

BANK CREDIT AND ECONOMIC GROWTH IN NIGERIA

BY

**OBAMWONYI QUEEN OSASOGIE
SBS/2012051350**

**A PROJECT SUBMITTED TO THE DEPARTMENT OF ACCOUNTANCY,
SCHOOL OF BUSINESS STUDIES, AUCHI POLYTECHNIC, AUCHI,
EDO STATE, NIGERIA**

**IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE
AWARD OF HIGHER NATIONAL DIPLOMA (HND) IN ACCOUNTANCY**

NOVEMBER, 2022

CERTIFICATION

We, the undersigned, hereby certify that this project work was carried out by **OBAMWONYI QUEEN OSASOGIE** with **MATRIC NO.: SBS/2012051350** of the Department of Accountancy, School of Business Studies, Auchi Polytechnic, Auchi.

We also certify that the work is adequate in scope and quality in partial fulfillment of the requirements for the award of Higher National Diploma (HND) in Accountancy

MR. LAWANI, A.O
(Project Supervisor)

DATE

MR. ABUMERE, D.I
(Head of Department)

DATE

DEDICATION

This work is dedicated to my God Almighty for his love and protection

ACKNOWLEDGEMENT

My profound gratitude goes to God almighty, who through his wisdom and knowledge made this research work possible.. I also want to thank my project supervisor Mr. Lawani, A.O for his effort, contribution and adequate supervision of this research work.. my special thanks goes to the entire lecturers in the Department of Accountancy for their knowledge imparted in me throughout my stay in the institution.

Special regard to my lovely parent Mr. and Mrs. Obamwonyi for their prayers, support and effort in making my academic dream a reality. I will not fail to acknowledge my brothers, sisters and friends Sani, Esther, and Grace who in one way or the other contributed to the success of this project work.

Special thanks to my wonderful course mate, Joseph, Samuel Thema, Glory, Emma and Miracle for their contribution and support. I appreciate the scholars and author whose work served as impact to the research work

TABLE OF CONTENTS

Title page	i
Certificate	ii
Dedication	iii
Acknowledgement	iv
Table of Contents	v
Abstract	vii

CHAPTER ONE: INTRODUCTION

1.1 Background to the Study	1
1.2 Statement of the Problem	5
1.3 Objectives of the Study	6
1.4 Research Questions	6
1.5 Research Hypotheses	7
1.6 Significance of the Study	7
1.7 Scope of the Study	8
1.8 Limitations of the Study	8
1.9 Operational Definition of Terms	9

CHAPTER TWO: LITERATURE REVIEW

2.1 Conceptual Review	10
2.1.1 Concept of Bank Credit	10
2.1.2 Concept of Economic Growth	11
2.1.3 Review of Studied Variables	12
2.1.4 Bank Credit as an Instrument for Nigerian Economic Growth	16
2.1.5 Criteria for Credit Administration	18
2.2 Theoretical Framework	20
2.2.1 The Financial Liberalization Theory	20
2.2.2 The Quality Theory of Credit	21

2.2.3	The Credit Channel Theory	23
2.2.4	The Balance Sheet Credit Channel Theory	23
2.2.5	The Bank Lending Credit Channel Theory	24
2.3	Empirical Evidence	26
2.4	Research Gap	38

CHAPTER THREE: RESEARCH METHODOLOGY

3.1	Research Design	40
3.2	Population of the Study	40
3.3	Sample and Sampling Techniques	40
3.4	Method of Data Collection	41
3.5	Data Analysis Techniques	41
3.6	Variable Description and Measurement	41
3.7	Model Specification	42

CHAPTER FOUR: DATA PRESENTATION, ANALYSIS AND DISCUSSION

4.1	Data Presentation	43
4.2	Data Analysis	44
4.3	Test of Hypotheses	44
4.4	Discussion of Findings	49

CHAPTER FIVE: SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

5.1	Summary of Findings	51
5.2	Conclusion	51
5.3	Recommendations	52
	References	53
	Appendices	59-60

ABSTRACT

The aim of this study is to examine bank credits and economic growth using time series data covering the period from 2010 to 2021. Gross domestic product was used as proxy for the economic growth while inflation rate, money supply and lending rate were used as proxies of banks credits. The study adopts the ex-post factor research design. This study relies purely on secondary data, using multiple regression model with the aid of STATA. The study reveal that, inflation rate has a negative effect on the growth of Nigeria economy. Lending rate positively impacted to the growth of Nigeria economy. The study also reveal that money supply has a negative effect on the growth of Nigeria economy. This study recommends that, monetary authorities should control key macro-economic factors; this will enable the banking sector to create more credit for the economy. Thereby enhancing investment and employment opportunities which on the other hand will boast economic growth and development in the country.

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

In Nigeria, the banking sector is an important part of the financial system. The financial system consists of institutions like banks, insurance, stock market, and other financial institutions. The banking sector dominates the Nigerian financial system as it accounts for about 90 % of the total assets in the system and about 65 % of market capitalization of the Nigeria Stock Exchange (Soludo, 2012).

Nigeria is one of the 20 or so countries in the world with a domestic credit to private sector ratio of below 15% of GDP. Credit allocation to individuals and households is also low. This is because banks usually impose onerous conditions that make it nearly impossible for many Nigerians to obtain loans. Nigeria's private sector credit to GDP ratio rose to 13.5% as of the third quarter of 2020 and a sharp rise from 11.8% reported at the end of 2019.

Private sector debt to GDP compares the total number of bank lending to the private sector with the gross domestic product of the country. Bank loans are a very valuable tool for the growth and sustainability of businesses in Nigeria. According to Ezirim (2015), bank extend credit to deficit economic unit in order to meet their financing need. This credit can be classified into short term, medium term and long-term basis, while it can be sub-classified into manufacturing credit,

agricultural credit, industrial credit and personal loans; all these directly and indirectly affect return on asset of banks.

In Nigeria, credit has been recognized as an essential tool for promoting growth and development in the country. About 70 percent of the population is engaged in informal sector. The federal and state government of Nigeria have recognized that for sustainable growth and developments in Nigeria, the financial empowerment of both the urban and rural areas in the economy is very vital being the repository of both the predominantly poor in society and in particularly the small and medium scale enterprises. The growth strategy is adopted, and the latent entrepreneurial capabilities of this large segment of the people is sufficiently stimulated and sustained, then positive multipliers will be felt throughout the economy. To give effect to this aspiration, various policies have been instituted over time by the federal government to improve agricultural production capabilities, positivity and channel the potential to enhance the standards of living and to put the sector in the front burner of government development strategy.

The analysis of bank credit in the Nigeria economy can be said to have a great impact to economic growth and development of the country to the extent that if there were no banks, then the activities of the economic growth and development could not be possible. Deposit money banks plays important role in the economy of every nation. The health of the economy is closely related to the soundness of its

banking sector. Although banks create no new wealth by their lending, borrowing and related activities that facilitate the process of production, exchange and communication of wealth. Ademola (2016) highlighting the role of bank credit explained that it can be used to prevent economic activity from total collapse in the event of natural disaster such as flood, drought, disease or fire. Importance of bank credit to the Nigerian economy has led to sustained increase of credit to productive sector of Nigeria's economy.

Today, modern banks are very useful for the utilization of the resources of the country. The impacts of the banks have been felt by the various sectors of the economy. For the provision of the needed credit or loans for growth, financial institutions come into play to render these financial services of giving out credit. Commercial banks or money lending banks are one of the major institutions involved in giving out credits to the different agencies or agents. Banks are integral in channeling these funds because they enable the movements of capital which are taken from surplus unit of the economy to the part of the economy which is suffering from deficit. The movement of the funds is seen in the conversion of money deposits to credit (Olowofeso, Adeleke, & Udoji, 2015).

Sebastian (2018) discovered that the cost, quality and quantity of credit has limited self-employment and other channel of creating jobs, the expansion of businesses are constrained by the availability of loanable funds. The informal

sector of the economy still holds substantial proportion of credit transactions despite all the effort government place in making credit available to the productive sector through banks and deposit money banks (DMBs). According to Adekunle, Salami and Adedipe (2013), a well-developed financial system plays several roles to boost efficiency of intermediation through reduction of information, transaction and monitoring costs. It will also enhance investment by identifying and funding good business opportunities, mobilizes savings, encourage trading, hedging and diversification of risk as well as facilitating exchange of goods and services. All these resulted in more efficient allocation of resources, accumulation of physical and human capital and faster technological progress, which in turn leads to economic growth.

According to Nwakanma, Nnamdi, and Omojefe (2014), the productive sector of the economy are allocated loan and advances, this function is underscored by the banks' ability to mobilize savings from the public which ensures that projects that facilitates development are funded properly. Moreover, the amount of loanable fund accessible, determine the supply of credit that is made available by the banking sector to the government, institutions and individuals. Loanable fund is composed of savings from individuals, firms, and various actions of depository institutions in the financial market. Access to loans still remains one of the basic problems faced by most sectors. Despite the loans allocated to various sectors in

Nigeria, the procedure of securing a loan facility is cumbersome, and the terms and condition required are stressful and this makes them to give up the process along the line (Nzomoi & Rutto, 2012). It is against this backdrop that the study examines the impact of bank credit on economic growth in Nigeria.

1.2 Statement of the Problem

There still remains a gap in understanding the causal relationship between bank credit and economic growth in developing economies. In particular, little studies have been done to find out the impact the various types of bank credits have on the growth of national economies. The influence of such types of credit (like those advanced to the public sector and the private sector) on economic growth has received little attention from researchers. In similar perspective, Tuuli (2012) posits that although there have been numerous empirical studies on the determinants of growth in transition economies the relationship between bank credits and economic growth, however, has largely been ignored. Thus, studying the impact of bank credits on the growth of the Nigeria economy has become very necessary.

Generally, economic growth has long been considered an important goal of economic policy with substantial body of research dedicated to explaining how this goal can be achieved. But unfortunately, such concerted efforts in both researchers and policies have yielded no meaningful result. The questions, therefore, remain why is it so? And what practical measures should be taken to

plug the situation? Central Bank of Nigeria (2019) notes that flow of credit to the priority sectors fell short of prescribed targets and failed to impact positively on investment, output and domestic price level. Certainly, these comments have triggered questions on the effectiveness and productivity of bank credits on the Nigerian economy. In similar perspective, Taiwo and Abayomi (2017) note that the justification of public sector credits is for the provision of infrastructural facilities, which will consequently drive economic growth. However, they further posit that the effects of such government spending on economic growth are still an unresolved issue theoretically as well as empirically. For this reason, the need to fill this gap necessitated this empirical study on the Nigerian case from 2010-2021.

1.3 Objectives of the Study

The general objective of the study is to examine empirically the impact of bank credit on the growth of Nigeria's economy. The study sought to achieve the following specific objectives:

- (i) To examine the impact of inflation rate on the growth of Nigeria economy.
- (ii) To establish the extent to which the lending rate affects Nigeria's economic growth.
- (iii) To examine the significant relationship between money supply and economic growth in Nigeria.

1.4 Research Questions

To achieve the aforementioned objectives, this study shall be guided by the following research questions.

- (i) To what extent does inflation rate affect Nigeria's economic growth?
- (ii) Does the lending rate influence Nigeria's economic growth?
- (iii) What is the significant relationship between money supply and economic growth in Nigeria?

1.5 Research Hypotheses

The null hypotheses of this study are as follows:

H₀₁: Inflation rate has no impact on the growth of Nigeria economy

H₀₂: There is no significant relationship between lending rate and Nigeria's economic growth.

H₀₃: There is no significant relationship between money supply and Nigeria's economic growth.

1.6 Significance of the Study

The study will be of immense benefit to the following:

- **Bankers:** The study will enhance their understanding of the relationships existing between bank credits and economic growth. This will go a long way in enabling them carry out efficient financial intermediation function bearing in mind how it will impact on economic growth.
- **Regulators of the Financial Industry:** When economic growth is of the essence, they will find this research relevant in their policy strategies, and regulatory

prerogatives aimed at fostering sustainable economic growth and building efficient financial sector development.

- **Investors:** Both foreign and indigenous investors in the Nigerian economy will stand to take advantage of the gift of this study to already existing body of knowledge. The study will sharpen their understanding of causal relationships between financial development and economic growth. When they understand the relevance of bank credits to increase in productivity, it will enable them make rational decisions in obtaining funds at a price and amount that will serve their needs.

- **The Government:** different levels of government will find this study useful especially policy implementation, enactment of laws and making pronouncement that will promote economic growth.

- **Researchers:** other researchers will find this study very useful since it will add to the existing knowledge. Such researchers and students who wish to carry out a related study will have to use it as a research material.

1.7 Scope of the Study

The study will focus on the impact of bank credits on economic growth of Nigeria over the period of 2010 to 2021. This study covers the period of 12 (Twelve) years. The data will be sourced from CBN statistical Bulletin, 2021. Bank credits indices used in this study are inflation rate, bank lending rate and

money supply. Economic growth shall be proxy by the Gross Domestic Product (GDP).

1.8 Limitations of the Study

The researcher was faced with a number of problems in the process of carrying out this research study and as a result the research admits its shortcomings. The researcher faced challenges in acquiring secondary data from CBN statistical bulletin on some variables for Nigeria and as such these variables were exempted from the model. Also, unavailability of materials and information was one of the major factors which limit this research work. Certain materials and information which could be useful to boost the capacity and courage of this research work were not available; this can be traced to human factors and dearth of enough research material.

In spite of all these shortcomings the researcher did her best in making this research work a reality

1.9 Operational Definition of Terms

Credit: Credit is the system by which goods and services are provided in return for differed rather than immediate payment; it may be provided by the seller, or by a bank or finance company.

Bank Credit: Bank Credit is the aggregated amount financial institutions (i.e., banks) are willing and able to offer a loan or advance to an individual or organization.

Economic Growth: Economic growth is defined as a positive change in the national income or the level of production of goods and services by a country over a certain period of time.

Lending Rate: This is the rate of interest charged by a financial institution for lending money.

Gross domestic product (GDP): This is the total monetary or market value of all the finished goods and services produced within a country's borders in a specific period of time.

CHAPTER TWO

LITERATURE REVIEW

2.1 Conceptual Review

2.1.1 Concept of Bank Credit

Credit is the system by which goods and services are provided in return for differed rather than immediate payment; it may be provided by the seller, or by a bank or finance company. John (2013) gave support that credit implies a promise by one party to pay another for money borrowed or goods borrowed and service received. However, our focus in this study is on banking system credit (Bank credit) which involves financing economic activities such as manufacturing, production, commerce etc, through the provision of loans and overdrafts by banks.

According to CBN (2018), the amount of loans and advance given by the banking sector to economic agents constitute bank credit. CBN Monetary policy circular (2017) identifies bank credit facilities to include loans, advances, commercial papers, bankers' acceptance, bill discounted with a bank credit risk. Bank credit is often accomplished with some collateral that helps to ensure the repayment of the loan in the event of default. Credit channels savings into productive investment thereby encouraging economic growth. According to Nzotta (2017), it is generally accepted that bank credits influence positively the level of economic activities in any country; that is, it influences what is to be produced, who produces it and quantity to be produced. Bank credit affects and alters the level of money supply in an economy or country. It is the most important source of

bank income and it promotes the activities of banks and non-bank financial institution and this influences the level of growth of production, the level of entrepreneurship and the realization of aggregate economic performance, development and growth. It could thus be said with absolute assurance that banking industry credit is of crucial importance both to the bank, the monetary authorities, business community and the economy in general.

Bank credits affect and alter the level of money supply in an economy or country. It is the most important source of bank income and it promotes the activities of banks and non-bank financial institutions and thus influences the level of growth of the financial system. It also affects aggregate output and productivity, the pattern of production, the level of entrepreneurship, and the realization of aggregate economic performance, development and growth. It could thus be said with absolute assurance that banking industry credit is of crucial importance both to the banks, the monetary authorities, business community and the economy in general.

2.1.2 Concepts of Economic Growth

Economic growth is increase in the total value of domestic produced goods and services in a nation. Adewuyi and Olowookere (2016, pp.43) define “economic growth as the process by which domestic income or output is increased”. Okwo, Mbajiaku and Ugwunta (2012) view economic growth as the

process by which national income or output is increased. Therefore, an economy is said to be growing if there is a sustainable increase in the actual output of goods and services per head. Kira (2013) defines economic growth as total market value of all final goods and services produced within the country in a given period of time (normally one year). Yakubu and Affoi (2014) view economic growth as a sustained increase in the actual output of goods and services per head. Ismaila and Imoughele (2015) opine that economic growth is the quantity of goods and services produced in a nation and it is mostly measured by real GDP. Ozurumba and Onuorah (2013) in Olusola (2016) define economic growth as positive change in the national income or level of domestically production of goods and services of a nation over time. Hence, this study operationally defines economic growth as total market value of domestically produced goods and services in a nation usually in a year. This is because a nation's commodities consist of both domestic and foreign produced goods and services known as Gross National Product (GNP).

2.1.3 Review of the Studied Variables

Inflation Rate

The annual inflation rate in Nigeria accelerated to 20.52 percent in August of 2022 from 19.64 percent in the previous month. Inflation refers to the persistent and the continuous rise in the general level of prices of goods and services in an economy. It is no gainsaying the fact that different economies in different parts of the world experience inflation. Maybe the differences lie in the timing, causes,

duration and in their prevailing economic conditions. Suffice to say then that, be it developed, developing or underdeveloped; economies of countries of the world does witness rise in price. The several impulses of inflation in any economy have made it an issue of concern for policy makers.

According to Aminu and Anono (2012), parts of the macroeconomic goals which the government strives to achieve are the maintenance of stable domestic price level and full employment in order to avoid cost of inflation and the associated uncertainties. When inflation is above single digits level and remain spiral, investors are hesitant to invest and this affects the future growth outcome of the country. This may partly explain why domestic producers in Nigeria cry of overhead cost thereby making the foreign imported goods to have competitive advantage in terms of cost and quality over the domestic commodities. According to Adebisi (2019), in the long run, high and variable inflation increases consistently discourages investment and reduces economic growth.

It can be deduced that, depending on the causes of inflation and the general macroeconomic conditions in a particular country, inflation can produce diverse effects on real output growth. Moreover, in order to identify and understand the nature of the link between inflation and real output growth rate, it is essential to determine the sources of inflation and the circumstances surrounding output growth in the respective country (Isik, 2016) which will succour to develop and

implement an effective economic policy that would lead to an eventual transformation of the economy. Although, examining the inflation and economic growth nexus is necessary, it is not a sufficient condition for the development of an effective economic policy (Umaru & Zubairu, 2018). It is in view of this that, this study examined critically the relationship between inflation and output growth in Nigeria with the aimed of identifying macroeconomic implications of the high and unstable increase in prices on the domestic economy.

Lending Rate

Interest rate is the price of money paid for deposits known as deposit rate and the price of money paid for loan known as lending rate expressed in percentages usually in a year. Jhingan (2010) defines interest rate as the reward not only for saving money but the reward for parting with liquidity for the specific period of time. Interest rate is also the price the lender that takes credit or loan is willing to pay the borrower. The lender (banker) wants to charge enough interest rate to ensure each loan is profitable and cover the risk in the business. On the other hand, the business customer (borrower) needs a reasonable rate to be able to repay back the credit. Interest rate is also the price a borrower must pay to secure a credit or loan from a lender for a specific period of time.

The relationship between bank lending rate and economic growth has generated lots of contradictions in economic thinking. Some researchers argued

that bank lending rate promotes economic growth while others said it hampers economic growth. Tridico (2007) opined that low bank lending rate stimulates economic growth as a complex issue which needs positive interaction of several socio-economic and institutional factors. While Gruseh and Oritsejafor (2007) argued that bank lending rate affects economic growth in Nigeria. In other studies, conducted in Nigeria found positive relationship bank lending rate and economic growth

Money Supply

Money supply can also be defined as the sum of all the money holdings of all the members of the society. This could be either M1 or M2 in Nigeria. The supply of money in Nigeria based on its composition appears to be determined basically by the behaviour of three main economic factors. First, is the behaviour of the banks concerning the amount of reserves that they decide to keep at any point in time. This amount given the fact that banks maximize profit in the long run, is influenced by the bank's foresight and their perception of the economic activities surrounding them. Secondly, the behaviour of the non – bank public in dividing their money between currency and demand deposits. The larger the non-bank public's marginal currency deposits and money supply resulting from it, the larger the monetary base or high – power money. In general, when the GDP growth rate shows rising economic productivity, the value of money in circulation

increases. This is because each unit of currency can subsequently be exchanged for more valuable goods and services.

The broad money supply is a measure of the quantity of money consisting of M1, plus savings, small time deposits, overnight commercial bank deposits and plus non-institutional money market accounts (CBN, 2020). According to Omodero, (2019), Money supply is a monetary policy instrument that is extremely important to improve a nation's economic development. All M2 components are very liquid, and the non-cash components can very easily be converted into cash. Broad money includes notes and coins, with saving accounts & deposits also included. Treasury Bills and gilts can also be included. These securities are considered to be “near money”.

2.1.4 Bank Credits as an Instrument for Nigerian Economy Growth

The role of bank credits and growth of modern economies seems inseparable. The quantum of financial capital required before achieving any meaningful economic development also underscores the importance of banks. An individual's savings are not usually large enough to procure all his needed resources for development. The saver may not also possess the ability and huge capital that investment calls for. The banks therefore, aggregate the small savings of the individuals and hold these, away from the consumption and made available as loan for investment. Several studies have adopted various measures of bank

credits. For instance, Levin (2015) discussed the relationship between bank credit and economic growth. According to him, bank credit can be sub divided into two: credit to the private sector and credit to the public sector. The credit to the public sector has been empirically proven to have weak effect on the economic growth because they are prone to waste and politically motivated programmes which may not deliver the best result to the populace. He also defines economic growth as a positive change in the national income or the level of production of goods and services by a country over a certain period of time. It can be measured in terms of the level of production of goods and services by a country over a certain period of time.

Other measures of economic growth include real per capital GDP, the rate of physical capital accumulation etc, (king & Levin 1993). Bencivenga and Smith (1991) posit that consumption goods in the economy are produced from capital and labour. An entrepreneur who lends credit from the bank purposely for the commencement of a business, uses it to hire labour so as to produce goods and services which in turn leads to economic growth. Demirguc-Kunt and Levine (2008) emphasized the importance of allocating credit to the private sector as opposed to all bank intermediation. Similarly, Crowley (2008) also observes that private credit serve as good predictor of economic growth. In the study of Onuorah (2011), some factors were identified as a driver of credit growth which are largely

but not researched hence the contribution of the well acclaimed private sector credit to the growth of the economy may not be easily measured. An entrepreneur who owns the capital invested in the business uses it to employ labour in order to produce goods. Bayoumi and Melander (2018) state that, 2½% reduction in overall credit causes a reduction in the level of GDP by around 1½%. Similarly, findings have shown that economic growth can also be a causal factor for financial development. This occurs when the level of development within the economy is responsible for prompting the growth of the financial system.

2.1.5 Criteria for Credit Administration

The administration of credit is basically the function of a unit of bank offices which engage in controlling the extension and maintenance of credit. This unit performs the functions of credit documentation, monitoring and maintenance of credit files, collateral and security as well as ensuring that loan disbursement and repayment conform to laid down procedure. Thus, credit administration is the follow up on the credit created to ensure that loans advanced are serviced and paid back at the stipulated time. According to Ogunbi and Ogunseye, (2014), several factors are considered in the credit administration process but the most important ones are usually referred to six (6) cannons of lending:

Character: The need for the credit officer to assess the character of the applicant for loan or credit is very essential because the integrity of the customer must be

considered and if a company, its director's integrity should be assessed. The important factor is the track record of the customer with the bank to know whether he/she has borrowed in the past and default. If the customer is a new one, a status enquiry should be raised to obtain useful information from previous banker(s).

Capability/Capacity: This states that borrowing customer must have special skills, experience and exposure in the project, which he/she intends to borrow to finance. That is, there must be a good spread of skill and experience among the management team in the aspect of production, marketing, finance etc. This is one of the reasons why legal requirement did not gives room for extending credit to minor except for the purpose of necessities of life like food, clothing, shelter and medicine.

Capital: The bank customers are expected to have a reasonable stake in term of financial contribution to the project by way of personal financial investment in the business.

Cost: This refers to the income earned from the interests, commission and fees charged on credit facilities to their customers. The interest rate a bank charges on credit will depend on the risk and term of credit. All these are the costs accrued to the customer and the banks

Collateral: After the careful considerations of the above factors, the lender/ bank needs to take collateral or security as a form of insurance to cover him/her in bad times. The bank would like to take the security,

which has value or that leaves enough margin of safety above the amount of credit granted.

Country: To engage in international lending, several factors such as the different in culture, legal and economic influences that exist in other countries which may influence or affect the credit decisions must be put into consideration.

2.2 Theoretical Framework

2.2.1 The Financial Liberalization Theory

This theory was the original work by (McKinnon and Shaw, 2014). Under this theory, the consideration is central on the part played by government intervention in the financial markets as a critical setback to growth, investment and savings mobilization. The role of government in interest rate control and credit allocation to the productive economic sectors in developing countries hinders the mobilization of savings and discourages financial assets holding, economic growth and capital formation. Interest rate ceiling on deposit indirectly inhibited financial saving which resulted in excess liquidity outside the banking industry.

Government pervasive intervention and financial system involvement through the supervisory and regulatory framework, especially interest rate control and credit allocation tends to facilitate financial market distortions. As such, the intervention of government is adversely affecting the market players' decision regarding investment and savings and resulted in financial mediation

fragmentation. The resultant effect of this scenario is an economy that is financially repressed.

Financial liberalization promotes stronger bank competition that increases risk-taking incentives in developed countries, whereas in developing countries it increases bank risk by expanding opportunities to take risk. The effect of this theory on bank credit is to increased flow of capital into the country and makes it cheaper for companies/banks to access capital from investors. A lower cost of capital allows companies/banks to undertake profitable projects they may not have been able to with a higher cost of capital pre-liberalization, leading to higher growth rates.

2.2.2 The Quantity Theory of Credit

Werner in his work towards a quantity theory of disaggregated credit and international capital flows presented the Quantity Theory of Credit with a central focus on different equation of exchange distinguishing between money used for GDP-transactions and money used for non GDP-transaction. He further stressed that money should not be defined as bank deposits or other aggregates of private sector savings. More so, that bank should not be seen as not being financial intermediaries that lend existing money, rather creators of new money through the process of lending.

Consequently, the effect of bank credit depends on its quantity and quality which is defined as whether it is used for unproductive transactions (credit for consumption or asset transactions, producing unsustainable consumer or asset inflation, respectively) or productive transactions (delivering non-inflationary growth). Credit used for productive a transaction aim at income growth and is sustainable; credit for asset transactions aims at capital gains and is unsustainable.

Quantity Theory of Credit argues that credit for (a) productive use in the form of investments for the production of goods and services is sustainable and non-inflationary, as well as less likely to become a non-performing loan, (b) unproductive use in the form of consumption results in consumer price inflation and (c) unproductive use in the form of asset transactions results in asset inflation and, if large enough, banking crises.

2.2.3 The Credit Channel Theory

Bernanke and Gertler postulated the credit channel theory. This theory emphasized that the direct effects of monetary policy on interest rates are amplified by endogenous changes in the external finance premium. They described external finance premium as the difference between the cost between funds raised externally and funds raised internally by the borrower. More so, the imperfection of credit market depends on the size of the finance premium and a change in monetary policy that raises or lowers open market interest rates tends to change

external finance in the same direction. In addition, they linked the monetary policy and external finance premium through “Balance Sheet Credit Channel” and “Bank Lending Credit Channel”.

2.2.4 The Balance Sheet Credit Channel Theory

This theory stressed that the external finance premium facing a borrower depends on borrower's financial position. Therefore, the greater is the borrower's net worth, the lower the external finance premium and overall terms of credit. The theory further stated that the quality of borrower's sheet similarly affects their investment and spending decisions. This balance sheet channel arose due to shifts from central bank's policy not only affects market interest rate but also the financial positions of borrowers.

The balance sheet channel theorizes that the size of the external finance premium should be inversely related to the borrower's net worth. For example, the greater the net worth of the borrower, the more likely she may be to use self-financing as a means to fund investment. Higher net worth agents may have more collateral to put up against the funds they need to borrow, and thus are closer to being fully collateralized than low net worth agents. As a result, lenders assume less risk when lending to high-net-worth agents, and agency costs are lower. The cost of raising external funds should therefore be lower for high-net-worth agents.

Since the quality of borrowers' financial positions affect the terms of their credit, changes in financial positions should result in changes to their investment and spending decisions. This idea is closely related to the financial accelerator. A basic model of the financial accelerator suggests that a firm's spending on a variable input cannot exceed the sum of gross cash flows and net discounted value of assets. This relationship is expressed as a "collateral-in-advance" constraint. An increase in interest rates will tighten this constraint when it is binding; the firm's ability to purchase inputs will be reduced. This can occur in two ways: directly, via increasing interest payments on outstanding debt or floating-rate debt, and decreasing the value of the firm's collateral through decreased asset-prices typically associated with increased interest rates (reducing the net discounted value of the firm's assets); and indirectly, by reducing the demand for a firm's products, which reduces the firm's revenue while its short-run fixed cost do not adjust (lowering the firm's gross cash flow). The reduction in revenue relative to costs erodes the firm's net worth and credit-worthiness over time.

2.2.5 The Bank Lending Credit Channel Theory

The bank lending channel theorizes that changes in monetary policy will shift the supply of intermediated credit, especially credit extended through commercial banks. The bank lending channel is essentially the balance sheet

channel as applied to the operations of lending institutions. Monetary policy actions may affect the supply of loanable funds available to banks (i.e. a bank's liabilities), and consequently the total amount of loans they can make (i.e. a bank's assets).^[9] Banks serve to overcome informational problems in credit markets by acting as a screening agent for determining credit-worthiness. Thus many agents are dependent on banks to access credit markets. If the supply of loanable funds banks possess is affected by monetary policy changes, then so too should be the borrowers who are dependent on banks' funds for business operations. Firms reliant on bank credit may either be shut off from credit temporarily or incur additional search costs to find a different avenue through which to obtain credit. This will increase the external finance premium, consequently reducing real economic activity.

The bank lending channel presumes that monetary policy changes will drain bank deposits so long as banks cannot easily replace the short-fall in deposits by issuing other uninsured liabilities. The abolition of reserve requirements on certificates of deposit in the mid-1980s made it much easier for banks facing falling retail deposits to issue new liabilities not backed by reserve requirements. This is not to say that the bank lending channel is no longer relevant. On the contrary, the fact that banks can raise funds through liabilities that pay market interest rates exposes banks to an external finance premium as well. Forms

of uninsured lending carry some credit risk relative to insured deposits. The cost of raising uninsured funds will reflect that risk, and will be more expensive for banks to purchase.

The banking lending channel stated that monetary policy also affects the external finance premium by shifting the supply of the intermediated credit, especially loans from commercial banks. It indicated that if supply of bank loans is disrupted for some reason, bank dependent borrower may not be necessarily shut off but incur cost of finding lenders. Therefore, a reduction in the supply, relative to other forms of credit is most likely to increase external finance premium and reduce real activity.

2.3 Empirical Review

Abina (2020) examines sectorial allocation of bank credits and economic development in Nigeria. The study made use of human development index as proxy for dependent variable measuring economic development while bank credits to public sector, manufacturing, agricultural, mining general commerce sector, real estate and construction, was used in the study as independent variables. All data were obtained from Central Bank of Nigeria statistical bulletin and index-mudi which span across 1985 to 2019. Data stationarity was ensured using the Augmented Dickey Fuller statistics, while the error correction model was applied to as the statistical tool for acceptance of hypothesis. The study concluded that,

bank credits to manufacturing, mining and general commerce sector contributed negatively to human development index.

Shuaib and Kabiru (2019) examines the effect of lending by Deposits Money Banks' (DMBs) on economic growth of Nigeria from 1981 to 2016. The population of study is 64 DMBs that includes 45 defunct and 19 existing DMBs operating in the Nigeria banking industry as at December, 2016. The entire population constitute the sample frame for the study and tool for analysis is regression. The study found that estimated coefficient Beta values of the DMBs' lending and DMBs' lending rate fall within lower and upper boundary of confident interval at 95%. The regression results indicated that DMBs' lending has positive and significant effect on economic growth.

Idachaba, Olukotun and Elam (2019) examine the influence of bank credits on the Nigerian economy using time series data covering the period from 1980 to 2017. Gross domestic product was used as proxy for the economy while credits to the private sector, public sector and prime lending rate were used as proxies of Banks credits. Unit root test was used to test stationary which reveals that all the variables were stationary at first difference. The regression analysis result shows that credit to the private sector have positive effect on Nigerian economy

Stephen and Rodiat (2019) examine the impact of sectoral allocation of banks' credit on economic growth in Nigeria. The study uses annual time series

data obtained from the Central bank of Nigeria (CBN) statistical bulletins and National Bureau of Statistics (NBS) annual reports covering the period of thirty years (1986-2015). The data were analyzed using Augmented Dickey Fuller (ADF) unit root test, Johansen co-integration test, vector error correction model (VECM) and fully modified Ordinary Least Square (FMOLS) regression. The results of the regression revealed that credit allocated to productive sector and broad money supply have a significant positive influence on economic growth in Nigeria at 1% level of significance, while credit allocated to general commerce, credit allocated to service sector and credit allocated to other sectors have a negatively significant effect on economic growth in Nigeria at 1% level of significance.

Nwakanma, Georgiadou, Walther, Stewart and Cunnington (2018) investigate the direction and long run relationship between private sector and bank credit, Granger Causality and Autoregressive Distributed Lag Bound (ARDL) was used for statistical analysis and it was concluded that long run relationship and causality exist between bank credits and loan given to the private sector.

Olowofeso, Adeleke and Udoji (2015) examined the impact of private sector credit on economic growth of Nigeria using quarterly data from 2000-2014. The results indicate that banking sector credit to private sector has positive and significant impact on economic growth. On the other hand, the prime lending rate

has negative and significant impact on economic growth. But the study used prime lending rate.

Awoyemi and Dada (2019) examined the effect of financial sector reforms on Nigeria's economic growth from 1991 to 2012. The regression results indicate that banking system credit to private sector and prime lending rate have significant positive impact on economic growth of Nigeria.

Ayenagbo (2015) empirically analyzed the impact of economic credits on the inflation and economic growth from 1970 to 2010 in Togo. The results of regression show that banking sector credit to private sector has no significant impact on economic growth. The result contributes significantly to knowledge but the study did to look at the impact of bank lending rate on economic growth.

Agbanike, Onwuka and Eyoghasim (2016) investigated commercial bank lending and output growth of some selected sectors in Nigeria from 1980 to 2012. The estimated OLS regression result indicates that bank lending (commercial bank credits to economy) has significant negative impact on output growth. On the other hand, bank lending rate has insignificant positive impact on output growth of selected sectors such as agriculture, manufacturing, and mining and quarrying. But, the study used output of some real sector of economy instead of GDP as measure of output growth.

Falade and Folorunso (2019) investigated the influence of fiscal, monetary policy instruments and economic growth of Nigeria from 1970 to 2013. The result shows that domestic interest rate has significant influence on economic growth. However, the study failed to stipulate the type of domestic interest rate that significantly affect the economic growth of Nigeria.

Andabai and Eze (2018) examined the causal relationship between bank credit and manufacturing sector output, the study made use of time series data from 1990-2016, it was discovered after using vector error correction model and causality test that there is no causal relationship between bank credit and manufacturing sector output. The study further suggests that reduced interest rate with favourable inflation rate will stimulate manufacturing sector output which should be regulated by the needed authorities.

Michael, Babatunde, and Joseph (2017) investigated how bank loan affect the manufacturing sector in Nigeria, the study made use of time series data from 1999 -2014. Autoregressive Distributed Lag (ARDL) was used as the statistical tool for analysis, it was discovered that financial institution credit increases output in the manufacturing industry. The study concluded that if output was to increase then financial institution is required to place more priority to the financial needs of private sector; thus, manufacturing sector output will increase.

Timsina (2017) investigated determinants of bank lending in Nepal from 1975 to 2014. The result shows that there is significant positive relationship between commercial banks credit to private sector and economic growth. But the findings may not be generalized to other parts of the world because the research work was conducted in Nepal.

Onwuteaka, Okoye and Molokwu (2019) examined the impact of monetary policy on economic growth in Nigeria using secondary data from the Central Bank of Nigeria statistical bulletin covering the period 1980-2017. Estimates of the model were calculated using a multiple econometric model of the ordinary least square to determine the impact of money supply, credit in the economy, interest rate on credit, infrastructure, inflation rate, external debt, price index on Nigerian development. The findings show that money supply, interest rate on credit, infrastructure and external debt have been statistically important in explaining its effect on economic development, while other variables used in the analysis have all been found to be statistically insignificant in explaining the growth rate of the Nigerian economy.

Karimo and Ogbonna (2018) assessed financial deepening and economic growth in Nigeria from 1970 to 2013. The findings show that there is negative relationship between banking sector credit to private sector to economic. Also, there is positive relationship prime lending rate and economic growth. However,

the study did not report causality relationship that exists among the variables. Also, the study utilized the banks prime lending rate as against maximum lending rate.

Mandiefe (2015) studied the impact of financial sector development on economic growth of Cameroon and South Africa from 1980 to 2010. The findings show that credit to private sector do not cause economic growth in both Cameroon and South Africa. But the findings of the study may not be applicable to other nations in Africa.

Olusola (2016) critically evaluated banking lending and economic development from 1980 to 2013 in Nigeria. The findings reveal that there is statistical significant relationship between banking sector credit to private sector and economic growth of Nigeria. The study recommends that banks should finance economic development. However, the study did not look at the effect of bank lending rate on economic growth of Nigeria.

Andabai and Eze (2018) examined the causal relationship between bank credit and manufacturing sector output, the study made use of time series data from 1990-2016, it was discovered after using vector error correction model and causality test that there is no causal relationship between bank credit and manufacturing sector output. The study further suggests that reduced interest rate with favourable inflation rate will stimulate manufacturing sector output which should be regulated by the needed authorities.

Abubakar and Gani, (2018) also agreed that the real sector in Nigeria still face difficulty in the accessibility of financial resources especially from the commercial banks that hold about 90% of the total financial sector assets and high rate of interest rate causing many firms to avoid bank-borrowing. Other formidable financing challenges include concentration of bank credit to the oil and gas, communication and general commerce sectors to the disadvantage of the core real sectors such as agriculture and manufacturing sectors. Also, banks are more disposed to financing government financial need as almost 50% of their assets are tied up by government debt. Based on this premise, the study therefore investigates the impact of bank credits on Nigerian economy growth.

Bongini, Iwanicz-Drozowska, Smaga and Witkowski (2017) investigated the financial development and economic growth of foreign-owned banks in Central, Eastern and South-Eastern European (CESEE) countries from 1995 to 2014. The result shows that banking sector domestic credit to private sector foster economic growth. However, the research work failed to investigate the effect of lending rates on economic growth.

Ndubuisi, Okorontah and Chikeziem (2014), the study investigates the significance of banks credit in stimulating output (GDP) and the factors that prompt financial intermediation within the economy. It is a contribution to the existing literature on finance and growth applied to the Nigerian economy.

Evidence from this work shows that the marginal productivity coefficient of bank credit to the domestic economy (proxies by credit to the private sector) is positive but insignificant. The implication is that bank's credit did not affect the productive sectors sufficiently for the later to impact significantly on the Nigerian economy. It was also observed that real output causes financial development, but not vice versa, and that export was not significant in driving financial development; but growth in financial sector was highly dependent on foreign capital inflows.

Modebe, Ugwuegbe and Ugwuoke (2014) investigated the impact of bank credit on the growth of Nigerian economy for the period of 1986-2012; the result of the OLS regression showed that there is a negative and significant relationship between GDP and TBCPS in the long run. M2 which was used as control variable has a positive and significant impact on GDP at the long run. The short run dynamics of the variables indicates that TBCPS also have a negative and insignificant impact on GDP at the short-run. The result of the granger causality test reveals that causation runs from GDP to TBCPS and not the other way round, a case of unidirectional causality. The result also showed bidirectional causality between TBCPS and M2.

Aliero, Abdullahi and Adamu, (2013) examined the impact of bank credit on economic growth over the period 1974-2010. The result from Autoregressive distributed lag bound approach showed that private sector had significant positive

effect on economic growth in Nigeria. Kiran, Yavus and Guris (2009) apply ratios of bank credits to the GDP and private sector credit to the GDP and find a positive and statistically significant relationship between bank credits and economic growth.

Murty, Sailaya and Demissie (2016) by using multivariate Johansen co integration approach examined the long run impact of the bank credit on economic growth of Ethiopia. The study found a significant long-run relationship between bank credits and economic growth in Ethiopia. Nuno (2012) applies a dynamic panel data (GMM-System Estimator) technique to evaluate the nexus between bank credits and economic growth in the European Union. The study found that savings promotes growth while inflation and bank credits negatively impacts on economic growth.

Akpansung and Babalola (2017) found significant long-run relationship between private sector bank credits and economic growth in Nigeria. The causality runs from GDP to private sector bank credits and also from industrial production to GDP, lending rate are found to impede economic growth.

Hassan, Sanchez and Yu (2011) assert that rapid bank credit expansion negatively impacts on economic growth. The studies argue that rapid and uncontrolled expansion in bank credits has the tendency to discourage domestic savings and investments.

Obademi and Elumaro (2014) re-examine the financial repression hypothesis in order to determine the impact and direction of causality between banks and economic growth during intensive regulation, deregulation and guided deregulation regime. Ordinary least square regression and Causality test conclude that banks have significant positive impact on growth in Nigeria especially during deregulation. Nevertheless, banks appear to be passive to growth in terms of causality.

Ogege and Boloupremo (2014) employ ADF, Johansen co-integration and ECM, the study concludes that only credit allocated to production sector is having a significant positive effect on growth.

Inam and Ime (2019) studied the impact of monetary policy on Nigeria's economic growth from 1970-2017 using Ordinary Least Squares (OLS) method and Granger Causality test. The study found an insignificant positive relationship between money supply and economic growth. Mohamed Aslam (2016) investigated the impact of money supply on Nigeria economy from 1959-2013. The study made use of gross domestic product (GDP) as the dependent variable while the independent variables were money supply, exchange rate, export earnings, import outflows and the consumer price index. The regression results indicated that money supply maintained significant positive influence on economic growth at 1% level of significance.

Akpansung and Babalola (2009), examined the impact of bank credit on the growth of Nigerian economy for the period of 1970-2008, using two-stage least square and granger causality test, the result indicates that bank credit has a negative impact on the growth of Nigerian economy with causation running from GDP to bank credit.

Andabai and Eze (2018) examined the causal relationship between bank credit and manufacturing sector output, the study made use of time series data from 1990-2016, it was discovered after using vector error correction model and causality test that there is no causal relationship between bank credit and manufacturing sector output. The study further suggests that reduced interest rate with favourable inflation rate will stimulate manufacturing sector output which should be regulated by the needed authorities.

Ekine and Onukwuru (2018) the study made use of error correction model as the analytical tool, significant relationship was discovered between bank credit, interest rate and agricultural expenditure on agricultural sector output. Thus, the study recommends that government and private individual should make effort to invest more in agricultural activities.

2.4 Research Gap

Although evidence from empirical studies support the fact that bank credits has impact on economic growth, the degree and magnitude of this impact is country specific. Also, the direction of casual relationship between bank credits and economic growth is one area of contention among researchers.

Previous studies as well as economic literature is replete with possible qualitative and quantitative variables that influence the growth in real output. However, there is no consensus on the effect of explanatory variables on economic growth.

In previous studies which focused on how banking credit can be used as an instrument of economic growth, Agada (2010) identifies public and private sector credits as variables that cause variations on GDP. Toeing similar lines, Nwanyanwu (2015), Fadare (2016), Awoyemi and Dada (2019) among other authorities adopted similar variable in their studies which largely focused on bank and economic growth. Also, Andabai and Eze (2018), Onwuteaka, Okoye and Molokwu (2019), and Ayenagbo (2015) identifies interest rate and inflation rate as variables that causes variation on GDP Having reviewed literature related to this study, it was discovered that only few discourse actually disaggregate money supply and Lending rate as variables to examine the impact bank credit on economic growth in Nigeria.

The Estimation technique (methodology) used are also inconsistent. We observed that, though credits have increased tremendously in recent times, its expected effect on domestic economy and output or GDP in particular is not significant. There is a statistically insignificant relationship between aggregate bank lending and economic growth in Nigeria.

This gap is what the present study intend to fill by using money supply (M_2) as a determinant of bank credit. Descriptive statistics, correlation analysis and regression analysis were the statistical techniques the present study employed.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Research Design

The study used ex- post facto research design. An ex post facto research design is a method in which groups with quantities that already are compared on the dependent variable(s). It is also known as “after the fact” research. An ex -post facto research design is considered quasi-experiment because the subjects are not randomly assigned; rather, they are grouped based on a particular characteristics or trait. The aim of a research design is to ensure that the overall strategy chosen to integrate the different components of the study address the research problem as unambiguously as possible (Onwumere, 2009).

3.2 Population of the Study

The data used in this study is annual covering the period from 2010 to 2021, from the yearly report of Inflation Rate, Gross Domestic Product, Lending Rate and Money Supply.

3.3 Sample and Sampling Methods

The study exhausted the population size stated in section 3.2 which from (2010-2021) as quoted in Central Bank Statistical Bulletin (2021). A convenience sampling techniques was adopted because it allows the researcher to generate large samples in a short period of time.

3.4 Method of Data Collection

The data for this study was obtained mainly from secondary sources particularly from yearly report of Inflation Rate, Gross Domestic Product, Lending Rate and Money Supply.

3.5 Method of Data Analysis

The data for this study was analyzed using descriptive statistics. The specific descriptive statistics used by this study were mean, standard deviation, frequency distribution. The result was of descriptive statistics were presented in tables. Correlation analysis was conducted to determine the relationships established by the study. In addition, the researcher conducted further statistical data analysis to test the hypothesis of the study. This was achieved through the use of ordinary least square (OLS) method of data analysis. The data analysis were aided by the use of Microsoft Excel 2010 and E-views 9.

3.6 Variable Description and Measurement

Variables	Proxy	Variable Type	Measurement	Expected Effect
Gross Domestic Product	GDP	Dependent	Measured using the values obtained from CBN	
Inflation Rate	INF	Independent	Measured using the values obtained from CBN Bulletin	+
Lending Rate	LR	Independent	Measured using the values obtained from CBN Bulletin	+

Money Supply	MS	Independent	Measured using the values obtained from CBN Bulletin	+
--------------	----	-------------	--	---

Source: Researcher's Compilation (2022)

3.7 Model Specification

Model which specifies that economic growth [proxy by Gross Domestic Product (GDP)] is significantly influenced by the Bank credit indices (Inflation Rate, Lending Rate and Money Supply) is formulated as follows:

$$\text{GDP} = f(\text{INFR LR, MS}) \text{-----(1)}$$

To make the Mathematical expression estimable, it is transformed as equation below

$$\text{GDP} = \beta_0 + \beta_1 \text{INFR} + \beta_2 \text{LR} + \beta_3 \text{MS} + e_t \text{-----(2)}$$

Where;

$\beta_1 - \beta_4$ = regression coefficients for Independents Variables

GDP = Economic Growth (It is used as a proxy for Gross domestic Product)

LN: Natural Logarithm

INFR= Inflation Rate

LR= Lending Rate

MS= Money Supply

e_t = Disturbance Term

The theoretical expectations about the sign of the coefficients of the parameters are as follows; we expect; $\beta_1 > 0$, $\beta_2 > 0$, $\beta_3 > 0$.

CHAPTER FOUR

DATA PRESENTATION AND ANALYSIS

4.1 Presentation and Analysis of Data.

Table 4.1 Descriptive Statistics

Variable	Obs	Mean	Std. Dev.	Min	Max	Pr(Skewness)	Pr(Kurtosis)	Prob>chi2
GDPG	12	8.712846	.1902811	8.331753	9.016071	0.0036	0.0051	0.0084
RINR	12	25.7528	.7360697	22.96398	27.25513	0.0007	0.0003	0.0001
EFLR	12	27.89403	2.150281	21.92624	31.10553	0.0038	0.0268	0.0112
MNSS	12	28.64943	1.922917	23.81749	32.04676	0.0022	0.0013	0.0066

Source: Researcher's Computation Using STATA

Table 4.1 presents the summary of the descriptive statistics for the dependent and independent variables for twelve (12) observations. It shows that Nigerian economic growth measure has a mean value of about 8.712 and a standard deviation of about 0.190. The maximum value of the variable is 9.016 while the minimum is 8.33. The maximum values for all other variables are 27.2, 31.106 and 32.046 while the minimum for all the variables are 22.96, 21.92 and 23.82 respectively.

For inflation rate has a, mean value was 25.75 and standard deviation of 0.736. The corresponding values for the others are: lending rate, 27.89 and 2.15 respectively; money supply, 28.65 and 1.92 respectively. The p-values of the skewness and kurtosis statistics show that nearly in all the cases the data are judged to be normally distributed at 5% level of significance

Table 4.2 : Correlation Matrix

	GDPG	RINR	EFLR	MNSS
GDPG	1.0000			
RINR	-0.2042	1.0000		
EFLR	0.0788	0.0771	1.0000	
MNSS	-0.0595	-0.0773	0.1543	1.0000

Source: Researcher's Computation Using STATA

Table 4.2 shows that there are mixed correlations between the various variables used in the study. The table shows negative correlations between economic growth and money supply, inflation rate, but a positive relationship between economic growth and lending rate. The table shows that no two of the explanatory variables are perfectly correlated or nearly so. Thus, the problem of multicollinearity is absent in this model.

4.2 Testing of Hypotheses

Test Statistic

The statistical tool used in testing the stated hypotheses is the regression test procedure which uses the individual significance test (t-test) and the overall significance test (chi-squared-test). The goodness of fit of the model is tested using the coefficient of determination. The estimation of these statistics is done using the STATA computer software.

Significance Level

The level of significance adopted in this study in testing the stated hypotheses of this study is 5%. This level is usually considered adequate for studies in management and other behavioural sciences.

Decision Rule

The critical p-value used in these tests is 0.05. Thus, the researcher accepts a given alternative hypothesis as being accepted if calculated p-value is less than or equal to 0.05, otherwise the researcher accepts the null hypothesis that there is no significantly affect.

Source	SS	df	Number of obs =	12	
			F(3, 31) =	0.65	
Model	.072827213	3	Prob > F =	0.0091	
Residual	1.15820679	31	R-squared =	0.00592	
			Adj R-squared =	-0.0319	
Total	1.23103401	34	Root MSE =	.19329	
GDPG	Coef.	Std. Err.	t	P>t	Interval]
RINR	-0.0569	.0451265	-1.25	0.019	.0126432
EFLR	0.0097	.0156672	0.62	0.038	.0417011
MNSS	-0.0093	.01752	-0.53	0.001	.0264817
_cons	10.170	1.323463	7.68	0.000	12.86954
VIF		1.03			
Heterocedasticity		3.15(0.0758)			

Table 4.3 shows that the explanatory variable does not account for much of the systematic variations in the dependent variable. The table shows very moderate value of R-squared of 0.0592.

This moderate value of the R-squared statistic suggests that there are many other variables in explaining changes in the dependent variable. For the model, the p-value of the F statistic (0.0091) shows that the model overall is suitable for estimating the stated model.

The VIF test (1.03) shows that there is the absence on multi-collinearity and so there is no need to drop any variable. Also, the heteroscedasticity is 1.34 with p-value of 0.0758, showing that there is no significant heteroscedasticity problem and so no need for a robust regression.

Hypothesis I

H₀: Inflation rate has no significant effect on the growth of Nigerian economy.

H₁: Inflation rate has a significant effects on the growth of Nigerian economy

Computation

The test statistic is computed by STATA software and the results are as shown in Table 4.3.

Table 4.3: Regression Results on Inflation rate has a and Nigerian economic growth

Variable	Coefficient	Std Err	t-test statistic	p-value
RINR	-0.0569	0.0451	-1.25	0.019

Source: Extracted from STATA Computations

Decision

With a coefficient of -0.0569 the results indicate that inflation rate has a negatively growth of Nigerian economy, while the probability value of 0.019 indicates that the positive impact is significant. This leads to the rejection of the null hypothesis, thus acceptance of the alternative hypothesis that inflation rate has

a significant impact on the growth of Nigerian economy, though the impact is negative.

Hypothesis II

H₀ : Lending rate does not significantly affect the growth of Nigerian economy.

H₁ : Lending rate significantly affects the growth of Nigerian economy.

Computation

The test statistic is computed by STATA software and the results are as shown in Table 4.4.

Table 4.4: Regression Results on Lending rate and Nigerian economic growth

Variable	Coefficient	Std Err	t-test statistic	p-value
EFLR	0.0097	0.0157	0.62	0.038

Source: Extracted from STATA Computations

Decision

With a coefficient of 0.0097 the results indicate that lending rate positively impacts the growth of Nigerian economy, while the probability value of 0.038 indicates that the positive impact is significant. This leads to the acceptance of the alternative hypothesis, thus the rejection of the null hypothesis. The researcher accepts that lending rate significantly impacts the growth of Nigerian economy, and that such effect is positive.

Hypothesis III

H₀: Money supply does not significantly affect on the growth of Nigerian economy.

H₁: Money supply significantly affects on the growth of Nigerian economy.

Computation

The test statistic is computed by STATA software and the results are as shown in Table 4.6.

Table 4.6: Regression Results on Money supply and Nigerian economic growth

Variable	Coefficient	Std Err	t-test statistic	p-value
MNSS	-0.0093	0.0175	-0.53	0.001

Source: Extracted from STATA Computations

Decision

With a coefficient of -0.0093 the results indicate that money supply negatively impacts the growth of Nigerian economy while the probability value of 0.001 indicates that the negative impact is significant because it is less than 0.05. This leads to the acceptance of the alternative hypothesis, thus rejecting the null hypothesis. The researcher accepts that money supply significantly affects the growth of Nigerian economy.

4.4 Discussion of Findings

This study examined the relationships among the variables: lending rate, money supply, inflation rate and Nigerian economic growth. The results indicate that almost all the variables are significantly normally distributed at 5% level of significance. The correlation matrix indicates the variables have mixed relationships. The results also indicate the absence of multi-collinearity.

Essentially, the findings of the study are: with a coefficient of -0.0569 the results indicate that inflation rate has a negatively effect on growth of Nigerian economy, while the probability value of 0.019 indicates that the positive impact is significant. This leads to the rejection of the null hypothesis, thus acceptance of the alternative hypothesis that inflation rate has a significant impact on the growth of Nigerian economy, though the impact is negative. The result does not agree with consistent with the findings of Abina (2020), but was not consistent with the findings of Shuab and Kabiru (2019). This inconclusiveness may have resulted from the existence of varying degrees of institutional backdrops.

Similarly, with a coefficient of 0.0097 the results indicate that lending rate positively impacts the growth of Nigerian economy, while the probability value of 0.038 indicates that the positive impact is significant. This leads to the acceptance of the alternative hypothesis, thus the rejection of the null hypothesis. The

researcher accepts that lending rate significantly impacts the growth of Nigerian economy, and that such effect is positive. The result agrees with the findings of Stephen and Rodiat (2019), and Idachaba et al. (2019), but not consistent with the findings of Olowofeso et al. (2015).

And, with a coefficient -0.0093 the results indicate that money supply negatively impacts the growth of Nigerian economy while the probability value of 0.001 indicates that the negative impact is significant because it is less than 0.05. This leads to the acceptance of the alternative hypothesis, thus rejecting the null hypothesis. The researcher accepts that money supply significantly affects the growth of Nigerian economy. The result agrees with the findings of Ayenagbo (2015), Agbanike et al. (2016), Michael et al. (2017) and Falade and Folorunso (2019) but not consistent with the finding of Andabai and Eze (2018). This might have been as a result of using different industrial sectors.

CHAPTER FIVE

SUMMARY OF FINDINGS CONCLUSION AND RECOMMENDATIONS

5.1 Summary of Findings

The following findings of the study are:

- (i) Inflation rate has a significant negative effects on the growth of Nigerian economy.
- (ii) Lending rate significantly affects the growth of Nigerian economy positively.
- (iii) Money supply has a significant affects on the growth of Nigerian economy.

5.2 Conclusion

In this work, effort was made to determine the impact of bank credit on the growth of Nigerian economy. The result of the findings indicates that bank credit has a positive and significant effect on the growth of Nigerian economy. The result emanating from this study shows that money supply and lending rate exacted a positive and significant impact on economic growth while inflation rate have a negative and significant impact on economic growth in Nigeria. The negative significant effect of inflation rate implies that high inflationary pressures shifts economic growth in Nigeria. Therefore, this study concludes that for the Nigerian economy to grow, emphasis should be placed on developing and implementing policies that will address increase in banks credit to critical areas like research and education, manufacturing, agriculture, power, infrastructural development etc, as

these are growth oriented areas that can move the country forward. The high rate of inflation interest charged on credit by banks erodes the net returns on the investment leaving the enterprise with nothing and in most cases worse than they were before they accessed the credit. This however reduces their contribution to the growth of Nigerian economy

5.3 Recommendations

In line with both the findings of the study and conclusion drawn from this study, the following recommendations were made for policy purposes:

- (i) Policy makers should focus on maintaining inflation at a low rate (single digit) and ensuring interest rate stability.
- (ii) The study recommend that, there should be a reduction in lending rate by banks in order to enhance rapid growth and development of the economy.
- (iii) The Central Bank of Nigeria, should try to understand the role of money supply in enhancing economic growth and come up with monetary policies that will enable money supply to drive the economy properly in order to achieve economic growth. One of such policies is by reducing the price for credit to the private sectors because their activities contribute so much to economic growth in Nigeria. When the interest rates for obtaining credits are not choking, the private sectors will invest more, thereby giving room for more outputs and job opportunities. The study is also suggesting that the Bank of Nigeria should equally

strategize ways to ensure that the monetary policies on M2 and CPS is favorable enough to enhance economic expansion in Nigeria

References

- Abina, A. P. (2020). Sectorial allocation of bank credits and economic development in Nigeria. *Journal of Contemporary Research in Business, Economics and Finance*, 2(1), 18-28.
- Abubakar, A., & Gani, I. M. (2018). Impact of banking sector development on economic growth: Evidence from Nigeria. *Journal of Business Management & Social Sciences Research (JBM&SSR)*, 2 (4), 47- 59.
- Adekunle, O. A., Salam, G. O., & Adedipe, O. A. (2013). Impact of financial sector development on the Nigerian economic growth. *American Journal of Business and Management*, 2 (4), 347- 356.
- Ademu, W. A. (2016). "The informal sector and employment generation in Nigeria: The Role of Credit." Employment Generation in Nigeria. Selected Papers for the 2016 Annual Conference of the Nigerian Economic Society, in Calabar, august 22nd to 24th.
- Adewuyi, I. D., & Olowookere, J. K. (2016). The contributions of capital market to economic development in Nigeria. *International Journal of Economic Development Research and Investment*, 2(1), 36-46, April 2011.
- Agbanike, T. F., Onwuka, K. O., & Eyoghasim, M. (2016). Bank lending and output growth in Nigeria. *Journal of Economics and Sustainable Development*, 7(7), 30-37.
- Akpansung, A. O., & Babalola, S. J. (2011). Banking sector credit and economic growth in Nigeria: An empirical investigation. *CBN Journal of Applied Statistics*, 2(2), 51-62.
- Alaba John, S., & Yetunde Lawal, R. (2019). Impact of sectoral allocation of banks' credit on economic growth in Nigeria. *International Journal of Accounting and Finance (IJAF)*, 8(2), 96-113.
- Aliero, H. M., Abdullahi, Y. Z., & Adamu, N. (2013). Private sector credit and economic growth nexus in Nigeria: An Autoregressive Distributed Lag Bound Approach. *Mediterranean Journal of Social Sciences*, 4(1), 83-83.
- Alkhazaleh, A. M. K. (2017). Does banking sector performance promote economic growth? Case study of Jordanian commercial banks. *Problems and Perspectives in Management*, (15, Iss. 2), 55-64.
- Aminu, A., & Anono, A. Z. (2012). External debt and growth relationship in Nigeria (An Empirical Analysis). *International Journal of research and advancement in Social, Science, Pan-African Book Cc, JIMST, Medina, accra. Ghana*.

- Andabai, P. W., & Eze, G. P. (2018). Bank credit and manufacturing sector growth in Nigeria: A causality investigation. *International Journal of Economics, Commerce and Management*, 6(3), 326.
- Andabai, P. W., & Eze, G. P. (2018). Bank credit and manufacturing sector growth in Nigeria: A causality investigation. *International Journal of Economics, Commerce and Management*, 6(3), 326.
- Awoyemi, S. O., & Dada, O. D. (2019). The effect of financial sector reforms on Nigeria's economic growth. *International Journal of Economic Development Research and Investment*, 6(1), 52-63.
- Ayenagbo, K. (2015). Analysis of the impact of the economic credits on the inflation and economic growth in Togo. *African Journal of Marketing Management*, 7(6), 69-79, July 2015.
- Ayomitunde, A. T., Olaniyi, O. O., Zannu, S. M., & Stephen, B. A. (2019). Monetary policy and economic growth in Nigeria: an ARDL-bound testing and ECM approach. *Eur. J. Econ. L. & Pol.*, 6, 1.
- Bayoumi, T., & Melander, O. (2008). Credit Matters: Empirical Evidence on US Macro-Financial Linkages. IMF Working Paper, 08/169, 1-27
- Beck, T., Demirguc- Kunt, A. S. L. I., Laeven, L., & Levine, R. (2008). Finance, firm size, and growth. *Journal of money, credit and banking*, 40(7), 1379-1405.
- Bencivenga, V.R. and Smith, B.D. (1991) Financial Intermediation and Endogenous Growth. *Review of Economic Studies*, 58, 195-209.
- Bongini, P., Iwanicz-Drozowska, M., Smaga, P., & Witkowski, B. (2017). Financial development and economic growth: The role of foreign-owned banks in CESEE countries. *Sustainability*, 9(3), 335.
- Ekine, D. I., & Onukwuru, F. (2018). Deposit money banks' credit and agricultural sector performance in Nigeria. *Greener Journal of Agricultural Sciences*, 8(3), 65-73.
- Ekine, D. I., & Onukwuru, F. (2018). Deposit money banks' credit and agricultural sector performance in Nigeria. *Greener Journal of Agricultural Sciences*, 8(3), 65-73.
- Ezirim, G.. (2016). The political economy of Nigeria's power sector reforms: Challenges and prospects, 2005-2015. *Mediterranean Journal of Social Sciences*, 7(4), 443.
- Falade, O. E. and Folorunso, B. A. (2015). Fiscal and monetary policy instruments and economic growth sustainability in Nigeria *American Journal of Economics*, 5(6): 587-594

- Hassan, M. K., Sanchez, B., & Yu, J. S. (2011). Financial development and economic growth: New evidence from panel data. *The Quarterly Review of economics and finance*, 51(1), 88-104.
- Hassan, M. K., Sanchez, B., & Yu, J. S. (2011). Financial development and economic growth: New evidence from panel data. *The Quarterly Review of economics and finance*, 51(1), 88-104
- Imoughele, L. E., & Ismaila, M. (2015). Monetary policy and balance of payments stability in Nigeria. *International Journal of Academic Research in Public Policy and Governance*, 2(1), 1-15.
- Inam, U. S., & Ime, B. S. (2017). Monetary policy and economic growth in Nigeria: Evidence from Nigeria. *Advances in Social Sciences Research Journal*, 4(6), 41-59..
- Innocent, I. O., Ademola, O. G., & Glory, E. W. (2019). Influence of bank credits on the Nigerian Economy. *American Economic & Social Review*, 5(1), 1-9..
- Ismaila, M., & Imoughele, L. E. (2015). Macroeconomic determinants of economic growth in Nigeria: A co-integration approach. *International Journal of Academic Research in Economics and Management Sciences*, 4(1), 34-46.
- Jan, A. A. and Syed, R.G. (2017). Predicting delinquency on mortgage loans: an exhaustive parametric comparison of machine learning techniques. *International Journal of Industrial Engineering and Management*, 12(1), 1.
- Jhinghan, M. L (2010). Macro economic theory, (11th Edition). New Delhi: Vrinda Publications (P) Ltd
- John, E. (2016). Commercial bank credit and manufacturing sector output in Nigeria. *Journal of Economics and Sustainable Development*, 7(16).
- Karimo, T. M. & Ogbonna, O. E. (2017). Financial deepening and economic growth nexus in Nigeria: Supply-Leading or Demand-Following? *Journal of Economies*, 5(4).
- King, R.G. and Levine, R. (1993) Finance and Growth: schumpeter might be right. *Quarterly Journal of Economics*, 108, 717-738.
- Kira, A. R. (2013). The factors affecting Gross Domestic Product (GDP) in developing countries: The case of Tanzania. *European Journal of Business and Management*, 5(4), 148-158.
- Levine R. (2015), "Financial and Growth: Theory and Evidence" in the handbook of Economic Growth the Nether lands: Elsevier Science Press.

- Mandiefe, P. (2015). The impact of financial sector development on economic growth: analysis of the financial development gap between Cameroon and South Africa.
- Mandiefe, P. (2015). The impact of financial sector development on economic growth: analysis of the financial development gap between Cameroon and South Africa. *Available at SSRN 2616296*.
- Modebe, J. N., Ugwuegbe, S., & Ugwuoke, R. O. (2014). The impact of bank credit on the growth of Nigerian economy: A co integration approach. *Research Journal of Finance and Accounting*, 5(10), 87-95.
- Nwakanma, P. C., Nnamdi, I. S., and Omojefe, G. O., (2014). Bank credits to the private sector: potency and relevance in Nigeria's economic growth process. *Accounting and Finance Research*, 3(2), pp. 23-35..
- Nwanyanwu, O.J. (2011). "An nalysis of Banks' credit on the Nigerian economic Growth"; *Jos Journal of Economics*, Vol.4, No.1.
- Nwaru, N. M., & Okorontah, C. F. (2014). Banks' credit as an instrument of economic growth in Nigeria. *Int J Bus Law Res*, 5(2), 102-110.
- Nwaru, N. M., & Okorontah, C. F. (2014). Banks' credit as an instrument of economic growth in Nigeria. *Int J Bus Law Res*, 5(2), 102-110.
- Nzomoi, J. N., Were, M., & Rutto, N. (2012). Assessing the impact of private sector credit on economic performance: Evidence from sectoral panel data for Kenya.
- Nzotta, S. M. (2017). Money, banking and finance: theory and practice. Owerri: Inter Continental Educational Books and Publishers.
- Obademi, E. O., & Elumaro, A. (2014). Banks and economic growth in Nigeria: a re-examination of the financial repression hypothesis. *American Journal of Business and Management*, 3(1), 1-9.
- Ogege, S., & Boloupremo, T. (2014). Deposit money banks and economic growth in Nigeria. *Financial Assets and Investing*, 5(1), 41-50.
- Okwo, I. M., Mbajiaku, B., & Ugwunta, D. O. (2012). The effect of deposit money banks (DMBs) credit on Nigerian economic growth. *International Journal of Current Research*, 4(12), 555-559, December, 2012.
- Oladipo, O. N. (2020). Interest rate and economic growth as determinants of firms investment decision in Nigeria: a cointegration approach. *EuroEconomica*.
- Olowofeso, E. O., Adeleke, A. O., & Udoji, A. O. (2016). Impact of private sector credit on economic growth in Nigeria. *CBN Journal of Applied Statistics*, 6(2), 81-101.

- Olusola, A. A. (2016). Critical evaluation of banking lending and economic development in Nigeria (1980-2013). In *Proceedings of 1st International Conference at LAUTECH with a theme of Institutional Frameworks, Building and National Development* (pp: 1-22). A publication of Department of Management and Accounting, Faculty of Management Sciences, Ladoke Akintola University of Technology, Ogbomoso, Nigeria.
- Omodero, C. O. (2019). The effect of foreign debt on the economic growth of Nigeria. In *The effect of foreign debt on the economic growth of Nigeria: Omodero, Cordelia Onyinyechi*.
- Onuorah, A. C. (2011). Fundamentals of finance, (1 Edition). Asaba: C.M Global Co. Ltd.
- Onuorah, A. C., & Ozurumba, B. A. (2013). Bank credits: An aid to economic growth in Nigeria. In *Information and Knowledge Management* (Vol. 3, No. 3, pp. 41-50).
- Onuorah, A. C., & Ozurumba, B. A. (2013). Bank credits: An aid to economic growth in Nigeria. In *Information and Knowledge Management* (Vol. 3, No. 3, pp. 41-50).
- Onwuteaka, I., Okoye, P., & Molokwu, I. M. (2019). Effect of monetary policy on economic growth in Nigeria. *International Journal of Trend in Scientific Research and Development*, 3(3), 590-7.
- Sebastian, O. U. (2018). Banking system credits to the domestic economy and national development. *Annals of University of Bucharest, Economic and Administrative Series*, 1(6), 149-164
- Soludo, C.C. (2012). The developments in the banking sector. Being press released by Central Bank of Nigeria on 23 Feb.
- Taiwo, A. M. & Abayomi, S. T. (2017). Credit management spur high profitability? Evidence from Nigerian banking sector. *Journal of Applied Economics and Business*, 1(1), 46- 53.
- Timsina, N. (2017). Determinants of bank lending in Nepal. *NRB Economic Review*, 20(1), 22-42.
- Tridico, P. (2007). Institutions, human development and economic growth in transition economies. *The European Journal of Development Research*, 19(4), 569-593.
- Tuuli, S. (2012). Model-based regulation and firms' access to finance. *Bank of Finland Research Discussion Paper*, (4).
- Ugwuegbe, S., & Ugwuoke, R. O. (2014). The impact of bank credit on the growth of Nigerian economy: A co integration approach. *Research Journal of Finance and Accounting*, 5(10), 87-95.

Yakubu, Z., & Affoi, A. Y. (2014). An analysis of commercial banks' credit on economic growth in Nigeria. *Current Research Journal of Economic Theory*, 6(2), 11-15.

Zubairu, U. M. (2018). A Systematic review of the field of Debt financing. *Covenant Journal of Entrepreneurship*, 1(3)d

APPENDIX

Variable	Obs	Mean	Std. Dev.	Min	Max	Pr(Skewness)	Pr(Kurtosis)	Prob>chi2
GDPG	12	8.712846	.1902811	8.331753	9.016071	0.0036	0.0051	0.0084
RINR	12	25.7528	.7360697	22.96398	27.25513	0.0007	0.0003	0.0001
EFLR	12	27.89403	2.150281	21.92624	31.10553	0.0038	0.0268	0.0112
MNSS	12	28.64943	1.922917	23.81749	32.04676	0.0022	0.0013	0.0066

	GDPG	RINR	EFLR	MNSS
GDPG	1.0000			
RINR	-0.2042	1.0000		
EFLR	0.0788	0.0771	1.0000	
MNSS	-0.0595	-0.0773	0.1543	1.0000

Variable	Obs	Pr(Skewness)	Pr(Kurtosis)	adj chi2(2)	Prob>chi2
GDPG	12	0.0036	0.0051	3.34	0.0084
RINR	12	0.0007	0.0003	18.18	0.0001
EFLR	12	0.0038	0.0268	8.99	0.0112
MNSS	12	0.0022	0.0013	10.05	0.0066

Source	SS	df	Number of obs = 12		
			F(3, 31) = 0.65		
Model	.072827213	3	Prob > F = 0.0091		
Residual	1.15820679	31	R-squared = 0.0592		
			Adj R-squared = -0.0319		
Total	1.23103401	34	Root MSE = .19329		
GDPG	Coef.	Std. Err.	t	P>t	Interval]
RINR	-0.0569	.0451265	-1.25	0.019	.0126432
EFLR	0.0097	.0156672	0.62	0.038	.0417011
MNSS	-0.0093	.01752	-0.53	0.001	.0264817
_cons	10.170	1.323463	7.68	0.000	12.86954

Variable	VIF	1/VIF
mnss	1.03	0.968185
eflr	1.03	0.968217
rinr	1.01	0.985891
Mean VIF	1.03	

Breusch-Pagan / Cook-Weisberg test for heteroskedasticity
Ho: Constant variance
Variables: fitted values of gdpg
chi2(1) = 3.15
Prob > chi2 = 0.0758