A STUDY ON INTEREST RATE STRUCTURE IN NIGERIA AND ITS IMPLICATION FOR MACRO ECONOMIC STABILITY

BY

EMEREONYEKWE NGOZI GLORIA
19994075348

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AFFIRMATION OF RESPONSIBILITY

This Is To Certify That This Work Was Carried Out By Emereonyekwe Ngozi Gloria (Miss) Of The Department Of Project Management, Federal University Of Technology, Owerri And That This Work Has Not Been Submitted To Any Other Institution For A Degree

Supervisor Date

Head Of Department Date

Dean P.G.S. Date

External Examiner Date
DEDICATION

To My Beloved Children! I Love
You All.
ACKNOWLEDGEMENT

First to God be the glory for seeing me through this work and also I am grateful to my supervisor Dr. S.M. Nzotta who took pains to go through my work until its completion.

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GLORY BE TO GOD ALMIGHTY
TABLE OF CONTENTS

Title Page........................................................................................................... i
Affirmation of responsibility................................................................. ii
Dedication........................................................................................................ iii
Acknowledgement....................................................................................... iv
Table of Contents......................................................................................... v-vii
Abstract.......................................................................................................... Vi-vii

CHAPTER ONE - INTRODUCTION

1.1 Introduction.......................................................................................... 1
1.2 Statement of the problem................................................................. 3
1.3 Overview of the problem................................................................. 5
1.4 Objective of the study......................................................................... 7
1.5 Hypotheses.......................................................................................... 8
1.6 Significance of the study..................................................................... 10
1.7 Scope of the study............................................................................... 11
1.8 Definition of operational terms......................................................... 11

CHAPTER TWO-LITERATURE REVIEW

2.1 Introduction.......................................................................................... 13
CHAPTER FOUR - DATA PRESENTATION AND ANALYSIS

4.1 Presentation of Data ......................................................... 90
4.3 Analysis of Data ............................................................. 94
4.4 Interpretation of Results .................................................. 96

CHAPTER FIVE - SUMMARY OF FINDINGS, RECOMMENDATIONS & CONCLUSION

5.1 Introduction ................................................................. 107
5.2 Summary of findings ....................................................... 107
5.3 Conclusion ................................................................. 111
5.4 Recommendations ....................................................... 112
ABSTRACT

Prior to 1986, the rate of interest was administratively fixed at low levels with sectoral targets to encourage investment in the preferred sectors of Nigeria's economy. With economic reform in 1986, interest rates were deregulated—allowing the market a greater role in rationing financial resources.

This study investigated the relationship between interest rates and macroeconomic stability in Nigeria. It also tried to ascertain whether the market determined interest rates are favourable to economic development and stability in Nigeria. The following hypotheses were tested.

i) There is no significant relationship between interest rate level and Gross domestic product (GDP) in Nigeria.

ii) Interest rate fluctuations are significantly related to exchange rate in Nigeria.

iii) There is no significant relationship between interest rate and inflationary rate in Nigeria.

The researcher used regression and correlation models to establish the empirical relationship between interest rates and other variables used in the analysis. The main findings were as follows:

i) A significant and inverse relationship existed between interest rates and Gross Domestic Product (GDP).

ii) An insignificant relationship was established between interest rate and exchange rate in Nigeria.

iii) There is no significant relationship between interest rate and inflationary rate.

From the findings, we conclude that a rise in interest rates is likely to have a negative impact on economic growth, development, and stability in Nigeria, since there is a significant relationship between lower interest rate and economic stability.
CHAPTER ONE

INTRODUCTION

1.1 Background of the study

Usually, in the economic management of any nation, especially, that of the developing nations, governments applies economic policies which are geared towards the attainment of not only set national goals but also for the growth and development of the economy.

This particular situation is applicable to Nigeria which also belongs to the category of such countries. With the above statement in mind, it is equally important to state that these nations economic policies are aimed at placing adequate control and monitoring of the various economic units of the country so as to attain the desired levels of growth.

With particular reference once again to these countries in general and in which Nigeria finds itself, development according to Jhingan (1985) “requires and involves some sort of direction, regulation and guidance. This is with the purpose of generating the force of expansion and maintaining them”. This therefore implies that
the policy of guidance and regulation is most desired in developing economies.

The two main tools available to government for guiding and regulating the economy are the fiscal and monetary tools.

Fiscal policy generally looked upon as that part of government policy concerning the raising of revenue through taxation and other means and deciding on the level and pattern of expenditure for the purpose of influencing economic activities. Monetary policy on the other hand refers to the major economic stabilization weapon which involves measures designed to regulate and control the volume, cost, availability and direction of money and credit in an economy for the purpose of achieving some specific macroeconomic policy objectives. (see Anyanwu, 1990). The understanding is that monetary policy is a deliberate effort by the Central Bank to control the money supply by adjusting interest rates for the purpose of achieving certain broad economic objectives.

On interest rate and its structure, Ogundipe (1988) stated that, “it is a monetary policy instrument used by the government through the Central Bank to check the amount of money in circulation”. If the government wants to reduce the amount of money in circulation, what
it does is to increase the rate of interest and the ability of the banking sector to create credit will be reduced. On the other hand, should the government desire to increase the money supply it will reduce interest rate, hence, the ability of the banking system to create credit will be enhanced. It is therefore these changes and the way and manner that the government through the Central Bank changes interest rate that constitutes its structure.

With all these in mind, the structure of interest rates in Nigeria has constituted a powerful instrument through which the government can move the economy to the level in which they desire it. This research will try to examine the structure of interest rate in Nigeria, with a view to find out the extent of its impact on the economy.

1.2 STATEMENT OF THE PROBLEM

According to the early classical economists, all economic agents are supposed to be allowed to interact freely with a view to determining the prices sold to the public. Hence, Adams Smith (1776) specifically stated that there should be no government intervention whatsoever. But many, especially development economists have equally argued that a situation where some of these economic agents
are allowed to determine their rates can lead to a one-sided development and at – times unhealthy competition in an economy. The market feature argument is one of the reasons for the emergence of government interference in the activities of many economic units. This no doubt has caused many problems to both the firms and individuals wishing to establish or invest in any productive venture. The cost of capital (interest rate) and the inadequacy of capital have been identified as the two major militating factors against the development of the Nigerian economy. No wonder the government has continued to intervene (change the structure of interest rate) in the administration or determination of the level of cost of capital i.e the structure of interest rate. These developments have had their impact on the economy and will be examined.

Another major problem which has been identified is the frequent change made by different governments as regards to monetary policy instruments especially, interest rate. This has no doubt frustrated the efforts of investors willing to invest in the economy. Also, the non-sustenance of monetary policies in the Nigerian economy have equally contributed to the unstable nature of interest rate. There has been this complaint that while the rates paid to customers on savings, current and even deposit accounts have been so small than that charged for borrowing i.e interest rate on
loans. Despite the 7% disparity level, most financial institutions in Nigeria have continued to disobey this guideline. It has caused lots of problems to investors.

However, government has always used monetary policy to influence the activities of all economic units whether during boom or recession. The policy instrument chosen at any point in time should be in accordance with the prevailing economic condition in the country.

1.3 AN OVERVIEW OF THE STUDY

An appraisal of monetary policy in Nigeria has revealed that most of the instruments have not been able to achieve most of their stated objectives, especially, in affecting the level of economic activities in Nigeria. To this extent therefore, a need arises that a study of monetary policies and instruments, such as interest rate and its structure, should be undertaken to determine the extent of its impact on the Nigerian economy.

It is important to state here that the aggregation of firms in an economy determines to a large extent the level of economic activity in that country. Secondly, the decisions on how much to produce and what to produce and for whom to produce by the numerous economic
units are largely influenced by the monetary policy decisions of a country.

Apart from the above mentioned issues that affect the decisions of firms, there is also the frequent changes made in the rate of interest (structure) at the beginning of every financial year, especially, during the time interest rate structure was determined by the government and/ or its monetary authority, the CBN. Equally, many experts, especially, financial experts, economists and budget analysts have questioned the manner in which monetary instruments are administered. Hence, there is this conclusion that the frequent changes in the structure of interest rates in Nigeria have had a kind of mixed blessings for the nation.

It is with this in our minds that this study has set out to examine critically the structure of interest rate in Nigeria with a view to determining and at the same time evaluating its impact on the development of our economy.

1.4 OBJECTIVE OF THE STUDY

A critical look at the Nigeria economy as a whole will reveal that there have been many developments in the administration of monetary policy in general and interest rate in particular. Equally,
many, people have complained that the rate of interest in the Nigeria economy has to large extent discouraged those who are willing to invest in the economy mainly to the unstable nature of the structure and its attendant high costs. Also, there has been complaints about the low percentage of interest paid to savers of funds which has discouraged people from saving. All these have therefore affected the Nigerian economy.

To this extent, this research intends to;

i. Evaluate the various interest rate policies adopted by the monetary authorities in the quest to provide loan -able funds for economic advancement.

ii. Ascertain the extent of the impact of the changes in the structure of interest rate on the Nigerian economy.

iii. To determine the relationship between interest rate and growth in the Nigerian economy using the GDP as a measuring rod.

iv. To draw attention to major factors determining interest rates in Nigeria and probably with adverse influence on the macro-economic stability of the nation.
v. To make useful suggestion on how to manage interest rates to enhance productivity, economic development and stability in Nigeria.

1.6 HYPOTHESES OF THE STUDY

The general hypotheses for this study are that;

1. There is no significant relationship between interest rate and GDP in Nigeria

ii. There is no significant relationship between interest rate and exchange rates in Nigeria

iii. There is no relationship between interest rate and inflationary rates in Nigeria.

iv. There is no significant relationship between interest rate and level of savings, investment, exchange rate and inflationary rates.

As regards to economy will also be examined. This is to determine whether the impact has been positive or negative. Lastly, the scope will cover the changes which interest rate has undergone in Nigeria (1990 - 2000) and hence critically evaluate its implication on the economy.
1.5 SIGNIFICANCE OF THE STUDY

With particular reference to the subject of our research, we can see that the topic is relevant to both the government, policy-makers and implementors, central and commercial banks, the manufacturing industries, management, finance and economics students.

The relevance of the study is such that all the aforementioned institutions who have dealings with interest rates and its policies will know to what extent these changes in the structure of interest rate have affected their operations, hence the Nigerian economy. Equally, the central Bank will be in a position to determine which particular method to adopt in fixing interest rate or indirectly affecting changes in the structure of interest rate, especially as it affects the issuance of loans to those wishing to invest in the economy.

Essentially, this study will provide the government, policy-makers, and managers of our financial institutions, especially the monetary authorities a working document for its decisions and policy making process. The result of the findings will suggest ways to improve the efficiency of interest rate administration especially the stability of its structure or organization and implementation.
Lastly, it will add to the body of knowledge and literature existing on the structure of interest rates in Nigeria with emphasis on its impact on the economy.

1.7 SCOPE OF STUDY

This study centres on the structure of interest rate in Nigeria with reference to the economy of Nigeria. This study confines itself to a time frame of eleven years ie (1990 - 2000). The central aim is to appraise and evaluate the numerous developments (structure) in interest rates in Nigeria in relation to its impact on the economy.

This study equally embraces such issues like the objectives of monetary policy in general and interest rate in particular.

1.8 DEFINITION OF TERMS

Interest Rate: This is a monetary policy instrument that is used to control the level of amount in circulation in an economy. It is equally the cost of borrowing money from the financial institutions by both governments (all tiers) corporate bodies, corporate individuals and the general public.

Interest Rate Structure: This is the organization and / or changes usually made in the rate of interest in Nigeria. It also
involves the developments in interest rate especially, the frequent changes made in the administration of interest rate in Nigeria.

Monetary Policy: All those measures designed to control and/or regulate the volumes, costs and direction of money and credit in an economy.

Monetary Policy Instrument: This comprise all those instruments or techniques employed by monetary authorities to regulate and control the activities of the financial institutions. Examples are interest rate, inter-bank rate, exchange rate, bank rate, etc.

Financial Institution: All those institutions engaged in holding money in trust for the public and in lending it to investors and individuals at a cost or rate. (Interest rate).
CHAPTER TWO

REVIEW OF LITERATURE

2.1 INTRODUCTION

For any research work to be authentic, meaningful and acceptable, there should be a careful review of past cum present or current literature regarding the subject – matter involved. This chapter is devoted to this task and it is carried out based on the table of contents.

It is important at this introductory stage to state that the theory of the rates of interest (interest rate) has a rather stormy history. Economists have engaged in many disputes with respect to the determinants of the rate of interest, the significant of interest rate to economic development, the best interest rate policy etc. These issues are relevant to this study.

2.2 THE MEANING AND ROLES OF MONETARY POLICY IN AN ECONOMY.

It has been viewed earlier that there are two major instruments available to the government to move the economy to the desired
level. These two instruments are the fiscal and monetary policies. Much to our concern in this study is that of the monetary policy which generally has been seen as the use of money and its instruments to move the economy to the desired level.

But according to Otiti (1982) monetary policy is the, “measure designed to regulate and control the volume, cost and direction of money and credit in the economy, its role being to achieve some specified macroeconomic policy objectives which can change from time to time depending on the economic fortunes of a particular country”. Further more, he added to this definition what he considered the major objective of monetary policy. these according to him are, “full employment, rapid economic development, maintenance of price stability and balance of payment equilibrium”. He goes ahead to point out that monetary policy pre – supposes that there is some relationship between the supply and demand for money in one hand, and such economic aggregates like the general price level, out put, income, savings and investment. It is therefore the assumed relationship that influences the mix of policy instruments used and consequently its effectiveness, he contends.
Ojo (1992) sees monetary policy as an art of controlling the movement of monetary and credit aggregates in the pursuance of stable prices and sustainable economic growth.

In his own contribution, Adekanye (1986) views monetary policy as that, “which deals with the terms and conditions under which money and credit are provided to the economy by monetary authorities.” In other words he is basically concerned with the conditions that necessitate the pumping of money into the economy. He goes further to contend that monetary policy is not crucial as fiscal policy, while fiscal policy has direct impact on economic activity through government expenditure and taxation, monetary policy only affects economic activity by linking interest rate and investment. That is why this study will critically examine interest rate and its role in the overall investment in the Nigerian economy.

But before proceeding further, it is important to take a further look at the meaning of monetary policy since interest rate which is the major aspect of this work is an instrument of monetary policy. To this extent therefore, Baumol and Blinder (1982) view monetary policy as actions that the Federal Reserve System takes in order to change the equilibrium of the money market that is, to alter the money
supply, move interest rate or both. According to them, monetary policies that expand the money supply normally lowers interest rate, while that which reduces the money supply normally raises interest rate.

In his opinion, Hindaier (1976) indicates that monetary policies are generally implemented to change an economy's supply of money and credit in order to affect either the level of purchasing in the economy or the economy's balance of payments position. He goes further to state that the implementation of monetary policies takes the form of open market operations, the use of interest rates, changes in reserve requirements etc. Anyanwu (1993) considers monetary policy as, “a major economic stabilization weapon which involves measures designed to regulate and control the volume, cost, availability and direction of money and credit in an economy to achieve specified macroeconomic policy objectives”. No doubt all the definitions on monetary policy have in one way or the other touched on interest rate as a monetary policy instrument. We will therefore examine the meaning of monetary policy instruments especially those that bother on interest and interest rate.
2.3 INSTRUMENTS OF MONETARY POLICY (INTEREST RATE)

Adekanye (1986) stated that "the instruments of monetary control are those devices which are used by the monetary authorities to influence the supply, allocation and cost of credit in the economy". In the execution of the Central Bank of Nigeria's control measures, the Bank has attempted to draw on some instruments of monetary policy which has depended on the prevailing economic conditions and the objectives to be achieved. The array of monetary instruments available can be categorized into two, namely; quantitative and qualitative instruments. The quantitative instruments include Bank rate (rate of interest), cash reserve requirements, open market operations etc, while qualitative instruments will include selective credit control and moral suasion.

Regarding Bank Rate, Ajayi and Ojo (1981) contends that, "it is the rate at which the could conveniently be returned with interest some part or all of the animals’ progeny could be reformed with the animals. We can surmarize that the concept of interest in its modern sense arose from just such productive loans.

The concept of credit therefore conjures up a number of ideas. A Dictionary of Banking by F. E Perry shows that its meaning
includes, ‘a reputation for solvency; the time given for payment of goods sold on trust; trust reposed with regard to property handed over on the promise of payment at a future time; any thing due to a person”.

With particular reference to interest, the Dictionary of Finance and Banking equally stated that, “interest is the money which is paid for the use of money”. It also went ahead to say that interest may be simple or compound. Simple interest is the application of a percentage rate to the principal sum for the period in question. On the other hand, compound interest is the interest on the principal sum plus the accruing interest.

Interest on bank accounts is “simple” interest but is compound in the case of a deposit account to the extent that interest is allowed on interest previously credited to the account.

With particular reference to the topic of this research, ie interest rate, a lot have equally be said by experts on the subject. According to Anyanwu (1990), “interest rate or rate of interest is the reward for parting with liquidity for a specified period. It is the inverse proportion between a sum of money and what can be obtained for parting with control over the money in exchange for a debt for a stated period”.
From the above definition, Anyanwu states further that interest rate is seen as a measure of the unwillingness of those who possess money to part with their liquid control over it.

Ajay and Ojo (1981) saw interest rate as the “price which equilibrates the desire to hold wealth in the form of cash with the rate available quantity of cash, ie the price of credit.” Hence interest rate was seen as the prices paid for the right to borrow and use loanable fund, are the costs of holding money. That is, they are the prices that must be paid to get people to forgo willingly the advantages of liquidity.

Still writing on the rate of interest, both the monetarist and Keynesians concede that any increase in the stock of money say through interest rate will affect the level of economic activity. Hence, interest rate in the capitalist system is used to control and regulate the economy because of the very important role which it plays.

No doubt, all the literature reviewed saw the rate of interest as the payment made for borrowing a given sum of money and within a stipulated period of time. To this extent central Bank will discount commercial and merchant bank’s first class bills, mainly treasury bills and the rate at which it lends to commercial and merchant banks and
other financial institutions in its capacity as lender of last resort). In the words of Otiti (1982) the discount rate is the rate of interest the central bank charges the commercial banks on loans extended to them. He further explained that, should the monetary authority decide to reduce liquidity in the economy they may increase the discount rate. By so doing, the cost of borrowing will increase and negative investment will set in the economy. The reverse is the case if they monetary authority decide to increase liquidity and production.

Interest rate is a price of capital to the borrower and a return on capital to the saver or lender. As an instrument of monetary policy it can be used to combat inflation, ease budget burden, promote capital inflow and discourage capital flight as well as avoid misallocation of resources. It can also be used to promote the growth of the capital and monetary markets.

In Nigeria, interest rate was first used as an instrument of control between 1959 and 1962. It was used as a means of making short – term investments of banks in Nigerian market more profitable enough to encourage them repatriate short –term funds kept abroad for retention in Nigeria. In other words, which interest was used as an instrument of monetary policy this was directed at reducing the
cost of government borrowing or making credit for the private sector more costly. Interest rate has been relatively stable in Nigeria compared with other developing nations, especially those in Africa.

Analyzing interest rate structure in Nigeria, Otiti (1982) stresses that, “it has been revised up wards and vice-versa to curtail credit the private sector”. The minimum re-discount rate in 1985 was 10 percent and in 1987 it was de-regulated leaving the MRR to an upward of 15 percent. It was reduced to 13.25 percent in 1989 while in 1991 it was fixed at a 4 percent point between their cost of fund and the lending rate (ie if discount rate is 10 percent, interest rate must not exceed 14 percent). In 1992, it was fixed at 5 per cent and this was retained in 1993. This shows the extent of the instability associated with interest rate structure as an instrument of monetary policy in Nigeria.

2.4 THE MEANING AND DEFINITION OF INTEREST AND INTEREST RATE.

The earliest historical records show that interest was already a usual and accepted concomitant of credit. According to Sidney (1963) “varieties of loan exist and existed at very early times, which suggest repayment with interest loans of seeds and animals”. At
harvest times the seeds interest rate provides an opportunity for those wishing to borrow and pay back later with a stated sum on top of the principal.

According to the CBN Briefs 98/04, “interest rates are the rental payments for the use of credit by borrowers and return for parting with liquidity by lenders”. It went on to state that like other prices, interest rate perform a rationing function by allocating limited supply of credit among the many competing demands on it.

2.5 INTEREST RATE AS A MONETARY POLICY TOOL

The research department of the central Bank of Nigeria indicated in the CBN briefs (1994 series) that the structural Adjustment Programme was adopted in July 1986 following the crash in the international oil market and the resultant down turn in the economic activities in Nigeria. This programme was designed to achieve fiscal balance and balance of payments viability by altering and restructuring the production and consumption patterns of the economy. Other objectives include eliminating price distortions, reducing the heavy dependence on crude oil exports and consumer goods imports, enhancing the non – oil export base of the economy and achieving sustainable growth in the economy.
Furthermore, the programme aimed at rationalizing the role of the public sector and accelerating the growth potential of the private sector. The main strategies of SAP were the deregulation of external trade and payments, the adoption of a market – determined exchange rate for the naria, the determination of the rate of interest by the forces of demand and supply of money etc.

Writing on monetary policy and interest rate or interest rate as a monetary policy tool, Odoko (1994) tries to remind us that the objectives of monetary policy since 1986 have remained as in the earlier period – the stimulation of output and employment by firms and the promotion of domestic and external stability”. In line with the general philosophy of economic management, monetary policy through the use of interest rate is aimed at inducing the emergence of a marked – based financial system for effective mobilization of financial savings and efficient resources allocation.

Obaseki (1994) in his view points out that within the framework of de-regulating the economy in 1986 to enhance competition and allocation of resources, the CBN introduced a market – based interest rate policy as an effective monetary tool designed to economic growth in the country. “ Although it was stated that this policy
generated some measure of controversy. It was generally agreed that low interest rates could hamper savings, while high interest rates, which are likely to accompany deregulation, might militate against investment. This deregulation of interest rates which are contained in the reform of the monetary instruments, made it possible for banks to determine their deposit and lending rates according to market conditions through negotiation with their customers.

Still on interest rates as a monetary policy tool in Nigeria, history has it that its origin dates back to 1959. Although the statute that established the Central Bank of Nigeria charged it with the responsibility of formulating and executing monetary and banking policies, there is no single document which stipulates what may be called CBN’s monetary policy whatever policy that existed may be gleaned from the various budget speeches of the federal government, particularly those of late chief Fetus Okotie – Eboh, the late federal commissioner for finance, from successive development plans and from the CBN’s animal reports.

In the 1960 Budget speech for instance, the policies were stated as “the achievement and maintenance of the highest possible rate of increases in the standard of living and the creation of the
necessary conditions to this end” (stability budget in the six budget speeches by Festus O. Eboh)

During the formative years of Nigeria’s monetary policy ,the most active policy instrument was the interest rate. For example Okotie Eboh (1958) identified the rediscount rate and treasury bills as being the monetary instrument that were revised 10-13 times respectively between 1960 and 1961.

Nwankwo (1985) equally stated that, “ interest rate was first used as a monetary policy tool in Nigeria between 1959 – 1962 as a price for obtaining loanable funds and return for foregoing liquidity, hence he was of the opinion that interest rate have an important allocative influence on the level of economic activity aside the other monetary instruments.

With the financial reforms undertaken since 1990 especially in monetary policy measures and its instrument, it is quite clear that interest rate is moving gradually in terms of design and implementation towards a more and more market based system which is common in advanced countries of the world.
2.6 THEORIES OF INTEREST RATE

According to Anyanwu (1990), “various theories of interest rates put together explain or provide variables which determine interest rate”. Hence, we are equally going to examine the determinants of interest rate in any economy. This will no doubt enable an in-depth analysis to be made as to what actually determines the rate of interest in the Nigerian economy. Let us therefore examine in-detaiils the theories and or the determinates of interest rate.

2.6.1 THE CLASSICAL THEORY OR SAVINGS – INVESTMENT THEORY

The savings – investment theory of employment to total output. The role of the saving – investment market contends the classicals, is simply to divide between consumption and saving.

We clearly have not assessed the importance of the attack on the classical saving function. In fact, we have only restated the classical position of the role of interest rate. Ranlett (1969) observed that, “the importance of interest rate on income level as a determinant of saving really depends on the period of time under consideration. In the short –run it seems less probable that the interest rate is a
significant factor. In the long – run, it probably becomes more important, he concluded.

Another contributor to the classical theory of interest is Anyanwu (1990). He stated that, “according to the classical theory the interest rate is determined by the intersection of the investment-demand – schedule and the saving – schedule ie. Schedule disclosing the relationship of investment and saving to the rate of interest”. He was equally of the opinion that the Keynesian attack of the classical theory of interest is indeterminable too.

2.6.2 THE KEYNESIAN LIQUIDITY PREFERENCE THEORY OF THE RATE OF INTEREST.

This theory according to Anyanwu poists that the rate of interest is determined by the intersection of the supply – schedule of money (perhaps interest inelastic if rigorously fixed by the monetary authorities) and the demand schedule for money (the liquidity – preference schedule).

However, he was of the opinion that this analysis is also indeterminated because the liquidity preference schedule will shift up or down with changes in the income level. Thus, money supply and demand schedules cannot give the rate of interest unless the income
level is already known, hence, the same criticism of in determinacy Keynes leveled against the classics is applicable to his theory.

2.6.3 THE LOANABLE FUNDS THEORY OF INTEREST RATE

This is also known as the neoclassical theory of interest rate. As a result of dissatisfaction with the classical saving – investment theory, the loanable fund theory was developed by Dennis. H Robertson.

In his loanable funds theory of interest rate, Robertson stated that the rate of interest is determined by the intersection of the demand schedule for loanable funds with the supply – schedule. Here, the supply – schedule is compounded of savings (in the Robertsonian sense voluntary savings) plus net additions to loanable funds from new money (AMS) and the dishoarding of idle balance (ADH). However, since the saving portion of the schedule varies with the level of disposable income’ (ie yesterday’s income’) it follows that the total supply schedule of loanable funds also varies with income. Therefore, this theory is also indeterminate. Interest is also known as the classical theory of interest. In this theory, interest rate is said to be determined by the interaction between the demand for loans
(capital) on one hand, and the supply of loanable funds, on the other. Specifically, the interest rate is determined by:

i. The demand for funds to finance investment which varies inversely with the rate of interest and

ii. The supply of savings that people are willing to withhold from their income and lead, which varies directly with the rate of interest.

According to Ranlett (1969) “the intersection of these two schedule determines the equilibrium rate of interest. Only at this interest rate does the amount of savings equal the amount of investment”.

The supply schedule of saving is assured to be an increasing function relative to the rate. In other words, people save more at high interest rates than at low interest rates; saving varies directly with the rate of interest. This belief is based squarely on an assumption of utility maximization. An individual is assumed to have some preference function which relates the satisfaction he will get from using his income for current consumption to the satisfaction he will get by shifting his consumption to a future date. To maximize his total satisfaction our time, the individual will allocate his income to the time period in which it yields the greatest satisfaction. But in this income
allocation process, the individual must consider the interest rate. For by foregoing current consumption and lending part of one’s income, satisfaction is derived in the future not only from the consumption of the principal amount but from interest earnings as well.

Other things being equal, it is assumed that a person would prefer current to future consumption. If this is the case, an individual would save – forego current consumption – only to the extent that his preferences for current consumption will be offset by the interest paid for deferment of consumption.

Several attacks have been made on the assumption that savings varies directly with the interest rate. For example, Ranlett (1969) observed that, “If a person is saving to obtain a specific sum the higher the rate of interest, the less that has to be saved because the increased interest contributes more to growth of the fund. In the case, the saving schedule would slope down ward – be inversely related to the interest rate”.

A more fundamental objection to the classical saving – investment model is the Keynesian argument. This view maintains that saving are primarily influenced by the level of income, not by the rate of interest. How did the classical school react to this objection? First, the
classical economists would probably agree that saving varies with the level of income. But then they would argue that the level of real income is not determined by the saving – investment process but rather in the labour market and by production function that relates total.

2.6.4 THE KEYNESIAN THEORY

Keynes (1936) recognized the theoretical validity of the loanable funds theory but pointed out that the extention of the theory to saving – investment equality was fallacy. He argued that it is not necessarily true that all savings will be directly invested or placed in the bond market, so that the equilibrium in the bond market does necessarily imply saving – investment equilibrium.

In the Keynesian framework, how is the rate of interest determined? Keynes argued that in the absence of a rate of interest, an individual will hold his savings in the most liquid form. Since there is cost associated with converting financial assets to cash, an individual will not want to part with his liquidity without the payment of interest. Hence, the rate of interest is the premium offered to an individual to part with his liquidity.
Consider a typical riskless bond traded in the market. Such bond has the greatest liquidity except itself. The rate of interest on such a bond will be determined in the market where people choose between holding their assets (savings) in the form of money or as interest-earning securities. Hence, it must be determined by the demand for money and the supply of money. In the words of Keynes (1936) “The rate of interest is not the price which brings into equilibrium the demand for resources to invest, with the readiness to abstain from present consumption. It is the price which equilibrates the desire to hold wealth in the form of cash with the available quantity of cash”.

The Keynesian theory of interest like its classical counterpart, has been criticized on several grounds. First, it has been argued that it is not a theory of interest rate determination but rather a theory of the dynamics if interest rate movements from the historical point to another.

Secondly, Hicks (1964) argued that to regard the rate of interest on perfectly safe securities as being determined by nothing else but uncertainty (as Keynes did) is to leave the rate of interest hanging by its fingernails, and obviously there is more to interest rate determination than this.
According to Ajah and Ojoh (1983), a lot of debate has been generated about:

(1) Whether the classical theory is a real or monetary theory, and whether the Keynesian theory is a real or a monetary theory,

(2) The superiority of one over the other. While we do not want to go into details about the first debate in this research, we want to say that the classic contribution of Metzler (1951) has finally put the debate to rest. His contribution can be briefly summarized. He identified two ways of increasing the money supply. The first is a change that take place through the open market operations of the Central Bank. This type of change consists of an exchange of one form of asset for another. The second type of change consists of a direct increase or decrease in the money supply without any offsetting changes in private holdings of other assets. He then showed that the classical theory of interest is a real theory from the point of view of both types of monetary change. The rate of interest of the classical theory is independent of both the quantity of money and the policy of the central Bank.
On the other hand, the Keynesian interest rate is a monetary theory from the point of view of either monetary disturbance. Since the Keynesian interest rate is governed by the decision of wealth-holders concerning the proportions in which the wish to hold money and securities, such a rate of interest metzler (1951) concluded is determined by liquidity preference.

On the debate on the superiority of one theory over the other, metzler stated that it was unfortunate and said that if the economy is in equilibrium and the terms are properly defined and understood, the two theories yield identical results, so that the question of superiority (or inferiority) does not arise.

2.6.5 GENERAL EQUILIBRIUM THEORY

The rate of interest can be conceptualized or seen within the framework of general equilibrium. A theory of the rate of interest determined within such a system is both real and a monetary theory because it is determined by the interaction of the real and monetary forces.

When we consider the apparatus (Is -Lm) developed by Hicks (1937). This curve indicates the level of income at each interest rate at which derived expenditure are equal to savings.
In effect, it depicts the equilibrium in the commodity market. On the other hand, the LM curve gives the value of the rate of interest for each level of income at which the monetary sector is in equilibrium. Putting the two curve together, we get the equilibrium rate of interest, at which the economy is in equilibrium.

According to Ajah and Ojoh, most economists today, while noting the contribution of the classical economists and Keynes, would agree that neither theory adequately explains interest rate determination. The theory of interest rate determination properly belongs to capital theory—a topic that is beyond the scope of this work.

2.7 AN OVERVIEW / STRUCTURE OF INTEREST RATE IN NIGERIA.

According to the CBN briefs, series No. 98/04, “There are various rates of interest in the financial system. These are generally classified into two categories: deposit and lending rates. Deposit rates are paid on saving and time deposits of different maturities.

Equally, it is necessary for us to appreciate exactly what economists mean when they refer to the structure of interest rates. According to malkiel (1966) Economists often speak of “the rate of
interest” as if it were a single datum ready observable in the real world. If one were infact, to look at actual market rates of interest on a single day, one would find what is at first glance a bewildering variety of yields for the obligations of different issuers.

MODERN THEORY OF INTEREST

A critical examination of the theories so far discussed exposes the inadequacy of all to the explanation of the behaviour of interest rate viz –a viz its effects on the economy. No wonder Jhingan (2000) opined that “no single theory of interest rate is adequate and determinate”. To this extent therefore, an adequate theory to be determinate must take into consideration both the real and monetary factors that influence the interest rate. According to Hicks as quoted in Jhingan , utilized the Keynesian tools in a method of presentation which shows that productivity, thrift, liquidity preference and money supply are all necessary elements in a comprehensive and determinate interest theory.

To this extent therefore, Hansen (1972) stated that "an equilibrium condition is reached when the desired volume of cash balances equals the quantity of money, when the marginal efficiency of capital is equal to the rate of interest and finally, when the marginal
efficiency of capital is equal to the rate of interest and finally, when the volume of investments is equal to the normal or desired volume of saving. and these factors are interrelated”. Thus, the modern theory of interest, savings, investment, liquidity preference and the quantity of money are integrated at various levels of income for a synthesis of the loanable funds theory with the liquidity preference theory.

The four variables of the two formulations have been combined to construct two new curves, the income – saving (1S) curve represent flow variable of the loanable funds formulation (or the real factors of the classical theory) and the liquidity money (LM) curve representing the stock variables of liquidity preference formulation. The equilibrium between Is and LM provides a determinate solution. (see Jhingan, 2000)

**THE IS CURVE**

It is derived from the loanable funds formulation. It also explains the relationship between a family of saving schedules and investment schedules. Hence it shows the equality of saving and investment at various combination of the levels of income and the rates of interest.

**THE LM CURVE**
Liquidity money curve shows all combinations of interest and levels of income at which the demand and supply of money are equal. The LM curve is derived from the Keynesian formulation of liquidity preference schedules and the schedule of supply of money. Hence the LM curve consists of a series of points, each points representing an interest – income level at which the demand for more (L) equals the supply of money (M).

**DETERMINATION OF THE RATE OF INTEREST**

The IS and LM curve relate to income levels and interest related. Taken by themselves they cannot tell us either about the level of income or the rate of interest. It is only their intersection that determines the rate of interest.

The Hicks – Hansen analysis which is the intersection of LM and Is curve is thus an integrated and determinate theory of interest in which the two determinates, the IS and LM curves, based on productivity, thrift, liquidity preference and the supply of money, all play their parts in the determination of the rate of interest.

Despite the merits of this modern theory which has tried to pull the other theories together, many people have criticized it as not being free from certain weaknesses. Such criticisms are that it is a
static theory that explains only the short term –run behavior of an economy, secondly, that interest rate is not flexible, that investment is not interest. Inspite of all these weaknesses, it does not undermine the utility of the IS – LM technique in explaining the determination of interest rate in an economy.

**TERM STRUCTURE OF INTEREST RATE**

Another important sub-topic that needs to be critically discussed is the term structure of interest rate. Since this study concentrates on interest rate, it has become imperative and at this stage to examine the effect of market rates of interest on short – term and long – term securities. Hence, the term structure of interest rates refers to the relationship between market rates of interest on short-term and long-term securities. (see Jhingan, 2000 and Anyanwu, 1993).

The term structure of interest rate according to Thingan is the interest rate difference on fixed income securities due to differences in time maturity. He went further to explain that it is, therefore, also known as time – structure or maturity – structure of interest rates which explains the relationship between yields and maturities of the same type of securities.
To Anyanwu, “the term structure of interest rates, refers to the relationship between yield to maturity and the length of time until a loan, bond or other debts securities become due (mature )”.

A further explanation of the term structure of interest rates shows that if two securities are identical in every respect except maturity, it is likely that they will see in the market at different prices (or yields or interest rates). Generally, their prices will change in the same direction. If the short–term securities rise in price, the long-term securities will also rise, in price. People generally hold both short-term securities and they adjust their holdings of securities depending on the relative yields.

There are four major causes for differing term structures; the expectation theory, the liquidity – preference theory, segmented markets theory and the preferred Habitat theory. These theories are explained thus;

THE EXPECTATIONS THEORY

This particular theory according to Nzotta(1999) was originated by Irvin Fisher and perfected by Hicks in his Treatise. Value and capital. Its contention is that future interest rate are the principal determinates of the presents structure of interest rate.
To this extent therefore the assumptions of this theory was summarized by Jhingan (1986) as follows:

i. All investors have definite expectations with respect to future short term interest rates and these expectations are held with complete confidence;

ii. The objectives of investors is to maximize expected profits and they are prepared to transfer funds freely from one maturity to another in order to achieve this objective;

iii. There are no costs associated with investments and disinvestment in securities;

iv. The short-term and long term interest rates are adjusted for any differences due to risk and liquidity;

v. Safe securities of various maturities are perfect substitutes in the portfolios of investors;

vi. investors are profit maximizers who hold such financial assets in their purse as to maximize return over the period they are held; and.

vii. All investors hold with certainty the same expectations of how future rates are going to behave.(see also Nzotta, 1999)
Based on these assumptions above, Jhingan (2000) opined that the theory states that the long – term interest rate at any point in time represents an average of expected short-term interest rates.

He went further to explain that suppose a long – term security maturing after three year sells at the short – term interest of 2 percent in the first years, and that the expected short term interest rates in the second and third years are 3 and 4 percents respectively. The long – term interest rate on this security will be the average of the short – term interest rates over the three years, ie, 3 percent (\(=2\% + 3\% +4\% = 9/3\)). Should the interest rate on the short – term security for the first year be expected to decline by 1 per cent the long term yield on the three – years security will be 2.67 per cent (\(=1 \% + 3\% + 4\% = 8/3\) percent). On the other, if the interest rate is expected to increase by 1 per cent on the three – year security, then the long – term yield will be 3.33 (\(= 2\% + 3\% +5\% = 10/3\%\)).

To this extent therefore, the expectations theory of interest rate holds that differences in yields on securities of different maturities are due to the fact that the market expects the interest rates on different securities to be the same over an equal period of time.
According to warren (1970) "investors generally have repressive interest rate expectations that is to say, at any particular time they have an opinion regarding the level of interest rates they regard as normal, and as short-term rate rise above or fall below this level, they expect them to regress back towards this normal level. Thus, as rates risk above normal, investors expect them to fall; and as rates fall below normal, investors expect them to rise”.

SEGMENTATION THEORY OF INTEREST RATE

Both Jhingan (2000) and Nzotta (1999) agreed that this particular theory of interest rate holds that “investors are very much risk averse and hence they hedge against risks by matching the maturity of their assets and liabilities”. A capital loss is incurred if the maturity of an investor's assets is longer than that of the liabilities. At this stage it implies that he is forced to sell his assets before they are due for redemption. In a situation where his maturity is shorter than that of his liabilities, he runs the risk of income loss. So to avoid two extreme risks, investors match the maturities of their assets and liabilities.

The theory according to Nzotta holds that, "short and long term interest rates are prevalent in various segmented market. These
markets (long – term and short – term securities market) essentially influence the rate structure. They are sustained by institutional practices.

**THE SUBSTITUTABILITY THEORY OF INTEREST RATE**

It is the view of this theory that short – term and long – term securities are substitutes for borrowers and lenders. According to Jhingan (1985) “when buyers and sellers of securities are engaged in arbitrage and switching operations, they tend to eliminate discrepancies between long- term and short – term interest rates in the short- run. Hence, he stated that or such operations, “the theory assumes optimizing behaviour on the part of the buyers and sellers, and relatively free and unrestricted markets”.

**FLUIDITY AND PSYCHOLOGICAL THEORIES**

According to Keynes (1936), the fluidity theory holds that, “there is correspondence, both in direction and timing, of movement in interest rates, with short – term interest rates moving proportionately more than long – term interest rates”. Further, any action on the part of the authority such as the central Bank to Influence short – term interest rates is readily transmitted to long term interest rates. The fluidity theory was contained in Keynes
Treatise on Money. Hence he stated that “during a slump in security prices, the central bank’s action to influence short-term securities through open market operation may not help in reducing yield on long-term securities.

On the other hand, the psychological theory which is contained on Keynes General theory holds that the long–term interest rate is a highly psychological phenomenon dominated by short–run expectation about its future level. The long–term interest rates are sticky in the downward direction even when short–term interest rate decline substantially. This is due to the psychology of investors. If investors believe that the long–term interest rate have reached the “irreducible conventional minimum” and the next change would be in the upward direction, they will not deal in long-term securities for fear of capital loss.

According to Jhingan, this happens during a depression when liquidity preference is perfectly interest elastic. All efforts on the part of the Central Banks to purchase short–term securities in the open market will fail to persuade investor to buy long–term securities.
THE LIQUIDITY OR RISK PREMIUM THEORY

This is some – how different from the expectations theory and the Keynesian Fluidity Theory. This theory which is called the liquidity or Risk Premium Theory rejects the view that short – term and long – term securities are comparable except for maturity. But it accepts the view that yields on various maturities are related to each other by the expectations of long – run and short run rates. Hence, it adds to the expectations Theory that lenders and borrowers differ in their attitudes to short – term and long – term securities.

Still writing on the liquidity – preference theory, Anyanwu (1993) opined that the risk premium model, a variant of the expectations hypothesis is of Keynesian inspiration (1930) but articulated largely by Hicks (1930). Hence he was of the view that the theory asserts that short – term bonds are less risky and, therefore modifies the expectation by adding a premium to long – term issues.

That is, it accepts the view that yields on various maturities are related to each other by the expectations of future long rates, and hence also short rates, but it calls attention to differences in the degree of certainly which attaches to the expected return to be obtained, in the short – run from holding securities of different length.
According to the theory, while the return on short term securities is certain, the return on longer maturities is not guaranteed because of the uncertainty of future rates and hence of the end of period market value of the bond.

PREFERRED HABIT

According to Anyanwu, this particular theory was posited by Modigliani and Sutch (1966) blends the above three theories i.e segmented market theory, the liquidity – preference and the expectations theory / hypothesis. It shares with the Hicksian approach the notion that the yield structure is basically controlled by the principal of the equality of expected returns but modified by the risk premiums.

However, this theory differs in the fundamental sense of asserting that different transactors are likely to have different habitats as suggested by the segmentation theory resulting in shift of funds between different maturity markets through speculations and arbitrage.

Basically, this theory implies that the spread $s(n, t)$ between the long rate $R(n, t)$ and the short rate $(l, t)$ should depend primarily on the expected change in the long rate $R^e(n, t)$. This spread may
also be affected by supply of long and short – term securities by primary borrowers (i. e by borrowers other than arbitrageurs ) relative to the corresponding demand of primary lenders, to an extent reflecting prevailing risk aversion, transaction costs and facilities for effective arbitrage operations.

In conclusion therefore, Jhingan opined that the preferred Habitat Theory point out that “expectations, risk premium and market segmentation all play a part in determining the term structure of interest rates”. If lenders and borrowers in the capital market are not rigidly tied to market segments, but simply have preferred habitats, then expectations play their part in determining interest rates which are not completely independent. Other things being equal, lenders’ preference for liquidity will have tendency for long – term rates to be above short – term rates. For different maturities of the same issuer”.

We try to account for these variations by linking them to a number of differing factors, and will designate the systematic arrangement of the yield variations as “the structure of interest rate”.

Okigbo (1981) showed that the central Bank of Nigeria (CBN) makes money supply available to the institutions in the financial system, particularly to the commercial banks. The rate at which credit
is available from the CBN to the commercial banks determine the rate which the later charge for their loans. The CBN Amendment Act of 1962 No 19 has the following provisions;

i. Rate of interest charged on advances or other credit facilities by licensed banks were to be linked with the Minimum Rediscount Rate of the central Bank of Nigeria to the State minimum rate of interest.

ii. The interest rate structure of every licensed bank should be subject to the approval of the CBN.

By this Act, the CBN is empowered to fix vary and make public at all times the minimum rediscount rate or bank rate. The bank rate is the minimum rate at which the CBN offers financial assistance to the commercial banks by discounting bills for them. Commercial and Merchant banks’ lending and deposit rates are directly linked to the CBN Minimum Rediscount Rate (MRR).

Still writing on the structure if interest rate in Nigeria, the CBN Brief of series No. 98/04: was of the view, “lending rates and interest charged on loans to customers, and they vary according to perceived risks, the duration of loans, the cost of loanable funds, and lending margins, etc.” other rates of interest in the financial system include
the treasury bill rate, the inter – bank, and minimum rediscount rates. The treasury bill rate is the discount offered by government to savers who purchase treasury bills issued to cover its, short – term borrowing needs.

Similarly, the inter – bank rate is the rate paid in the inter – bank market when bank borrow from and lend to one another in order to adjust their liquidity positions. The minimum rediscount rate refers to the amount that is charged by a central bank for lending to bank in the performance of its function of lender of last resort. The Brief therefore concluded that, in view of the above where the term to maturity is assumed to be the major factor affecting the rate of interest”.

The minimum rediscount rate observed by Ojo (1991) has always been varied in response to the prevailing economic condition since the inception of the CBN The (banks) lending and deposit rates move in response to the variations in minimum Rediscount Rate. At a higher MRR, the lending rate moves in positive direction and at lower MRR, the lending rate also moves downwards.

As explained by Onoh (1982), “the interest rate is one of the quantitative instruments of monetary policy used by the central Bank
of Nigeria to exert significant control on the level of investments”. According to Okigbo (1981) there is no evidence that the jump in aggregate credit between 1975 and 1977 has anything to do with the interest rate structure”. Public that concentrates therefore on influencing the rate of or term on which credit is available but not the over all availability of credit to the business community will fail to have desired effect.

Onoh (1982) observed that the instruments of interest rate policy in Nigeria are;

i. Minimum Rediscount Rate (MRR)

ii. Fixing of (eiling ) rate

iii. Low and high lending rates

He further observed that MRR serves two main aims:

a. as a penalty rate

b. as an indicator of the monetary policy pursued which may be expansionary or contractionary.

That when the CBN is pursuing tight monetary policy, the rediscount rate is raised. If the monetary policy is expansionary, the rediscount rate is lowered to encourage rediscounting of bills.
Prior to the establishment of CBN in 1959 and up to the 1960’s, the interest rate structure in Nigeria was adjusted to the rediscount rate of the Bank of England. When the CBN Commenced operations in 1959, there was no formal relationship between the lending, deposit and savings rates of the commercial banks and the MRR of the CBN. It was not until 1970 that the CBN directed banks to link rate movements with the MRR.

The practice would suggest a direct relationship between the MRR and interest rates. In other words, when the MRR increase, the interest rate increases and vice-versa. It follows that low or high lending rates in these circumstance could be used to encourage or curb certain activities relating to production and consumption.

2.8 INTEREST RATE AS A TOOL FOR FORMULATING ECONOMIC POLICIES

Interest rate in the capitalist system has been used to control and regulate the economy because of the very important role it plays.

The monetarist and Keynesians concede that any increase in the stock of money say through interest rates will stimulate the short term lending temper of commercial banks which will lead to increase
in the current level of production or capacity expansion. If there is a corresponding increase in the demand for loans by customers, this will mean increase in profit levels of banks and higher dividend paid out to scheme holders. This higher dividend will increase the market value of the bank which will now have a greater capacity to expand its operations.

However, if the government is trying to fight inflation by reducing the stock of money through increases in interest rate, this will make banks to liquidate their assets and decrease their lending rate. This situation according to Richland and steward (1996) “leads to risk in the cost capital and discourages customers from borrowing from the banks and may resort to other sources of capital.

According to Olaloku (1982) said that, “interest rate represents the cost of borrowing by commercial banks from the central Bank when the former is in need of funds to replenish reserves in order to create deposit by extending loans to customers.”

In other words, should the monetary authorities decide to pursue an expansionary monetary policy or economic policy by increasing liquidity and production, they will reduce interest rate and borrowing becomes attractive. Under this condition, customers will
now consider the various cost of the sources of finance open to them. If the bank loans are cheaper, they go for it thereby affecting the operation of the bank. If the CBN decides to reduce liquidity, they may increase the interest rate thereby increasing the cost of borrowing. This will discourage firms from borrowing from banks under normal circumstance and they will resort to other short term borrowing measures like deferred liabilities or they may decide to increase their long term finance like loan stock or shares.

Interest rate is price of capital to the borrower and a return on capital to the saver or lender. Also contributing on the use of interest rate as an economic policy tool, Otiti (1982) has this to say, “Discount rate influences the interest rate structure in the Nigeria economy thereby providing a situation where the monetary authorities could control the monetary base thereby influencing the operations of banks.”

2.9 THE ROLE OF INTEREST RATE IN A MODERN ECONOMY.

According to Okigbo (1981), “the significance and role of the rate of interest have been a source of confusion among classical economists”. The area where there is no controversy concerns the role of interest rate in planned investment. He observed that planned
investment is a negative function of the rate of interest on financial assets.

Keynes (1942) had earlier shown that when there is a change in the prospective yield of capital or in the rate of interest, the schedule of marginal efficiency of capital will be such that the change in new investment will not be in great disproportion to the change in the former, that means moderate charges in the prospective yield of capital or in the rate of interest will not be associated with very great changes in the rate of investment.

Cumes (1974) interpreted the foregoing statement by Keynes into simple, practical requirements of policy to mean that investment and consequently employment – would be maximized if money were cheap; the lower the rate of interest, the greater would be the range of profitable investment cheap money therefore become one of the key elements in the Keynesian policies of full employment and economic stability introduced into most of the developed countries after the second world war. The cheap money policy worked, private investment, generally supported by public investment, remained high. Productivity and output increased.
With particular reference to Nigeria, the CBN Briefs series No. 98/04 stated that “the primary role of interest rate in Nigeria is to help in the mobilization of financial resources and to ensure the efficient utilization of such resources in the promotion of economic growth and development. It went further to state that interest rate affect the level of consumption on the one hand and the level and pattern of investments on the other. They are crucial in financial intermediation, which involves transferring funds from surplus units in an economy to deficit units. In general, interest rates are useful in gauging financial market conditions and they are a major tool of monetary policy.

Commenting further on the role of interest rate in any modern economy Cumes (1974) is of the view that the rise in interest rate will have some effect on the economy. Hence he stated that, “the movement in the rate of interest might be the most thrusting element in increases of price, wages and incomes and the major destabilizing element in the modern economy.

As the productive economy is largely based on various forms of credit, the rate of interest might be the most portent single force in
changes in the balance between production and consumption and thus in changes in price and partly by derivation in wages.

Under Keynesian policies, the effort to dampen economic activity in the restrictive phase of government economic management is directed partly at investment; the Keynesian thesis being that consumption and investment are variable in the course of trade cycle which together make up aggregate demand. According to cumes, this effort is successful with private investment. Whether indirectly through the stock market or directly through purchases of capital equipment, buildings and so on investment declines under the pressure of restrictive fiscal and monetary policy.

The rate of interest can be – as cumes put it – “a simple agency for equilibrating the demand for and the supply of money or it can be, as Keynes saw it, a price for overcoming liquidity preference”. According to Keynes “the rate of interest at any time, being the reward for parting with liquidity, is a measure of unwillingness of those who posses money to part with their liquid control over it.

The rate of interest can be a stimulus to the flow of short term funds internationally and thus a destabilizing element in the balance of payments. Through its domestic and international effect it can,
ultimately destroy the stability of a high employment economy and undermine the international monetary system.

Commenting specifically on the importance of interest to production, Hanson (1975) observed that,

“it influences capital accumulation”. If a new machine costing £500 will add £30 a year to the income of a firm installing it, it will be to the advantage of the entrepreneur to borrow the necessary fund provided that the rate of interest is less than 6 per cent. As the rate of interest falls, some forms of production previously unprofitable can be undertaken. Capital is scarce relative to the demand for it, and so it is the purpose of interest to distribute it among all various uses competing for it. Samuelsons (1980) said, ‘the market rate of interest traditionally has two major functions. It rations out into the uses with highest net productivities, society’ existing scarce supply of capital goods, and in the long run, it may (or may not) induce people to sacrifices current consumption and add to the stock of capital “.

Several thing can be said about the rate of interest in a modern economy of which the Nigerian economy is one of them.

Cumes (1974) listed the following about interest rate,
i. The rate of interest has a significant role in the modern economy.

ii. Its role in the economy now is different from that which it has twenty-five years ago, because the economy in which it operates is different.

ii. A rise in the rate of interest will have a depressing effect on those parts of consumer spending (such as purchase of houses) which because they involve large outlays are therefore dependent on credit.

iii. But other consumer spending will remain high and might even be increased, inter alia, by transfer of expenditure from the interest dependent objects.

iv. On balance therefore, a rise in the rate of interest is likely to have a relatively small net effect on consumption but it is likely to have relatively large net effect on production and could cause unemployment or more employment away from production to, for example, consumer marketing.

v. Through its effect on production and employment a rise in the rate of interest will therefore tend to intensity inflation and a fall in the rate will tend to reduce it.
vi. More directly the rate of interest will have an effect on production costs, especially on those industries that are heavily dependent on borrowed funds and this impact on costs will again intensify inflation if the movement in the interest rate is upwards and reduce inflation if the rate moves downwards.

2.10 FACTORS INFLUENCING THE LEVEL OF INTEREST RATE

We shall first set out a theoretical framework of numerous factors that govern the level of interest rate. The purpose of doing so is to sharpen our perspectives. By defining theoretically the factors that determine the level of interest rates we should then be better able to sport them operating in practice.

Interest rate can be viewed as changing through many dimensions. Sidney (1963) observed that the principal dimensions are time, space quality of loan and maturity of the loan. Other factors are marketability, size of loan, redemption term, legality, tax status, class of debtor and class of creditor.

Rate on one specific type of loan at one place will change from day to day or from year to year, or any one time, the rates on
otherwise similar types of loan will change from city to city or from
country to country – the dimension of space.

Again at one specific time and place there is usually a great range of interest rates according to liquidity of assets. Following from this attribute, there are two rates of interest – long-term and 'short-term'. According to Hanson (1975), "the longer the period of redemption, the higher the yield ... securities that fall due within a very short time period such as trade bills, treasury bills, etc bear only a low rate of interest'. This is the short-term rate of interest. The cost of keeping one's assets liquid, therefore, is the short-term rate of interest which is generally regarded as the fundamental rate, the long-term being determined by it.

The prime instrument of official interest policy in most countries, according to chambers is the central bank discount rate at which temporary assistance is given to the banking system to alleviate cash shortage. This rate exerts a general influence upon the level of market short-term rates.

Hanson (1975) observed that the amount of interest to be paid on a loan depends on:

a. the character of the borrower
b. the expenses the lender incurs in making the loan, and

c. the prevailing rate of pure interest.

Of all these three factors (a) and (b) are variable, but at a particular time (c) will be the same for loans of equal amount and for the length of time the rate of pure interest may vary between one period and another.

It is worthy to note the fluctuations in the operations of the market force relating to supply of and demand for funds during different phases of the business cycles. Orisakwe (1988) observed that the demand for funds exceed the supply during boom period. He attributed the condition to the profit potentials available in the economy which is supposed to be matched with increase in demand for funds in order to take advantage of the profits potentials. The increase in the demand for funds consequently leads to an increase in the rate of interest. During a period of depression, the level of interest rate falls as a result of slump in business activities. Under depression expected returns may not be adequate to offsets the cost of capital.

Inflation is another critical factor that affects interest rate. Cumes (1974) observed that inflationary disease shows many symptoms not
the least of which is a trend towards higher interest rates as lenders demand higher returns, and borrowers more willingly put up with higher interest charges.

McKenzie and Tullock (1978) observed that the nominal interest rate is a straightforward money rate whereas the real rate of interest is the nominal rate adjusted for the expected rate of inflation, if the inflationary rate is expected to exceed the level of the nominal rate of interest during the periods of the loan, the real rate to the lender becomes negative.

Agada (1997) listed the following factors as influencing interest rate charged by (Nigerian) banks

i. volume of cash required by the fund user,

ii. the nature of risk involved

iii. the type of security the borrower provided, e.g share certificate of blue chip companies,

iv. level of activity on loan which will affect profit

v. type of goods to be produced with borrowed funds – whether they are easily disposed of in case the borrower defaults.
Eriri (1993) stated that high interest rates in the economy was created and sustained by the government through policies such as:

i. direct actions of the CBN which include high rediscount rate,

ii. the application of interest rate of about 100 per cent on bank account overdrawn for more than 30 days.

iii. High monetary policies which relied on the issuance of stabilization securities.

iv. The high volume of idle cash balances in the economy which rendered monetary policies ineffective,

v. The operations of the foreign exchange market which encourage irresponsible speculative behavior by banks,

vi. The unpatriotic attitude of Nigerians who keep their financial resources overseas and the absence of deliberate policy by government to minimize capital outflow.

vii. The entrance of all kinds of characters into the finance industry (sic)

viii. Lack of appropriate investment culture in Nigeria

ix. The problem of deficit financing which renders the assumed stock of money in circulation incorrect, and
x. Inter bank rates which go a long way in determining the interest rates at which banks give credits to their clients.

A rise in the rate of interest as a result of the following conditions is likely to curb production and becomes an element of economic imbalance.

Still writing on the factors that influence interest rates, the CBN Brief 98/04 opined that, “a number of factors influence the behaviour of interest rates in an economy. Prominent among these ‘are’ savings, investment, inflation, government spending, monetary, policy, and taxation”. Equally, that there is a general agreement that the price of any factor of production (land, labour, and capital in a market system is determined by the forces of supply and demand). Savings constitute the major source (supply) of credit while investment represents the main demand for credit. Consequently it held the view that, “the amount of savings by individuals, business and government partly determine the level of interest rates”. For instance a decrease in the accumulation of loanable funds saving is likely to exert an upward pressure on interest rates just as a reverse situation would tend to have a moderating effect. Inflation is another factor which affects the level of interest rates. The nominal interest
rate is a function of the real interest rate and inflationary expectation. Expectations about inflation influence interest rates' movements though the demand and supply for capital remains constant.

In Nigeria also, government activities influence interest rate on both the demand and supply sides of the credit market. When government actions result in the supply of credit, it may increase the level of money stock which is likely to influence a downward movement in interest rates. The reverse is true when government demands credit. In addition, monetary policy, through expansions and contractions in the money stock can influence interest rates. For instance, if money supply is increased with the demand for money remaining unchanged, short-term interest rate may decline. Restrictive monetary policy may lead to a rise in interest rate while an expansionary policy may result in lower interest rate.

The term to maturity of financial assets the CBN briefs also identified as one of the factors affecting the level of interest rates in Nigeria. Long term funds tend to attract higher interest rates than short-term funds because of future uncertainties. Other factors that affect interest rates include speculation, expected charges in
exchange rates, and differentials between domestic and international interest rates.

More recently, the influence of the oligopolistic structure of the banking structure, the operations of distressed banks, and administrative intervention by government have affected interest rate developments in Nigeria.

2.11 RECENT DEVELOPMENTS IN INTEREST RATE IN NIGERIA

In Nigeria today, many changes has taken place in the administration of interest rate which have had with positive and negative implications or the economic development of the nation. Under this section of the literature review, efforts will be made to examine the recent developments in interest rate and how it have affect the overall performance of the Nigerian economy.

The origin of interest rate policy in Nigeria dates back to 1959 when the central Bank of Nigeria was established. Although the statute that established the Bank charges it with the responsibility of formulating and executing monetary and banking policies, there is no single document which stipulates what may be called CBN’s monetary policy or interest rate policy.
According to the CBN Briefs 98/04, “Prior to the structural Adjustment Programme (SAP), the level and structure of interest rates were administratively determined by the CBN. Both deposit and lending rates were fixed by the Banks based on policy decisions. At that time, the major reason for administrating interest rates were the desire to obtain the social premium in resources allocation, promote orderly growth of the financial market, combat inflation and lessen the burden of internal debt servicing on the government.

We were therefore examine in details the developments in interest rate before 1986

2.11.1 INTEREST RATE DEVELOPMENTS BEFORE 1986

Having stated earlier that prior to 1986 interest rate was administratively determined by CBN, hence the CBN Briefs (op at) also stated that before the introduction of SAP in 1986, credit policy of the government was classified into three categories: preferred, less preferred and others. The preferred category included agriculture, manufacturing, and residential housing, while the less preferred sector consisted of import and general commerce. In the group of “others’ were credit and financial institutions, government, and “personal and professional sectors. This policy enabled
government to direct financial resources at concessionary rates to sectors considered as priority areas. It was established that the concessionary rate curve typically below the minimum rediscount rate which was itself quite low, averaging about 7.25 per cent between 1978 and 1985. To this extent therefore it was unable to keep pace with inflation, resulting in negative real interest rates.

Moreover, demand for credit soon exceeded the rate of savings and a large proportion of government borrowing had to be financed by the central Bank. Other implications of the low interest rate policy was that even “preferred sectors” could but access funds partly because financial institutions were unable to raise sufficient loanable funds through savings or from the money market at the favoured / concessionary rates of interest. Consequently, the low interest rate regime resulted in inefficient production and excessive demand for credit.

12.11.2 INTEREST RATE DEVELOPMENTS SINCE 1986

With the general framework of deregulating the economy in 1986 to enhance competition and efficient allocation of resources, the central Bank of Nigeria introduced a market – based interest rate policy in August 1987. The CBN Brief stated that, “the policy decision
was not without controversy.” While it was generally agreed that low interest rates, which low interest rates did not encourage savings, it was feared that high interest rates, which were likely to accompany deregulation, might stifle investment. This policy allowed banks to determine their deposit and lending rates according to market conditions, through negotiations with their customers. However, the minimum rediscount rate (MRR) which influences other interest rates continued to be determined by the CBN in line with the changes in overall economic conditions.

In 1989, some measures were put in place to remove the distortions in the structure of interest rate. The CBN Brief Series No.95/04 stated that, the CBN reached an accord with banks towards the end of 1989 on margins between their deposit and lending rates. Consequently, the spread between the saving deposit rates and lending rates was fixed at 7 per cent points. Also, the margin between the prime and the maximum lending rates for each bank was fixed at 4 percentage points, while the inter – bank rates were to be at least 1 percentage point below the prime lending rates.

Also in 1994, some measure of regulation was re-introduced in the management of interest rates. Deposit rates were set at 12.0 –
15.0 per cent per annum, while a ceiling of 21.0 per cent per annum was fixed for lending. In real terms the CBN Annual Reports (1994) noted that rates were negative since the rate of inflation was estimated to be over 50 per cent.

In 1995, the central Bank maintained the interest rate regime introduced in 1994 with minor modifications. To make for flexibility. Also, this trend was the same in 1996, 1997, 1998 and 1999. With the recent introduction of full market reforms by the new civilian administration, interest rate has fully be de-regulated, we will therefore examine the deregulation or liberalization of interest rate in general and Nigeria in particular. To this end, its economic contributions will be considered.

2.11.3 ISSUES IN INTEREST RATE DEREGULATION

LIBERALIZATION IN NIGERIA

It is widely accepted that interest rate policy plays an important role in achieving both internal and external balance and ensuring the efficient allocation of financial resources in an economy. Interest rates according to Leite and Sundararajan (1990) “influence the demand and supply of investible resources and the decisions of economic agents to invest and consume”. They are at the central of
any policies that the monetary authorities may choose to undertake to influence business conditions and economic activity.

Many countries have chosen to administer interest rates at low or negative real levels often unchanged for protracted periods. An administered interest rate policy, however misallocates resources and hampers financial sector development that is essential for growth.

It is therefore in recognition of the above that the Nigeria government decided to liberalize the interest rates believing that it will definitely impact positively on the growth of the productive sector of the economy.

In an economy where the financial system is deregulated or liberalized, interest rates are only indirectly influenced by official policy action. Prior to deregulation of the Nigeria economy, the interest rate structure was directly controlled and managed by the CBN. According to Adekanye (1986) “Every year, the CBN would fix ranges within which both the deposit and lending rates were to be maintained“. It was therefore as a result of this that the government decided to allow the force of demand and supply in the money market to determine the rates of interest that will be charged in all the
categories of interest rate. The CBN brief noted that “it was in oct. 1996 that interest rates were fully deregulated with the Bank given freedom to determine the structure of interest rates in consultation with their customers”.

A question arises as to whether the deregulation and the subsequent liberalization of interest rates have impacted positively on the Nigerian economy or not.

Many watchers of the Nigeria economy after the deregulation exercise was of the view that interest rate deregulation has resulted in sharp increases in lending rates. According to Agada (1977), noted that “interest rate war had escalated among Nigeria banks. “He reported that some banks charge above 21 per cent previously prescribed by CBN, but the rates were generally lower than 25 to 35 per cent which many banks charged hither to. He further observed that “in a merchant bank on Lagos island, export financing attracted 26 per cent plus a flat 1 per cent management fee while lending for imports attracted 22 per cent for prime customers.”

Observers of financial market trends are of the view that interest rates rose to unprecedented levels immediately after deregulation. According to Ogwuma (1993), “the rapid up ward
movement in the interest rates was not favourable to production and growth”. In an attempt to economies on a resource that was getting increasingly expensive many firms abstained from borrowing from banks while the bulk of those who borrowed made losses or profit that could not support production initiative.

Also on the impact of interest rate on the Nigerian economy after de-regulation, the CBN (1997) said, “that the performance of manufacturing sub sector was below expectation in 1997. Anticipated growth in the sub –sector in 1997 was hindered by a combination of factors which include high cost of production, traceable largely to high but relatively stable levels of exchange and lending rates.

In view of the above discussion, the literature reviewed will continue by taking a critical look at the consequences of interest rate developments in Nigeria.

2.12 ECONOMIC CONSEQUENCE OF FREQUENT CHANGES IN INTEREST RATES DEVELOPMENT IN NIGERIA
Interest rate policies had been frequently changed by the government to reflect the economic/financial policy that each government wants to adopt. The consequences have not been favourable to both the economy and the financial sector.

According to Adenigba (1992) “the changes in the 1992 budget, especially the removal of ceiling on interest rate is dangerous to the economy”. Further, he stated that, “industrialists are in for hard times”. Collaborating what Adenigba said, Aluko (1992) also said that, “the removal of interest rate is a poison to the Nigeria economy.”

Alluding to the confusion that would now characterize the Nigeria economy, Nwanne (1992) told the Nigerian economist Magazine that, “increase in interest rate as a result of liberalization and deregulation would discourage industrialists from going to banks for funds”. A situation that he fears might discourage expansion in productivity.

Onosode (1992) in his own reaction likened the deregulation to the removal of petroleum subsidy which has a multiplier effect. Furthermore, he said that,” from a macroeconomic point of view, the deregulation of interest rate and bank lending rate is supposed to have a positive effect, but the problem is that the Nigeria economy does not respond in like manner due to embedded imperfections like
inadequate and unrealistic statistics”. Consequently, he believes the exercise will have a negative effect, with a resultant increase in inflation in all sectors”.

Bebaginda (1992) while presenting the 1992 budget said, “that this administration is again changing the monetary policy especially the interest rate since according to him, “the pegged interest rate, contrary to expectation had not achieved its desired goal of stimulating new investments, nor did it result in increase in capacity utilization in industries. He concluded by saying that, the business community can not claim to be better off under regulated interest rate regime while the foreign exchange market is deregulated.”

The question every one is now asking is this, in view of these frequent changes in interest rates, why have the economy still remained prostrate? We can conclude that the impact of frequent changes in interest rate policy have not actually benefited the economy.

Equally, other experts have identified other factors that have militated against the efficient performance of interest rate as the poor implementation along side other monetary policies.
According to Oruma (1995) “for about seven years beginning from September 1986, Nigeria was turned into a guinea pig for the experimentation of various economic theories which were in most cases very unsuitable to us, not only because the theories failed to come to terms with our peculiar productive base but also our lack of the necessary and sufficient disciplined and honest policy in monetary policy implementation”. Furthermore, he said that in 1994, the government in search for popular acceptance rather than a commitment to regulation principles put in place some regulatory policies but in paper only; for the polices were most half – heartedly and contradictorily implemented”. For a whole year the supposedly regulatory policy lived, nothing was done to implement the policies contained in the reforms. The law promised to outland market where the naira is so bastardized that it is no longer worth the paper on which it is printed.

The bottom line according to Oruma (1995) is that, “the fault is not in whether we adopt regulation or deregulation policies. It is rather in the lack of discipline honesty and commitment to the monetary and other policies which had affected interest rate policy implementation. And unless something is urgently done to institute these lacking
requisite ingredients in the management of our affairs, even if we try all the deregulations, regulation, liberalization and controlled deregulations in this world, we will be marred in the same worsening problems”.

Inang (1997) blamed the nation’s journey to decadence on poor implementation of policies. He attributed this to what he called “inefficiency and lack of professionalism in the handling of the nation’s affairs. He particular took a swipe at the Nigeria economy since independence concluding that despite the immense natural and human resources, corruption still finds its way into the management of the nation’s affairs and the common. Citizens have not been better for it.

The government has equally been blamed for the poor rate of interest rate in Nigeria. According to the Banker’s Magazine (1998), they identified government and regulatory authorities – CBN and NDIC as the major contributor to the prevailing uncertainties in the financial sector. Accordingly, “lack of knowledge about the consequences of actions and inadequate information have made banking environment unpredictable leading to higher transaction cost (interest rate)".
2.13 GOVERNMENT EFFORTS TOWARDS EFFECTIVE USE OF INTEREST RATE IN DEVELOPING THE NIGERIAN ECONOMY

Having critically analysed the consequences of frequent changes in policies in Nigeria, especially interest rate and other related interest rates, the government recently introduced far-reaching measures that have been designed to permanently address these problems.

In the 200 budget speech of the president, he stated that the central Bank of Nigeria has been granted full autonomy that have eluded them since independence. The government will no longer interfere with the day-to-day running of the Bank. The Bank will now be answerable to the National Assembly as stipulated in the relevant sections of the 1999 constitution.

Equally, the bank has been granted full powers to deal with all matters contained in the monetary and credit policies of the government. Infact, it is the responsibility of the central Bank to formulate and implement monetary and credit policies, especially the determination of the structure of interest rate.
Consequently, and in line with the liberalization policy of the government, the Central Bank has completely and totally liberalized and de-regulated the interest rate structure in Nigeria. This is a step in the right direction.

On implementation of monetary policies, the government has charged the Central Bank to discharge this responsibility in the with its resolve to stamp-out corruption in the country. Any offender will be made to face the full wrath of the law. Also, the government has directed the central Bank to finally resolve the distress situation in the financial sector as this will eliminate the smooth sailing of monetary policies especially, interest rates. Such as inter – bank rate, the minimum Residiscout Rate (MRR) etc

Lastly, the Anti corrupt offences bill has been passed and signed into law. This law according to the president is designed to check the activities of corrupt officials who have failed in the discharge of their duties. Equally, the tribunal that will investigate and prosecute offenders have been worn in by the president. It is envisaged that this will check some of the fraudulent activities in the Banking sector which have militated against the efficient working of monetary policies, especially, interest rate.
CHAPTER THREE

RESEARCH METHODOLOGY

3.1 INTRODUCTION

As could be noted earlier, the title of this research is recent developments in interest rate in Nigeria or interest rate developments in Nigeria and its economic impact. But we have in some cases begun our discussions by setting out the theoretical framework relating to the issues. The purpose, as pointed out earlier, is to sharpen our perspectives. We believe that by dealing with the theoretical aspects first we are in a vantage position to grapple with the practical parts. This aided the researcher in search of objectivity to enhance the validity of findings. However, our analysis is strictly quantitative.

In this chapter, we are equally going to present the research methods to be employed in this study. The area of coverage, the sample plan and the descriptions of data analysis technique will be highlighted.

3.2 THE AREA OF COVERAGE / STUDY

This study or the area of coverage or study for this research will be for a period of 1990 – 1999. Hence, the area to be covered by
this work will be a 10 year period. The idea behind this is to estimate the extent of the impact of recent developments in interest rate and its effects on the economic development of Nigeria.

Specifically, the study will consider the interest rate structure or selected interest rates and how it has affected loans advances to the economy secondly, it will equally determine the impact of these loans and advances on the Nigerian economy using the Gross Domestic product (GDP) as measuring rod for economic development. Hence, both simple and multi–regression analysis will be employed to examine the extent of their relationships.

3.3 SAMPLE PLAN

The sample plan of this work will be to collect secondary data on the loans and advances given to the economy by the commercial banks as a result of the prevailing interest rate. Also, data will be collected on the Gross Domestic Product (GDP) of the nation.

Loans and advance will be received from the loans and advances to both the private and government sectors. The two areas will be considered in relation to the Gross Domestic Product.
Also, we will critically examine the extent of the relationship between loans and advances and interest rate. The data, which a secondary one will also be collected from CBN statistical Bulletin.

3.4 DESCRIPTION OF DATA ANALYSIS TECHNIQUE

This study will employ an econometric tool of analysis, the simple and or multiple regression method to investigate whether a positive or negative relationship exist between both the dependent and independent variable to be applied.

In this study, we are going to put forward two hypothesis which reads;

**HYPOTHESIS I:** There is no significant Relationship between interest Rate and loans and advances to the economy.

**HYPOTHESIS II:**

There is no significant relationship between loans and advances and GDP Thus, the general theoretical representation of the relationship for any given period can be put symbolically as follows; \( Y = f(x) \) ie \( Y \) is a function of \( X \).

Rewrite, \( Y = b_0 + b_1 x + u \)

Where,

\( Y = \) the dependent variable interest rate
X = represents the explanatory variable (loans and advances to both the private sector and Government sector).

\( b_i = \) the coefficient of the explanatory variable

\( b_o = \) the intercept, and

\( U = \) is the stochastic variable

We can equally restate our hypothesis in the format of null and alternative hypothesis as follows;

**NULL HYPOTHESIS**

There is no significant relationship between interest rate and loans and advances to the economy

**ALTERNATIVE HYPOTHESIS**

There is a significant relationship between interest rate and loans and advances to the economy

The criterion for acceptance or rejection of the null hypothesis is;

Reject Ho if \( b_i r^2 \) and \( r \) are not equal to zero. This will obtain if \( t_c > t^* \), where,

\( b_i = \) rate of charge of the dependent variable as \( x \) changes.

\( r = \) Coefficient of Correlation

\( r^2 = \) Coefficient of determination
Furthermore, the t–test will be used to determine the level of significance of the result. At this point, it is important to explain the formulæ that will be applied. These formulæ include:

\[ b_i = \frac{\sum x y}{\sum x^2} \quad \text{or} \quad n\sum(yx) - \sum y (Ex) \]

\[ b_o = \bar{y} - b1x \]

\[ r = \frac{\sum xy}{\sqrt{\sum x^2 \sum y^2}} \]

\[ r^2 = \frac{\sum x^2 \sum y^2}{\sum x^2 \sum y^2} \]

\[ t = \frac{r}{\sqrt{n-k}} \cdot \frac{1-r^2}{1} \]

II. For hypothesis two: Using the multiple regression method, the test equation is of the form:

\[ Y = f(x_1 \text{ and } x_2) \quad \text{ie} \quad Y \text{ is a function of } X^1, X^2 \]

Rewrite \[ Y = b_o + bix_1 + b2x_2 + U \]

Where

\[ Y \quad \text{Gross Domestic Product (GDP)} \]

\[ b_i \quad \text{the parameters} \]

\[ x \quad \text{the explanatory variables (exogenous)} \]

\[ u \quad \text{Error term} \]
bi and b2 represents the parameters.

In the equation ‘b_o’ is called the intercept and represents geometrically the value of (Y) where the regression cross the ‘Y’ axis or substantively, the expected value of ‘Y’ when ‘X’ does not contribute at all in the determination of ‘Y’. bi in the equation is the slope of the regression line and represents the rate of change of ‘Y’ with respect to change in ‘X’

To estimate ‘b_o’, bi and b2 coefficients, the following equations are used.

1. \[ b_i = \frac{\sum x^2 \sum x_1 y - \sum x_1 x_2 \sum x_2 y}{\sum x_1^2 \sum x_2^2 - (\sum x_1 x_2)^2} \]

2. \[ b_2 = \frac{\sum x_1 \sum x_2 y - \sum x_1 x_2 \sum x_1 y}{\sum x_1^2 \sum x_2^2 - (\sum x_1 x_2)^2} \]

3. \[ b_o = \bar{y} - b_1 x_1 - b_2 x_2 \]

2. We then compute the misadjusted coefficient of multiple determinations by using the formula

\[ R^2 = \frac{b_i \sum x_1 y + b_2 \sum x_2 y}{\sum y^2} \]

This evaluates how well the regression equation explains the variable observed in the dependent variable.
3. The next is the estimation of the standard error of \(b_0\), \(b_1\) and \(b_2\).

To do this, we first estimate the value of \(\hat{\mu}^2\). The estimate of the \(\mu\) s(error term) = \(\hat{\mu}^2\), where \(\hat{\mu}^2 = \frac{\sum e_i^2}{n - k}\), \(k\) is the total number of parameters and \(n\), the number of observation.

To obtain the value of \(\hat{\mu}^2 = \sum e_i^2\), which include the sum of squared residuals, we obtain it as follows, 

\[
R^2 = 1 - \frac{\sum e_i^2}{\sum y^2}
\]

solving for \(\sum e_i^2\), we get

\[
\sum e_i^2 = \sum y^2 (1 - R^2)
\]

After this, then the variances of three variables model are calculated as follows;

\[
\text{Var} \ (b_0) = \delta \mu_2 \left( \frac{1 + x_2 \sum x_2^2 + x_2^2 \sum x_1^2 - 2x_1 x_2 \sum x_1 x_2}{n} \right) \frac{\sum x_1^2 \sum x_2^2}{\sum x_1^2 \sum x_2^2 - (\sum x_1 x_2)^2}
\]

\[
\text{var.} \ (b_1) = \delta \mu_2 \frac{\sum x_1^2}{\sum x_1^2 \sum x_2^2 - (\sum x_1 x_2)^2}
\]

\[
\text{var} \ (b_2) = \delta \mu_2 \frac{\sum x_1^2}{\sum x_1^2 \sum x_2^2 - (\sum x_1 x_2)^2}
\]

The standard error are found as follows
\[ Se (b_0) = \sqrt{\text{var} (b_0)} \]
\[ Se (b_1) = \sqrt{\text{var} (b_1)} \]
\[ Se (b_2) = \sqrt{\text{var} (b_2)} \]

We then proceed by setting of the Complete Regressions equation as

\[ Y = b_0 + b_1 + b_2 + u \]

4. To discover whether the relationship between the variables are significant, the t – test statistic is used where

\[ t = \frac{b_1}{\text{se } b_1} \]

Lastly, the adjusted coefficient of multiple Determination is calculated with;

\[ R^2_{\text{adj}} = 1 - \frac{(1 - R^2) (n - 1)}{n - k} \]

This will help determine the extent of the significance of the variables is explaining the total variation and also to compare the extent of the difference between the adjusted and the unadjusted values.

Hence, a computer package known as SPSS (special package for social sciences will be applied).
CHAPTER FOUR

DATA PRESENTATION AND ANALYSIS

4.1 The previous chapter forms the basis on which the empirical analysis on the effect of interest rate structure in Nigeria has impacted on the macro-economic stability, between 1990 – 2000. The focus of this chapter therefore is to prove the extent of the relationship between the entire interest rate structure and some variables that affect its effective functioning in an economy. Prior to the analysis, we shall begin with the presentation of the data needed for each analysis using the SPSS computer package.
4.2 PRESENTATION OF DATA


<table>
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<tr>
<th>Year</th>
<th>GDP(N billions)</th>
<th>Interest Rate (%)</th>
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</thead>
<tbody>
<tr>
<td>1990</td>
<td>90.34</td>
<td>26.25</td>
</tr>
<tr>
<td>1991</td>
<td>94.61</td>
<td>20.45</td>
</tr>
<tr>
<td>1992</td>
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<td>25.00</td>
</tr>
<tr>
<td>1993</td>
<td>100.02</td>
<td>29.90</td>
</tr>
<tr>
<td>1994</td>
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</tr>
<tr>
<td>2001</td>
<td>143.71</td>
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# TABLE 4.2: INTEREST RATES AND EXCHANGE RATES; 1999 – 2001

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<thead>
<tr>
<th>Year</th>
<th>Interest Rate</th>
<th>Exchange Rate</th>
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<tr>
<td>1990</td>
<td>26. 25</td>
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<td>103. 72</td>
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<tr>
<td>2001</td>
<td>32. 43</td>
<td>115. 71</td>
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Table 4.3 INTEREST RATES AND INFLATIONARY RATES 1990

<table>
<thead>
<tr>
<th>Year</th>
<th>Interest Rate</th>
<th>Inflation</th>
</tr>
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<tbody>
<tr>
<td>1990</td>
<td>26.25</td>
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<tr>
<td>1996</td>
<td>20.18</td>
<td>59.7</td>
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<tr>
<td>1997</td>
<td>19.20</td>
<td>61.6</td>
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<td>34.7</td>
</tr>
<tr>
<td>2001</td>
<td>32.43</td>
<td>33.4</td>
</tr>
</tbody>
</table>

source: CBN statistical Bullentin 2001
### TABLE 4.4 INTEREST RATES, EXCHANGE RATES AND INFLATIONARY RATES

<table>
<thead>
<tr>
<th>Year</th>
<th>Interest Rate</th>
<th>Exchange Rates (x1)</th>
<th>Inflation (x2)</th>
</tr>
</thead>
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<td>26.25</td>
<td>8.35</td>
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</tr>
<tr>
<td>1991</td>
<td>20.45</td>
<td>9.91</td>
<td>13.0</td>
</tr>
<tr>
<td>1992</td>
<td>25.00</td>
<td>17.30</td>
<td>44.5</td>
</tr>
<tr>
<td>1993</td>
<td>29.90</td>
<td>22.07</td>
<td>57.2</td>
</tr>
<tr>
<td>1994</td>
<td>20.60</td>
<td>22.89</td>
<td>57.9</td>
</tr>
<tr>
<td>1995</td>
<td>20.50</td>
<td>25.73</td>
<td>59.5</td>
</tr>
<tr>
<td>1996</td>
<td>20.18</td>
<td>25.95</td>
<td>59.7</td>
</tr>
<tr>
<td>1997</td>
<td>19.20</td>
<td>64.71</td>
<td>61.6</td>
</tr>
<tr>
<td>1998</td>
<td>19.80</td>
<td>83.72</td>
<td>54.7</td>
</tr>
<tr>
<td>1999</td>
<td>21.95</td>
<td>95.66</td>
<td>35.6</td>
</tr>
<tr>
<td>2000</td>
<td>22.23</td>
<td>103.72</td>
<td>34.7</td>
</tr>
<tr>
<td>2001</td>
<td>32.43</td>
<td>115.71</td>
<td>33.4</td>
</tr>
</tbody>
</table>


### 4.3 ANALYSIS OF DATA

We have earlier specified the objective of this study which is to investigate and empirically analyze whether a significant relationship exist between. Interest rates and GDP, interest rates and exchange
rates, interest rates and inflation and interest rates and exchange rate and inflation rates put together. The data used for this analysis spans from 1990 – to – 2001 ie a period of 12 years. The period includes the period of deregulation and liberalization of interest rates in Nigeria.

To achieve the foregoing objectives, regression analysis was adopted and the following. Parameters were generated with the computer.

i. The constant of the regression line

ii. The slope of the regression equation

iii. Coefficient of determination, $R^2$

iv. Standard error of $Y$ estimate

v. Standard error of $X$ coefficient (also $X_1$ and $X_2$)

vi. Number of observations

vii. Degrees of freedom, D.F

viii. Correlation coefficient and Multiple $R$, $R^2$ and $\bar{R}^2$

ix. T value

The Regression results are presented below
Table 4.5: GDP and Interest Rates

X = (Interest Rate (Independent variable))

Y = Gross Domestic Product (GDP) (dependent variable)

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>84.727653</td>
</tr>
<tr>
<td>Slope</td>
<td>1.000</td>
</tr>
<tr>
<td>$R^2$ (Coefficient of determination)</td>
<td>0.0886</td>
</tr>
<tr>
<td>$R^2$ (Adjusted R)</td>
<td>-0.00254</td>
</tr>
<tr>
<td>Multiple R</td>
<td>0.29766</td>
</tr>
<tr>
<td>Standard error of y estimate</td>
<td>24.903399</td>
</tr>
<tr>
<td>Standard error of x coefficient</td>
<td>1.057270</td>
</tr>
<tr>
<td>No. of observations</td>
<td>12</td>
</tr>
<tr>
<td>Degrees of freedom</td>
<td>1</td>
</tr>
<tr>
<td>T – value (computed)</td>
<td>0.956</td>
</tr>
<tr>
<td>T – table</td>
<td>0.3474</td>
</tr>
</tbody>
</table>

4.4 INTERPRETATION OF RESULTS

HYPOTHESIS I

Ho: $b_1 = 0$ There is no significant relationships between GDP and interest rate in Nigeria

Ho: $b_1 # = 0$: There is a significant relationship between interest rate and GDP in Nigeria.
DECISION RULE

1. if the calculated \( t \) value > to .025 (two tailed test at 5\% level of significance) reject the null hypothesis and accept the alternative

ii. if the calculated \( t \) < to .025

In our study the relationship between interest rate and GDP is computed thus

\[
Y = 84.727653 + 1.0 \times 1x
\]

This implies that a unit change in interest rate brings about 1.000 change in the value of GDP. This estimate reveals a weak correlation coefficient 0.2976. This coefficient of determination \( R^2 = 0.0886 \) seem to support the weak relationship. It implies that only 8.86\% of the variation in \( Y \) can be accounted for by variations in \( X \). since \( R^2 = 0.0886 \), it represents the proportion of variation explained, \((1 - r^2)\) represents the proportion that is not explained. We can therefore conclude that about 91.14\% of the variation in the value of GDP is explained by factors other than interest rate.

If we wish to avoid the inaccuracies caused by the size of the sample \((n)\), we need to use the \( t \) – distribution. \( T \) – distribution population standard deviation is unknown, therefore, the \( t \) – value
computed (0.956) is greater than the t – significance (or t – table of 0.3474. based on the decision rule, we

Therefore reject the null hypothesis and accept that there is a significant relationship between interest rate and GDP.

Table 4.6: Regression Results of Interest Rates and Exchange Rate in Nigeria: 1990 – 2001

<table>
<thead>
<tr>
<th>Y</th>
<th>Interest Rate (dependent variable)</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>Inflationary rates (independent variable)</td>
</tr>
<tr>
<td>Constant</td>
<td>22.452428</td>
</tr>
<tr>
<td>Slope</td>
<td>1.00</td>
</tr>
<tr>
<td>( R^2 )</td>
<td>0.002017</td>
</tr>
<tr>
<td>( \bar{R}^2 )</td>
<td>-0.07781</td>
</tr>
<tr>
<td>Multiple R</td>
<td>0.1420</td>
</tr>
<tr>
<td>Standard Error of Y estimate</td>
<td>4.46451</td>
</tr>
<tr>
<td>Standard Error of X Coefficient</td>
<td>0.33505</td>
</tr>
<tr>
<td>No. of observations</td>
<td>12</td>
</tr>
<tr>
<td>Degrees of freedom</td>
<td>1</td>
</tr>
<tr>
<td>T – value (computed T)</td>
<td>0.454</td>
</tr>
<tr>
<td>T – table (significant )</td>
<td>0.6597</td>
</tr>
</tbody>
</table>
HYPOTHESIS II

Ho: \(b_o \neq 0\): There is no relationship between interest rates and exchange rates in Nigeria

Ho: \(b_o \neq 0\): There is a relationship between interest rate and exchanges rates in Nigeria

DECISION RULES

1. If the calculated t value > t.0.025 (two tailed test at 5% level of significance) reject the null hypothesis and accept the alternative
2. If the calculated t < to.025

In our study the relationship between interest rates and exchange rates is computed thus \(Y = 22.452428 + 1.00x\).

This implies that a unit change in interest rate will bring about 1.000 change in the value of exchange rate. This estimate reveals a weak correlation coefficient \(R\) of 0.1420. The coefficient of determination \(R^2 = 0.02017\) seems to support the weak relationship between the adjusted coefficient of determination has a negative value (- 0.0778) This therefore implies that only about 2.02% of the variation in y can be accounted for by variations in x. Since \(r^2 = 0.0217\), it represents the proportion of variation explained, \((1 - r^2)\) represents the proportion of variation that is not explained. To this
extent therefore, one can conclude that about 97.98% of the variation in the value of exchange rate is explained by factors other than interest rate.

If we also wish to avoid the inaccuracies caused by the size of the sample n, we need to use the t – distribution. T distribution as has been explained earlier is appropriate when n < 30 and the population standard deviation is unknown Hence, the t value computed which is 0.454 < table of 0.6597. Hence, conclude that there is no significant relationship between interest rate and exchange rate in Nigeria in other words, interest rate is not responsive to exchange rates in Nigeria.
Table 4. 7: Regression Results of Interest Rates and Inflationary Rates In Nigeria; 1990 – 2001

Y = Interest Rate (dependent variable)
X = Inflationary Rate (independent variable)

<table>
<thead>
<tr>
<th>Constant</th>
<th>25.647727</th>
</tr>
</thead>
<tbody>
<tr>
<td>Slope</td>
<td>1.000</td>
</tr>
<tr>
<td>R²</td>
<td>0.06631</td>
</tr>
<tr>
<td>R²</td>
<td>-0.01857</td>
</tr>
<tr>
<td>Multiple R</td>
<td>0.25750</td>
</tr>
<tr>
<td>Standard Error of Y estimate</td>
<td>4.15531</td>
</tr>
<tr>
<td>Standard error of x coefficient</td>
<td>0.65052</td>
</tr>
<tr>
<td>No. of observations</td>
<td>12</td>
</tr>
<tr>
<td>Degrees of freedom</td>
<td>1</td>
</tr>
<tr>
<td>T – value (computed)</td>
<td>-0.884</td>
</tr>
<tr>
<td>T – table (significant 1)</td>
<td>0.3957</td>
</tr>
</tbody>
</table>

**HYPOTHESIS III**

Ho: b₀ = 0: There is no significant Relationship between interest Rate and Inflationary Rate In Nigeria.

Ho : b₁ ≠ 0: There is a significant Relationship between Interest Rate and Inflationary Rate In Nigeria.
DECISION RULE

1. If the calculated t value > t 0.025 (two – tailed) test at 5% level of significance reject the null hypothesis and accept the alternative.

ii. If the calculated t < t 0.025, accept the null hypothesis.

Based on the findings of the study, it was revealed that y = 25.647727 + 1.000 x

This implies that a unit change in interest rate will bring about 1.000 change in inflationary rate. This estimate reveals a weak correlation coefficient of 0.25750, although it is positive. The coefficient of determination $R^2 = 0.06631$. This implies that only 16.631% of the variation in y (interest rate) is accounted for by variations in x (inflationary rates) since $R^2 = 0.06631$ represents the proportion of the variation that is explained or accounted for, $(1 – R^2)$ represents the proportion that is not explained. We can say that 93.37% of the variation in the value of interest rate is explained by factors other than inflationary rate.

If we also wish to avoid the inaccuracies caused by the size of the sample $(n_1)$ we need to use the t – distribution. T- distribution is
appropriate when \( n < 30 \) and the population standard deviation unknown.

Therefore, the t value completed which is \( -0.884 \) when compared with the t table or t – significance which is 0.3957 implies that t – calculated < t – table. On the basis of this, the null hypothesis is accepted. This implies that there is no significant relationship between interest rate and inflationary rates in Nigeria between the periods 1990 – 2001.

It is important to note that the results shows that there is no significant difference between the coefficient of determination and the adjusted coefficient of determination \( \overline{R^2} = -0.1857 \). Both are very low, although that of the adjusted is both low and negative.

The data shows that there is no auto correlation in the data. With the value of DW = 1.937 which is very close to 2, we conclude that there is no autocorrelation in the data used
Table 4.8: Regression Results of Interest Rates (Y), Exchange Rates (x^1) and Inflationary (x^2)

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>24.893857</td>
</tr>
<tr>
<td>Slope</td>
<td>0.14646 and – 0.0568</td>
</tr>
<tr>
<td>R^2</td>
<td>0.085</td>
</tr>
<tr>
<td>R^2_-</td>
<td>- 0.11833</td>
</tr>
<tr>
<td>Multiple R</td>
<td>0.29155</td>
</tr>
<tr>
<td>Standard Error of Y estimate</td>
<td>4.54765</td>
</tr>
<tr>
<td>Standard error of X coefficient</td>
<td>0.034157</td>
</tr>
<tr>
<td>Off x2 coefficient</td>
<td>0.071210</td>
</tr>
<tr>
<td>Degrees of freedom</td>
<td>9</td>
</tr>
<tr>
<td>T – value (computed)</td>
<td>0.429 (x^1) – 0.799 (x^2)</td>
</tr>
<tr>
<td>T – table (t – significance)</td>
<td>(0.6782) (0.4451)</td>
</tr>
</tbody>
</table>

**HYPOTHESIS IV**

Ho: b_0 = 0: There is no significant relationship between interest rate (Y) and exchange rates (X^1) and inflationary (X^2)
Ho: $b_0 \neq 0$ There is a significant relationship between interest rate and exchange rate and inflationary rates.

Based on the findings and the results as tabulated in Table 4.8, the regression equation can be written as $Y = 24.893557 + 0.034157 + 0.71210$.

On the strength of the above equations, it therefore implies that a unit change in interest rate will bring about 0.034157 change in the value of exchange rate and 0.71210 changes in the value of inflationary rates. The coefficient of determination reveals a weak but positive relationship with a value of 0.29155. The coefficient of Multiple determination $R^2 = 0.085$ seems to support the weak relationship. It implies that only 8.5% of the variation in $Y$ can be accounted for by variations in $X_1$ and $X_2$. Since $R^2$ represents the proportion of variation explained, $1-R^2$ represents the proportion that is not explained.

We therefore conclude that about 91.5% of the variation in the value of exchange rate and inflationary rate is explained by factors other than interest rate.

If we wish to avoid the inaccuracies caused by the size of the sample ($n$) we need to use the $t$ – distribution. $T$ – distribution is
appropriate when \( n < 30 \) and the population standard deviation is unknown. Therefore the \( t \) – values computed are 0.429 and –0.799 while the \( t \) – tables are 0.6782 and 0.45 respectively. To this extent therefore we reject the null hypothesis while the alternate is accepted.

This therefore implies that there is a significant relationship between interest rate on one hand and exchange rate and inflationary rate on the other.
CHAPTER FIVE
SUMMARY, CONCLUSION AND RECOMMENDATION

5.1 INTRODUCTION

This is the concluding chapter of this research which sought to find out about interest rate structure in Nigeria and its implication for macro-economic stability; 1990 – 2001. In this section, efforts will be made to summarize the findings of this research, make recommendation and conclusion of the research.

5.2 SUMMARY OF FINDINGS

Interest rate is an emerging issue in current economic policy in Nigeria in view of the role it is expected to play in a deregulated economy in inducing savings, investment and growth. This study has investigated and empirically analyzed whether a significant relationship exists between interest rates and Gross Domestic Product (GDP), interest rate and exchange rate, interest rate and inflation and lastly interest rates, exchange rate and inflationary rates. To throw more light on the subject matter, the research considered the determinants of interest rates in the Nigeria setting.

The study is necessitated basically by the wide – spread comments on disruptively high lending rates offered by Nigerian
banks since the adoption of the economic reform programme. Therefore data was collected from 1990 to 2001.

The analysis commenced with an introduction intended to clarify the subject matter. This is followed by statement of the research problem, its objective, significance, hypothesis formulation, scope, limitations, organization of study and definition of terms. We latter embarked on extensive review of literature on theories of interest. The role of Interest rate, factors influencing the level of interest rate, structure of interest, deregulation of interest rate, modern theories of interest rate, etc.

In the course of the literature review, some of the factors determining interest rates levels were identified. They include inflation, foreign exchange, inflationary rates, etc. regression analysis was used to establish the empirical relationship between interest rates and GDP and other variable. The main findings of this analysis were;

**HYPOTHESIS I**

The first hypothesis sought to find out the extent of the relationship between GDP and interest rate. Based on the computations made through the SPSS package, it was discovered
that $R^2 = 0.0886$ and the correlation coefficient is 0.2976. The implication is that there is a weak relationship between the two variables ie GDP and interest rate Despite these issues raised, the hypothesis that there is a relationship between GDP and interest rate was accepted. There is no doubt about this fact low interest rate induces investment which in turn increases the Gross Domestic Product of the nation

**HYPOTHESIS II**

In the second hypothesis, we sought to find out the extent of the relationship between interest rates and exchange rates. On the basis of the computations made, it was discovered that with $R^2 = 0.02017$, $\bar{R^2} = 0.07781$ and Multiple $R =0.1420$. To this extent, there is a weak correlation between the variables which was supported by a weak $R^2$. This result was also confirmed by the adjusted $R^2$ which has a low and negative value.

Still on the second hypothesis, the $t$ – calculated has a value of 0.454 while that of $t$- table of 0.6597. With this we concluded that there is no significant relationship between interest rates and exchange rates in Nigeria within the period 1990 – 2001.
HYPOTHESIS III

This hypothesis equally wanted to determine the extent of the relationship between interest rate and inflationary rate. It was first discovered that with $R^2 = 0.066$, Multiple $R = 0.25$ and $R^2 = -0.1857$, there is a weak correlation between interest rate and inflation rate in Nigeria. Only 16.63% of the variation in interest rate are accounted for by variations in inflationary rate.

On whether to accept and/or reject the hypothesis, it was discovered that since $t_c < t$, we therefore accept the null hypothesis and conclude that there is no significant relationship between interest rates and inflationary rates in Nigeria.

HYPOTHESIS IV

To carry out a further investigation into the effects on interest rate by exchange rates and inflation rate, a multiple regression analysis was done. The results show that with multiple $R = 0.29$, there is a weak but positive correlation between interest rate and inflation and exchange rates. The coefficient of multiple determinations $R^2$ which has a value of 0.085 seems to support the weak relationship and explains only about 8.5% of the variation in $Y$. 
On whether to accept or reject the hypothesis, it was discovered that since the $t_c < t-t$ the null hypothesis was rejected and we conclude that there is a significant relationship between interest rate on one hand and exchange and inflationary rates on the other.

**CONCLUSION**

From the foregoing analysis it becomes logical to conclude that GDP does not respond or is not influenced by interest rates in Nigeria. But this is not supposed to be so. Based on the Keynesian transmission mechanism, a lower interest rate stimulates investments. With a high level of investment, the nation’s wealth will no doubt increase. Hence, a higher GDP. But the interest rate structure in Nigeria has not had an effect on the GDP and it is hereby concluded that efforts should be made by the monetary authorities to lower interest rate which will in – turn increase investments and the GDP.

Another conclusion that can be deduced from the findings is that exchange rate does not affect interest rates. Rather exchange rates and inflationary rate have minimal effects in determining the level of interest rate n Nigeria. Although both variable play a significant role in the overall determining of the monetary policy of a
nation, interest rates are very veritable instrument that can be used to mobilize savings, encourage investment, reduce the level of inflation and exchange rate, thereby increasing the overall growth to the nation.

**RECOMMENDATIONS**

The following recommendations which are based on the findings from this study are hereby stated below;

i. interest rate policy should be among the leading issues in current economic policy in Nigeria in view of the role it is expected to play in a developing economy such as that of Nigeria. To this extent therefore, all efforts must be put in place to fine-tune this policy so as to enable it to increase savings and investment.

ii. Despite the fact that the results shows an insignificant relationship between GDP and interest in Nigeria, the hypothesis accepted the fact that there is a significant relationship between the two variable. To this extent therefore, this study is recommending that government in its bid to increase the GDP of the nation should explore the
use of interest rate by lowering the rate at which investors borrow in Nigeria.

iii. Government policies which negatively affect interest rates should be identified to forestall any undesirable effect. For instance, the present resurgence of distress, which is politically motivated should be avoided.

iv. Government must continue to be consistent with its monetary and fiscal policies as these two policies affect the interest rate structure in Nigeria. Government should equally sustain the policy of deregulation if gains from management experience is anything to go by. However, policy measures should be taken to ensure moderation and stability of interest rates and hence their compatibility with other macro-economic targets.

v. The Central Bank in conjunction with the Federal government should ensure that there is an interest rate policy that stabilizes or reduces consumption and which stimulates increases in investment. The flow of available finance should be less to consumption and more to investment through the use of high and low interest rates.
vi. Banks should not be allowed to manipulate the spread between lending and deposit rate. By making deposit rates too low and lending rate too high, banks tend to defeat the desired objectives viz, lower deposit rates would not provide sufficient incentives to depositors to place more funds with banks to accelerate the pace of growth in the economy while too high lending rate could lower and/or dampen investment demand.

Government must device means to severally punish banks which float its directives on the spread between deposit and lending rates so as to serve as a deterrent to others.
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