show that the loan gap in Brazil is substantial<sup>140</sup>.

The investigation on the financial inclusion and performance of banks, have come up with mixed views. The study evaluated financial inclusion as determinant of Nigeria deposit money banks performance. Data financial inclusion variants (bank network, automated teller machine and loans penetrations) and performance measures (total assets and liquidity ratio) were sourced from statistical bulletin of Central Bank of Nigeria during the periods 1981-2019. Multivariate time-series result showed that financial inclusion variants of bank networks and automated teller machine penetrations are the most fundamental determinants of deposit money banks performance, particularly. More so, while loans penetration significantly affects the performance of deposit money banks, is negative. Thus, there is the need to increase loans penetration channels so as to further augment the performance Nigeria deposit money banks. In addition, there is the need to encourage banks to invest in more branches or networks; this would help policy-makers develop effective strategies aimed at expanding bank networks, automated teller machines and loans penetrations of deposit money banks in Nigeria<sup>141</sup>.

In a study on the role of financial inclusion in promoting banks performance using data of 189 countries<sup>142</sup>. The research found evidence that financial inclusion via the instrumentality

of improved bank branches, bank penetration influence banks to realize more returns and decrease risk.

Likewise, evaluated financial inclusion and financial performance of Kenya banks employing measures of financial literacy program, usage of agents and representatives, enhanced proliferation of ATMs and mobile banking services. The result showed that financial inclusion measures positively and significantly impact on Kenya banks performance<sup>143</sup>.

Equally, examined the dynamics of financial inclusion and its impact on the financial performance of 63 India, Southeast Asia, and Africa Fintech start-up companies and found that financial service experiences, strategic partnerships with financial institutions and e-commerce significantly and positively correlation with financial inclusion variables of active customers. More so, the study established that financial inclusion positively and significantly influences the financial performance, measured by yearly revenue<sup>133</sup>.

The effect of financial inclusion (bank branches expansion and efficiency) on local economic growth in Italy<sup>134</sup>. The study found evidence that improved bank branches enhance revenues. Similarly, researchers ascertained financial inclusion and economic growth in India over some periods. Findings showed a positive and significant effect of bank branches, while an insignificant effect for ATMs growth<sup>134</sup>. The research on the use of electronic banking (e-banking) for transaction in Nigeria. The study observed reasons for this dynamic change in banking systems. One of these reasons was the inherent benefit of e-banking to save time and magnificent efficiency in the speed in the transaction of banking activities and consequently enhancing performance of banks. Another benefit was the accuracy and reliability of the information if accurate data are inputted. The work was designed to find out the following things: the benefit and problems of electronic banking on banks. The method of data collection were secondary data which comprises of electronic banking guidelines, financial

summary of the bank over the years, annual report of the bank, journal and magazines of e-banking, computer data base accessed through the internet. The analysis tool used to test the hypothesis was the simple linear regression and the student's t-test. The findings were: the application of e-banking has enhanced the profitability (operating profit, profit before tax and profit after tax) of banks. The study recommends that there was need for banks to upgrade their information and communication technology infrastructural facilities, cost of installing a sound ICT should be minimized or regulated by the government and more so, Government should as matter of urgency fix the issue of power supply<sup>135</sup>.

In the work that studied the relationship between electronic banking and the performance of Nigerian commercial banks. The study was necessary due to the increased adoption of the electronic banking which has redefined the banking service both in Nigeria and internationally. Electronic banking was proxied by value of Point-of-Sale transactions while commercial banking performance was proxied by customers' deposits. Engle-Granger cointegration model was used to analyse data for the sample period January 2009 to December 2013. The results show that POS is not cointegrated with both the savings and time deposits but are cointegrated with demand deposits. It was recommended that the monetary authorities and commercial banks should embark on an all-inclusive enlightenment campaign for the banking public on the benefits, convenience and importance of adopting e-banking channels in completing their transactions<sup>136</sup>.

Correspondingly, focused on the effects of financial inclusion on the performance of companies using firm-level data in seventy-nine (79) countries. The study found evidence that financial inclusion positively and significantly impacts on companies growth; this positive effect is amplified when bank are less concentrated<sup>137</sup>.

The role of deposit money banks (DMBs) as a critical component of the financial intermediary component of the financial systems for the benefit of their shareholders and the economy at large has become more pronounced in recent times. Banks help link both the surplus spending unit and the deficit spending unit for a fee which is interest income. Interest income is generated from the traditional activities of banks as a reward for their intermediation. A study examined the impact of interest income on the performance of DMBs in Nigeria. The study employed data from the annual reports and accounts covering the period 2012-2017 of fifteen (15) selected interest charging DMBs out of the twenty-one (21) listed banks on the Nigerian Stock Exchange as on December 31, 2018. The results obtained from the random effect model indicate that interest income and capital adequacy contribute and significantly drive the profitability of the Nigerian DMBs. The study therefore recommends that DMBs should maintain an adequate level of capital and a stable interest income through effective management of loans and advances to increase the income generated from lending and consequently improve their profitability for the benefit of their shareholders<sup>138</sup>.

The sources of bank income are majorly two, interest income and non-interest income, which contribute to the performance of banks. The researchers focused on the sources of income / revenue banks can generate from their clients. Long term loan was found to have a significant impact on bank revenue while short term loan and other non-fund based products and services were found not to have impact on the revenue generated by banks. The conclusion of the study is that it is only long-term loan that has significant contribution on the bank's performance<sup>139</sup>. Fund based income was discovered to contribute to the effective functioning of an organization which was found to be stable while non-fund based income was discovered to be increasing but appears to be volatile in respect to the systemic risk. Big banks were also found to have constant non-fund based income compared to small banks.

The relationship between non-fund based income and bank performance from 2005 to 2010 and some variables that impact on bank performance was investigated. They found bank size, capital adequacy and credits to contribute to the performance of banks positively while general expenses decrease bank performance<sup>140</sup>.

The result of the research conforms to the results of a study who revealed that bank size, loan, and capital adequacy impact bank performance positively while overhead expenses was found to impact bank performance negatively<sup>141</sup>. The scholar further asserted that non-interest income helps improve the equity capital of banks.

The examination of the impact of non-interest income on bank performance in the Tanzania banking sector. Interest income was found to contribute positively to bank performance while non-interest income was found not to be reliable because it may affect bank performance negatively. The study further suggested that diversification will further strengthen the banking sector performance in Tanzania<sup>142</sup>.

In the analysis of the relationship between non-interest income and the financial performances of commercial banks in Kenya and discovered that a negative relationship exists between non-interest income and financial performance of banks in Kenya. This negative relationship could be attributable to volatility of the return and net interest income<sup>143</sup>. The factors that determine the performance of banks that engage in non-interest earning activities in Ghana. It was discovered that small banks engage in non-interest earning activities more than big banks. Customers' deposit, exposure to risk, interest income and liquidity were found to be among the determinants of bank performance in Ghana.

The impact of moving to new income stream and the consequent rising diversification on performance for banks in India. The study found that foreign banks and new private banks perform better than public banks in terms of generating income from non-interest activities.

The researcher concluded that public banks need to generate more income from non-traditional activities and choose sources of non-traditional activities that have a stable and positive impact on the bank performance<sup>143</sup>.

The internal factors that influence the performance of government and private banks in Indonesia. The data for this study was sourced from the financial statement of banks from 2004 to 2013. The findings of the study revealed that the performance of government banks is influenced by net interest margin, operational efficiency and non-performing loans. The performance of private banks is influenced significantly by capital adequacy and operational efficiency<sup>144</sup>.

The relationship between non-interest in-come and performance of banks in China. The data for this study was sourced for sixteen (16) listed banks in China from 2007 to 2013. The findings revealed that there is an inverse relationship between non-interest income and bank performance. The result further revealed that there is a non-linear relationship between these two variables. The study concluded that the ratio of non-interest income should be increased to improve the performance of banks<sup>145</sup>.

An investigation into how banking reforms have enhanced or inhibited Deposit Money Banks (DMB's) profitability in Nigeria. The data set comprising 12 of the 22 banks that have national and international authorisation was annual data that covered the period 2006 to 2018 and were analysed by adopting a dynamic GMM econometric methodology for the derived panel data. The conclusions from the study was that bank credit risk exposure, the inflation rate, and the exchange rate were significant indicators of profitability of DMB'S in Nigeria. The estimated results show that when bank credit risk exposure rise by 10%, the return on equity will drop by about 9%. It further shows that when inflation rises by 10%, return on equity will decrease by about 1.4% and that when the exchange rate appreciates by 10%,

return on equity will rise by 0.06%. The result allows us to conclude that the banking reforms may have reduced the credit risk exposure of DMB's thereby increasing their profitability, whilst enhancing the benefits of recapitalization of deposit money banks. The reforms seem to have enhanced market concentration as envisaged by the structure conduct performance (SCP) hypothesis as well as efficiency as postulated by the efficiency structural hypotheses. The CBN should intensify efforts at tackling the exposure of DMB's to exchange rate volatility and spikes in the inflation rate due to increasing national indebtedness, falling foreign reserves and the falling value of the naira due drop in revenue from crude oil sales<sup>146</sup>.

The factors that impact on Islamic bank profitability; as seen from the experience of Middle Eastern countries. The research used a panel regression that covered 14 Islamic banks between the years 1993 to 1998; it revealed that capital adequacy, risk indicators, GDP, inflation and loan have a positive and strong connection to the profit-making capacity of banks, but the nexus of CAD, loan/total asset with profitability was statistically insignificant<sup>147</sup>.

Contrarily, in Tunisian banks by the adoption of a balanced panel regression; it was observed that CAD, overhead/asset ratio, loan/asset all exerted a significant and positive influence on profitability and GDP, but on the other hand inflation, size and ratio of assets that were noninterest bearing were insignificant in determining the profitability of Tunisian banks, though size had the most negative relationship with bank's profitability in the study<sup>148</sup>.

A research adopted ratio analysis in determining the efficiency of South African banks between 2005 and 2009. The study discovered that profitability (based on the analysis of the ROA and ROE) had significant connection with financial performance. But same was not true of liquidity and asset quality as these did not have significant relationship with financial performance<sup>149</sup>.

The operational efficiency of the first private commercial bank in Ethiopia in financial terms between 2003 and 2009 by adopting liquidity, profit, credit risk exposure, solvency and efficiency financial ratios in the adopted method<sup>150</sup>. The study made a comparative analysis of results with industry averages and discovered that of all the adopted variables, only profitability had a significant relationship with the profitability of bank as regards the measures adopted.

Determinants of capital structure in Nigeria banking sector. A research on the factors that induce profitability in banks of an economy that is still developing by utilizing annual time series data from 1980 to 2010; cointegration and an ECM. Their findings show that the adequacy of capital as measured on the basis of equity to total asset ratio had a long run and short run effect on the profitability of banks' and that this was of a negative nexus<sup>151</sup>.

In the evaluation of the financial performance of Deposit Money Banks in Nigeria. The researchers looked at the variables that affect the deposit money banks financial performance in Nigeria between 2001 and 2010 utilizing SPSS regression method. They discovered that; capital adequacy, asset quality and employee motivation had significant relationship with financial performance. But the foregoing does not minimize the impact of the reforms as these areas were the target of the reforms, yet the ultimate goal of the reforms was increased bank profitability<sup>152</sup>.

The impact of scores on cost and profit efficiency of a total of 26 banks in Ghana from 2003 to 2011. This research discovered that in large banks, there is high cost as well as profit efficiency than in smaller banks<sup>153</sup>. Another research saw a significant link connecting capitalization and profitability for firms from countries that transitioned early from command economy to free market after the collapse of the Iron curtain in Eastern Europe and that for those countries that are late transition countries the nexus is insignificant. The conclusion was

that there is an inverse U-shaped nexus linking capital to assets ratio and banks' profitability, which is quite an interesting result<sup>154</sup>.

A research isolates the determinants of the profitability of banks' in 13 countries from the former Soviet Union. The annual data that spanned the period from 1996 to 2016 was examined by considering panel regression using GMM. The study found that the value of loan, NIM and output growth were significant factors impacting on profitability. The findings show that, the NIM and economic growth had a strong positive link with profitability. The study made recommendation that post-Soviet countries banks' need to consider means by which their banks NIM can be increased<sup>155</sup>.

In the effect of financial inclusion on financial performance of banks listed at the Nairobi securities exchange in Kenya. The study sought to determine the effect of financial literacy programs, usage of agents and representatives, increased proliferation of ATMs and Mobile banking services on the financial performance of listed banks in Kenya and to determine the effect of bank branch spread on performance of listed banks in Kenya. The main theories reviewed in this study were the Grameen Model of Banking, Bank Led Theory, Financial intermediation theory and Contemporary Banking Theory. The study adopted a descriptive research design, and the study population included management and operational level employees of the 11 banks listed on the Nairobi Securities Exchange. A census study was conducted with primary data being collected using questionnaires. The NIC Bank provided data for pilot testing to determine the reliability and validity of the research instruments. The analysis of data based on SPSS software (version 2.3) and regression analysis presented using charts and tables. The results of the studied determined that financial inclusion elements have a positive and strong impact on the financial performance of banks in terms of return on equity. The study determined that financial literacy programs have positive but weak impact on financial performance of banks. The use of agents and representatives had positive and

strong effect on performance of banks. The proliferation of ATMs and Mobile banking services had positive but weak effect on financial performance of banks. Bank branch spread had positive but weak effect on financial performance of banks. The study recommends that policy makers in the financial institutions such as banks should make use of financial inclusion elements to improve financial performance of banks. The study recommends further research using moderating and intervening variables such as size and ownership of business entity<sup>156</sup>.

An examination of the determinants of variables that influenced profitability of DMB's in Nigeria from 2008-2016 was analysed. Data for the analysis was sourced from fourteen DMB's that were quoted in the NSE. The study adopted ROA as the proxy for profitability, while the regressor variables were; capital adequacy, credit risk, and inflation. The findings from the study show that while CAD had a positive, but significant effect on profitability, credit risk had a negative significant impact on profitability<sup>157</sup>.

A study on what determined commercial bank profitability in India. This study utilized data from a balanced panel that covered the period 2008 to 2017 for a total of 6 Indian commercial banks. In this research, Indian commercial bank profitability was represented by, ROA and ROE, and size of bank, assets quality, CAD, liquidity, operating efficiency, deposits, leverage, assets management, and the numbers of branches were used as other factors that were bank specific. The summary findings show that the size of bank; the number of bank branches, ratio of assets management, operational efficiency, and leverage ratio are the major bank specific factors that influence bank profitability in India as depicted by the ROA. Factors that are considered bank specific were; bank size, assets management ratio, assets quality ratio, and liquidity ratio; which all had significant and positive effect on ROE. The inflation rate, rate of exchange, the rate of interest, and demonetization were seen to have a serious effect

on ROA. The results for the ROE; the macroeconomic factors excluding demonetization all have a major effect on the on the ROE<sup>158</sup>.

Bank profitability is a product of size, increased solvency, financial structure, and cost of operation, productivity of labour, market power, and economic growth. The nexus linking size of banks to profitability was an inverted U-shaped. The study adopted the Herfindahl–Hirschman Index to measure the effect of market power and the results show a confirmation of the Structure Conduct Hypothesis. The other factors such as; quality of credit, operational efficiency, development of the banking sector, inflation, and industry concentration had a significant but negative link to bank profitability. The study also found that during transition; the profitability of banks was lower. The findings showed Pakistan's specialized banks (SB) generated bigger net interest margin (NIM) than the total number of theremaining commercial banks<sup>159</sup>.

The impact of regulation on bank efficiency by utilizing system GMM via a dynamic panel regression for 21 former Eastern bloc countries spanning 2002-2014. The findings from the system GMM estimation shows that the restriction of bank activity improves the efficiency of banks in these countries that make up the study population. But the results from dynamic panel quantile reveal that the impact of regulation was different in the separate quantiles. The conclusion from this study provides a major policy implication as regards the impact of transition countries banking regulations<sup>160</sup>.

In aresearchthat did inquire into the factors that impact on bank profitability in Vietnam for the period that spanned from 2006 to 2014. The study adopted a number of econometric methods to evaluate the sourced data; the findings of the study shows that, the size of the bank, capital adequacy, risks, expenses, had impact on profitability. The findings also show that the characteristics of the banking sector and the non-bank specific variables affect bank

profitability. But the direction of causal links; where similar when assessed based on profitability measures that were examined<sup>161</sup>.

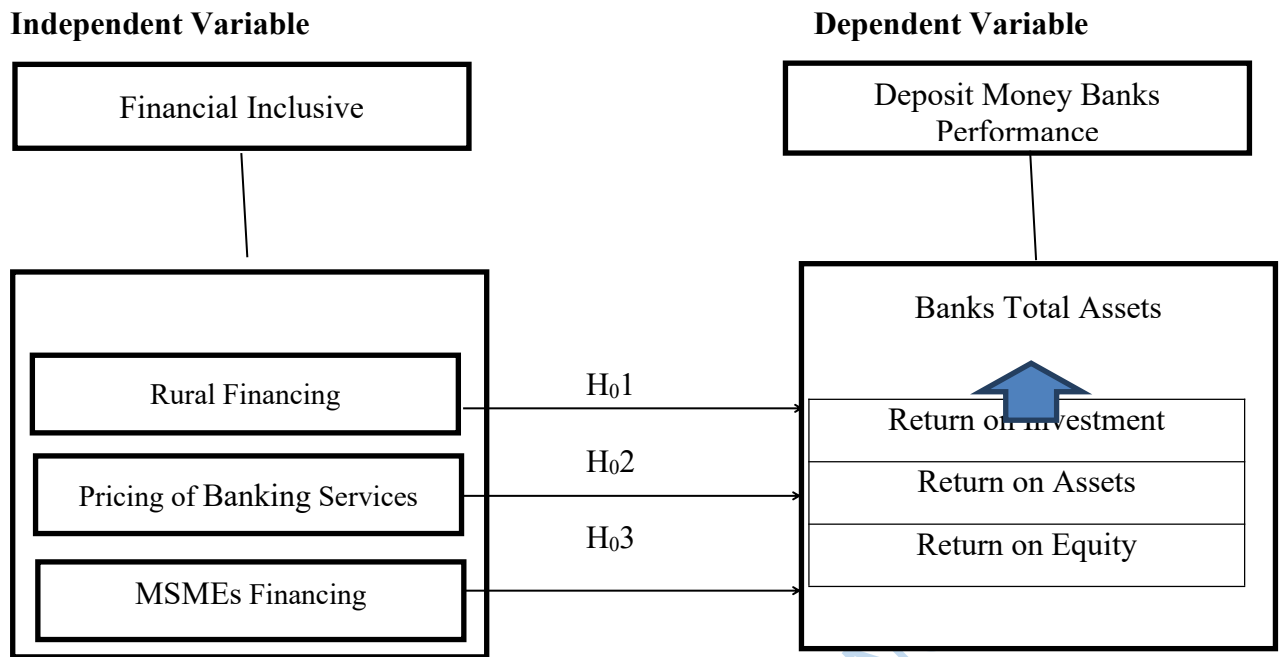
Charles Soludo, a former governor of CBN, while commenting on the banking reform (the recapitalization policy) observed that it was meant to: (1) enable the nation's banks to become global players'; (2) protect the safety of depositors' money, by making the banking sector to become strong; (3) make the banks to become effective in economic development; (4) enable the banks to become less dependent of public funds, and (5) become a major financier of the real sector. These reforms were based on certain anchors, they were; improving the quality of all banks, enhancing financial stability, ensuring healthy financial sector improvements, and enabling the financial sector impact tremendously on the output growth of the real economy. The argument seems to go back and forth, yet within the intervening period Nigerian banks have become global players with international authorization by the CBN, if the reforms have expanded their asset and equity base, has it an effect on their profitability? This makes for an interesting case study. Literature in finance and economics is replete with studies that have investigated the profitability of DMB's in Nigeria. In previous studies, application was made of linear regression, while others adopted the ordinary least square (OLS) regression fixed and random effect<sup>162</sup>.

The reviewed experiences of other jurisdictions in the achievement of financial inclusion. More importantly, the various country experiences showed that, though financial inclusion may have become a general phenomenon, its nature, form and challenges differ among jurisdictions and as such cannot be addressed by a single product or "one size fit all" approach. Nations should therefore implement initiatives that take into consideration the peculiarities of their environments and most critically its local people. It further reviewed past and present efforts at promoting financial inclusion in Nigeria. Although gradual progress is being made to improve on financial inclusion, critical challenges of low financial literacy,

inadequate infrastructural facilities as well as inadequate and inefficient technology based facilities by financial institutions, has limited the achievement of significant expansion in financial inclusion level in Nigeria. This study recommends a systematic approach that aligns responsibility and institutions among all stakeholders in the financial inclusion process to guarantee sustainability<sup>163</sup>.

#### **2.4 Conceptual Model**

The conceptual model shows the direction of the research as the arrows indicate the objectives of the study. Financial inclusion was proxy by Rural Financing, Pricing of Banking services and MSMEs financing while banks total assets was proxy as financial performance. The conceptual model depicts the interaction between financial inclusive and financial performance.



**Figure 2.1 Conceptual Model**

**Source: Researcher's Conceptual Model, (2023)**

## 2.5 Summary of Gap in the Literature Reviewed

Although it seems obvious that many empirical works are already conducted on financial inclusion and its impact on bank performance, findings are inconclusive as mixed reports were given by the studies. Some reported positive, some studies found effect of financial inclusion to be negative for banks while some others recorded no significant impact between the variables<sup>164</sup>. Having report of this nature suggested a further analysis of the relationship. This study therefore provides further empirical investigation on the impact of financial inclusion on bank performance in Nigeria.

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## **Chapter Three**

### **Methodology**

This chapter addressed the issue relating to the methods with which this research was carried out: research design, population, the sample size and the sampling technique, sources and instruments for data collection, and method of data analysis. The chapter is presented in the following sequence namely: research design, sources of data, Model Specification, data analysis and techniques, model specification, *A priori* expectation, Measurement of Variables, and instruments for data collection.

#### **3.1 Research Design**

The study shall adopt an *ex-post facto* research design. The adoption of this research design is because the researcher has no direct control over the variables involved and it is based on the fact that the study relied on significant data obtained from the relevant publications and as such the data already are in existence. In this study, an attempt will be made in order to account for the interactive effect of financial inclusive and deposit money banks financial performance in Nigeria.

#### **3.2 Data Collection**

The data employed in this study are secondary data. The study employed annual time series data. The data series were adapted from the 2020 Central Bank of Nigeria Statistical Bulletin.

#### **3.3 Description of the Research Instrument**

Secondary data were employed in this study. For the purpose of this study, the time series data which will be obtained from the Central Bank of Nigeria's Statistical Bulletin (2020 various issues) and World Development Indicators will be used. The data will cover the

period 1986 to 2020 (35 years). Thus, the measurement of the variables intending to use are discussed in Table 3.1.

**Table 3.1: Table of Variables Measurement**

<b>Variables</b>	<b>Description</b>	<b>Sources</b>
Banks Total Assets	A bank's Total assets are measured in million naira (#'Billion).	Sourced from Central Bank of Nigeria (CBN) Statistical Bulletin, 2020
MSMEs financing	DMBs Loans to Micro Small Medium Enterprises measured in millions	Sourced from Central Bank of Nigeria (CBN) Statistical Bulletin, 2020
Rural Financing	Loans of rural branches of DMBs measured in million naira.	Sourced from Central Bank of Nigeria (CBN) Statistical Bulletin, 2020
Pricing of Banking services	weighted average lending rate as charged by DMBs. It is measure in naira and billion (#'Billion)	Sourced from Central Bank of Nigeria (CBN) Statistical Bulletin, 2020
Loan Accessibility	Number of branches of listed DMBs in Nigeria.	Sourced from Central Bank of Nigeria (CBN) Statistical Bulletin, 2020
Interest rate	Interest rate represents annual interest rate in percent.	Sourced from Central Bank of Nigeria (CBN) Statistical Bulletin, 2020

**Source: Researcher's Concept, 2023**

### **3.4 Method of Data Analysis**

This study employed several techniques giving importance to the nature of the objectives. Objective one, two and three will employed Error Correction Model (ECM) along with some pre-estimation testing to anchor the modeling of the study. The fully modified ordinary least square (FMOLS) estimation of Philips and Hansen was employed in providing robustness to the error correction model estimation as well as its suitability for estimating long-run estimates of I(1) variables. These tests are discussed below:

### 3.4.1 Unit Root Test

Unit root test are used to distinguish if data have stationary autocorrelation function (ACF) or partial autocorrelation function (PACF) figure diagnosis. It is arbitrary to use figure diagnosis to judge variable's stationary. The study will use Augmented Dickey Fuller test (ADF) that it is purposed to eliminate error term correlations. The test equations are expressed below:

$$A. \text{ No intercept and no time trend items: } \Delta Y_t = \delta Y_{t-1} + \sum_{t=1}^p \alpha \Delta y_{t-1} + \varepsilon \dots\dots(9)$$

$$B. \text{ intercept and no time trend item: } \Delta Y_t = \alpha + \delta Y_{t-1} + \sum_{t=1}^p \alpha \Delta y_{t-1} + \varepsilon \dots\dots(10)$$

$$C. \text{ intercept and time trend item: } \Delta Y_t = \alpha + \gamma t + \delta Y_{t-1} + \sum_{t=1}^p \alpha \Delta y_{t-1} + \varepsilon \dots\dots(11)$$

The study used unit root test to allow intercept and time trend to determine whether there is a unit root in the data series.

### 3.4.2 Augmented Dickey-Fuller

An **augmented Dickey–Fuller test (ADF)** tests the null hypothesis that a unit root is present in a time series sample. The alternative hypothesis is different depending on which version of the test is used, but is usually stationarity or trend-stationarity. It is an augmented version of the Dickey–Fuller test for a larger and more complicated set of time series models.

The augmented Dickey–Fuller (ADF) statistic, used in the test, is a negative number. The more negative it is, the stronger the rejection of the hypothesis that there is a unit root at some level of confidence.

### 3.4.3 Ordinary Least Square

The **Ordinary Least Squares (OLS)** is a type of linear least squares method for choosing the unknown parameters in a linear regression model (with fixed level-one effects of a linear function of a set of explanatory variables) by the principle of least squares: minimizing the sum of the squares of the differences between the observed dependent variable (values of the variable being observed) in the input dataset and the output of the (linear) function of the independent variable.

### 3.4.4 Analysis of Variance (ANOVA)

Analysis of variance (ANOVA) is an analysis tool used in statistics that splits an observed aggregate variability found inside a data set into two parts: systematic factors and random factors. The systematic factors have a statistical influence on the given data set, while the random factors do not. Researchers used the ANOVA test to determine the influence that independent variables have on the dependent variable in a regression study.

**The Formula for ANOVA is:**

$$F = \frac{MSE}{MST} \dots \dots \dots (12)$$

**where:**

F=ANOVA coefficient

MST=Mean sum of squares due to treatment

MSE=Mean sum of squares due to error .

### 3.4.5 Multicollinearity Test

A multicollinearity test helps to diagnose the presence of multicollinearity in a model. Multicollinearity refers to a state wherein there exists inter-association or inter-relation between two or more independent variables. The presence of multicollinearity in a dataset is problematic because of four reasons.

- It causes increased variability in the dataset.
- It causes the dataset to be extremely sensitive to minor changes.
- It causes instability in the regression model.
- It leads to skewed and unreliable results.

### 3.4.6 Test for Heteroskedasticity

Heteroskedasticity refers to situations where the variance of the residuals is unequal over a range of measured values. When running a regression analysis, heteroskedasticity results in an unequal scatter of the residuals (also known as the error term).

### 3.5 Model Specification

The Ordinary least Square (OLS) was adopted, depicting the effect of financial inclusion on Deposit Money Banks financial performance was operationalized for the purpose of this study:

$$Y = f(X) \text{-----}(1)$$

Y = Dependent Variable (Financial Performance)

X = Independent Variable (Financial Inclusion)

Where:

Y = Deposit money banks financial performance

X<sub>1</sub> = Rural Financing

X<sub>2</sub> = Pricing of Banking services

X<sub>3</sub> = SMEs financing

The model in this study followed the work of a scholar whose work premised on Financial Inclusion, MSMEs and Its Impact on Deposit Money Banks Performance in Nigeria. The empirical function in which this study proposed to stand is giving as:

$$ROA = F(MSF, UBS, PBS, NBR, RFI) \dots \dots \dots (2)$$

Where,

ROA = Return on Assets

MSF = SMEs Financing (DMBs loans to SMEs)

UBS = Usage of Banking Services (Deposits of rural branches of DMBs)

PBS = Pricing of Banking Services (Weighted average lending rate)

NBR = Number of Bank Branches of DMBs

RFI = Rural Financing (Loans of rural branches of DMBs)

The study adapts the equation 2, thus the model was presented in line with the three objectives of the study, and the empirical model for this study was presented below.

$$BAS_t = \beta_0 + \beta_1 RFN_t + \beta_2 LNA_t + \beta_3 INT_t + \mu_t \dots \dots \dots (3)$$

$$BAS_t = \beta_0 + \beta_1 PBS_t + \beta_2 LNA_t + \beta_3 INT_t + \mu_t \dots \dots \dots (4)$$

$$BAS_t = \beta_0 + \beta_1 MSMEF_t + \beta_2 LNA_t + \beta_3 INT_t + \mu_t \dots \dots \dots (5)$$

BAS- Banks Assets

RFN= Rural Financing

PBS= Pricing of Banking services

SMEF= SMEs financing

LNA= Loan Accessibility

INT= Interest rate

T = time

$\mu_t$  = Stochastic error term (Omitted variables)

$\beta_0$  = Intercept

$\beta_1$ - $\beta_3$  = Parameters to be estimated

To avoid the problem of heteroskedasticity, the variables in millions can be reduced in logarithm since it compresses the scale in which the variables are measured. The model was formulated in semi-log-linear form in order to rescale the variables in millions. The model was re-structured into:

$$LBAS_t = \beta_0 + \beta_1 LRFN_t + \beta_2 LNA_t + \beta_3 INT_t + \mu_t \text{-----} (6)$$

$$LBAS_t = \beta_0 + \beta_1 PBS_t + \beta_2 LNA_t + \beta_3 INT_t + \mu_t \text{-----} (7)$$

$$LBAS_t = \beta_0 + \beta_1 LMSMEF_t + \beta_2 LNA_t + \beta_3 INT_t + \mu_t \text{-----} (8)$$

Where L is the natural logarithms

## Chapter Four

### Results and Discussion of Findings

In this chapter, descriptive and inferential statistics were used in this study to analyze the data. The inferential statistics utilized in this study is the time series regression analysis which comprised of the correlation matrix, and the Test of Hypotheses using ANOVA for the research questions. The Fully Modified Ordinary Least Square (FMOLS), The Error Correction Model (ECM), Autoregression Distribution Lag (ADRL), Augmented Dickey-Fuller (ADF) and Philip-Perron (PP) test, and Unit Root Test were all used to analyze with the use of secondary data that used E-view because it is a panel data which consist of time series cross-section data.

#### 4.1 Presentation of Data

**Table 4.1 Data Collected**

Years	DMBFP	RFN	PBS	SMEF	LNA	INT
1986	6,770.73	10,144.94	1,399,702	7,337.63	15,253.69	9,216.16
1987	7,131.12	11,823.89	2,907,358	7,337.63	14,962.70	10,513.08
1988	8,371.37	12,918.73	4,032,300	9,683.89	14,799.13	11,537.19
1989	10,977.37	10,022.58	4,189,250	12,404.82	14,766.89	13,481.01
1990	36,000	9,936.48	3,989,450	7,579.04	25,751.00	7,858.07
1991	47,100	5,397.55	4,679,212	7,337.63	39,200.00	10,944.55
1992	57,500	5,944.46	6,713,575	28,422.91	53,475.00	11,149.55
1993	91,800	7,274.27	6,895,198	29,555.51	60,698.00	10,194.63
1994	108,600	7,716.21	7,795,758	29,745.78	57,275.00	2,296.17
1995	136,400	9,924.36	9,913,518	30,149.60	78,666.00	2,300.83
1996	159,500	10,098.14	11,411,067	17,252.26	48,446.00	2,427.33
1997	178,100	25,707.79	14,610,882	17,624.23	73,037.00	2,908.46
1998	221,600	24,786.95	18,564,595	18,506.00	46,285.00	2,154.98

1999	289,600	25,758.78	20,657,318	18,713.66	90,077.00	2,014.07
2000	401,700	26,616.74	24,296,329	17,252.26	18,056.00	2,005.60
2001	481,400	13,790.57	24,794,239	1,870.84	88,666.00	2,442.99
2002	564,890	13,862.77	54,612,264	1,812.29	68,446.00	5,994.56
2003	659,154	14,505.34	62,980,397	1,978.19	33,037.00	5,173.11
2004	710,555	16,249.77	71,713,935	2,068.52	56,285.00	4,994.76
2005	802,684	1,777.70	80,092,563	10,154.25	30,077.00	6,237.97
2006	802,965	1,764.77	89,043,615	13,245.39	46,056.00	8,100.66
2007	767,330	1,755.61	93,426,656	13,576.88	74,666.00	7,924.29
2008	828,200	1,869.67	108,916,911	13,103.09	49,446.00	8,043.61
2009	972,350	8,149.54	114,834,459	11,107.00	75,037.00	8,625.77
2010	1,108,140	7,187.18	121,674,276	12,381.37	1,088.33	33,481.29
2011	1,188,580	7,000.37	144,210,492	13,555.67	1,179.30	34,440.80
2012	1,536,834	8,680.95	152,324,071	15,976.62	1,248.27	34,229.65
2013	2,072,850	9,880.33	175,500,000	19,903.12	1,494.81	34,850.88
2014	767,330	9,558.24	20,657,318	20,212.15	4,766.51	7,002.91
2015	828,200	9,667.25	24,296,329	21,409.78	3,174.47	7,002.42
2016	972,350	10,648.41	24,794,239	21,728.35	1,029.56	7,368.22
2017	1,108,140	16,598.05	54,612,264	31,010.12	922.38	5,972.94
2018	1,188,580	17,880.14	62,980,397	32,593.52	35,776.64	26,478.39
2019	1,536,834	17,194.17	71,713,935	34,965.45	35,767.99	27,438.38
2020	2,072,850	18,229.53	80,092,563	37,704.98	35,995.01	26,861.43

**Source:** CBN Statistical Bulletin, 2020

**Table 4.2: Descriptive Statistics**

	<b>DMBFP</b>	<b>RFN</b>	<b>PBS</b>	<b>SMEF</b>	<b>LNA</b>	<b>INT</b>
Mean	14256.84	11.46733	22.78800	11.40000	0.071531	0.622312
Median	13893.22	11.40000	22.62000	12.00000	0.107346	0.709170
Maximum	28783.19	18.55000	31.09000	14.00000	0.187693	2.950663
Minimum	2637.910	6.600000	9.030000	6.000000	-0.251615	-3.174599
Std. Dev.	7911.214	3.239576	5.565351	2.662236	0.106897	1.244961
Skewness	0.220717	0.525451	-0.692544	-0.877360	-2.047237	-1.599499
Kurtosis	2.055343	2.717551	3.690082	2.722903	6.779069	7.596704
Jarque-Bera	0.679525	0.740109	1.496676	1.972390	19.40380	19.60205
Probability	0.711939	0.690697	0.473152	0.372993	0.000061	0.000055
Observations	15	15	15	15	15	15

**Source:** Data Analysis, 2023

Table 4.2 provides a brief overview of the central trends, degree of distribution, minimum and maximum values, and degree of Peakedness, asymmetric value, and Jarque-Berastatistics for all of the series that were used in the inquiry. All of these data can be found in the table. By using the average values (mean), the lowest values, and the maximum values, the study was able to determine the position of the center of distributions for the series. The use of the root mean squared deviation, also known as the standard deviation, indicated how individual variable values are distributed on either side of the center. This, in turn, highlighted the uniformity of the items that make up the distribution of each variable. The kurtosis statistics tell which variables have peaks, the skewness value reveals whether or not the series is symmetrical, and the Jarque - Bera statistics reveal whether or not each series meets the normalcy criterion. The kurtosis statistics illustrate how each variable peak at a certain point in time. Table 4.2 displayed the following data: The Deposit Money Bank Financial Performance was 14256.84, the Rural Financing was 11.47, the Pricing of Banking Services was 22.79, the SMEs Financing was 0.072, and the Loan Accessibility and Interest Rate were

respectively 11.4 and 0.622.

A look at the table showed that the lowest possible figure for Rural Financing was 6.6 percent, while the highest possible value was 18.6 percent. Table 4.2 data showed that the minimum value for the Pricing of Banking Services was 9.03 percent, while the highest value was 31.09 percent. The lowest value of the monetary policy rate that was stated in table 4.2 was six percent, while the highest number was fourteen percent. According to Table 4.2, the SMEs Financing was -0.252, while the highest possible value was 0.188. The smallest figure for Loan Accessibility was -3.175, and the maximum value was 2.951. Only the Deposit Money Bank Financial Performance and the Rural Financing were found to have a skew to the right, as shown by their respective positive skewness statistics of 0.2207 and 0.5255, respectively, in table 4.2. This was one of the things that was shown to be the case. As a result, the presence of a distribution with a negative skew is a signal that the level of risk is higher than what is measured by the standard deviation. In terms of kurtosis, a leptokurtic distribution is referred to as a kurtosis with a distribution that is bigger than 3. When compared to a normal distribution of kurtosis with a value of 3, a leptokurtic distribution has a kurtosis value that is more than 3, which results in a sharper peak with a lower likelihood. A platykurtic distribution is one that has a kurtosis that is less than three. This distribution has a peak that is lower, broader, and has a larger probability than leptokurtic and normal distributions.

Notably, the kurtosis statistics revealed that maximum Pricing of Banking Services (3.690), Loan Accessibility (6.779), and Interest Rate (7.597) were leptokurtic (i.e. positive kurtosis values are greater than 3), whereas Deposit Money Bank Financial Performance (2.055), Rural Financing (2.718), and SMEs Financing (2.723) were platykurtic. This finding is noteworthy because it indicates that maximum Pricing of Banking Services, Loan Accessibility, and Interest Rate were all Leptokur (i.e. positive kurtosis values are less than 3). With regard to the Jarque-Bera result, the probability values of Deposit Money Bank

Financial Performance (0.7119), Rural Financing (0.6907), Pricing of Banking Services (0.4731), and SMEs Financing (0.3730) showed a normal distribution. This was due to the fact that their values were greater than the benchmark 0.05 level of significance specified for the normality test. The only purpose of the aforementioned study was to expose the descriptive statistics associated with each of the variables. As a result, there is no conclusion that can be formed from the traits that were seen. In addition, it is clear that each of the variables has a total of 15 observations. This is because there is a wealth of information available on the factors that were investigated in the research.

**Table 4.3: Correlation Matrix of Variables**

	<b>DMBFP</b>	<b>RFN</b>	<b>PBS</b>	<b>SMEF</b>	<b>LNA</b>	<b>INT</b>
DMBFP	1.000000					
RFN	0.291190	1.000000				
PBS	0.260545	0.227507	1.000000			
SMEF	0.736340	0.001665	0.384818	1.000000		
LNA	0.279940	-0.412420	0.273544	0.744297	1.000000	
INT	-0.056220	-0.057870	-0.062357	-0.073703	0.007819	1.000000

**Source:** Data Analysis, 2023

Table 4.3, presents the correlation coefficients that have been calculated between the variables that have been examined. The connection between the two variables is shown in each column of the table. This helps to determine which sets have the greatest degree of association.

The link between the variables that were independent and those that were dependent was outlined in Table 4.3. Loan Accessibility had a positive relationship with both the maximum Pricing of Bank Services (0.274), the Deposit Money Bank Financial Performance (0.2799) and SMEs Financing (0.744). This indicates that an increase in the Deposit Money Bank

Financial Performance, SMEs Financing, and Pricing of Bank Services resulted in an increase in the deposit money banks in the proportion of 27.99 percent, 27.4 percent, and 74.4 percent, respectively, as a result of the increase in Loan Accessibility. Nevertheless, a negative correlation was found between Loan Accessibility and Rural Financing (-0.412), which suggests that as Financial Inclusion increases, deposit money Banks would drop. On the other side, the data also revealed that Interest Rate had a negative relationship with the Pricing of Banking Services (-0.062), Deposit Money Bank Financial Performance (-0.056), Rural Financing (-0.058), and SMEs Financing (-0.074). This suggests that the rise in the independent variables led to a fall in the deposit money Banks as a consequence. The results shown in Table 4.3 demonstrate that, on the whole, correlations between independent variables are low. This is an indicator of the lack of multi-co linearity, which is often associated with data pertaining to time series.

#### **Tests for the Diagnosis and Unit Root**

A test of the variables' ability to remain stationary was carried out. Before using traditional econometric methods, the theory of economics mandates that the variables be in a stationary state. This is done so that the findings do not seem to be deceptive. A maximum latency of three was employed while doing the stationarity test, and this lag was included into the intercept. The Augmented Dickey-Fuller (ADF) unit root test was carried out on each of the series that were the focus of this investigation.

**Table 4.4. Unit Root Test Results**

	Level			1st Difference		
	Intercept	Intercept and Trend	None	Intercept	Intercept and Trend	None
DMBFP	0.9986	0.9508	1.0000	0.0404**	0.1226	0.7785
RFN	0.0984	0.1290	0.4288	0.0150**	0.1259	0.0008**
PBS	0.3535	0.2413	0.3814	0.3447	0.8719	0.0413**
SMEF	0.5325	0.2791	0.7012	0.0021**	0.0002**	0.0008**
LNA	0.0001**	0.1325	0.2526	0.3145	0.3576	0.0201**
INT	0.0413**	0.1458	0.0096**	0.0035**	0.0186**	0.0001**

\*\*5% level of significance

Source: Data Analysis, 2023

**Table 4.5. Summary of Unit Root Tests**

Augmented Dickey-Fuller(ADF)				
Variables	Level	First Difference	I( <i>d</i> )	Remarks
DMBFP	-	0.0404**	I(1)	Stationary
RFN	-	0.0150**	I(1)	Stationary
PBS	-	0.0413**	I(1)	Stationary
SMEF	-	0.0002**	I(1)	Stationary
LNA	0.0001**	0.0201**	I(0)	Stationary
INT	0.0096**	0.0001**	I(0)	Stationary

\*\*5% level of significance

Source: Data Analysis, 2023

The study utilized the Augmented Dickey Fuller (ADF) Test in order to investigate the order of integration among the variables such as Deposit Money Bank Financial Performance, Rural Financing, Pricing of Banking Services, SMEs Financing, Loan Accessibility and Interest Rate. This was done in order to investigate the order of integration among these variables. The application of the unit root test, also known as the ADF, is evaluated for each

variable by comparing the null hypothesis "presence of unit root test" (i.e., presence of non-stationarity) with the alternative hypothesis "series is stationary." The null hypothesis is tested against the alternative hypothesis first. If the value of the absolute probability is higher than the value of the benchmark probability (0.05), then the null hypothesis is accepted, and it is inferred that the series is stationary, and vice versa if the value of the absolute probability is lower. The results of the unit root test of the ADF are displayed in Table 4.5. The results show that only return on assets and return on equity were stationary at the level indicated as I(0) in Table 4.5. On the other hand, Deposit Money Bank Financial Performance, Rural Financing, Pricing of Banking Services, SMEs Financing, were stationary at first difference indicated as I. However, Loan Accessibility and Interest Rate were the only stationary variables in the table (1). The findings provide evidence of co-integration, which refers to a link that exists over the long term, between DMBFP, RFN, PBS, and SMEF. Due to the fact that the series are in the same order of integration, this suggests that the co-integrating regression estimate is the method of estimation that should be used. As a result, the model incorporates a co-integrating process across all four variables, and the Johansen co-integration test was carried out with this setting in mind.

## 4.2 Test of Hypotheses

**Table 4.6: Estimates of Regression using the Ordinary Least Square (OLS)**

### Method

Dependent Variables	Deposit COM
DMBFP (Deposit Money Bank Fin. Perf.)	0.457**(0.0670)
RFN (Rural Financing)	0.789*** (0.006)
PBS (Pricing of Banking Services)	0.977 (0.004)
SMEF (SMEs Financing)	0.342 (0.0003)
LNA (Loan Accessibility)	0.576 (0.00045)
INT (Interest Loan)	0.673 (0.001)
C (Regression Coefficient)	6.734*** (0.000)
R <sup>2</sup> (Reg. Coeff. Sq)	0.767
Adjusted R <sup>2</sup>	0.829

**Source:** Researchers' E-View result, 2023

Hypothesis One (H<sub>01</sub>): There will be no significant impact of rural financing on the financial performance of listed Deposit Money Banks in Nigeria.

It is demonstrated that at the 5% level of significance, with a regression coefficient of 0.457 and a p-value of  $0.05 > 0.067$ , there will be no significant and negative impact of rural financing on the financial performance of listed Deposit Money Banks in Nigeria. As a result, the null hypothesis which states that there will be no significant impact of rural financing on the financial performance of listed Deposit Money Banks in Nigeria is accepted. As a result, the alternative hypothesis is rejected.

Hypothesis Two (H<sub>02</sub>): There will be no significant influence of the pricing of banking

services on the financial performance of listed Deposit Money Banks in Nigeria.

With  $p = 0.006 < 0.05$  and a regression coefficient of 0.789, a significant and positive influence of the pricing of banking services on the financial performance of listed Deposit Money Banks in Nigeria. As a result, we rule out the null hypothesis that there will be no significant influence of the pricing of banking services on the financial performance of listed Deposit Money Banks in Nigeria. As a result, the alternative hypothesis is accepted.

Hypothesis Three (H<sub>03</sub>): There will be no significant effect of small and medium-sized enterprises financing on the financial performance of listed Deposit Money Banks in Nigeria.

At a 5% level of significance, a regression coefficient of 0.977 and a  $p = 0.004 > 0.05$  a significant and positive between small and medium-sized enterprises financing and financial performance of listed Deposit Money Banks in Nigeria. As a result, we rule out the null hypothesis that there will be no significant effect of small and medium-sized enterprises financing on the financial performance of listed Deposit Money Banks in Nigeria. As a result, the alternative hypothesis is accepted.

This one-of-a-kind discovery, however, cannot be separated due to the fact that the program was a relatively recent addition to Nigeria's Deposit System.

**Table 4.7: Estimates of Regression using the Ordinary Least Square (OLS)****Method**

<b>Dependent Variables</b>	<b>Deposit COM</b>
DMBFP (Deposit Money Bank Fin. Perf.)	0.457**(0.040)
RFN (Rural Financing)	0.789***(0.006)
PBS (Pricing of Banking Services)	0.977 (0.004)
SMEF (SMEs Financing)	0.342 (0.0003)
LNA (Loan Accessibility)	0.576 (0.00045)
INT (Interest Loan)	0.673 (0.001)
C (Regression Coefficient)	6.734***(0.000)
R <sup>2</sup> (Reg. Coeff. Sq)	0.767
Adjusted R <sup>2</sup>	0.829

**Source:** Researchers' E-View result, 2023

The Ordinary Least Square (OLS) estimates, as well as significant statistics like R<sup>2</sup> and adjusted R<sup>2</sup>, are included in the regression findings. The variance in Deposit Money Bank Financial Performance as a result of the six dependent variables was shown by the coefficient of determination (R squared) of 76 % (Banks Assets, Rural Financing, Pricing of Banking Services, SMEs Financing, Loan Accessibility, and Interest Rate) the remaining 46% of the variables were left out of the research. The findings revealed that there is a positive relationship between Financial Inclusion and Financial Performance of listed Deposit Money Banks in Nigeria. At a 5 % level, Financial Inclusion invariably have a beneficial influence on Financial Performance of listed Deposit Money Banks in Nigeria. Furthermore, the significant coefficient is 0.457, implying that a 1% increase in Financial Inclusion will result in a 0.457 % increase in Financial Performance of listed Deposit Money Banks over time, but

at a lower proportion. As a result, the more Financial Inclusion, the more likely there is to be Financial Performance of listed Deposit Money in the Banks; this was backed by a p-value of  $0.04 < 0.05$  level of significance.

Furthermore, the findings revealed a positive relationship between SMEs Financing & Financial Performance of listed Deposit Money Banks, with a regression coefficient of 0.342, indicating that SMEs Financing & investigation is more closely linked to Deposit Money in the Banks. The significance of SMEs Financing & Financial Performance of listed Deposit Money Banks, is also confirmed by the p-value of  $0.0003 < 0.05$ . The conclusion is that a 1% increase in SMEs Financing & Financial Performance of listed Deposit Money Banks, leads to a 0.342 % increase in Deposit Money in the Banks.

Similarly, data revealed a positive correlation between field Loan Accessibility and Financial Performance of listed Deposit Money Banks, with a regression coefficient of 0.576, indicating that Loan Accessibility is more related to Deposit Money Banks than Rural Financing. The significance of Loan Accessibility is also confirmed by the p-value of  $0.00045 < 0.05$ . The implication is that a 1% increase in Loan Accessibility leads to a 0.576 percent increase in Deposit Money Banks. Implementing a long-term Loan Accessibility regime capable of increasing Deposit Money Banks in Nigeria. There is a positive but shaky link between back Loan Accessibility and Deposit Money Banks in the case of bank audit.

**Table 4.8: ANOVA**

Model	Sum of Square	df	Mean of Square	F-Statistics	Sig
Regression	165.542	12	54.448	99.870	.000 <sup>b</sup>
Residual	226.458	488	0.557		
<b>Total</b>	<b>392.000</b>	<b>500</b>			

**Source:** Researchers' E-View result, 2023

a. Dependent Variable: Deposit Money Bank Financial Performance

b. Predictors: Banks Assets, Rural Financing, Pricing of Banking Services, SMES Financing, Loan Accessibility and Interest Rate.

To determine the model's validity and significance, an Analysis of Variance (ANOVA) was used. The ANOVA results are shown to test the overall model's relevance. The model is significant at the 1% level of significance, according to the findings, with an F-statistics of 99.870 and a p-value of 0.000.

### Multicollinearity Test

$H_0$  = the model has no multicollinearity

$H_1$  = the model has multicollinearity

**Decision Rule:** reject  $H_0$  if the probability value is less than 0.05, otherwise accept  $H_0$ .

### Multicollinearity Test Results

Multicollinearity LM Test by Breusch and Godfrey:

F-statistic	18.1276	Probability	0.5438
Obs*R-squared	23.2350	Probability	0.6754

**Source:** Researchers' E-View result, 2023

The serial correlation yields a probability value of 0.5438, which is greater than 0.05 and indicates that  $H_0$  is accepted. The model, on the other hand, does not appear to be multicollinearity.

### Test for Heteroskedasticity

$H_0$  = the model has no heteroskedasticity.

$H_1$  = the model shows heteroskedasticity.

**Table 4.9: White Heteroskedasticity Test**

F-statistic	21.2345	Probability	0.5309
Obs*R-squared	13.56900	Probability	0.5340

**Source:** Researchers' E-View result, 2023

The heteroskedasticity test yields a probability value of 0.5309, which is greater than 0.05, implying that  $H_0$  is accepted. As a result, the model is homoscedastic and does not have any heteroskedasticity. We have concluded that this is the best model for explaining the variables' connection.

### 4.3. Discussion of Findings

According to the findings of the regression analysis, all of the independent factors (the Rural Financing, Pricing of Banking Services, SMEs Financing, Loan Accessibility and Interest Rate) have a substantial influence on the overall financial performance of deposit money banks in Nigeria. It was determined from the data that there is a considerable positive association between Loan Accessibility and Interest Rate. This was made clear by the fact that the coefficient linked with the Loan Accessibility was 5.280, and the P-value was 0.0184. Both of these figures were lower than the benchmark of 5% that was stated for this research. The outcome suggests that the Loan Accessibility is a primary instrument for encouraging the financial performance of deposit money Banks in Nigeria, which is consistent with the

positive a priori assumption. This finding was reached as a consequence of the analysis of the data. Additionally, a growth in the money supply promotes the capacity of banks to generate new money by granting loans to their clients, and it causes the amount of credit granted by deposit money Banks to expand as a result of this ability. In this approach, investors have the opportunity to get fresh loans with which to increase their existing interests<sup>1,2</sup>.

Therefore, banks that rely primarily on Interest Rate as their primary source of revenue will be in a position to significantly boost their profitability as a result of this change. This conclusion is consistent with the results of which obtained their research on the influence of monetary policy on the performance of commercial banks in Nigeria via the use of a micro-panel analysis<sup>3</sup>.

They came to the conclusion that there is a considerable positive association between the performance of banks and the amount of money available. This conclusion, however, runs counter to the findings of a scholar who discovered insignificant positive relationship between money supply and profitability of Deposit Money Banks, which suggests that money supply does not boost profitability. Also a scholar contradicts the finding, the study found out that the Maximum lending rate, Real Interest rate and Savings deposit rate have negative and significant effects on the profitability of Nigerian Deposit Money Banks as measured by return on assets at the 5% level of significance<sup>1</sup>. Also, the study found that Real interest rate at the 8% level of significance has negative and significant relationship with Return on Equity of Deposit Money Banks in Nigeria<sup>3</sup>.

In addition, it was shown that there is a large and negative link between the Loan Accessibility and Interest Rate. This was made abundantly clear by the fact that the coefficient related with Loan Accessibility was negative (-0.0124), and its P-value was bigger than the threshold of 0.0345% that was stipulated for this research. This suggests that Loan

Accessibility in Nigeria has a significant influence on the performance of deposit money banks in the country. This demonstrates that Loan Accessibility environment leads to a reduction in the performance of banks when the money supply is reduced, which in turn leads to a restriction of financial resources for the conduct of investment projects. Additionally, Interest Rate severely restricts the availability of payment-deferring instruments that are linked with a high opportunity cost of withholding money in the form of cash reserves. This does not allow deposit money banks to give out loans and advances to customers, which in turn reduces their ability to generate interest income, which in turn leads to decreased profitability for the business.

Furthermore, due to the fact that Loan Accessibility causes a decline in the value of money, consumers benefit from it while deposit money banks suffer from it. This is because the value of money that is loaned or advanced to consumers in the form of loans or advances will have decreased by the time the consumers are ready to repay the loans or advances. This discovery is in agreement with a proposal made by a scholar about the loanable funds theory of the interest rate. He hypothesized that interest rates would decrease as the Loan Accessibility rose, and that a high Loan Accessibility would reduce the productivity of the financial sector by increasing the resistance of financial markets, which would in turn slow down the performance of deposit money Banks. In addition, with the help of a research, they looked at the impact that the factors that determine interest rates have on the operations of commercial banks. They came to the conclusion that a greater level of Loan Accessibility leads to better performance in deposit money banks in Nigeria as a consequence of the findings of their study, which demonstrated that interest rates had a beneficial impact on the performance of deposit and money banks.

The research also showed that there is a substantial positive association between the maximum Loan Accessibility and the financial performance of deposit money banks in

Nigeria. This was one of the key takeaways from the study. This was made abundantly clear by the fact that the coefficient linked with the bank lending rate was 0.808046, and its p-value was 0.0312, both of which were lower than the benchmark of 5% that was required for this research. This demonstrates that the bank lending rate as a variable is an accurate metric for gauging bank performance since it has a positive sign in its value.

The finding implies that hypothesis one, which stated that there is significant impact of rural financing on listed Deposit Money Banks' performance in Nigeria, is correct. These findings supported the conclusions of experts who concluded in their study that rural financing has a beneficial impact on Deposit Money Banks' performance in Nigeria. A good and significant association has been found based on the work of several scholars<sup>4,5</sup>.

The Ordinary Least Square (OLS) estimates, as well as significant statistics like  $R^2$  and adjusted  $R^2$ , are included in the regression findings. The variance in Deposit Money Bank Financial Performance as a result of the six dependent variables was shown by the coefficient of determination (R squared) of 76 % (Banks Assets, Rural Financing, Pricing of Banking Services, SMEs Financing, Loan Accessibility, and Interest Rate) the remaining 46% of the variables were left out of the research. The findings revealed that there is a positive relationship between Financial Inclusion and Financial Performance of listed Deposit Money Banks in Nigeria. At a 5 % level, Financial Inclusion invariably have a beneficial influence on Financial Performance of listed Deposit Money Banks in Nigeria. Furthermore, the significant coefficient is 0.457, implying that a 1% increase in Financial Inclusion will result in a 0.457 % increase in Financial Performance of listed Deposit Money Banks over time, but at a lower proportion. As a result, the more Financial Inclusion, the more likely there is to be Financial Performance of listed Deposit Money in the Banks; this was backed by a p-value of  $0.04 < 0.05$  level of significance.

Furthermore, the findings revealed a positive relationship between SMEs Financing & Financial Performance of listed Deposit Money Banks, with a regression coefficient of 0.342, indicating that SMEs Financing & investment is more closely linked to Deposit Money in the Banks. The significance of SMEs Financing & Financial Performance of listed Deposit Money Banks, is also confirmed by the p-value of  $0.0003 < 0.05$ . The conclusion is that a 1% increase in SMEs Financing & Financial Performance of listed Deposit Money Banks, leads to a 0.342 % increase in Deposit Money in the Banks.

Similarly, data revealed a positive correlation between field Loan Accessibility and Financial Performance of listed Deposit Money Banks, with a regression coefficient of 0.576, indicating that Loan Accessibility is more related to Deposit Money Banks than Rural Financing. The significance of Loan Accessibility is also confirmed by the p-value of  $0.00045 < 0.05$ . The implication is that a 1% increase in Loan Accessibility leads to a 0.576 percent increase in Deposit Money Banks. Implementing a long-term Loan Accessibility regime capable of increasing Deposit Money Banks in Nigeria. There is a positive but shaky link between bank Loan Accessibility and Deposit Money Banks in the case of bank audit.

To determine the model's validity and significance, an Analysis of Variance (ANOVA) was used. The ANOVA results are shown to test the overall model's relevance. The model is significant at the 1% level of significance, according to the findings, with an F-statistics of 99.870 and a p-value of 0.000. The serial correlation yields a probability value of 0.5438, which is greater than 0.05 and indicates that  $H_0$  is accepted. The model, on the other hand, does not appear to be multicollinearity.

The heteroskedasticity test yields a probability value of 0.5309, which is greater than 0.05, implying that  $H_0$  is accepted. As a result, the model is homoscedastic and does not have any heteroskedasticity. We have come to the conclusion that this is the best model for explaining

the variables' connection.

### Endnotes

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## Chapter Five

### Conclusion

#### 5.1 Summary of Findings

The study examine the impact of financial inclusion on the financial performance of deposit money banks in Nigeria. It precisely assessed how small and medium-sized enterprises' financing affects the financial performance of deposit money banks in Nigeria. Also, it examined the impact of rural financing on the financial performance of deposit money banks in Nigeria. Similarly, it investigate the influence of pricing banking services on the financial performance of deposit money banks in Nigeria. Further analysis was done to determine the relationship between financial inclusion and financial performance of listed deposit money banks in Nigeria. From the analyses and interpretation of hypotheses, the following can be summed up as the major empirical findings of this study:

1. Rural financing has no significant effect on the financial performance of listed deposit money banks in Nigeria ( $Adj R^2= 0.829$ ,  $p= 0.05$ ).
2. Pricing of banking services has a significant effect on the financial performance of listed deposit money banks in Nigeria ( $Adj R^2= 0.829$ ,  $p= 0.006$ ).
3. Small and medium-sized enterprises financing has a significant effect on the financial performance of listed deposit money banks in Nigeria ( $Adj R^2= 0.829$ ,  $p= 0.006$ ).

#### 5.2 Conclusion

According to the findings of the research, the liberalization of interest rates in Nigeria had a beneficial impact on the financial performance of deposit money Banks in the country. It has also been successful as a consequence of the overall outcome, which is that efficient administration of interest rates has played a vital part in the expansion and development of

Nigeria's deposit money Banks. This indicates that it has been successful. According to the findings of the study, an increase or decrease in the Loan Accessibility has a significant effect on the financial performance of deposit money banks.

We know that Financial Inclusion contributes to country development and sustainability. However, up to our best knowledge, there is no evidence in the literature on linking financial inclusion with banks profitability, especially in emerging economies. Financial inclusion is essential to improve the ways of groups unable to reach financially and drive the sustainable economy. Here, there must be joint strategies between financial and non-financial Banks from the private and public sectors and the Central Bank of Nigeria (CBN) to develop criteria, foundations and indicators for financial inclusion, while creating a supportive implementation framework for this strategy with policies in place. And appropriate financial regulations and infrastructure. Given the various efforts by the Central Bank of Nigeria (CBN) to adopt global standard practices for financial inclusion, these will be successful only if supported by reliable data, actual indicators, and a realistic strategy based on a review and monitoring of progress achieved in achieving improvements in indicators of inclusion and financial success. In addition, given the correlation between the indicators of financial inclusion and the financial performance of banks, these financial Banks must have major trends towards increasing innovative access to financial services, and developing financial services infrastructure in order to raise the level of digital financial services relatively low compared to middle-income countries.

### **5.3 Recommendation**

As a result of this, the study suggested that:

- the Central Bank of Nigeria (CBN) should redefine the Loan Accessibility supply as a tool for monetary policy by establishing an equilibrium level. This would allow the

bank to make more funds available to deposit money banks so that they could improve their performance and increase the amount of loans they issued.

- Also, considering that the Interest Rate has a negative effect on the performance of deposit money banks, there is an urgent need for the government to strictly impose restrictions on the cross-border flow of capital and
- To make use of the relevant macroeconomic management tools to control Loan Accessibility in times of crisis in order to mitigate the effects of Interest Rate on the profitability of deposit money banks. This is because there is an urgent need for the government to do so because the Interest Rate has a negative effect on the financial performance of deposit money banks in the country.

#### **5.4 Contributions to Knowledge**

The study adds to the body of knowledge by expanding the understanding of the concepts (Nigerian banking industry, financial inclusion, financial exclusion and inclusion, deposit money banks performance) used in this study. More so, the researcher introduced the researcher's model. Furthermore, the researcher used three dimensions of financial inclusive (rural financing, pricing of banking services, and MSMEs financing) in the study to respond to the call for researchers to shift away from using only one aspect of financial inclusive. In addition, this study filled a conceptual gap in the literature regarding the combined effect of financial inclusion and financial performance of listed deposit money banks in Nigeria.

Conclusively, the researcher's model developed for the study is another area that has contributed conceptually to the body of knowledge. The model also adds to the existing models on the link between financial inclusion and financial performance in the Nigerian banking industry. The empirical outcome of this study contributes to the existing literature

and empirical findings in the area of psychological factors and customer behaviour. It will also serve as a resource material for future researchers.

### **5.5 Suggestions for Further Studies**

The study has only looked at five independent variables that are related to the factors that determine interest rates in Nigeria, and it has only looked at one dependent variable that are related to financial performance. Additional factors affecting interest rates and financial performance of Nigerian deposit money banks, including industry-specific variables as well as macroeconomic variables, should be included in any future research that investigate this topic. Once again, it has been proposed that more research on the ways in which interest rates influence the financial performance of other sectors of the economy, such as oil and gas, manufacturing, insurance, technology, and health care enterprises, should be carried out.

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### Unpublished Thesis/Dissertation

- Vu, M.C., Phan, T.T. & Le, N.T. *Relationship between board ownership structure and firm financial performance in transitional economy: The case of Vietnam*. *Research in International Business and Finance*, 45, 2018, pp.512-528.

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**Signature**

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**Date**