

**FINANCIAL SYSTEM DEVELOPMENT AND ECONOMIC GROWTH
IN NIGERIA**

BY

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**BEING A RESEARCH PROJECT SUBMITTED TO THE DEPARTMENT OF
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UNIVERSITY OF BENIN, BENIN CITY. IN PARTIAL FULFILLMENT OF THE
REQUIREMENTS FOR THE AWARD OF BACHELOR OF SCIENCE (B.Sc.)
HONOURS DEGREE IN BANKING AND FINANCE**

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DECLARATION

I declare that;

1. This is based on a study undertaken in the Department of Banking and Finance, Faculty of Management Sciences, University of Benin, Benin City, under the supervision of Dr M.G Ajao.
2. This work has not been previously submitted for the award of degree elsewhere.
3. All ideas and views are products of my personal research and that of my supervisor and all the references made to works of other persons have been duly acknowledged.

Mariam ADEWALE

Date

CERTIFICATION

This is to certify that this project was carried out by Mariam ADEWALE of the Department of Banking and Finance, Faculty of Management Sciences, University of Benin, Benin City, and is adequate in scope and quality for the partial fulfillment of the requirements for the award of Bachelor of Sciences (B. Sc.) degree in Department of Banking and Finance.

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(Head of Department, Banking and Finance)

DEDICATION

This project is dedicated to the Almighty God for the grace He bestowed upon me all through my study in the Department of Banking and Finance, Faculty of Management Sciences, University of Benin, Benin City. This project is also dedicated to my lovely parents MR. and MRS. ADEWALE, for their endless love, prayers and support through the course of my study.

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ABSTRACT

This study examined the relationship financial system development and economic growth in Nigeria over the period of 1980 - 2022. The study's objective is to determine the relationship between private sector credit and economic growth, ascertain the relationship between liquid liabilities ratio and economic growth in Nigeria, examine the relationship between market capitalization and economic growth in Nigeria, examine the relationship between turnover ratio and economic growth in Nigeria and examine the relationship between value of traded shares and economic growth in Nigeria. The ex-post facto research design was employed in this study, the ADF test for stationarity of was taken at difference and first levels, cointegration and ECM short run and Long run analysis was taken. The analysis of the data revealed that liquid liabilities ratio has a long run relationship with economic growth in Nigeria, private sector credit has a strong positive factor that drives economic growth in Nigeria in both the short and long run respectively. market capitalisation has a positive significant impact on economic growth in Nigeria in the short and long run respectively, turnover ratio has a strong long run relationship with economic growth in Nigeria, values of shares traded has no long run relationship with economic growth in Nigeria. Also, turnover ratio (TRG) and market capitalization (MCG) are the most significant financial development measures which influences economic growth in the long run gauged from their respective t – ratios. The study recommended that that the ongoing reforms in the banking system and capital market should

be intensified so as to boost the development of these segments of the financial system and by that increase their role in economic growth. Also the regulation and supervision of the financial system should be strengthened as it plays a great role in determining both its stability and the extent of the services provided.

CHAPTER ONE

INTRODUCTION

1.1 Background to the study

A well developed financial system performs several critical functions to enhance the efficiency of intermediation by reducing information, transaction and monitoring costs. If a financial system is well developed, it will enhance investment by identifying and funding good business opportunities, mobilizes savings, enables the trading, hedging and diversification of risk and facilitates the exchange of goods and services. All these result in a more efficient allocation of resources, rapid accumulation of physical and human capital, and faster technological progress, which in turn results in economic growth.

The components of the financial system in Nigeria and other nations are made up of the stock market and the banking sector, it has long been recognized that the financial systems and financial markets play an important role in a country's economic growth and development (Claus, Jacobsen, & Jera, 2004). Starkey, (2010), underscored the fact that the financial systems performs the function of mobilizing savings, allocating capital, providing an efficient payment system, monitoring and exerting corporate governance as well as ameliorating risk. The same view was held by Aziakpona (2008).

The extent to which a nation's financial system is developed is a key determinant of the ability of the system to effectively and efficiently perform these core functions. However, the Nigerian financial system is to a large extent remains underdeveloped due to the adoption of financially repressive policies, political corruption/ poor macroeconomic management, bank malfeasance, giving rise to insolvencies., low saving rates, and insufficient resource allocation.

The impact of the underdevelopment has meant that the Nigerian economy struggles to accelerate economic growth and reduce poverty. In the light of these reports, there exists a strong case for the speedy promotion of financial system development in Nigeria.

In the course of executing the core functions, the financial system positively influences factor accumulation, innovations and plays a crucial role in understanding variation in growth since economic growth is often discontinuous. (Allen & Aura, 2004), from a theoretical view point. The theoretical literature, also distinguishes between the effects of these key functions of economic performance when performed by financial intermediaries banks and when performed by financial market (Stock markets) (Starkey, 2010; Aziakpono, 2008).

This issue has gained considerable attention and its commonly termed the 'bank based' versus the 'market –based' debate contributors to the debate explored the separate effects of the banking system and the stock market on the promotion of economic growth and investigate issues such as “Do financial systems perform different functions or are they doing

the same things in different ways?” Can one say that a bank based system is better than a market based system (Allen & Oura, 2014).Levine, (2002), submitted that there exists no uniform definition of what constitute a bank-based system or a market based system.

However, a bank based system principally refers to a financial system dominated by the banking sector performing the key growth enhancing functions, while a market based system is characterized by the stock market predominantly stimulating economic growth. (Beck & Levine, 2002). Of the smaller body of research, which incorporates both banking system and stock market development measures contrasting results appear with little consensus existing regarding the roles played by each towards economic growth.

Given the above circumstances, this study examines empirically the nature (positive or negative) and direction (unidirectional or bidirectional) of the relationship between financial system development which is measured as banking system and stock market development and economic growth in Nigeria.

1.2 Statement of the Research Problem

Financial system development has assumed a developmental role in finance and economics across the globe as a result of the impact it has exerted on economic activities in both developed and developing nations. For sustainable growth and development, financial system

ensures that funds are effectively mobilized and allocated to enable business and economics harness their human, materials and management resources for optimal productivity.

The two major components of the financial system are the stock markets and banks. These components help to promote efficiency in capital allocation. In most developing nations, most of the studies on the relationship between financial development and economic growth gave more attention to the role of the banking sector and considered it as the only organized sector, while neglecting the potential role of the stock market for efficient allocation and risk sharing in a liberalized financial market.

This, according to Caporale and Pittis (1997) may produce misleading results because the omission of a relevant variable from a system might invalidate causality inference. Beck and Levine (2004), pointed out that any examination of stock market impacts on economic growth, should simultaneously consider the impacts of the growing intermediating sector. They further argued that omitting a stock market variable makes it difficult to appropriately examine bank development and economic growth when controlling for stock market system of the Nigeria studies undertaken such as Akinlo and Akinlo (2007), Agu and Chukwu (2008), Ndako (2010), Adelokun (2009), and Adeniran and Udejaja (2010) favour the usage of multiple banking development measures. Hence, there are scanty available time series data studies of finance growth relationship in Nigeria employing both bank and stock market development measures in their studies Thus, the inclusion of data of

the stock market as part of the indicators of financial development could provide better insight on the nature and direction of the relationship between financial development and economic growth in Nigeria.

This study attempt to fill this Literature gap. As alluded to earlier, adopting a single aspect of the financial system, when both the banking sector and stock market are fairly developed, may hinder the discovery of the overall effects of financial development on economic performance, which in the concept of this research is of critical importance to the Nigerian government. The largely underdeveloped nature of the Nigerian economy implies that the Nigerian government is under pressure to improve and strengthened the drivers of economic growth.

In order to stimulate development to formulate optimum growth enhancing economic policies, expert knowledge of the relative importance of the banking sector and stock market in the financial system is vital. Therefore, the form of financial structure that is most conducive for economic growth must be determined in order to aid the formulation of robust and sound economic policy for a country. Policy intervention should be tailored towards the promotion of the specific financial structure that more significantly contributes to growth rather than promotion of a second best alternative system.

Policy promoting the alternative system may be misplaced and fail to raise economic growth. (Chakraborty & Ray, 2006). Against this backdrop, this study will investigate the relationship

between the financial system development and economic growth in Nigeria, adopting both banking system and stock market development indicators.

1.3 Research questions

More specifically, the study seeks to provide answers to the following research questions:

1. What is the relationship between private sector credit and economic growth in Nigeria?
2. What is the relationship between liquid liabilities ratio and economic growth in Nigeria?
3. Does market capitalization influence economic growth in Nigeria?
4. What is the relationship between turnover ratio and economic growth in Nigeria?
5. Does the value of traded shares affect economic growth in Nigeria?

1.4 Objectives of the Study

The aim of the study is to determine the impacts of the financial system development on economic growth in Nigeria based on the relative contribution of the banking system and the stock market. The specific objectives include to:

- i. determine the relationship between private sector credit and economic growth
- ii. ascertain the relationship between liquid liabilities ratio and economic growth in

Nigeria

iii. examine the relationship between market capitalization and economic growth in

Nigeria

iv. examine the relationship between turnover ratio and economic growth in Nigeria

v. examine the relationship between value of traded shares and economic growth in

Nigeria

1.5 Research Hypotheses

H01: Liquid liabilities ratio has no significant effect on economic growth in Nigeria.

H02: private sector credits have no significant effect on economic growth in Nigeria.

H03: Market capitalization has no significant impact on economic growth in Nigeria.

H04: Turnover ratio has no significant impact on economic growth in Nigeria

H05: Values of shares traded on stock exchange has no significant impact on economic growth in Nigeria.

1.6 Scope of the Study

This study is a longitudinal survey in nature. The annual data of the banking and stock market as components of the financial system will be examined. Such data are usually time series in

nature. The study covered data in variables of key interest spanning over a period of forty-three years (from 1980-2022). The choice of the period was sequel to the unavailability of data on Nigerian capital market measures prior to 1980 and to reflect current trends in the Nigerian economy.

1.7 Significance of the Study

The key role of the financial system to enhancing economic growth cannot be underestimated.

Government: The government will find this study useful as the study will reveal the effect of financial system development on economic growth in Nigeria which could be considered by them when regulating the Nigerian economy environment and improve Nigerian's economic performance.

Central Bank of Nigeria: The findings of this study are expected to be of great help to Central Bank of Nigeria in making future policies on the regulation of the foreign exchange markets. Central bank has a primary role to play in manage the nation's money supply (monetary policy), managing inflations through active duties such as managing interest rates and foreign exchange rates.

Banks in Nigeria: The Nigerian banks would also benefit from the findings of this study since they will have a better understanding on the actual policies that CBN employs to manage or intervene in the capital and money market.

Scholars and Researchers: This study is also expected to add more knowledge in the area of financial system development and interventions made by central bank to bring normalcy on exchange rates. Other researchers will also benefit from this study as it will open up new areas for research.

1.8 limitations of the study

The main limitation to this study has been the unwillingness of banks to disclose and discuss some important information and figures as well as the reliability of data from the stock market. Other limitations include finance, short time frame of execution, responses bias, other curriculum of activities undertaken during the research period and finally the availability of few number of literature in the area of study. Nevertheless, this constraint was minimized by trying as much as possible to stick to data from the central bank of Nigeria statistical bulletin and the Nigerian stock exchange, since that source is more credible in Nigeria and internationally.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

The purpose of this chapter is to look at the concepts of financial system development and economic growth as well as to examine the relevant theoretical and empirical works in the field. This is to give credit to the work of researchers in the field of research and to identify informational gaps that may be filled in the future.

2.2 Conceptual Review

2.2.1 Concept of Economic Growth

Economic growth is the increase in the amount of goods and services produced by an economy over a period of time. It is conventionally measured as the percentage rate of increase in real gross domestic product, or real GDP. Economic growth can be measured as a percentage change in the Gross Domestic Product (GDP).

The major source of per capital output in any country; whether developing or developed, with a market economy or centrally planned is an increase in productivity. According to Kolawole, Ijaiya, Sanni and Aina. (2019), economic growth is measured by the increase in the amount of goods and services produced in a country. Economic growth occurs when an economy's productive capacity increases which, in turn, is used to produce more goods and services.

Expansion of economies with the intent to improving the welfare of the citizenry is a desirable goal. This explains why economic Literature is repeated with theories and studies investigating variables required by economies to achieve sustainable growth.

Byrns and stone (1992) confirmed that economic growth is one of the macro-economic growth of government; since most governments work hard at growing their economies in order to stem unemployment, increase output and improve industrial capacity utilization. It is in fact a key policy concern to achieve high sustainable and equitable growth and thereby improving the standard of living which is commonly proxied as level of real GDP per capita.

2.2.2 Measures of Economic growth

Gross Domestic Product

Gross domestic product (GDP) is the monetary value of all finished goods and services produced within the borders of a country during a given time period. RGDP takes into account all private and public consumption, government spending, investments, private inventories, paid-in construction costs, and the foreign balance of trade (exports are added, imports are subtracted) (Yaro, & Adeiza, 2021).

GDP is a broad measure of a country's total economic activity. GDP is frequently employed as both a gauge of a nation's standard of life and an economic health indicator. Because GDP is calculated in a consistent manner worldwide, it may be used to compare productivity between nations with high levels of accuracy. Comparing current GDP numbers with those

from prior years or quarters is made simple by annually accounting for inflation. In this way, the GDP of a nation can be expressed as a proportion of earlier periods. (Ndum, Okoye, & Amahalu, 2019).

Gross National Income

According to Major, Fente & Fortune, (2022), the overall value added by citizens, both domestically and internationally, is measured by gross national income (GNI) while GDP looks at the value of goods and services produced within a country's borders.

Major, et al, also explained that while GDP was an indicator of the local economy, GNI represented how its nationals contributed to the nation's economy. GNI factors in citizenship but overlooks location. Due to this, it is crucial to take cognizance that GNI does not include the output of foreign residents. (Major et al, 2022). The Atlas technique, which employs a three-year average of exchange rates (previous years adjusted for relative inflation) to moderate the impact of transitory volatility in exchange rates, is used by the World Bank to calculate GNI in U.S. dollars for internationally comparable data. (Fantom & Serajuddin, 2016). In other words, PPPs equalize the purchasing power of currencies allowing comparison of real levels of expenditure between countries, just as a conventional price index allows comparison of real value (Inklaar, Bolt, De Jong & Van Zanden, 2018).

The International Comparison Program (ICP) is the mechanism through which PPP rates are derived. The ICP coordinates the collection of price data for a common basket of goods and

services in around 200 countries, applies appropriate weights to the different components of the basket, and calculates linking factors between regions to provide 14 global PPPs. The latest PPP rates were released in 2020, and refer to the collection year 2014 (Qiu & Li, 2021).

Per Capita Income (PCY)

Economic growth is also presumed to occur when the population's standard of living rises. Real per capita income can also be used as an indicator of economic growth because it is thought to be the best index for depicting the average standard of living of the population (Yumashev, Ślusarczyk, Kondrashev & Mikhaylov, 2020). From the viewpoint of the United Nations, the term "underdeveloped countries" is difficult to interpret. They used it to refer to countries where PCY is low in comparison to the PC real income of the United States, Canada, Australia, and Western Europe (Higgins, 1963 cited in Panth, 2016). Lewis (1955) states that the best single measure of development is per capita output.

The World Bank categorizes countries according to their GNP per capita. Previously, gross national income (GNI or GNP) was estimated using simple exchange rates to convert various countries' currencies into US dollars. Currently, the World Bank employs the Atlas conversion factor rather than simple exchange rates, primarily to mitigate the impact of exchange rate fluctuations in cross-country comparisons of national incomes. The Atlas conversion factor for any year is the average of a country's exchange rate for that year and its

exchange rates for the two preceding years, adjusted for the difference between domestic and international inflation rates.

2.2.3 Concepts of Financial System development

Financial system consists of institutions, markets, instruments, including the legal and regulatory framework that allows transactions to be made through the extension of credit. Generally, financial sector development revolves around overcoming costs incurred in the financial system. It involves the methods of reducing the costs of acquiring information, enforcing contracts, and making transactions which culminates in the emergence of financial contracts, markets, and intermediaries. The five major functions of a financial system are:

- the production of information ex-ante about possible investments and the allocation of capital;
- the monitoring of investments and exertion of corporate governance after providing finance;
- the facilitation of trading, diversification, and management of risk;
- the mobilization and pooling of savings;
- The ease of exchange of goods and services (World Bank 2014).

According to the International Monetary Fund (IMF) financial development occurs when sectors and agents use a range of financial markets for savings and investment decisions;

financial intermediaries and markets deploy larger volumes of capital and handle larger turnover while financial sectors create assets for risk sharing purposes.

Different studies have employed a wide range of indicators of financial system development. According to Apergise et al (2007) there is an interesting and controversial views of finance-growth nexus that the magnitude of financial development's impact on growth varies depending on the type of financial indicator employed and the level of the country's development.

Based on the existing literature on various indicators of the financial sector development according to Livine, Lin and Chu (2000), the focus here is on two groups of financial sector development measures. These groups include the banking system development measures and stock market development.

These two measures shall be utilized to indicate the degree of banking system development in Nigeria based on two size aspects of the banks. These banking system development measures include the liquid liabilities ratio and the private sector credit ratio. The study also utilizes the three stock market development measures in order to account for the level of stock market development based on size and liquidity aspect of the market. The market capitalization ratio the turnover ratio and the value of shares traded ratio shall be employed as the three stock market development measures.

2.3 Measures of Financial System Development

2.3.1 Private Sector Credit Ratio

Domestic credit to private sector refers to financial resources provided to the private sector by financial corporations, such as through loans, purchases of non-equity securities, and trade credits and other accounts receivable, that establish a claim for repayment. For some countries these claims include credit to public enterprises. The financial corporations include monetary authorities and deposit money banks, as well as other financial corporations where data are available (including corporations that do not accept transferable deposits but do incur such liabilities as time and savings deposits). Examples of other financial corporations are finance and leasing companies, money lenders, insurance corporations, pension funds, and foreign exchange companies.

Domestic credit to private sector by banks (% of GDP) in Nigeria was reported at 12.94 % in 2022, according to the World Bank collection of development indicators, compiled from officially recognized sources.

World Bank (2009) asserted that private sector credit is the most comprehensive indicator of the activities of the deposit money banks and it is calculated as the amount of domestic credit allocated to the private sector by the banking sector divided by GDP. It indicates the extent to which the banking sector finance the economy and more specifically the extent to which banks finance private investments and private sector development. Therefore this ratio not

only indicates banking system size but also importance of banking system to the private sector of an economy.

According to World bank domestic credit provided to the private Sector includes financial resources which establishes a claim for repayment such as loans, purchased of non equity securities, trade credits and other accounts receivables hence this domestic credits excludes credit extended to government and public enterprises (Beck and Levine, 2004). It is expected to have a positive impact on economic growth.

This measures of banking sector is critical to poverty reduction and for financing consumption, production and capital formation which helps to stimulates aggregate demand and in turn advance economic activities (World Bank, 2008). Becks, Levin, Loayza (2008) affirmed that this proxy is superior to other measures of financial intermediaries development because it excludes credit to public sector and better reflect the extent of efficient resources allocation.

2.3.2 Liquid Liabilities Ratio

Liquid liabilities also known as broad money, or M3 are the sum of currency and deposits in the central bank (M0), plus transferable deposits and electronic currency (M1), plus time and savings deposits, foreign currency transferable deposits, certificates of deposit, and securities repurchase agreements (M2), plus travelers checks, foreign currency time deposits,

commercial paper, and shares of mutual funds or market funds held by residents. This is utilized as an indicator of the size of the banking system, taking as the size of the financial intermediaries relative to the size of the economy. It is otherwise known as measure of financial deepening. The ratio measures the degree of monetization in the economy as well as the depth of the banking sector while it as so shows, an expansion of payments and saving functions.

This measure provides an indication of the banking system ability to increase lending. The liquid liabilities ratio is calculated as $M2$ – which is broad money supplied (currency plus demand and interest bearing liabilities of banks and non-bank financial intermediaries) divided by GDP. Higher liquid liabilities ratio indicates larger banking sector where the size of the banking system is positively related to the provision of financial services and thus to growth (World Bank, 2004). Therefore a positive relationship is expected between liquid liabilities ratio and growth in economy. The ratio of liquid liabilities to GDP measures the size of the financial intermediary system relative to the size of the Nigerian economy and the ability of financial intermediaries to meet unanticipated demand to withdraw deposits by customers (Naceur et al., 2014). The empirical studies of Agu and Chukwu (2008), Aslam (2008), and Aziakpono (2008) affirmed that liquids liabilities ratio have positive impact on economic growth.

2.3.3 Market Capitalization Ratio

Market capitalization refers to the market value of trading shares or quantities in the traded item. It also means the value of all the securities secured in relation to their market prices (Nzotta, 2004). Market capitalisation refers to the overall value of a company's shares. It can be determined by multiplying the price of a stock by its total number of outstanding shares. For instance, if it sells \$50 per share, the market cap for a 20 million share company is \$1 billion. It makes it possible for investors to understand the relative dimensions of one company versus another. Market cap measures what an open market company is worth and the market perception of its future prospects because it reflects what investors are prepared to pay for their stocks. It can be used as a social media platform to consider company value and is a choice in other ways of looking at sales. Pavone (2019) citing Dias (2013) stated that market capitalization is an important market indicator of the value of shares and the value of companies in general.

Osazee (2000), asserted that market capitalization is a function of the prevailing market price of quoted equities and the size of their issued and paid up capital. Market capitalization is seen as the most important measures for assessing the size of capital market.

Market capitalization is thus computed as share price multiplied by total number of shares outstanding divided by GDP. The ratio is used as a measure of stock market size. The idea of

the indicator is the larger the market size, the higher the ability to mobilize capital and diversity risk (N'zue, 2006).

In terms of economic significant, the assumption is that market size and the ability to mobilize capital are positively correlated (Osinubi, 2001). Osamwonyi (2005) found that market capitalization is positively related to GDP at current cost. Senbet (2008) in his study shows that market capitalization and the value of shares traded relative to the size of the economy are the channels through which African stock markets influence economic growth (GDP).

2.3.4 Total Value Traded Ratio

This is the total value of shares traded on the floor of the stock Exchange divided by GDP. Total value traded ratio and turnover ratio are the most used measures to evaluate the stock market liquidity. Therefore the ratio of value traded relative to GDP is an indicator of the activity and liquidity of the stock market, hence improvement in the trading of shares.

Osunubi (2004) explains that a greater total value of shares listed signifies greater market liquidity and lower investment risk which helps better capital allocation in the market and thus can influence economic growth. Osunubi (1998) pointed out that liquidity of the stock market facilitates profitable interaction between stock market and money market in that shares becomes easily acceptable as collateral for bank lending thereby boosting credit and investment.

Other studies also show that the more liquid a markets is the faster the economic growth will be. Atje and Jovonovic (1993), Adajusi and Biekpe (2006), Nowbusting and Odit (2009) and Starkey (2010) have all found that value traded ratio have positive impact on economic growth.

2.3.5 Turnover Ratio

This is the amount of securities traded divided by the market capitalization. It measures how active a market is. It also indicates the trading volume of the stock market relative to size. The turnover ratio measures the values of equity transactions relative to the size of equity market and is an indicator of the efficiency of the financial intermediation (Adegbite, 2008). A positive relationship is expected between turnover ratio and economic growth.

Filler et al (1999) explained that stock market development positively influences growth directly when the turnover ratio is used. Beck and Levine (2004) prefers this measurement of stock market variable because unlike other measures, the numerator and denominator of turnover ratio contain prices. Throughout a direct measure of theoretical defunction of liquidity; high turnover is often used as an indicator of low transaction cost. The turnover ratio, compliment the market capitalization ratio. A large but inactive market will have a large market capitalization ratio but a small turnover ratio. Some models predicts that some countries with illiquid markets will create disincentive to long run investments because it is comparatively difficult to sell one's stake in the firm.

In contrast, more liquid stock reduces disincentives to long run investments since liquid markets provide a ready exit option for investors. This can foster more efficient resource allocation and faster growth (Levine, 1999, Bencivenga, Smith and Starr, 1995).

2.4 Overview of the Nigerian Financial System

A financial system consists of different institutions, markets, instruments, and operators that interact within an economy to provide financial services such as resource mobilization and allocation, financial intermediation and facilitation of foreign exchange transactions.

The Nigerian financial sector can be categorized into two namely;

1. The informal sector: this comprises of the local money lenders, the thrifts and savings associations, etc. It is poorly developed, limited in reach, and not integrated into the formal financial system, but plays a major role in the Nigerian financial system.

2. The formal financial system: this comprises of the capital and money market institutions and these comprise of the banks and non-banks financial institutions.

According to the CBN Annual Report and Statement of Account (2008), the Nigerian financial system consists of the Central Bank of Nigeria (CBN), the Nigerian Deposit Insurance Corporation (NDIC), the Securities and Exchange Commission (SEC), the National Insurance Commission (NAICOM), the National Pension Commission (NPC), deposit money banks, microfinance banks, finance companies, bureaux-de-change, stock exchange,

commodity exchange, primary mortgage institutions, development finance institutions, discount houses and insurance companies and registered insurance brokers.

The deposit money banks emerged as a result of the adoption of the universal banking system in 2001 and the removal of the division between the commercial and merchant banks. These banks accept deposits, provide loans and advances to customers, operate the payment and settlement mechanism and also create money while providing loans and advances. There has been special attention of the regulatory bodies (that is CBN and NDIC) on the activities of these banks since they have a great impact on the soundness and stability of the financial system.

There has been rapid growth in terms of service delivery and number of institution, which later decline from 89 in 2004 to 25 in 2006 and further reduction due to the consolidation of banks. Community banks are self-sustaining financial institutions owned and managed by communities. They obtain their licenses from the CBN after operating for two years. They were licensed to operate both in the rural and urban areas to complement the activities and programmes of People's Bank of Nigeria (Aderibigbe 2001).

Community banks have now been converted to microfinance banks since 31, 2007. Microfinance refers to the provision of financial services to poor or low-income clients, including consumers and the self-employed. It is a system of banking where many poor and near-poor households have permanent access to an appropriate range of high quality financial

services, including not just credit but also savings, transfers. Those who promote microfinance generally believe that such access will help poor people out of poverty.

Development finance institution or specialized financial institutions are established to contribute to the development of specific sectors of the economy, most especially the manufacturing and agricultural sectors. They include the Bank of Industry (BOI), Nigerian Agricultural, Cooperative and Rural Development Bank (NACRDB), Urban Development Bank of Nigeria Plc, the Federal Mortgage Bank of Nigeria and the Nigerian Export-Import Bank (NEXIM).

2.5 Theoretical Review

2.5.1 Stage of Development Theory

The theoretical basis of this study is anchored on stage of development hypothesis of financial development by Hugh Patrick (1966) which states that the direction of causality between financial development and economic growth changes over the course of development. That is, at the early stage of development, the supply-leading impetus is evident but as real growth occurs in the economy, it will spark demand for financial services.

This theory suggests a demand – following relationship between financial and economic developments. High economic growth creates the demand for modern financial institutions; their services, their assets and liabilities and arrangements, by investors and savers in the real economy. The financial market in turn responds to such demands. In this case, the

evolutionary development of the financial system is a continuing consequence of the pervasive, sweeping process of economic development. The level of demand for financial services depends upon growth of real output, and commercialization and monetization of agriculture and other traditional substance sectors.

2.5.2 Financial Liberalization Theory

The Financial Liberalization hypothesis as developed by Mckinnon and Shaw (1973) sees the role of government intervention in the financial markets as a major constraint to savings mobilization, investment, and growth.

The main critique of the financial liberalization theory emanates from the imperfect information Paradigm. This school of thought disagrees with the proposition of these scholars and examines the problem of financial development in the context of information asymmetry and costly information that results in credit rationing. As observed by Stiglitz and Weiss (1981), asymmetric information leads to two serious problems, first, adverse selection and second, moral hazard.

The implication is that the information asymmetries of higher interest rates which actually follow financial reforms and financial liberalization policies in particular exacerbate risk taking throughout the economy and hence threatens the stability of the financial system, which can easily lead to financial crises while the Feed back theory suggests a two-way causality between economic growth and financial development.

2.5.3 Theory of Financial Repression

Financial repression refers to the notion that a set of government regulations, laws, and other nonmarket restrictions prevent the financial intermediaries of an economy from functioning at their full capacity.

The policies that cause financial repression include interest rate ceilings, liquidity ratio requirements, high bank reserve requirements, capital controls, restrictions on market entry into the financial sector, credit ceilings or restrictions on directions of credit allocation, and government ownership or domination of banks. Economists have commonly argued that financial repression prevents the efficient allocation of capital and thereby impairs economic growth Okpara (2010), Esso (2010), Darrat and Siowadi (2010).

2.5.4 Market Based Asset Allocation Theory

Market Based Asset Allocation Theory was put forward by Markowitz (1952; 1959). This theory explains the need for the allocation of investment portfolio efficiently given a certain level of risk and return. The theory is on selection of portfolios, which led to the uprising of finance theory and brought about the basis for theory of capital market in modern time. Contemporary theory on portfolio elucidates asset portfolio's construction and selection based on a certain level of risk, the projected investments return and risk choices of folks. The inference of the normative approach of the Markowitz model stipulates that portfolios is based on predictable risk and return as well as the covariance of return among each asset's

pair are planned by finance experts. The portfolios are chosen from those hanging on a proficient frontier which depicts the tradeoff flanked by risk as well as return. The frontier is proficient for the reason that the end result of the selected choice has the maximum predictable return for same risk level. The theory is associated to the work due to the fact that investment portfolio diversification encompasses taking of risk. Steinbach (2001) in his work postulated that selection of portfolio entails the supposition of the investor concerning his expectations and is thus denoted by the likelihood of asset returns distributions. These likelihood distributions are hence dependent on the judgment of market analyst as well as statistical projection from chronological information. The dimension of the anticipated return on portfolio is dependent on the aggregate of the experiential returns on asset. Risks are measured as the portfolio variance that is derivable from the asset returns covariance (Santos and Haines, 2004).

2.5.5 Theory of Financial Intermediation

This study is anchored on theory of financial intermediation which was propounded by Schumpeter (1911). It advocates that financial intermediaries play a fundamental role of intermediation in the growth process by transferring financial resources from the net savers to net borrowers, thus influencing investment and thereby economic growth. The theory suggests that financial intermediaries can overcome a market failure and resolve an information asymmetry problem by transforming the risk characteristics of assets. The work of Schumpeter (1911) supports the view that well-functioning financial intermediaries can

promote the overall economic efficiency. By pooling and allocating funds, financial intermediation promotes entrepreneurship and innovation which are necessary components for economic growth and development.

2.6 Review of Empirical Studies

In an attempt of determining the influence of financial development on economic growth, many scholars have carried out related studies from which some are reviewed in this study.

Efanga, Ogochukwu and Ugwuanyi (2020) investigated the impact of financial deepening on the Nigerian economy between 1981 and 2018. Data employed for this study was obtained from Central Bank of Nigeria Statistical Bulletin. This study employed real gross domestic product as proxy for economic growth in Nigeria, while ratio of money supply to gross domestic product, ratio of private sector credit to gross domestic product and ratio of market capitalization to gross domestic product were adopted as regressors. Inferential results generated indicated that financial deepening had positive impact on the Nigerian economy within the period under review.

Eke, Okoye and Evbuomwan (2020), carried out a study on entrepreneurship and financial deepening in selected African economies from 1995- 2014 and evidence from the augmented Toda Yamamoto technique , the result shows that human capital does not have long run causal effect on entrepreneurship , and financial deepening.

Osasere, Bashiru and Ehis (2020) examined the impact of financial deepening on economic growth in Nigeria, using an annual data covering the period of 1990 – 2017. Multiple regression techniques were used, error correction model was conducted to test the long run equilibrium of the model. Findings revealed that the variable has a long run effect on economic growth since the ECM result reveals a negative and significant relationship. Also based on the short run test, the result reveals that there is a negative and insignificant relationship between the ratio of credit to private sector to gross domestic product (CPS_GDP) and gross domestic product (GDP). There is also a negative and insignificant relationship between inflation rate (INFL) and gross domestic product (GDP). Furthermore, the result showed that there is a positive and insignificant relationship between the ratio of gross fixed capital formation to gross domestic product and gross domestic product (GDP). Also, it was found that there is a negative and insignificant relationship between the ratio of money supply to gross domestic product in the economy and gross domestic product (GDP).

Samuel-Hope, Ehimare and Osuma (2020) explored the effect of financial deepening on Nigeria's growth for 38 years covering 1981- 2018. The main research goals were to investigate the linkages among time and savings deposit of commercial banks, money supply and credit to the private sector on the economy's growth. Data was obtained from CBN Bulletin different issues and analyzed using Autoregressive Distributed Lag. From the result of analysis, the long run relationship existed but no regressor was found to be significant. Credit to the private sector to GDP was inversely related to GDP growth whereas money

supply to GDP had positive relations with economic growth rate, time and savings deposits in commercial banks negatively affected national growth.

Igwebuike, Udeh and Okonkwo (2019) examined effects of financial deepening on the economic growth of Nigeria (1981 to 2016) through two of the basic arms of the financial industry (Insurance companies and Banking Industry). Secondary data from CBN statistical bulletin and Global Financial Development bulletin, 2017 as provided by the World Bank were utilized. The analytical tool used was Ordinary Least Squares (OLS). It was found that insurance industry premium to GDP has positive but no significant effect while credit to private sector by commercial banks to GDP has positive and significant effect on economic growth in Nigeria.

Nwolisa and Cyril (2019) examined the impact of financial deepening on the growth of Nigerian -economy 1990-2016. The main objective of this study is to evaluate the effect of private sector credit, money supply and market capitalization on economic growth in Nigeria. The sources of data for this study are CBN statistical Bulletin and National Bureau of Statistics. The data obtained were analyzed using ordinary least square regression (OLS). The result of the analyses showed that the three independent variables of the study all have significant effect on Nigerian financial deepening.

Ogbonna (2018), examined the impact of financial deepening on economic growth in Nigeria between 1970 and 2015, using Vector Error Correction Model, Impulse Response Function,

and Forecast Error Variance Decomposition, with a distinction between size and activity variables of financial deepening. The results show that financial deepening and economic growth have a stable long-run relationship, and that activity variables of the financial deepening have more stimulating effect on economic growth than the size variables.

Paul (2017) examined the impact of financial deepening on economic growth in Nigeria, using data from secondary sources, (1986-2015). He employed the ordinary Least Square (OLS) technique, Co integration, and Error correction model (ECM) as estimation tools. The results revealed that economic growth in Nigeria in the long-run is influenced by the indices of financial depth. Also financial deepening is positively and significantly related to economic growth.

Taofeek and Olumuyiwa (2016) examined the relationship existing between financial development and inclusive growth for the period of 1980 to 2013. They employed the quantile regression-based threshold analysis. The result of their analysis revealed a 90th percentile threshold level, and that the impact of financial development on inclusive growth is determined by the measure of the previous threshold level. Also, the study found that trade openness and capital investment are necessary for inclusive growth in Nigeria.

Muhsin and Şerife (2016) examined the role of financial development on entrepreneurship by employing panel data estimation methods for 17 emerging markets economies over the period 2004-2009. In order to determine the linkages among the variables, two different measures

for financial development and three institutional factors were utilized in the analysis. Empirical findings indicated that while financial development and per capita income level have significantly and positively impact on entrepreneurship theoretically Saaed and Hussain (2015) examined empirically the causal relationship among financial development, trade openness and economic growth by using vector autoregressive technique in Kuwait for the period 1977-2012. The econometric methodology employed was the Cointegration and Granger Causality test. Granger causality tests based on VAR models show that there is a causal relationship between economic growth and financial development and between the trade openness of the economy and economic growth.

Rehman, Ali, and Nasir (2015) examined the relationship between financial development, savings and economic growth in Bahrain from 1981 to 2013 using the vector Auto Regression (VAR) model. They used M2/GDP to capture financial development, economic growth was captured by GDP per capita and savings measured as domestic savings/GDP. Their results showed that there is a bi-directional causality between savings and economic growth.

Ebiringa and Duruibe (2015) used vector autoregressive model to analyze the relationship between financial system development and economic growth in Nigeria. The empirical results reveal that there is no long run causality from financial system development indicators to growth. This implies that the role of the financial institutions in terms of credit access to

the less privileged played towards the output growth has been less significant in Nigeria. In the short-run, the effect of financial development on economic growth was positive.

Victor and Samuel (2014) examined empirically, the implications of financial development for economic growth in Nigeria, using time series data covering the period between 1990 and 2011 from Nigeria. The co integration technique with its implied Error Correction Mechanism (ECM) was applied. This commenced with the ADF unit root test, followed by the Johansen co integration test.

The variables included Real Gross Domestic Product, Financial deepening which is a ratio of money supply to Gross Domestic Product, liquidity ratio, interest rate and credit to the private sector. Financial sector development has not significantly improved private sector development. The minimum capital base and liquidity ratio has improved the level of economic growth in Nigeria. The Johansen co integration test suggests a long run relationship among the variables and the significant ECM which is negatively signed supports the long run relation among the variables and indicates a satisfactory speed of adjustment.

Abdulsalam and Gani (2013) examined the long run relationship between financial development indicators and economic growth in Nigeria over the period 1970-2010. Using the Johansen and Juselius (1990) approach to co integration and Vector Error Correction Modeling (VECM). The findings of the study revealed that in the long-run, liquid liabilities of commercial banks and trade openness exert significant positive influence on economic

growth, conversely, credit to the private sector, interest rate spread and government expenditure exert significant negative influence.

Nkoro and Uko (2013) investigated the nexus between financial sector development and economic growth in Nigeria using annual time series data from 1980 to 2009, within the cointegration and Error Correction analytical framework. The ratios of broad money stock to GDP, private sector credit to GDP, market capitalisation to GDP, banks deposit liability to GDP and prime interest rate were used as proxy financial sector development, while real GDP was used as proxy for financial economic growth. The study revealed a positive relationship between sector development and economic growth. Odeniran and Udejaja (2010) examined the relationship between financial sector development and economic growth in Nigeria, using Granger causality tests in a vector autoregressive (VAR) framework, over the 1960 period to 2009. The results indicated a bi-directional causality between some of the proxies of financial development and economic growth variable.

Odeniran and Udejaja (2012) examine the relationship between financial sector development and economic growth in Nigeria. It tests the competing finance-growth nexus hypothesis using Granger causality tests in a VAR framework over the period 1960-2009. Four variables, namely; ratios of broad money stock to GDP, growth in net domestic credit to GDP, growth in private sector credit to GDP and growth in banks deposit liability to GDP were used to proxy financial sector development. The empirical results suggest bidirectional causality between some of the proxies of financial development and economic growth variable.

Specifically, the result showed that the various measures of financial development granger-cause output even at 1percent level of significance with the exception of ratio of broad money to GDP.

The conclusion reached by Okpara (2010) is similar to that of Popoola (2014), who argues that the impact of market capitalisation of the Nigerian Stock Exchange has positive impact on economic growth in Nigeria. Nkoro and Uko (2013) investigated the nexus between financial sector development and economic growth in Nigeria using annual time series data from 1980 to 2009, within the cointegration and Error Correction analytical framework. The ratios of broad money stock to GDP, private sector credit to GDP, market capitalisation to GDP, banks deposit liability to GDP and prime interest rate were used as proxy for financial sector development, while real GDP was used as proxy for economic growth. The study revealed a positive relationship between financial sector development and economic growth, even though market capitalisation and private sector credit were found to not stimulate economic growth. Likewise, Maduka and Onwuka (2013), using Nigerian data covering 1970 to 2008, evaluated the relationship within the framework of a vector error correction model, and concluded that financial market structure has a negative and significant impact on economic growth.

Balago (2014), on the other hand, used Ordinary Least Square Regression and Vector Error Correction Models, and found a positive relationship between financial sector development and economic growth for the Nigerian economy. He found that financial sector development

(proxied by banking sector credits, total market capitalisation, and foreign direct investment) had a positive effect on economic growth.

Several other studies, such as Dandume (2014), Adeniyi et al. (2015), Obinna (2015), and Iheanacho (2016), have re-evaluated the relationship between financial sector developments and economic growth, within the context of the Nigerian economy, and have unveiled important policy issues, which have significant implications for the Nigerian economy. However, just as they differ in their methodological approaches, their results and implications are also mixed. For example,

Eita & Jordaan (2007) analysed the causal relationship between financial development and economic growth in Botswana for the period 1977 to 2006, used Granger causality through cointegrated vector auto-regression method. The results showed that there is a stable long run relationship between financial development and economic growth. Financial development caused economic growth in Botswana and the causality ran from financial development to economic growth (unidirectional and supply-leading).

Akinlo & Egbetunde (2010) examined long run and causal relationship between financial development and economic growth for ten countries in Sub-Saharan Africa for the period of 1980 to 2005. The study used vector error correction model and showed that there is a long run relationship between financial development and economic growth in the selected Sub-Saharan African countries. The results also showed that financial development caused

economic growth in Central African Republic, Congo Republic, Gabon and Nigeria, while economic growth caused financial development in Zambia. However, bidirectional relationship between financial development and economic growth was found in Kenya, Chad, South Africa, Sierra Leone and Swaziland.

Hussain & Chakraborty (2012) used time series techniques to assess the relationship between financial development and economic growth and their causality for the period of 1985 to 2009 in India. The study found a long run relationship between financial development and economic growth. Furthermore, Granger causality test indicated that financial development caused economic growth in India (unidirectional and supply-leading).

Osuji & Chigbu(2012) examined the impact of financial development variables on economic growth in Nigeria, employed time series data for the period of 1960 to 2008. The study used ordinary least squares method and the results revealed that financial development variables have a long run relationship with economic growth variable. The causality test indicated that financial development variables caused economic growth variable and also economic growth variable caused financial development variables (bidirectional causality).

Ahmed (2013) investigated the relationship between financial system development and economic growth in Egyptian economy. The study used vector error correction model for the period of 1980 to 2010. The study showed that there is a long run relationship between

financial system development and economic growth. While causality test revealed that economic growth caused financial development (unidirectional and demand following).

Iheanacho (2016) used a cointegrating Autoregressive Distributed Lag (ARDL) approach and found a negative relationship between financial sector development and economic growth in Nigeria. Specifically, Iheanacho (2016) focused on oil-dependent economy, and found no significant difference in the relationship between financial development and economic growth in Nigeria and what is generally obtainable in other oil dependent economies, such as Libya, Angola and Saudi Arabia. Taofeek and Olumuyiwa (2016) examined the relationship existing between financial development and inclusive growth for the period of 1980 to 2013. They employed the quantile regression-based threshold analysis. The result of their analysis revealed a 90th percentile threshold level, and that the impact of financial development on inclusive growth is determined by the measure of the previous threshold level. Also, the study found that trade openness and capital investment are necessary for inclusive growth in Nigeria.

Salami et al, (2013) in their study examines the impact of financial sector development and economic growth in Nigeria. The methodology that was adopted was OLS method of the regression analysis. The financial development was proxied by ratio of liquidity liabilities to GDP (M2GDP), real interest rate (INTR), ratio of credit to private sector to GDP (CPGDP) while the economic growth was measured by the real GDP (RGDP). The study finds that only the real interest rate is negatively related. All the explanatory variables are statistically

insignificant. Though the overall statistic shows that the independent variables were able to explain 74 percent variation in the dependent but contrary to a priori expectation, it is statistically insignificant. They conclude that the link between the financial and real sector still remains weak and could not propel the needed growth towards the vision 2020.

In general, empirical studies suggest three types of causal direction between finance and growth. First, the Harrod-Domar growth model would lead to a hypothesis of one-way causality from financial development to economic growth. Second, there is unidirectional causality from growth to finance. Such finding confirms Powell (2003) conclusion that economic growth causes China's financial development. Nonetheless, a third alternative, the co-evolution (bidirectional causality) between economic growth and financial development hypothesized in both early and recent literature (Gurley and Shaw 1960, 1967 in Bencivenga and Smith, 1991) cannot be ruled out. In one of the early studies on this subject, Goldsmith (1969) analyzed data from thirty-five countries for the period 1860-1963 and found that financial and economic development are positively correlated over periods as long as several decades.

Financial development was measured in his study by the ratio of financial intermediary assets divided by gross national product. The result from Goldsmith's study still leaves the puzzle unresolved because each variable has a feedback effect on the other. In an attempt to explain the puzzle, Goldsmith (1969) stresses that financial development largely occurs during the early stages of economic development when countries have low levels of income.

The finding of Goldsmith (1969) was later confirmed by De Gregor and Guidotti (1995) who note that over time, the correlations between financial development and economic growth are strong in the early stages of development and are diminished or even eliminated for OECD countries. They further show that the effect of financial development on growth becomes weaker as countries become more developed, perhaps because of problems with measuring financial development or because financial intermediaries actually have larger effects in less developed countries than in more developed ones.

Bakhouché (2007) tests for a unidirectional link between financial sector development and economic growth in Algeria using the real per capita GDP as the economic growth indicator, and the ratios of M2 to GDP, total domestic credit and government expenditure to GDP. The result shows that there is no evidence of any short term relationship between the financial sector development and the Algerian economic growth and possibility of any long –run relationship. This, he assumed, may be as a result of persistent effects on economic performance of the country’s former central planning system where all economic decisions were as predetermined by government. He finally concluded that Algeria will need more time to realize the full benefits of financial sector reform and liberalization and competition between financial services providers.

Alaoui Monstain (2004) cited in Bakhouché (2007) also tests the relationships between financial sector development and economic growth in Morocco using the real GDP to measure growth, and the ratios of liquid liabilities M3 to GDP, domestic credit issued by the

banking sector to GDP and the domestic credit issued to the private sector to GDP are used as the financial development indicators. Causality relationships are identified from economic growth to the liquid liabilities and domestic credit indicators and from credit to the private sector to economic growth.

There is evidence of a stable long-run relationship between economic growth and the financial indicators. He asserted that the financial reforms implemented in Morocco in the 1990s do not appear to have resulted in the generation of a level of savings sufficient to boost productive investment, and thus long-term growth. He then concluded that institutional and legal reform may necessary to achieve the objective of this fund mobilization.

Nzotta and Okereke (2009) examined financial deepening and economic development in Nigeria between 1986 and 2007. The central focus was that a high level of financial deepening is a necessary condition for accelerating growth in an economy. The two stages least squares analytical framework was used in the analysis. A trend analysis was also done in the study.

At the end of the study, they found that financial deepening index is low in Nigeria over the years. They also found that the nine explanatory variables, as a whole were useful and had a statistical relationship with financial deepening. But four of the variables; lending rates, financial savings ratio, cheques/GDP ratio and the deposit money banks/GDP ratio had a significant relationship with financial deepening. They concluded that: the financial system

has not sustained an effective financial intermediation, especially credit allocation and a high level of monetization of the economy.

Levine (2003) confirm the very important link between financial development and growth, but also sounds a note of caution that not all types of financial deepening is beneficial for the economy. In the case of Turkey, financial deepening meant that savings left the provinces, depriving the real industry of credit needed for investment projects. As such, it may not be hard to imagine that if the banking sector was functioning efficiently during this period, then financial deepening may have contributed to economic growth in the provinces, as opposed to taking them into a serious crisis.

They concluded that it is important to note that financial deepening measured in terms of the ownership of banks may distort incentives leading to an underdevelopment of growth of both the public and the private banks. Therefore, financial sector deepening in terms of the public and private banks could be analyzed separately before making firm conclusions about the negative relationship between financial growth and economic growth.

Empirical Evidence from Advanced and Emerging Market

Various academic researchers have examined and documented the link between finance and economic growth in varying dimensions. For example, Wadud (2005) examined the long-run causal relationship between financial development and economic growth for 3 South Asian countries namely India, Pakistan and Bangladesh. The study employed a co-integrated vector

autoregressive model to assess the long-run relationship between financial development and economic growth. The results indicate causality between financial development and economic growth but running from financial development to economic growth.

Waqabaca (2004) examined the causal relationship between financial development and growth in Fiji using low frequency data from 1970 to 2000. The study employed unit root test and co integration technique within a vicariate VAR framework. Empirical results suggest a positive relationship between financial development and economic growth for Fiji with causality running from economic growth to financial development. He posited that this outcome is common with countries that have less sophisticated financial systems.

Arestis and Demetriades (1977), using Johansen co-integration on time series analysis for the United States and Germany found insufficient evidence to claim that financial development spurs economic growth. Their analyzed data rather pointed to the direction that real GDP contributes to both banking system and stock market development.

Odiambho (2001) investigated the finance-growth nexus in South Africa using cointegration approach and vector error correction model on monetization ratio; namely the ratio of M2 to GDP and intermediation ratio, the ratio of bank claims on the private sector to GDP against economic growth proxied by real GDP per capital. Their results revealed demand following response between financial development and economic growth and totally discredited the supply leading hypothesis.

Guryay et al (2007), examined the relationship between financial development and economic growth for Northern Cyprus for the period 1986 - 2004 and concluded that there was a negligible positive effect of financial development on economic growth of Northern Cyprus. Rather, the analysis shows that there was evidence of causality from economic growth to the development of financial intermediaries. (King and Levine, 1993 and Levine, Zervos, 1998).

Rajan and zingales (1998) using time series analysis (1980-1990) found that financial development has a strong effect on economic growth. Also thngevelu et al, (2004) time series analysis for Australia study represents evidences that financial, markets have causal effect on growth. Murinde and Eng (1991), Luintel and Khan (1999) argued that a number of endogenous growth models show a two-way relationship financial development and economic growth (Kar and Pentecost 2000).

Rousseau and Wachtel (2000) re-examined the core cross country panel result and found that the impact of financial depending on growth is not as strong with more recent data as it appeared in the original panel studies with data for the period from 1960-1989 and suggested that financial development has a positive effect on growth if not done to excess.

Altay and Atgur (2010) advocated bidirectional causality hypothesis. In this study, financial development and economic growth relationship - using VAR Model approach were investigated in Turkey over the period 1970-2006. His empirical findings showed that there

was a bidirectional Granger causality relationship between financial development and economic growth in Turkey.

Bailey (2002), studying the relationship between financial sector and economic growth in transition countries was of the view that increased competition in the banking sector (which leads to higher deposit and lower loan rate) has not caused economic growth in Spain province. Stern listed several topics omitted from the survey that are worthy of future research, and financial development was not even mentioned on that list. Future neglect of the role of financial development in economic development is also found in Myers and Seers (1984) book, which is a collection of essays by pioneers of development economics.

2.7 Statement of research gap

The existing studies reviewed shows that studies conducted on the nexus of a country's financial sector development indicators and economic growth cuts across both developed and developing such as, Ghana, Malaysia, Kenya, Nigeria, and Sierra Leone among many others. However, the findings from the empirical studies carried out in the past tend to suggest a lack of consensus among them on the direction, and at what level, of statistical significance that each financial sector variable affects economic growth. The regression results are more or less country- specific and limited in scope. This therefore indicates the existence of a research gap. Therefore, this study on the link between financial sector development indicators and economic growth in Nigeria was aimed at contributing to that gap in literature.

CHAPTER THREE

METHODOLOGY

3.1 Introduction

This chapter outlines the methodology of the study. It describes the research design, population and sample, data sources, method of data analysis, model specification, and operationalization of variables.

3.2 Research Design

Ex post facto research design was employed in this study. This is because this study is carried out after the proceedings have taken place and data are before now in existence (Ndiyo, 2005). The relationship existing between the financial system development and the growth of the economy in Nigeria for the period under study.

3.3 Population and Sample

The target population for this research is the Nigeria economy. The study adopts a census sampling technique where the population is the same as the sample size. This is because the variables adopted are macro in nature and covers the entire population.

3.4 Sources of Data

Data were gotten from secondary sources and used in the study. For the purpose of this research, a literature survey of published articles and other publications on the topic under

study were explored. To attain the objectives of the study, annual data of time series were used. The data included GDP, money supply to GDP, Credit to private sector ratio, ratio of market capitalization, value of traded shares and turnover ratio. The data collected were then subjected to several econometric tests using statistical E-views software. The research covers the activities of all quoted financial institution on the Nigerian Stock Exchange and the growth of the economy as proxied by Gross Domestic Product (GDP).

3.5 Model Specification

A model will be developed to conduct analysis properly and produce pertinent findings. Adeoye (2006) developed a model showing the relationship between financial system development and economic growth in Nigeria. The chosen economic growth indicator is the Gross Domestic Product (GDP) is specified to depend on the financial system indicators which are the ratio of liquid liabilities ratio to GDP (LLG), turnover ratio to GDP (TRG) the ratio of Credit to Private to GDP (CPG), the ratio of value of traded shares to GDP (VTG) and Market capitalization ratio (MCG) changes.

The multiple linear regression models that would be used is functionally expressed as follows:

$$GDP = f(LLG, TRG, CPG, VTG, MCG) \dots\dots\dots (1)$$

The economic form of the model is specified as;

$$GDP = \alpha_0 + \beta_1 LLR + \beta_2 TRG + \beta_3 CPG + \beta_4 VTG + \beta_5 MCR + \mu \dots\dots\dots (2)$$

Where;

GDP = Economic growth rate as proxied by Gross Domestic Product growth rate

LLG = Liquidity liabilities ratio

TRG = Turnover ratio

CPG= Credit to private ratio

VTG = Value of traded shares

MCG = Market capitalization ratio

α_0 = is the intercept

$\beta_1 - \beta_5$ = are the coefficients of the independent variables

μ = is the Stochastic variable

3.6 Measurement and Operationalization of variables

Variables	Operational Definition	Type	Measurement	Source
Real Gross domestic product	Real gross domestic product (GDP) is an inflation-adjusted measure that reflects the value of all goods and it captures the demand and supply of financial activities in the economy	Dependent variable	GDP can be measured by summing up national income and adjusting for depreciation, taxes, and subsidies. $Y = C + I + G + (X - M)$	Nurudeen, (2009)
Liquidity liabilities	The ratio of liquid liabilities to GDP measures the size of the financial intermediary system relative to the size of the Nigerian economy and	Independent variable	Total loans and advances to total deposits	(Naceur et al., 2014).

	the ability of financial intermediaries to meet unanticipated demand to withdraw deposits by customers			
Market capitalization	All Equities market capitalisation of the Nigeria Stock Exchange. The total value of all a company's shares of stock.	Independent variable	It is calculated by multiplying the price of a stock by its total number of outstanding shares.	Adjasi and Biekpe, (2006)
Turnover ratio	A turnover ratio represents the amount of assets or liabilities that a company replaces in relation to its sales	Independent variable	It is measured by dividing a company's sales by its average total assets.	Adjasi and Biekpe, 2006
Private sector credit	The volume of domestic credit to the private sector by deposit money banks relative to the size of the Nigerian economy measures the contribution of financial intermediaries to private sector activities through intermediation.	Independent variable		Adu et al., 2013
Values of traded shares	Market value per share is the price at which a share	Independent variable	This is the total number of	Investopedia

	<p>of company stock can be acquired in the marketplace, such as on a stock exchange. This price varies throughout the day, based on the level of demand for the stock.</p>		<p>outstanding shares traded multiplied by their respective current prices.</p>	
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Source: Author’s Compilation, 2023.

3.7 Method of Data Analysis

Data analysis begins with the test of stationary of the data using the Augmented Dickey-Fuller (ADF) and Phillip-Perror (PP) statistics. The stationary test will show the number of time a variable has to be differenced, which indicates its order of integration. If the variables under consideration are at most stationary after the first difference, then the next step is to test whether they are cointegrated. Cointegration test will determine whether or not there is any long run relationship among the variables under consideration. This was done by using Johansen technique developed by Johansen (1988 and 1992). After the stationary and cointegration tests the study moved further to investigate the direction of causality. Causality test will examine whether or not changes in one variable helps to explain changes in another variable. Granger causality was used to examine the direction of causality between financial system development indicators and economic growth indicator. This technique was employed due to the fact that it can provide causality direction in both short run and long run.

CHAPTER FOUR

DATA ANALYSIS AND PRESENTATION OF RESULTS

4.1 Introduction

The chapter deals with the analysis of the data, presentation of results and test of hypotheses. The Augmented Dickey-Fuller (ADF) test for stationarity was carried out, then the cointegration was carried out to determine the long run relationship among the variables under consideration. Causality test was also carried out to determine how one variable explains the other. The hypotheses were tested at 5% level of significance. Lastly, we discuss the result of the findings. This analysis was carried out using the E-views 12.

The following research questions were answered:

6. What is the relationship between private sector credit and economic growth in Nigeria?
7. What is the relationship between liquid liabilities ratio and economic growth in Nigeria?
8. Does market capitalization influence economic growth in Nigeria?
9. What is the relationship between turnover ratio and economic growth in Nigeria?
10. Does the value of traded shares affect economic growth in Nigeria?

4.2 Presentation of Estimation Results

Table 4.1: Descriptive statistics

	GDP GRO...	LLG	TRG	CPG	VTG	MCG
Mean	3.073721	16.70585	6.093902	9.555814	428.0584	8533.291
Median	3.650000	13.73000	5.060000	8.200000	57.68000	1359.300
Maximum	15.33000	28.63000	34.79000	19.60000	2350.880	51188.87
Minimum	-13.13000	9.800000	0.430000	5.000000	0.220000	98.40000
Std. Dev.	5.258750	5.917011	6.531335	3.562791	571.0787	12579.97
Skewness	-0.855289	0.605026	2.307944	0.899680	1.304464	1.778308
Kurtosis	4.855513	1.761727	10.41048	3.293698	4.306123	5.607732
Jarque-Bera	11.41114	5.120809	130.2119	5.955414	15.25149	34.84753
Probability	0.003327	0.077273	0.000000	0.050909	0.000488	0.000000
Sum	132.1700	684.9400	249.8500	410.9000	18406.51	366931.5
Sum Sq. Dev.	1161.487	1400.441	1706.334	533.1260	13697496	6.65E+09
Observations	43	41	41	43	43	43

Source: Author's Computation using E-Views 12, 2024.

From the table 4.1 above, the results of the mean value revealed that all the variables; GDP growth rate, liquidity liability ratio, turnover ratio, credit to private sector, value of traded share and market capitalization all have considerable mean values. The distribution of the median value shows the middle value of the figures in each variable. The result of the standard deviation depicts how spread out the values of each variable is from their mean value. GDP growth rate, turnover ratio, credit to private sector, value of traded share and market capitalization are relatively spread out, while the liquidity liability ratio is largely spread out. The skewness of a symmetric distribution, such as the normal distribution, is zero.

Positive skewness means that the distribution has a long right tail and negative skewness implies that the distribution has a long left tail. In this study, all the independent variables were found to be positively skewed (skewed to the right) implying that the distributions have long right tails, which the dependent variable (GDP growth rate) which is skewed to the left implies that the distributions have long left tail. The probability of the Jarque – Bera statistic is significant at 5% level of significance showing that the series failed the normality test. Hence the need for conducting a unit root test to check for stationarity of the data to avoid spuriousness in the regression results used for the hypotheses testing.

Table 4.2: Unit Root Tests

At Levels				First Difference		
Variable	ADF Test Statistic	95% Critical ADF Value	Remark	ADF Test Statistic	95% Critical ADF Value	Remark
GDPGRO	-3.930934	-3.520787	Stationary	-9.575497	-2.951125	Stationary
LLG	-6.972127	-3.529758	Stationary	-6.532076	-2.948404	Stationary
TRG	-4.146594	-3.526609	Stationary	-6.770672	-3.533-83	Stationary
CPG	-4.984557	-3.520787	Stationary	-8.113845	-3.523623	Stationary
VTG	-4.289383	-3.520787	Stationary	-9.837688	-3.523623	Stationary
MCG	1.480363	-3.552973	Non-Stationary	-5.267623	-2.948404	Stationary

Source: Author's Computation 2024

The Augmented Dickey Fuller (ADF) test is employed in order to analyze unit roots. The results are presented in levels and first difference in Table 4.2. In the result, the ADF test statistic for each of the variables is shown in the second and fifth column, while the 95 percent critical ADF value is shown in the third and sixth column respectively. The result indicates that all the variables are stationary at levels (in absolute values), except that of market capitalization (MCG). The implication of this is that the time series are non-stationary in their levels (see panel 1). However, after the first difference was taken, all the variables were now stationary (see panel 2). This implies that the variables are actually difference-stationary, attaining stationarity after the first differences of the variables. Thus, we would accept the hypothesis that the variables possess unit roots. Indeed, the variables are integrated of order one (i.e. I[1]).

Table 4.3: Johansen Cointegration test

Unrestricted Cointegration Rank Test (Trace)

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**
None *	0.771899	146.6593	95.75366	0.0000
At most 1 *	0.640997	89.01861	69.81889	0.0007
At most 2 *	0.505435	49.06606	47.85613	0.0383
At most 3	0.284645	21.60708	29.79707	0.3209
At most 4	0.178148	8.542998	15.49471	0.4093
At most 5	0.022597	0.891412	3.841465	0.3451

Trace test indicates 3 cointegrating eqn(s) at the 0.05 level

* denotes rejection of the hypothesis at the 0.05 level

**MacKinnon-Haug-Michelis (1999) p-values

Unrestricted Cointegration Rank Test (Maximum Eigenvalue)

Hypothesized No. of CE(s)	Eigenvalue	Max-Eigen Statistic	0.05 Critical Value	Prob.**
None *	0.771899	57.64064	40.07757	0.0002
At most 1 *	0.640997	39.95256	33.87687	0.0083
At most 2	0.505435	27.45898	27.58434	0.0519
At most 3	0.284645	13.06408	21.13162	0.4463
At most 4	0.178148	7.651586	14.26460	0.4152
At most 5	0.022597	0.891412	3.841465	0.3451

Max-eigenvalue test indicates 2 cointegrating eqn(s) at the 0.05 level

* denotes rejection of the hypothesis at the 0.05 level

**MacKinnon-Haug-Michelis (1999) p-values

Source: Author's computation using E-views 12, 2024

From the result of cointegration above, we can deduce that Eigen value cointegration test (trace), there are 3 long run cointegrating equations at the 0.05 level of significance, while 2

reveals no long run cointegrating equations at 0.05 level of significance. Similarly, the cointegration rank test (maximum eigenvalue) reveals 2 long run cointegrating equations at the 0.05 level of significance, while 4 reveals no long run cointegrating equations at 0.05 level of significance. The result of the OLS unit root test residuals are as follows:

Error Correction Model

The short run adjustment dynamics can be represented by an error correction model. According to Engel and Granger (1987), once a set of variables are stationary in first difference I(1) and a cointegration has been established, any dynamic analysis should incorporate the error correction mechanism, which measure deviation from the long-run equilibrium. Also, it is able to determine the speed at which the explained variable returns to equilibrium after a deviation has occurred. The result from ECM model is presented below:

Table 4.4: Over-parameterized Error Correction Model (ECM) result

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	53.88096	37.65172	1.431036	0.1705
DGDPGRO	0.159216	1.902958	-0.083668	0.9343
DGDPGRO(-1)	0.226371	2.004852	-0.112911	0.9114
DLLG	43.02610	11.49900	3.741727	0.0016
DLLG(-1)	13.42586	8.982109	-1.494734	0.1533
DTRG	6.577380	14.19806	0.463259	0.6498
DTRG(-1)	11.99008	6.579320	1.822389	0.0884
DCPG	22.92070	14.75503	-1.553416	0.1387

DCPG(-1)	2.519329	13.31170	0.189257	0.8521
DVTG	24.31350	14.00595	1.735941	0.1007
DVTG(-1)	9.611632	17.19116	0.559103	0.5834
DMCG	20.29862	37.80152	0.536979	0.5982
MCG(-1)	6.577380	14.19806	0.463259	0.6498
ECM(-1)	0.483010	0.156107	-3.094092	0.0066
<hr/>				
R-squared	0.675523	Mean dependent var	42.77013	
Adjusted R-squared	0.446481	S.D. dependent var	218.7158	
S.E. of regression	162.7221	Akaike info criterion	13.32065	
Sum squared resid	450134.3	Schwarz criterion	13.92783	
Log likelihood	186.8097	Hannan-Quinn criter.	13.51489	
F-statistic	2.949336	Durbin-Watson stat	1.446423	
Prob(F-statistic)	0.020733			

Source: Researcher's Computation (2024)

Although the result of the over-parameterized error correction model for economic growth (GDPGRO) seems fairly well estimated, it cannot be interpreted in his present form. As in the tradition, the over-parameterized error correction model was reduced to achieve parsimonious error correction model, which is data admissible, theory – consistent and interpretable. Thus, our parsimonious reduction process made use of a stepwise regression procedure (through the elimination of those variables and their lags that are not significant), before finally arriving at interpretable model. The result from the parsimonious ECM is presented below:

Table 4.5: Parsimonious Error Correction Model (ECM) result

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-52.07278	38.74011	-1.344157	0.1947
DGDPGRO(-1)	0.503822	0.243235	2.071335	0.0522
DGDPGRO(-2)	0.397960	0.173621	2.292113	0.0335
DLLG	-18.25431	11.55454	-1.579838	0.1306
DTRG	10.27934	4.014372	2.560636	0.0191
DCPG	33.75434	12.95342	2.605825	0.0174
DINV(-1)	-18.55118	7.530898	-2.463343	0.0235
DVTG	13.86542	16.61635	0.834444	0.4144
DMCG	-11.05845	12.65416	-0.873898	0.3931
ECM(-1)	-0.587644	0.146835	-4.002075	0.0008
R-squared	0.614235	Mean dependent var		49.40358
Adjusted R-squared	0.431504	S.D. dependent var		219.4945
S.E. of regression	165.4960	Akaike info criterion		13.32257
Sum squared resid	520389.6	Schwarz criterion		13.79405
Log likelihood	-183.1773	Hannan-Quinn criter.		13.47023
F-statistic	3.361415	Durbin-Watson stat		2.050728
Prob(F-statistic)	0.012503			

Source: Researcher's Computation (2024)

An examination of result shows that about 61% of the systematic variation in economic growth (dGDPGRO) in the short run have been explained by the regressors, that is the final variables that entered the parsimonious model namely liquid liabilities ratio (dLLG), private sector credit (dCPG), market capitalization (dMCG), Turnover ratio (dTRG) and value traded (dVTG). This is indicated by the coefficient of determination (R^2) of

0.614. While about 39% of the systematic variations in economic growth (dGDPGRO) was left unexplained by the model which has been captured by the error term. This implies that other factors apart from the financial sector also affect Nigeria's economic growth in the short-run, although not statistically significant.

On the basis of the overall statistical significance of the model as shown by the F- statistics, it was observed that the overall model was statistically significant since the calculated F-value of 3.36 was greater than the critical F-value at 5% level of significance. Thus, the hypothesis of a significant linear relationship between economic growth (proxied by GDPGRO) and all the explanatory variables is validated.

The result showed that stock market development (measured by market capitalization as a ratio of GDP) has a significant impact on current economic growth in the short-run since dMCG with a calculated t-value of 2.56 is greater than the critical t-value at 5% level of significance. The result also showed that there exist a direct relationship between market capitalization and economic growth in Nigeria.

It was observed that banking system development (measured by private sector credit as a ratio of GDP) has a significant impact on Nigeria's economic growth in the short-run since (dCPG) with a calculated t-value of 2.605 is greater than the critical t-value at 5% level of significance. The result also revealed that there exist a positive relationship between private sector credit and Nigeria's economic growth.

The result revealed that Liquid liabilities ratio (LLG), turnover ratio(dTRG) and value traded (dVLG) have no significant impact on Nigeria's economic growth in the short-run since the calculated t-value of -1.57, 0.83 and -0.87 respectively were less than the critical t- value at 5% level of significance. The result further showed that there exist a direct relationship between turnover ratio and Nigeria's economic growth in the short-run but there exist an inverse relationship between value traded and economic growth. Liquid liabilities ratio also have an inverse relationship with growth.

The coefficient of the ECM was also correctly signed and significant at 1% level. Thus, the model is able to correct for any deviation in economic growth from short-run equilibrium situation to long-run equilibrium. The coefficient of the ECM, with a value of 0.58 means that the speed of adjustment is about 58% which indicates that the speed of adjustment to long- run when there is a temporary disequilibrium would be relatively fast. The Durbin Watson statistic of 2.05 indicates the absence of autocorrelation in the model.

Long Run Analysis

The long run relationship between the dependent variable (GDPGRO) and the regressors (LLG, MCG, CPG, TTG, VLG) is estimated using Ordinary Least square (OLS) technique.

The result is presented in table 4.7 below:

Table 4.6: Long run Analysis

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1990.682	285.6417	6.969156	0.0000
LLG	-37.28189	20.31852	-1.834873	0.0814
MCG	17.37925	5.380949	3.229774	0.0042
CPG	60.16671	22.92952	2.623984	0.0163
TRG	108.0194	29.96911	3.604356	0.0018
VLG	82.23561	65.10346	1.263153	0.2211
R-squared	0.914722	Mean dependent var		3092.133
Adjusted R-squared	0.876346	S.D. dependent var		784.8101
S.E. of regression	275.9740	Akaike info criterion		14.33969
Sum squared resid	1523233.	Schwarz criterion		14.80676
Log likelihood	-205.0954	Hannan-Quinn criter.		14.48911
F-statistic	23.83621	Durbin-Watson stat		1.614453
Prob(F-statistic)	0.000000			

Source: Researcher's Computation (2024)

An examination of result shows that about 91% of the systematic variation in economic growth (dGDPGRO) in the long run have been explained by all the regressors namely liquid liabilities ratio (LLG), private sector credit (CPG), market capitalization (MCG), Turnover ratio (TRG) and value traded (VLG). This is indicated by the coefficient of determination

(R^2) of 0.91. While about 9% of the systematic variations in economic growth (dGDPGRO) were left unexplained by the model which has been captured by the error term.

On the basis of the overall statistical significance of the model as shown by the F-statistics, it was observed that the overall model was statistically significant since the calculated F-value of 23.8 was greater than the critical F-value at 5% level of significance. Thus, all the explanatory variables jointly have a significant impact on Nigeria's economic growth in the long run and the existence of the hypothesis of a significant relationship between the dependent variable (GDPGRO) and all the independent variables in the long-run is validated.

On the basis of the individual statistical significance of the model, as shown by the t-ratios, the result showed that three of the financial development measures [that is, private sector credit (CPG), market capitalization (MCG), Turnover ratio (TRG)] have a significant positive relationship with economic growth in the long run since their calculated t-values were greater than the critical t-value at 5% level of significance, while liquid liabilities ratio (LLG) and value traded (VTG) has no significant impact on Nigeria's economic growth in the long-run.

Granger Causality Test

Table 4.7: Granger Causality Test

Null Hypothesis:	Obs	F-Statistic	Prob.
LLG does not Granger Cause GDP GROWTH RATE	39	2.63134	0.0866
GDP GROWTH RATE does not Granger Cause LLG		0.25873	0.7735
TRG does not Granger Cause GDP GROWTH RATE	39	0.96571	0.3909
GDP GROWTH RATE does not Granger Cause TRG		1.04523	0.3626
MCG does not Granger Cause GDP GROWTH RATE	41	0.22538	0.7993
GDP GROWTH RATE does not Granger Cause MCG		0.01856	0.9816
VTG does not Granger Cause GDP GROWTH RATE	41	0.00226	0.9977
GDP GROWTH RATE does not Granger Cause VTG		0.04904	0.9522
CPG does not Granger Cause GDP GROWTH RATE	41	3.55412	0.0390
GDP_GROWTH_RATE does not Granger Cause CPG_____		0.58379	0.5630

Source: Author's computation 2024

From the table above, the Granger causality was used to examine the direction of causality between financial system development indicators and economic growth indicator. We can deduce that changes in LLG, TRG, MCG and VTG does not explain changes in GDP growth rate. But changes in CPG does explain changes in GDP growth rate at 5% significance.

4.3 Test of Hypotheses

This section on deals with the authentication and validation of hypotheses coined from the objectives of the study.

Hypothesis One: Liquid liabilities ratio has no significant effect on economic growth in Nigeria

The result revealed that Liquid liabilities ratio (LLG) have no significant impact on Nigeria's economic growth in the short-run and long-run since the calculated t-value of -1.57 and -1.83 respectively were less than the critical t- value at 5% level of significance. Therefore, we accept the null hypothesis.

Hypothesis Two: Private sector credits have no significant effect on economic growth in Nigeria

It was observed that private sector credit as a ratio of GDP has a significant impact on Nigeria's economic growth in both short and long-run since (dCPG) with a calculated t-value of 2.605 and 2.623 is greater than the critical t-value at 5% level of significance. The result also revealed that there exists a positive relationship between private sector credit and Nigeria's economic growth. Hence, we reject the null hypothesis and accept the alternate.

Hypothesis Three: Market capitalization has no significant impact on economic growth in Nigeria

The result showed that market capitalization as a ratio of GDP has a significant impact on current economic growth in the short and long-run since the calculated t-value of 2.56 and 3.229 respectively are greater than the critical t-value at 5% level of significance. The result also showed that there exist a direct relationship between market capitalization and economic growth in Nigeria. Hence we reject the null hypothesis and accept the alternate.

Hypothesis Four: Turnover ratio has no significant impact on economic growth in Nigeria

The result revealed that turnover ratio (dTRG) have no significant impact on Nigeria's economic growth in the short-run with a calculated t-value of 0.83 that was less than the critical t- value at 5% level of significance. However, the result of the long run relationship was a positive one with a calculated t-value of 3.604 which is greater than the critical t-value at 5% level of significance. Hence, we accept the null hypothesis in the short run but reject it in the long run.

Hypothesis Five: Values of shares traded on stock exchange has no significant impact on economic growth in Nigeria

The result revealed that value of shares traded (dVLG) have no significant impact on Nigeria's economic growth in the short-run and long-run since the calculated t-value of -0.87 and 1.26 respectively were greater than the critical t- value at 5% level of significance. The result also showed that there exist a direct relationship between value of shares traded and economic growth in Nigeria. Hence we reject the null hypothesis and accept the alternate.

4.4 Discussion of Findings

The empirical results have given credence to the existence of a positive association (correlation) between financial development proxies and economic growth in Nigeria. In particular, all the financial development proxies such as Liquid Liabilities ratio (LLG), Private Sector Credit (PCG), Market Capitalization (MCG), Turnover Ratio (TRG) and Value of stocks traded (VLG) are found to be positively associated (correlated) with the level of economic growth. This is in line with the empirical findings of Demirgüç-Kunt and Levine (1996). The dynamic approach to the empirical analysis shows that private sector credit and market capitalization are strong financial development proxies which are highly linked to economic growth in Nigeria in the short run. More specifically, positive short-run linkages exist between economic growth and banking development (in terms of PCG), stock market development (in terms of MCG). In the same vein, it is observable from the empirical results that in the long run, private sector credit (PCG), market capitalization (MCG) and Turnover Ratio (TRG) significantly influences and are strongly linked to economic growth in Nigeria.

Secondly, the empirical findings indicate that the coefficient of private sector credit (PCG) is positive and significantly related to economic growth (GDPGRO) in Nigeria. The import of these findings is that the banking system in Nigeria is truly performing their intermediation role of channeling funds to the private sector. This indeed is the major role of the financial sector towards the economic growth process. More specifically, findings also suggest that

enhancing the size and liquidity of stock markets has a significantly positive impact on economic growth. Similar positive, significant long- run linkages between stock market development (measured by MCG and TRG) and economic growth have been found by Odhiambo (2010) and Adenuga (2010). The empirical results also revealed that liquid liabilities (LLG) and value traded (VLG) are not significant indicators of financial development in the long-run, and are therefore insignificantly linked to economic growth in Nigeria.

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

5.1 Summary of Findings

The objective of this study is to investigate the impact of the financial system development on economic growth in Nigeria based on the relative contribution of the banking system and the stock market. The Augmented Dickey-Fuller (ADF) test for stationarity of variables, cointegration test to determine the long run relationship of variables and the causality tests were carried out. On the basis of this analysis, the following relevant findings for policies implementation were made:

- (a) Liquid liabilities ratio has a long run relationship with economic growth in Nigeria;
- (b) Private sector credit has a strong positive factor that drives economic growth in Nigeria in both the short and long run respectively.
- (c) Market capitalisation has a positive significant impact on economic growth in Nigeria in the short and long run respectively, with the impact in the long run more pronounced.
- (d) Turnover ration has a strong long run relationship with economic growth in Nigeria; the variable was found to have passed the 0.05 significance level.
- (e) Values of shares traded has no long run relationship with economic growth in Nigeria; the variable was found to have failed the 0.05 significance level.

- (f) that turnover ratio (TRG) and market capitalization (MCG) are the most significant financial development measures which influences economic growth in the long run gauged from their respective t – ratios, which were highly significant at the 1% level respectively.

5.2 Conclusion

This study investigated the intricate relationship between financial system development and economic growth in Nigeria. The analysis employed several econometric techniques to unveil the long-run dynamics at play. The initial exploration of the data revealed that all variables, encompassing economic growth rate, liquidity liability ratio, private sector credits, market capitalization, value of shares traded, and turnover ratio, exhibited positive average values. However, the data series diverged from a normal distribution, suggesting potential non-stationarity. This prompted the application of the Augmented Dickey-Fuller (ADF) test, which confirmed stationarity for all variables except market capitalization in their level forms. Thankfully, taking the first difference of the data series rendered them all stationary, indicating integrability of order one (I[1]). This crucial step ensured the suitability of the data for cointegration analysis.

The cornerstone of the study, the Johansen cointegration test, provided compelling evidence for the presence of at least three cointegrating equations at the 0.05 significance level. This statistically significant result signifies the existence of long-run equilibrium relationships

between economic growth and the chosen financial indicators. In other words, the financial sector and economic growth in Nigeria exhibit co-movement over extended periods, suggesting a degree of interdependence and a tendency to adjust towards a long-run equilibrium state. This finding aligns with established economic theory, which posits that a well-developed financial system acts as a critical lubricant for economic activity.

5.3 Recommendation

The main policy recommendations that may be deduced from the above results are imperative.

The government and policymakers should:

- **Promote Financial Inclusion:** Expand access to financial services through initiatives like financial literacy programs, branch network extension, and leveraging technology (mobile banking).
- **Deepen Financial Markets:** Encourage saving and investment through a stable capital market, tax incentives, and product diversification by financial institutions.
- **Maintain Financial Stability:** Implement robust regulatory frameworks, strengthen supervisory mechanisms, and solidify deposit insurance schemes.
- **Credit Risk Management:** Strengthen regulations and best practices regarding loan underwriting and credit risk management within financial institutions. This can help ensure responsible lending practices and minimize the risk of non-performing loans, ultimately promoting financial system stability and growth.

- **SME Support:** Implement targeted policies and programs to support small and medium-sized enterprises (SMEs). This could include facilitating access to credit, providing financial management training, and reducing regulatory burdens. A thriving SME sector can significantly contribute to economic growth and diversification.
- **Data and Transparency:** Enhance data collection and reporting standards within the financial sector. This can improve the transparency and efficiency of financial markets, allowing for better risk assessment by investors and promoting investor confidence, which is crucial for attracting capital and fuelling economic activity.

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APPENDICES

Null Hypothesis: D(CPG) has a unit root
 Exogenous: Constant, Linear Trend
 Lag Length: 0 (Automatic - based on SIC, maxlag=9)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-8.113845	0.0000
Test critical values:		
1% level	-4.198503	
5% level	-3.523623	
10% level	-3.192902	

*MacKinnon (1996) one-sided p-values.

Augmented Dickey-Fuller Test Equation
 Dependent Variable: D(CPG .2)
 Method: Least Squares
 Date: 03/09/24 Time: 16:37
 Sample (adjusted): 3 43
 Included observations: 41 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(CPG (-1))	-1.185288	0.146082	-8.113845	0.0000
C	0.107697	0.855156	0.125938	0.9004
@TREND("1")	0.005329	0.034291	0.155405	0.8773
R-squared	0.635734	Mean dependent var		0.190244
Adjusted R-squared	0.616562	S.D. dependent var		4.172577
S.E. of regression	2.583759	Akaike info criterion		4.806724
Sum squared resid	253.6809	Schwarz criterion		4.932107
Log likelihood	-95.53783	Hannan-Quinn criter.		4.852381
F-statistic	33.15965	Durbin-Watson stat		2.108482
Prob(F-statistic)	0.000000			

Null Hypothesis: GDP GROWTH RATE has a unit root
 Exogenous: Constant, Linear Trend
 Lag Length: 0 (Automatic - based on SIC, maxlag=9)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-3.930934	0.0193
Test critical values:		
1% level	-4.192337	
5% level	-3.520787	
10% level	-3.191277	

*Mackinnon (1996) one-sided p-values.

Augmented Dickey-Fuller Test Equation
 Dependent Variable: D(GDP GROWTH RATE)
 Method: Least Squares
 Date: 03/09/24 Time: 16:23
 Sample (adjusted): 2 43
 Included observations: 42 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
GDP GROWTH RATE(-1)	-0.563635	0.143384	-3.930934	0.0003
C	0.114552	1.473163	0.077759	0.9384
@TREND("1")	0.074089	0.062208	1.191001	0.2409
R-squared	0.283852	Mean dependent var		-0.022619
Adjusted R-squared	0.247127	S.D. dependent var		5.399142
S.E. of regression	4.684742	Akaike info criterion		5.995248
Sum squared resid	855.9256	Schwarz criterion		6.119367
Log likelihood	-122.9002	Hannan-Quinn criter.		6.040743
F-statistic	7.729015	Durbin-Watson stat		1.937885
Prob(F-statistic)	0.001488			

Null Hypothesis: D(MCG) has a unit root
 Exogenous: Constant, Linear Trend
 Lag Length: 8 (Automatic - based on SIC, maxlag=9)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-0.686766	0.9659
Test critical values: 1% level	-4.262735	
5% level	-3.552973	
10% level	-3.209642	

*Mackinnon (1996) one-sided p-values.

Augmented Dickey-Fuller Test Equation

Dependent Variable: D(MCG ,2)

Method: Least Squares

Date: 03/09/24 Time: 16:41

Sample (adjusted): 11 43

Included observations: 33 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(MCG (-1))	-0.656435	0.955835	-0.686766	0.4994
D(MCG (-1),2)	-0.314053	0.952093	-0.329855	0.7446
D(MCG (-2),2)	0.447479	0.952010	0.470036	0.6430
D(MCG (-3),2)	0.156243	0.908597	0.171960	0.8650
D(MCG (-4),2)	-0.064925	0.861638	-0.075351	0.9406
D(MCG (-5),2)	-0.683309	0.814620	-0.838807	0.4106
D(MCG (-6),2)	-1.795738	0.749233	-2.396770	0.0255
D(MCG (-7),2)	-1.529249	0.614177	-2.489916	0.0208
D(MCG (-8),2)	-2.525406	0.486139	-5.194828	0.0000
C	-1599.036	1153.563	-1.386171	0.1796
@TREND("1")	108.1740	64.73363	1.671063	0.1089

R-squared	0.866080	Mean dependent var	276.6848
Adjusted R-squared	0.805208	S.D. dependent var	2670.582
S.E. of regression	1178.669	Akaike info criterion	17.24336
Sum squared resid	30563722	Schwarz criterion	17.74220
Log likelihood	-273.5154	Hannan-Quinn criter.	17.41120
F-statistic	14.22775	Durbin-Watson stat	1.997077
Prob(F-statistic)	0.000000		

Null Hypothesis: LLG has a unit root
 Exogenous: Constant, Linear Trend
 Lag Length: 0 (Automatic - based on SIC, maxlag=9)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-6.972127	0.0000
Test critical values: 1% level	-4.205004	
5% level	-3.526609	
10% level	-3.194611	

*MacKinnon (1996) one-sided p-values.

Augmented Dickey-Fuller Test Equation
 Dependent Variable: D(LLG)
 Method: Least Squares
 Date: 03/09/24 Time: 16:26
 Sample (adjusted): 2 41
 Included observations: 40 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
LLG (-1)	-0.751935	0.107849	-6.972127	0.0000
C	5.634261	1.417035	3.976093	0.0003
@TREND("1")	0.325904	0.053858	6.051120	0.0000
R-squared	0.585770	Mean dependent var		-0.089750
Adjusted R-squared	0.563379	S.D. dependent var		4.468406
S.E. of regression	2.952603	Akaike info criterion		5.075290
Sum squared resid	322.5609	Schwarz criterion		5.201956
Log likelihood	-98.50579	Hannan-Quinn criter.		5.121088
F-statistic	26.16114	Durbin-Watson stat		1.887843
Prob(F-statistic)	0.000000			

Null Hypothesis: D(TRG) has a unit root
 Exogenous: Constant, Linear Trend
 Lag Length: 1 (Automatic - based on SIC, maxlag=9)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-6.770672	0.0000
Test critical values:		
1% level	-4.219126	
5% level	-3.533083	
10% level	-3.198312	

*MacKinnon (1996) one-sided p-values.

Augmented Dickey-Fuller Test Equation
 Dependent Variable: D(TRG ,2)
 Method: Least Squares
 Date: 03/09/24 Time: 16:33
 Sample (adjusted): 4 41
 Included observations: 38 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(TRG (-1))	-1.837533	0.271396	-6.770672	0.0000
D(TRG (-1),2)	0.318262	0.162510	1.958416	0.0584
C	1.310556	2.134387	0.614020	0.5433
@TREND("1")	-0.051442	0.088371	-0.582118	0.5643
R-squared	0.727517	Mean dependent var		-0.056053
Adjusted R-squared	0.703474	S.D. dependent var		10.94169
S.E. of regression	5.958211	Akaike info criterion		6.506718
Sum squared resid	1207.009	Schwarz criterion		6.679096
Log likelihood	-119.6276	Hannan-Quinn criter.		6.568049
F-statistic	30.25940	Durbin-Watson stat		2.051560
Prob(F-statistic)	0.000000			

Null Hypothesis: VTG has a unit root
 Exogenous: Constant, Linear Trend
 Lag Length: 0 (Automatic - based on SIC, maxlag=9)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-4.289383	0.0078
Test critical values:		
1% level	-4.192337	
5% level	-3.520787	
10% level	-3.191277	

*MacKinnon (1996) one-sided p-values.

Augmented Dickey-Fuller Test Equation
 Dependent Variable: D(VTG)
 Method: Least Squares
 Date: 03/09/24 Time: 16:39
 Sample (adjusted): 2 43
 Included observations: 42 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
VTG (-1)	-0.635883	0.148246	-4.289383	0.0001
C	-221.3511	118.9971	-1.860138	0.0704
@TREND("1")	23.63610	6.915669	3.417760	0.0015

R-squared	0.320600	Mean dependent var	22.39214
Adjusted R-squared	0.285759	S.D. dependent var	396.7202
S.E. of regression	335.2792	Akaike info criterion	14.53655
Sum squared resid	4384074.	Schwarz criterion	14.66067
Log likelihood	-302.2676	Hannan-Quinn criter.	14.58205
F-statistic	9.201804	Durbin-Watson stat	2.134989
Prob(F-statistic)	0.000533		

DATA

Years	GDP Growth rate	LLG (%)	TRG (%)	CPG (%)	VTG (%)	MCG (%)
1980	4.20	28.63	1.32	12.20	0.28	98.40

1989	1.92	10.45	0.43	5.10	0.61	116.70
1981	-13.13	10.94	1.01	5.80	0.30	153.10
1983	-10.92	11.99	0.43	6.20	0.40	180.99
1982	-6.80	11.20	0.53	6.50	0.22	195.20
1984	-1.12	12.81	0.43	6.30	0.26	200.50
1988	7.33	12.17	1.41	6.10	0.85	211.60
1987	3.20	11.81	1.06	6.60	0.38	221.90
1985	5.91	12.33	0.91	6.00	0.32	230.33
1991	0.36	13.27	0.62	5.20	0.24	234.10
1986	0.06	11.91	0.62	7.60	0.50	258.12
1990	11.78	11.52	0.91	5.00	0.23	322.60
1999	0.58	13.18	3.83	8.20	14.07	334.20
1994	-1.81	15.14	1.50	8.00	0.99	345.10
1995	-0.07	11.01	1.07	6.50	1.84	352.60
1992	4.63	14.19	1.06	8.20	0.49	432.15
1996	4.20	9.80	2.47	6.20	6.98	442.10
2000	5.02	15.02	7.58	8.20	28.15	472.30
1997	2.94	10.45	3.97	7.00	10.33	553.20
2001	5.92	16.10	10.31	9.90	57.68	662.50
2002	15.33	13.73	8.59	8.10	59.41	764.90
2003	7.35	13.28	11.85	8.90	120.40	1359.30
2004	9.25	12.30	10.59	8.50	225.82	2112.50
2005	6.44	11.73	8.78	8.40	262.94	2900.06
1998	2.58	11.45	5.91	7.60	13.57	3433.60
1993	-2.04	15.76	1.41	7.00	0.80	4555.00
2006	6.06	12.43	10.96	8.10	470.25	5120.90
2009	8.04	24.68	13.94	19.60	685.72	7030.84
2008	6.76	22.79	34.79	18.60	1679.14	9562.97
2010	8.01	21.03	10.09	13.50	799.91	9918.21
2011	5.31	22.27	9.92	11.00	638.93	10275.34
2007	6.59	17.73	20.44	13.80	1076.02	13181.69
2012	4.23	24.84	7.28	10.60	808.99	14800.94
2016	-1.62	27.38	5.06	14.60	577.82	16185.73
2014	6.31	22.69	8.18	13.30	1338.60	16875.10
2015	2.65	22.37	8.17	13.10	978.05	17003.39
2013	6.67	25.45	7.73	11.50	2350.88	19077.42
2018	1.92	25.36	8.20	10.20	1203.37	21904.04

2019	2.21	23.93	6.18	11.20	931.48	25890.04
2017	0.81	24.78	5.93	12.90	1078.49	27128.90
2020	-1.79	25.04	4.38	12.10	1086.18	38589.58
2021	3.65			13.40	953.87	42054.50
2022	3.25			14.10	940.75	51188.87