INTEREST RATE MANAGEMENT AND THE NIGERIAN ECONOMY (1986—2018)

ABSTRACT

This study sought to examine the impact of interest rate on the Nigeria's economy during the pre and post Regulation periods (1986 – 2013).It also investigated the joint influence of Inflation, Investment, Exchange Rate, Money Supply and Monetary Policy Rate individually on the Gross domestic Product (GDP)which was used a proxy for output as well as the causality between all the factors combined and gross domestic product. Ex post facto method was adopted In order to test the hypothesis, the researcher adopted ADF, ECM and co-integration tests. The result showed that no significant relationship exists between GDP and Investment while still affirming that a significant relationship exist between GDP, Monetary Policy Rate, Inflation , Exchange Rate and Money Supply. The result of Johansen co-integration test showed the existence of two (2) co-integrating equations at 5% critical level; which is an indication of the existence of long-run or equilibrium relationship among our observed variables and as such there is the need to ascertain the speed of adjustment to the equilibrium in the case of short-run disequilibrium. The result of granger causality test indicates the absence of causal or directional relationship of any kind among our employed variables. This implies that the selected variables of interest did not lend support to each other as shown by their f-statistics and probability values. The following recommendations were made: The Monetary authority should ensure the Money supply in the economy is always sufficient to boost economic activities. this will equally make banks grant loans at a competitive rate of Interest, the Cash Reserve Requirement should be reduced further , this will leave more funds in the vault of Banks, making it easy to obtain loans at competitive rates, Banking habit should be inculcated in the citizenry, this will enable banks to further mop-up funds which by natural causes will increase her lending ability and at rates that can enable entrepreneurs make profit, The eye of the authorities should be on Inflation, because uncontrolled inflationary trends can make a mess of all the other efforts, Prudent management of our Oil earnings, adequate savings (Foreign Reserve) and investments in Infrastructure/Education will help stabilize the fluctuating exchange rate of the Naira. Because we are in the period of Deregulation when the economy has been opened up for investors globally, with consistent effort at investing by Nigerians and Foreigners alike, a fairly stable interest rate of interest will lead to consistent economic growth.

Keywords: *interest rate management, exchange rate, monetary policy rate, inflation, gross domestic product, Investments, Money Supply*

1. INTRODUCTION

Interest rate facilitates the flow of funds from lenders to borrowers. It is the cost of borrowing, and shows what a borrower pays to the lender for the use of money. Interest rate aids the flow of credit in the economy and helps financial entities such as corporate organization, banks, mutual funds and insurance companies carry out their intermediation role. In other words, the economic activity in any economy, to a large extent, is influenced by interest rate. Interest rate affects the demand for and allocation of available loanable funds. It also affects the level of consumption, and the level and pattern of investment. (CBN 2016)

Interest rate is important because it can affect the lives of people, the government, business firms, entrepreneurs, foreign investors, the financial sector, the household and also to a large extent determines the level of investment and the economic growth in an economy. The frequent changes (upward especially) in the rate of interest charged by different banks and non-bank financial institutions have retarded capital formation, investment and even economic growth in Nigeria.

That is why Fuller (1990) opined that interest rate is the factor reward or earning of capital. Interest rate is also seen as the payment for the use of money. Fuller added that "this source of finance will only be available if other people are willing to forgo current consumption and provide a pool of financial resources from which loans can be advanced. This supply of fund will only be forthcoming if those supplying it receive some reward for sacrificing their current consumption…" to sacrifice current consumption implies a form of savings for investment.

Interest rates, like other prices, perform a rationing function by allocating limited supply of credit among the many competing demands on it. Thus, it is an important instrument for monetary policy. For this reason, Nigeria has adopted two major interest rates regimes which include the low and fixed interest rates regime between 1960 and 1986. In these regimes, interest rates were administratively determined. But in 1987, Nigeria had a dynamic interest rates regime during which partial deregulation of interest rates started, market forces were allowed to interplay in addition to the management decision of interest rates. This continued till 2006 when it was fully deregulated. Under these arrangements, efforts were made in mobilizing savings for the purpose of channeling it into investment and other productive activities in order to attain high economic growth.

The end result is that almost four decades of policy somersault especially at an interest rate and exchange rate management, the Nigerian economy has not benefited immensely from the processes (Onagowora, 2007).

In August 1987, the Central Bank of Nigeria (CBN) liberalized the interest rate regime and adopted the policy of fixing only its Minimum Rediscount Rate (MRR). This was however modified in 1989, when the Central Bank of Nigeria (CBN) issued further directives on the required spreads between deposit and lending rates (Ojodu H; 2012).

Partial deregulation was restored in 1992 when financial institutions were required to only maintain a specified spread between their average cost of funds and maximum lending rates. The removal of the maximum lending rate ceiling in 1993 by the Central Bank of Nigeria (CBN) saw interest rates rising to unprecedented levels in sympathy with rising inflation rate which rendered banks' high lending rates negative in real terms. Interest rates in 1993 were volatile and rose to unprecedented levels.

The behavior of interest rates was traceable to a number of factors including: i). The high rate of domestic inflation arising from the huge fiscal deficit of Federal Government which was financed mainly by Central Bank; ii). The undue discretion which the deregulation of interest rates conferred on key market players in pricing their funds as well as the arbitraging activities of market speculators; and iii). The use of stabilization securities and the system of allocation of foreign exchange both induced the sterilization of large funds at the CBN. There was major objective to keep the supply of money just within the

required level needed for the target economic growth rate in a particular year. The policy of interest rate deregulation was retained in 1997, and developments since the beginning of the year show relative stability in the rates. Indeed, contrary to expectations, interest rates had fallen. Deposit rates on savings account at commercial banks declined from an average of 10.1 percent in December 1996 to 7.5 percent in March and further to 5.9 percent at the end of April 1997. Similarly, 3-month deposit rates declined from 12.3 percent in December 1996 to 7.3 percent in April 1997. During the fiscal year 2000, monetary, and other financial sector policies were also designed to maintain internal and external balance. The primary objective was to maintain the inflation rate at single digit. In order to achieve this objective, the monetary program focused on curtailing excess liquidity in the banking system and enhancing the viability of the external sector as well as the stability of the financial system. Other important objectives included enhanced growth of the economy and reduction in unemployment. The performance of the financial sector in 2000 indicated that deposit and lending rates fluctuated downwards due to liquidity overhang in the banking system and the reduction in MRR from 18.0 to 14.0, cash reserve ratio, form 12.0 to 10.0 percent, and liquidity ratio from 40.0 to 35.0 percent.

The Central Bank of Nigeria (CBN) may choose to roll out an improvement in the Minimum Rediscount Rate (MRR) now Monetary Policy Rate (MPR). A choice by the CBN to change the MPR influences the business sector loan in various ways. At the point when the Bank makes a declaration on the MPR which influence the desires of individuals and monetary specialists about the future heading of the economy. Such choices influence the costs of budgetary resources (like shares) and the conversion scale of the naira to different monetary forms and in addition the capacity of individuals and financial operators to spare and burn through cash. Factors such as Inflation, Fiscal Deficit, Exchange rate, Money supply, Risk and even government's monetary stance/Policy affect interest rates. However, interest rates play a pivotal role in influencing economic activities in any economy.

Additionally, the adjustment in interest rate could create an aberrant impact on the costs of products and administrations which rival merchandise that are locally delivered or those products and administrations that utilized imported crude materials. Again, an adjustment in interest rate has impact on the segment of the general value level of those merchandise that are foreign and this influence every single monetary operator in the nation. Interest rate level is affected by movement in price level or inflation rate, fiscal policy stance, and intermediation cost (cost of funds), how deep and developed financial markets are, level of risks and uncertainty, among other factors.

Interest rates are regarded as "high" or "low" relative to some economic fundamentals, namely:
The level of inflation rate; The degree of uncertainty and risks economic agents face; and How developed and deep financial markets are; The structure of the banking system—how competitive it is; The cost of

funds to the banks including deposit rates; The demand for credit by government when it runs deficit and whether it competes with the private sector.

There are conflicting and competing views about what constitutes an appropriate interest rate depending on whose perspective—savers or lenders/borrowers. Generally, interest rates are prices and must be right and attractive to: Reward depositors and encourage long-term savings as well as reward lenders; Long-term savings can only occur when inflation is tamed;

Statement of the Problem

The high cost of capital is suspected to be one of the factors militating against the growth of the Nigerian economy; this development according to critics has had negative impacts on the economy. No wonder successive administrations have intervened in the determination of the level and cost of funds; that is interest rate. The frequent changes in the rate of interest charged by different banks and non-bank financial institutions and worse still the private lenders is suspected to have made capital formation, investment and even economic growth really difficult

Critics have alleged that it has no doubt frustrated the efforts of the investors willing to invest in the economy as well as contributed in reducing the margin of profit expected in business deals. Inconsistencies in implementing this monetary policy Instrument is assumed to have had its toll; for instance, there has been this complaint that while the rates paid to customers on savings, Current and Deposit accounts have been so low, the charges for borrowing i. e. interest on loans have been high.

What is unclear, however, is whether there is a strong response in saving as a result of the rising interest rates or fixed interest rates. There appears to be a consensus among researchers on the relationship between interest rate and savings.

Empirical evidence from developing countries is however at variance with theorized relationship and when there exists any relationship, they are ambiguous and insignificant. However, the question there still exist unanswered questions such as, to what extent does interest rate affect savings? What impact does it have on investment and even economic growth?

The not too encouraging performance of the economy especially the private sector spreads through both the controlled and liberalized regimes. This study is therefore hoped to unravel which of the regimes contributed more or less to Nigeria's economic growth under the same circumstances.

Furthermore, the economy is still and essentially bedeviled by large size and inefficient public sector, low rates of savings and investment, persistent large budget deficits, and inconsistent macroeconomic environment (Eze, 2010).

All these have hampered the growth of the economy and Nigerians still remain expectant for brighter days ahead that improvements in the exchange rate and interest rate management could make a difference to the economic growth efforts (Jelilov, Gylych; Kachallah Ibrahim, Fatima; Onder, Evren, 2016)

Objectives of the Study

The aim of the study was to know the effect of Interest rate Management on the Nigerian economy 1986 – 2018

Other specific objectives were:

a) To find out the inter-relationships among the variables interest rates, investment, Money Supply, Monetary Policy Rate, Exchange Rate and Economic Growth in pre and post regulation periods in Nigeria
b) To ascertain how interest rate has affected economic growthin pre and post regulation periods Nigeria.

Research questions

a) What are the inter-relationships between Interest Rates, Investments, Money Supply, Monetary Policy Rates, Exchange Rates and Economic Development in pre and post Regulation periods in Nigeria?
b) To what Extent has Interest Rates affected Economic Development in pre and post regulation periods in Nigeria?

Statements of Hypotheses

To capture the objectives of the study, the following hypotheses were formulated:

H_{01}: There is no significant relationship between Interest Rate, Investments, Inflation, Money Supply, Monetary Policy Rate, Exchange Rate and Gross Domestic Product in pre and post regulation periods in Nigeria.

H_{02}: There is no causality between monetary policy rate, inflation, exchange rate, investment, money supply and Gross Domestic Product in pre and post regulation periods in Nigeria.

The rest of the paper is divided into four sections. Section two has literature review, three contains methodology with four housing the empirical results while five concludes.

2. REVIEW OF RELATED LITERATURES

Conceptual Framework

Emekekwue (2016) differentiated between the rediscount rate; the rate at which the Central Bank discounts bills from Commercial Banks stating that the Prime rate is the lowest rate of interest charged by

the nation's leading Banks on business loans to the most important and reliable business borrowers. He added that Banks determine the rate at which they charge their customers by adding a premium on the prime rate to adjust it for the borrower's riskiness. Fixed and floating interest rates were differentiated as meaning that it is fixed when the rate of interest is determined as a set increment above the prime rate and remains static until maturity while floating interest rate occurs when the increment above the rate is initially established and the rate of interest is allowed to float or vary above the prime as the prime rate varies until maturity.

Same interest rate can be paid at maturity , in installments or in advance and each method used leads to different effective costs for the loan, that quiving up maintaining, or reducing the effective cost/N; this is called the time dimension of the loan. Another consideration he said is on the method of calculation of interest; whether on the entire principal or on reducing balance.

Interest rates play a crucial role in the efficient allocation of resources aimed at facilitating the growth and development of an economy and as a demand management technique for achieving both internal and external balance with specific attention for deposit mobilization and credit creation for enhanced economic development (Ebiringa, 2012).

Though many expansionary monetary policies have been implemented, the inflationary pressure increased and forced the CBN to raise interest rate (CBN, 2013). As a result, the interest rate raised became controversial; in this study, we will try to figure the effects of interest rate on the economic growth in Nigeria. The study will examine the impact of interest rate as one of the main variables that affects economic growth in

The Monetary Policy Committee (MPC) of the Central Bank of Nigeria (CBN) on 5th June 2007 reviewed the major macroeconomic development and the implementation of fiscal, monetary and exchange rate policies in the first five months of 2007, as well as the challenges for the rest of the year. The MPC noted with satisfaction the macroeconomic performances (CBN; 2009).

Anyanwu (1993) stated that interest rate management in Nigeria and its economic impact refers to the totality of steps and procedures planned and utilized by central bank of Nigeria to decide, maintain or bolster the level of interest rates in an economy in ways that it will induce the accomplishment of the satiated macroeconomic aims and objectives.

However, the observed facts of exchange rate and interest rate management on macroeconomic variables that would culminate into economic growth are sluggish and not impressive let alone being sustainable (Obansa *et al.,* 2010).

What Nigeria gains from International trade and domestic investment is not consistent with the reform put in place expected to attain robust results. Accessing of funds for investment is still a challenge with lending rate being very high compared to the deposit rate in the economy (Oweoye, 2007).

The indirect monetary instruments aimed at the economic growth of Nigeria. According to the Central Bank of Nigeria's Annual Report and Statement of Accounts for the year ended 31st December, 2007, monetary policy alone did not automatically result in the development. The Nigerian economy appeared to improve in 2000 as the real GDP growth rate rose to 3.8 per cent compared with 2.8 per cent in 1999 and 1.8 percent in 1998 (Charles, 2010).

Several factors determine the interest rate on loans, Anyanwaokoro (2008) outlined the following:
Characteristics of the loan (Type, amount and maturity of the loan), Supply and Demand for Credits, Attitude towards future expectations, Degree of Credit risk, Borrowers habit and custom and Macroeconomic factors(Competition, Interest Rates ceiling, Inflation).
Interest rate can be viewed as changing through many dimensions.

Okoro (1987) observed that the principal dimensions are time, space quality of loans and majority of loans. Other factors being marketability, size of loans, redemption terms, legality, tax statues, class of debtor and class of creditor.

Otiti (1988) 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'

Hansen (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
c. The prevailing rate of pure interest.

Orisakwe (1988) observed that the demand for funds exceeds 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 advantages of the profit potentials. The increase in the demand for funds consequently lends 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 offset the cost of capital. Inflation is another critical factor that affects interest rates.

Nduka (1998) observed that inflation disease shows many symptoms not the least of which is a trend towards higher interest rate as lenders demand higher returns, and borrowers more willingly put up to higher interest charges.

Obilor (1988) observed that the nominal interest rate is a straight towards 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 period of the loan, the real rate to the lender becomes negative.

Interest Rates Deregulation

Interest rate deregulation is a financial term used to refer the circumstance where by the forces of demand and supply is permitted to decide the estimation of financing costs as opposed to its worth being regulated specifically by fiscal powers. Interest rate deregulation is seen as a deviation from budgetary restraint. It has been supported by numerous financial specialists that interest rate deregulation upgrades reserve funds, support venture and thus improve monetary development.

The Financial Liberalization Theory set forth by Mckinnon (1973) and Shaw (1973) proposes that financial liberalization in developing economies would trigger higher funds, particularly monetary reserve funds, build credit supply, empower speculation and consequently support financial development. Their claim is that regulation of interest rate lead to low real interest rate and at times negative which causes unacceptable growth in the developing countries

As indicated by Jhingan (2003), if there is an increment in interest rate, venture is at low level and when interest rate falls, speculation will rise. Hence, there is urgent need to promote interest rate regime. A similar view was held by Anyanwaokoro (2008) , who stated that a reduction in interest rate encourages bank lending and increases the liquidity in the economy;the reverse being the case when interest is increased.

Nwankwo (1989) trusted that interest rate deregulation will prompt more effective distribution of budgetary allocation assets. His position is in accordance with the contentions of Mckinnon (1973) and Shaw (1973).

Abiodun (1988), then holds that deregulation of interest rate resemble a two-fold edged sword, which will either empower or deface the economy. He declared that the deregulation of interest rate will prompt an expansion in interest rate, which will build investment funds. Be that as it may, he opined that high cost

of getting might realize cost-push inflation as borrowers of assets will pass the high cost of acquiring to the clients by pushing up costs.

Ojo (1988) and Ani (1988) are both of the conclusions that interest rate deregulation would damage the Nigerian economy. In their different papers, they imperfect the deregulation exercise, asserting it would demoralize investors and consequently financial development, by pushing interest rate high.

Ojo and Ani's position are upheld by Soyinbo and Olayiwola (2000) and Akpan (2004) who all pointed out the low positive effect of deposit rate on financial development after interest rate liberalization in Nigeria. These opposite feelings about the adequacy of the deregulation exercise in Nigeria raises the issue of the viability of the deregulation exercise. There is mainly, the requirement for a thorough assessment of the part of interest rate deregulation in advancing financial development in Nigeria through funds and venture.

Management of Interest Rate in Nigeria: Control Period (Before -1986)

Interest rate management refers to the totality of steps and processes designed and used by the monetary authorities (the CBN) to determine, sustain or support the level of interest rates in an economy in ways that engender the achievement of the stated macroeconomic goals of price and exchange rate stability, rapid and sustainable employment, and generating growth.

Interest rate management also entails anticipating the financial markets and developing appropriate policy measures to impact the markets using known monetary tools.

It needs to also ensure that rates do not fall to levels where the liquidity trap ensnares the economy. (Liquidity trap - the level of interest rate below' which further reductions will not impact on the level of economic activities/national income).

Some of the tools employed by the Apex bank in managing interest rates in Nigeria include: Regular Open Market Operations, adjustments in the following key ratios; Cash Reserve Ratio, Rediscount ratio, Liquidity ratio, regular examination of the documents/activities of deposit money banks and the publishing/monitoring of Prudential guidelines

According to Anynwaokoro (2008), interest rate deregulation began in 1988,; before then, the rates were fixed by the Central Bank.

The two major regimes of interest rate management in Nigeria are the period of Fixed and floating Interest Rates popularly referred to as period of Control and that of Liberalization. The period of control/Regulation was characterized as described below:

Use of Administrative Fiat : This involves direct approach (controls) of determining interest rates. It entails the administrative fixing of Lending and other bank charges by CBN with Periodic adjustments based on policy decisions. Funds allocation and Credit expansions are strictly under the control of monetary authorities. It was practiced during the pre-Structural Adjustment Programme era mainly to stimulate investment to promote orderly growth of the financial market, reduce inflation and lessen the burden of domestic debt servicing on government.

They added that the techniques had both positive and negative outcomes; it promotes stability and creates a high level of credibility. Negatively, Capital input is insufficiently used due to inappropriate pricing of Credit and Deposits. Loan able assets are on short supply since banks want to put their assets in treasury charges that are loaned underneath their normal expense of assets; capital development is at very low level.

In the words of Soludo (2008), the Fixed Exchange regime was characterized by the following: It was operated preceding 1986, under it, interest rate were settled at the management level by the CBN and it was likewise proposed to get socially ideal asset portion, to advance systematic development in the financial sector, to encourage stream of credit to the favored segments agribusiness, production, and so on.

Deregulation (Free Market) Period (Post - 1986)

Okereke, et al (2009), observed that this involves indirect approach in determining interest rate. Market forces determine the operations. Regulatory authorities only set the rules and allowed operators to play according to and within the rules. Monetary Policy Rate, called Minimum Rediscount Rate before December 2006 which is CBN's nominal anchor of interest rate play significant role in influencing the cost and availability of credit in the economy.

They further added that the determination of interest rates using indirect techniques is characterized by regular Open Market Operations. It increase the use of money market instruments like CBN Certificate, National Savings Certificate, adjustment of key Ratios like Cash Reserve Ratio, Liquidity Ratio and so on. During the liberalize regime, where market powers are at play, low inflation comprise the key target while interest rate turn into the principle approach instrument leaving costs to conform to guarantee value dependability.

According to Akanye (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 deregulation that the government allowed the forces of demand and supply in the money market to determine the rates of interest that will

be charged. The CBN brief N0. 98/04 noted that it was in 1996 interest rate were completely deregulated giving the banks opportunity to decide the structure of loan costs in discussion with their clients. Observers of financial market trends were of the view that interest rates rose to unprecedented rates immediately after deregulation.

Ogwuma (1993) alleged that the rapid upward movement in the interest rates was not favourable to production and growth. In an attempt to economize on a resource that was getting increasingly expensive, many firms refrained from borrowing from banks while the bulk of those who borrowed made losses or profits that could not support production initiative.

Soludo (2008) equally noted that: Following liberalization of interest rates in 1986 with the adoption of SAP, the level of interest rates has been market-determined, interest rates have risen relative to repressed regime era, inflation rate moderated significantly (lowest) since then, particularly during 1998-2006, except for the aberration between 1993- 1998, the period of "guided deregulation".
Real interest rate became generally positive since liberalization. In a liberalized environment, a choice must be made with regard to the main objective and instrument of monetary policy.
Under a liberalized regime, where market forces are at play, low inflation constitutes the *key objective* while interest rates become the main *policy instrument* leaving prices to adjust to ensure price stability. o Hardly any two customers are charged the same lending rate.

Regarding the impact of interest rates on Nigeria's economy after deregulation, CBN (1997) stated that the performance of the manufacturing sectors and sub-sector was below expectation in 1987. Anticipated growth in the sub-sector in1997 was hindered by a number of factors which include high cost of production, traceable largely to high but relatively stable exchange and lending rates.

The Relationships between GDP, Exchange Rate, Money supply and Inflation

Inflation & GDP (Output)

Gross domestic product and inflation are both viewed as imperative in economic variables. It is broadly understood that there is a relationship between the two. In effect, when government takes decisions on inflation and GDP, the result frequently cannot be ensured. Investigation of the relationship amongst Gross Domestic Product and inflation is best started by building up a comprehension of each term separately. GDP is an acronym for total national output, which is the estimation of a country's merchandise and administrations amid a predetermined period. This is by and large viewed as a vital maker of an economy's wellbeing. Inflation is defined as a situation where normal cost levels increases. In effect, cash has less purchasing power. As an oversimplified case, imagine that a nation's financial unit is

known as a Naira and every Naira buys a measure of rice and a cut of meat. At the point when people go to the business sector one day, they find that getting a measure of rice and pieces of meat will cost two naira. In this occasion, inflation has taken place.

When costs are pushed up according to belief system, individuals are fighting for a constrained supply of items. This implies an expansion of GDP, should equal the level of price. Everybody does not concur that this relationship is total. Gross domestic product and inflation are regularly connected with each other on the grounds that government and apex banks frequently by taking into account the figures and they endeavor to control them. On the off chance that an economy is not developing or is not developing sufficiently quickly, a national bank may bring down loan costs to make obtaining more alluring. The rationale behind this is it will empower spending, which will prompt an ascent in GDP. The disadvantage of this move is that, as indicated by numerous mainstream views, it will likewise incite expansion.

Output (GDP) and Exchange Rates

The relationship between Exchange Rates and Economic Growth is mainly expressed as a percentage. A portion of theories in exchange rate determinations, for example, the monetary policy is a way to deal with exchange rates, anticipate that higher development rates in an economy will bring about appreciation in country's currency. The circumstance outlines the relationship between say percent change in the Naira –dollar conversion standard and development rates in Nigeria's real Gross Domestic Product. One important issue on exchange rate is that it is more volatile than GDP. Regarding the normal relationship between changes in the exchange rate and monetary development, a few periods, for example, in the mid - 1970s, show valuation for the Naira when development rates are higher and show deterioration of the Naira when the development rates are lower. These affiliations are steady with the forecasts of the hypothesis of Monetary Approach to Balance of Payments (or the MBOP).

Money supply and Output(GDP)

Supply of money is the measure of cash that is accessible to the economy anytime. Money supply could be characterized both in restricted and in wide terms. Money supply consists of money available for use and demand deposit, while a more extensive meaning would incorporate parities in other demand deposit accounts. But In Nigeria, M1 narrow comprises of the availability of money in circulation and demand deposit while M2 the broad money represent narrow money in addition with savings and foreign currency deposit. Money supply can exert a lot of influence on productivity, but consideration has to be given to; the level of inflation, the Cash Reserve Requirement and the liquidity Ratio.

GDP and Interest Rate

Real interest rate is nominal rate adjusted to inflation and real GDP is how much goods you can buy actually (nominal adjusted to inflation). When interest rate decreases it gives incentive to companies to invest in business leading to increase in investment component which increases gross domestic product.The general principle is that the gross domestic product growth rate is higher for small estimations of interest rate and also respectively for higher value of investment. In contrary, small development rate relates to higher estimations of financing cost and in respect to small estimations of rate of investment. In reality, besides inflation must be viewed as together with other macroeconomic variables. In such way, we might consider a dynamic model of conditions including changes in inflation. Further, the model, showing complex flow, could supply answer for assessment regular rate of interest and other key parameters for macroeconomic choices.

Theoretical Framework

Theories of Interest rate

Market Segmentation or Hedging Pressure Theory

The desires Theory accept that on the total, loan specialists and borrowers are aloof between long haul and transient speculations aside from any normal yield differentials between the sorts of securities.

The Time Preference Theory

The time inclination hypothesis is connected with Irving fisher who characterized enthusiasm as a "record of the group's inclination for a dollar of present over a dollar of future salary.' Time inclination is the inclination that individuals have for present wage over future pay of an equivalent sum and break even with assurance.

The Classical Theory or Savings –Investment Theory

The reserve funds –investment hypothesis of premium is otherwise called the traditional hypothesis of premium. In this hypothesis, financing cost is said to be controlled by the association between the interest for credits (capital) and the supply of loanable assets.

The Neo-Classical or Loanable Funds Theory of Interest

As a consequence of disappointment with the traditional sparing –investment hypothesis, the loanable assets hypothesis was produced by Robertson (1938) in his loanable assets hypothesis of financing cost, Robertson expressed that the rate of premium is controlled by the convergence of the interest timetable for loanable assets with supply-plan.

The Keynesian Liquidity Preference Theory

According to Keynes (1936) he recognized the hypothetical validity of the loanable capital theory but pointed out that the extension of the theory to savings-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 is not necessarily I = S

Modern Theory of Interest

We have seen over that no single hypothesis of loan cost is satisfactory and determinate. A sufficient hypothesis to be determinate must mull over both the genuine financial elements that impact the loan cost. Hicks has used the Keynesian apparatuses in a strategy for presentation which demonstrates that profitability, thrift, liquidity inclination and cash Supply are all vital components in a far reaching and determinate premium hypothesis. Thus in the modern theory of interest, saving, 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.

Theories of Economic Growth

Classical Theory

The classical theory of economic growth was a combination of economic work done by Adam Smith, David Ricardo, and Robert Malthus in the eighteenth and nineteenth centuries. The theory states that every economy has a steady state GDP. Any deviation off of that steady state is temporary and will eventually return. This is based on the concept that when there is a growth in GDP, population will increase.

The Harrod-Domar growth theory, an off shoot of the classical theory is based on the work by these two authors. They developed their models independently, but the assumptions and results are, nevertheless, basically the same.

Neo- Classical Theory of Economic Growth

Two economists, T.W. Swan and Robert Solow, made important contributions to economic growth theory in developing what is now known as the Solow-Swan growth model. The theory focuses on three factors that impact economic growth: labor, capital, and technology, or more specifically, technological advances. The output per worker (growth per unit of labor) increases with the output per capital (growth per unit of capital) ,but at a decreasing rate.

Empirical Review

The relationship between interest rate management and economic growth has been a subject of discourse among modern financial researchers. This relationship has fortified a considerable measure of experimental investigation. For this reason, a well-known study is the MacKinnon-Shaw financial intermediation hypothesis.

According to MacKinnon (1973) and Shaw (1973), using OLS, positive relations exist between saving and interest rate. Interest rate is an important economic price, this is because its diverse role in the economy, and it has a fundamental implication for the economy. Interest rate increase savings when cost of capital and availability of credit are influenced if interest rate is administratively determined, it is known as fixed interest rate and floating if determined by market forces.

Ostry and Reinhart (1995) measured the interest rate sensitivity of household saving using the inter-temporal Elasticity of Substitution (IES) in consumption. The IES measures how easily households can substitute future consumption for current consumption subject to a resources constraint. They used IES for household in different income levels (low-income, middle-income, upper-income, high-income) in developing countries. The result showed that a 1% point rise in the real interest rate should elicit a rise in saving of only two-tenths of percentage point for the poorest countries in the sample. On the contrary, the rise in the savings rate because of a comparative change in the genuine loan cost in light of a comparable change in the genuine financing cost is around 66% of a rate point for the wealthiest nations contemplated. They upheld the adage that reserve funds rate and its affectability to loan cost changes is a rising capacity of wage, but instead noticed that its impact will be likely lesser in low-pay nations.

Ndukwe (1991) noticed that the bank stores expanded generously amid the period of loan fee variability. This portrays the deregulation of saving money operation in Nigeria. Using information for the periods 1984 to 1988 and OLS, he observed that reserve funds through bank stores have been exceptionally receptive to 1988.

Kendall (2000) used two Stage Least Squares (2SLS) and different procedures of econometric investigation in his study. Drawing from the McKinnon-Shaw model, he assessed the theory "an ascent in the normal real store loan cost prompts an expanded investment funds salary proportion." Using the proportion of gross domestic to GDP as the subordinate variable and five different variables, he found that the coefficient of the premium variables is of the right sign and critical, giving backing to the McKinnon-Shaw speculation.

Obamuyi (2009) looked at the relationship between interest rate and fiscal improvement in the regulation and deregulation period in Nigeria. His discoveries were that there existed a long run relationship between interest rate and monetary development and that the deregulation of interest rate in Nigeria may not

ideally accomplish its objective, if those different components which contrarily influence interest in the nation are not handled.

Eregha (2010) investigated the relationship between financing cost and interest in Nigeria somewhere around 1970 and 2002. He discovered that varieties in interest rate played a negative and huge part in speculation choice in the economy and interest for credit likewise has negative and huge impact on financing cost varieties in both the short-run and long-run.

Akintoye and Olowalaju (2008), in their work titled "Streamlining Macro Economic Speculation choices lesson from Nigeria" uncovered that low interest have compelled business choices in Nigeria. This disclosure does not bolster Eregha (2010) whose study demonstrated an opposite relationship between interest rate and speculation rate in Nigeria.

3. METHODOLOGY

Data and Design

The researcher adopted ex-post facto research design. The purpose was to examine interest Rate management and Nigerian economy between 1986 and 2013. It involves an investigation and analysis of apriori relationship between Interest Rate management and Economic Growth (GDP).

The use of secondary data was adopted to compute and present results in a tabular form. It also enabled the measurement of the dependent and independent variables. In this work econometric method of data analysis was adopted. Also since in time series, data are highly trended econometric methods may be of immense value for predicting the Interest Rate Management and Nigerian Economy between 1986 and 2013.

The data required for this study will include annual time series on GDP (This serves as proxy for collective growth of all sectors of the economy), Monetary Policy Rate, Money Supply, Inflation, Investment and Exchange Rate between 1986 and 2013. Estimation procedures of unit root test, Johansen co-integration, error correction model and Granger causality was deployed in this study.

Model Specification

The model specification in this work will be carried out within a panel data and a time series data analysis was also adopted. The use of this specification will help to control the heterogeneity issues within the system. Therefore a panel data analysis was permitted to control the individual specific relationship usually unobservable.

The model specifies that the Gross domestic product (Proxy) is significantly influenced by investment, inflation, money supply, monetary policy rate and exchange rate

Using econometric model, the model can be presented as:

GDP = f (INVT, INFL, MS, MPR, EXR)…… (1)

The variables are defined as follows:

- GDP – Gross Domestic Product
- INVT – Investment
- INFL – Inflation
- MS - Money Supply
- MPR - Monetary Policy Rate
- EXR - Exchange Rate

The model can be restated mathematically as:

$$GDP = \alpha_0 + \beta_1 LOG(INVT)_t + \beta_2 LOG(INFL)_t + \beta_3 LOG(MS)_t + \beta_4 LOG(MPR)_t + \beta_5 LOG(EXR)_t + \mu \quad \ldots\ldots(2)$$

B_1, b_2, **…** b_5 are parameter estimate

Where;

The apriori expectation is b_1 , b_3& $b_5 > 0$ while b_2& $b_{4 < 0}$

α_0 = Intercept

μ = Stochastic error term

Techniques of Data Analysis

To analyze the relationship between variables, the regression analysis was adopted using the Ordinary Least square method (OLS). The use of this technique is based on the properties of the estimators, which are efficiency and consistency unbiasedness. E-view 7.1 was used to analyze the data and the empirical evaluation of the model shall be based on the software package result at 5% level of significance.

The usual tests of significance and goodness-of-fit were employed to decide whether or not interest rate deregulation has a significant impact on the economic growth in Nigeria.

These included the t-values, the coefficient of determination ($R^{2)}$ and adjusted R2, the F test, and the Durbin-Watson test for autocorrelation. The t-test and F-test were both conducted at 5% and 10% level of significance. As a result, using their respective probability values, where their probabilities were below 10%, they were considered as being statistically significant.

In order to determine if the time series data is stationary or non-stationary, the widely used Augmented Dickey – Fuller (ADF) test (Dickey and Fuller (1979) also Phillips and Perron (1996), Phillips – Perron test were employed.

The Pseudo t-value associated with βo and δo are the ADF and PP statistics. The null hypothesis of non-cointegration is rejected, if the estimated ADF and PP statistics are found to be greater than its critical value at 1 or 5 or 10 percent level of significance.

F-Test (Joint test), this shows whether or not to accept the hypothesis. The calculated value of f(that is $f_{cal.}$) is compared with the value of F obtained from the F table (that is F, table) at the k-1 and n-k degrees

of Freedom and at α level of significance. The test is said to be significant (that is, the null hypothesis of no joint relationship is rejected if F_{cal} >F – table and accepted if otherwise).

Decision Rule:

If the calculated $t^{x}0.05$ > t0.05 tabulated, we accept the alternative hypothesis and reject the null hypothesis and vice versa.

SECTION IV: DATA PRESENTATION, ANALYSIS & DISCUSSION OF FINDINGS

Data Analyses

We analyze the results generated from the econometric views as given below

4.1.2 Analysis of ADF Results

To eliminate possible occurrences of spurious regression results, the Augmented Dickey Fuller test is applied.

Table 1 ADF Statistical Results

Variables	Critical values at 5%	ADF Stat at Level	ADF Stat at Differenced	Order of integration
GDP	-1.953858	-3.077414		I(0)
INVT	-1.953858	-0.625351	-4.523074	I(1)
INF	-1.953858	-1.558406	-3.442516	I(1)
MS	-1.958088	-0.738395	-5.515162	I(1)
MPR	-1.955020	-0.219443	-5.941690	I(1)
EXR	-1.953858	1.219722	-4.364759	I(1)

From the ADF result tabulated above, all the variables fail to reject the null hypothesis of non stationary at levels except gross domestic product which proved to be stationary at level; however, at the first differencing, all the variables proved to be stationary and as such leads to the rejection of null hypothesis of non-stationary at first differencing.

4.2.1 Johansen Co-integration

Table 2 co integration result

Date: 06/20/18 Time: 11:44
Sample (adjusted): 3 28
Included observations: 26 after adjustments
Trend assumption: Linear deterministic trend
Series: GDP INVT INF MPR MS EXR
Lags interval (in first differences): 1 to 1

Unrestricted Cointegration Rank Test (Trace)

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**
None *	0.865425	126.9573	95.75366	0.0001
At most 1 *	0.669037	74.81093	69.81889	0.0189
At most 2	0.598986	46.06144	47.85613	0.0730
At most 3	0.455399	22.30372	29.79707	0.2819
At most 4	0.202195	6.503479	15.49471	0.6360
At most 5	0.023951	0.630299	3.841466	0.4272

Trace test indicates 2 cointegratingeqn(s) at the 0.05 level
* denotes rejection of the hypothesis at the 0.05 level
**MacKinnon-Haug-Michelis (1999) p-values

From the result of Johansen co-integration test depicted above, the test statistic indicates the existence of two (2) co-integrating equations at 5% critical level; which is an indication of the existence of long-run or equilibrium relationship among our observed variables and as such there is the need to ascertain the speed of adjustment to the equilibrium in the case of short-run disequilibrium.

4.3.1 Analysis of ECM Results.

Table 3 ECM Result

Dependent Variable: D(GDP)
Method: Least Squares
Date: 01/20/16 Time: 11:38
Sample (adjusted): 2 28
Included observations: 27 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.788665	1.438602	0.548217	0.5896
D(INVT)	0.004410	0.701473	0.006286	0.9950
D(INF)	-0.018650	0.086804	-0.214848	0.8321
D(MS)	0.041751	0.088232	0.473196	0.6412
D(MPR)	0.274304	0.378423	0.724862	0.4769
D(EXR)	-0.042757	0.097236	-0.439726	0.6649
ECM(-1)	-0.529994	0.209110	-4.925606	0.0001

R-squared	0.560620	Mean dependent var	0.523704
Adjusted R-squared	0.428806	S.D. dependent var	9.126411
S.E. of regression	6.897499	Akaike info criterion	6.918609
Sum squared resid	951.5099	Schwarz criterion	7.254567
Log likelihood	-86.40122	Hannan-Quinn criter.	7.018507
F-statistic	4.253120	Durbin-Watson stat	2.090766
Prob(F-statistic)	0.006407		

Resulting from the multiple linear regression result depicted above, the variables subjected to the error correction test reveals that the parameters of investment, money supply, monetary policy rate possess a positive relationship with gross domestic product while inflation and exchange rates tends to be negative. Judging from the result, all the variables failed the test of significance at 95 percent confidence level. Our co-efficient of determination which is R^2 stood at 0.560620 which denotes that approximately 56% variations in our explained variable (GDP) were determined by our selected independent variables. However, our F-statistics which measures the fitness of our model was reported to be significant at 5% level with the value of 4.253120, and 0.006407probability; which implies that our model significantly captured interest rate management and Nigerian economy. On the side of serial correlation, our Durbin-Watson statistics of 2.09 approximately indicates the absence of serial correlation among the successive error terms as expected following the assumptions of classical linear regression. The parsimonious error correction model carried out as depicted in table one above, ECM was significant and rightly signed with -0.529994, which implies that over 53% of deviation from the equilibrium will be corrected over a year approximately.

614 **4.4.1Analysis of Heteroskedasticity Results**

Table 4. Heteroskedasticity Test: Breusch-Pagan-Godfrey

F-statistic	0.325960	Prob. F(6,20)	0.9155
Obs*R-squared	2.405086	Prob. Chi-Square(6)	0.8789
Scaled explained SS	6.479951	Prob. Chi-Square(6)	0.3716

615 From the result estimation of Breusch-Pagan-Godfrey Heteroskedasticity test, the observed F-statistics of 0.325960
616 with probability of 0.9155 denotes that the absence of heteroskedasticity among our error terms which is in line with
617 the classical linear regression assumption; and as such we accept the null hypothesis of no heteroskedasticity.

618 **4.4.2 Serial Correlation LM Results**
619 The Breusch-Godfrey Serial Correlation LM Test is a statistical devoted to the testing of serial autocorrelation
620 among successive error terms in a multivariate model. The basic need for this test arose because of the postulations
621 of the classical linear model assumptions.
622

Table 5 Breusch-Godfrey Serial Correlation LM Test:

F-statistic	0.952404	Prob. F(2,18)	0.4044
Obs*R-squared	2.583789	Prob. Chi-Square(2)	0.2747

623

624 From the result estimation of Breush-Godfrey serial correlation LM test, the observed probabilities were all greater
625 than our critical probability of 5% and as such, we accept the null hypothesis that the data are not serially correlated
626 which is in line with our Durbin-Watson postulation.

4.5.1 Analysis of Pair-wise Granger Causality Results
Date: 01/20/16 Time: 11:45
Sample: 1 29
Lags: 2

Null Hypothesis:	Obs	F-Statistic	Prob.
INVT does not Granger Cause GDP	26	1.21174	0.3177
GDP does not Granger Cause INVT	0.38539	0.6849	
INF does not Granger Cause GDP	26	0.32776	0.7242
GDP does not Granger Cause INF	1.90174	0.1741	
MPR does not Granger Cause GDP	26	0.05434	0.9472
GDP does not Granger Cause MPR	0.60006	0.5579	
MS does not Granger Cause GDP	26	0.88259	0.4285
GDP does not Granger Cause MS	2.47765	0.1081	
EXR does not Granger Cause GDP	26	1.33399	0.2848
GDP does not Granger Cause EXR	0.05527	0.9464	

As shown above, the result of granger causality test indicates the absence of causal or directional relationship of any kind among our employed variables. This implies that the selected variables of interest did not lend support to each other as shown by their F-statistics and probability values.

Hypothesis Testing

This is evidenced in the probabilities obtained which are all greater than our 5% critical probability.

Hypothesis one: There in no significant relationship between investment and gross domestic product in Nigeria.

With the probability of 0.9950 which is more than our 5% critical probability, this study therefore fail to rejects the null hypothesis in hypothesis one and as such, concludes that there is no significant relationship between investment and gross domestic product in Nigeria.

Hypothesis two: There is no significant relationship between inflation and gross domestic product in Nigeria.

From the analysis carried, investment reported a coefficient of -0.018650 and probability of 0.8321 with gross domestic product over the years of our study; and as such, we accept the null hypothesis in our hypothesis two since the calculated probability is more than our critical probability and conclude thereof, that there is no significant relationship between inflation and gross domestic product in Nigeria.

Hypothesis three: There is no significant relationship between money supply and gross domestic product in Nigeria.

As shown in OLS table depicted above, the coefficient of money supply with gross domestic product stood at 0.041751with 0.6412 probability level. Therefore, based on the probability which is higher than our 5% critical probability, this piece of work fail to sustain the alternate hypothesis and as such accept the null hypothesis and conclude that there is no significant relationship between money supply and gross domestic product in Nigeria over the years of our study.

Hypothesis four: There is no significant relationship between monetary policy rate and gross domestic product in Nigeria.

From the regression result obtained, monetary policy rate revealed a probability of 0.4769with coefficient of 0.274304and t-statistics of 0.724862. Therefore, based on the probability which is more than our 5% critical level, we accept the null hypothesis in our hypothesis four and conclude thereof that there is no significant relationship between monetary policy rate and gross domestic product in Nigeria.

Hypothesis five: There is no significant relationship between exchange rate and gross domestic product in Nigeria.

Having reported a coefficient of -0.042757 and probability of 0.6649, we therefore accept the null hypothesis at 5% level of confidence and conclude thereof that there is no significant relationship between exchange rate and gross domestic product in Nigeria.

Discussion of research findings

The variables subjected to the error correction test reveals that the **investment** parameter is positively but insignificantly related to gross domestic product. The relationship is positive but insignificant. This implies that when Investment Increases, the demand for loanable funds will increase which will increases the Interest Rate (Price of Money).

By implication an increase in domestic investment will definitely lead to a positive change in economic growth and development. In the model, **money supply** contributes positively to gross domestic product but in an insignificant manner. This implies that a change in money supply by the apex bank-central bank will result to an increase in gross domestic product.

Inflation carried a negative sign in the multivariate equation of the error correction model. This basically imply that high inflation tends to discourage economic development as such individuals tend to redefine themselves and their income to best fit persistent rise in prices of goods and services. This suggests that increase in Inflation will reduce the value of money and increase interest rate for loanable funds, thereby reducing borrowing by investors and in turn diminishing the output level of goods and services.

Monetary policy rate possess a positive relationship with gross domestic product. Judging from the result, this variable failed the test of significance at 95 percent confidence level which is inconsistent with our appriori. MPR is perceived to be a major determinant of interest rate in an economy and a positive relationship between MPR and GDP implies that an increase in MPR and by extension Interest rate will lead to a rise in GDP. This result though it is against the appriori could be occasioned by other factors other than the price of money (Interest Rate).

Concerning **Exchange rate**, a direct but insignificant relationship exists between the two variables. Large inflow of funds from outside occasioned by increase in export due to a rise in the exchange rate of the local currency will increase money supply which will in turn reduce interest rate . This will stimulate investment thereby increasing the output level of goods and services.

The ECM result however, showed an inverse relationship which is not consistent with our appriori and known economic theory. According to the World Bank, the history of the exchange rate of the Naira to the U.S $ has been N1.75/$ in 1986, N9.91 in 1991,N21.88/$ in 1996, N111.23 in 2001, N128.65 /$ in 2006, N154.74 in 2011 and N157.31/$ in 2013 showing a steady fall in the value of the Naira to the U.S $.

In the following indices given by the same World Bank (2014) for measuring the stability of exchange rate of any countries currency: Countries income levels, level of development, economic structure, unemployment, corruption , rule of law and governance, financial development, Economic freedom, Globalization ,Internal and external balances, Infrastructural development, Energy production and use, Health and education, Nigeria ranked low in most of them, little wonder why the Naira kept falling even in times of seemingly increasing GDP. Drawing implication from the above, we conclude that exchange rate did not contribute to the performance of Nigerian economy given the GDP growth rate. Furthermore this result testifies the fact exchange rate depreciation retard economic development while currency appreciation encourages or promotes developmental processes.

From the result of the co-efficient of determination which denotes that approximately 56% of the variations in gross domestic product were determined or explained by our selected independent variables with unexplained variations of about 44% which is ascribed to forces outside the model.

The F-statistics confirms how the variables are jointly related at 5% significant level given the probability value. This further implies that our model significantly captured interest rate management and a good performance of the Nigerian economy. Also the Durbin-Watson statistics of 2.09 approximately indicates the absence of serial correlation among the successive error terms as expected following the assumptions of classical linear regression. Generally drawing conclusion from the performance of the parsimonious error correction model carried out in the analyses, we can accept our results without caution or fear since the is significant and rightly signed at -0.529994 implying that over 53% of deviation from the equilibrium will be corrected or adjusted over a year approximately.

The Breusch-Pagan-Godfrey test for Heteroskedasticity reveals the presence of no heteroskedasticity in the model. This implies that the variance and mean of the error terms is not constant and this thus obeys the classical linear regression postulations. In like manner, the result of Breush-Godfrey serial correlation test also allows us to accept the null hypothesis that the data we employed in the analyses are not serially correlated with their respected error terms.

Having ascertained the presence of long run relationship in the ECM and co integration tests in the model, The result of Granger causality test did not established these correlations rather it went further to indicates the absence of unidirectional or bidirectional relationship of any kind among our employed variables; meaning that the selected variables of interest in the model did not lend full support to each other. This empirical evidence is due from the insignificant nature of the parameters in the Error Correction Model.

5. Conclusion

All in all, the study could demonstrate that interest rate management has no critical effect on economic growth in Nigeria. This repudiates the generally established relations between interest rate deregulation and these variables, as introduced by the Mckinnon–Shaw money related freedom theory. This may notwithstanding, be because of the inadequate deregulation and the effects of the other factors already mentioned.

From the findings of study, it was observed that there is no significant relationship between interest rate management and gross domestic product which is in conformity with the economic expectation.

Since economist are of the opinion, that investable funds for economic development can largely be sourced through the banking system, high monetary policy rate retard the economic growth in Nigeria; after critical consideration of the effect of inflation.

From the discussion of findings, the following recommendations are necessary:

- Provision of adequate security and other infrastructure in the banking sub-sector will engender savings culture on the citizenry, this will minimize leakages and naturally increase liquidity making loan able funds available at an affordable rate.

- Enforcing accountability especially in the financial sector will even encourage people to save for longer periods thereby guaranteeing liquidity in the economy at all times.

- Competition should be encouraged among the providers of loan able funds; this in the long-run will bring interest rate down.

- Inflation should be put at a reasonable level that will encourage no negative real interest rate thereby making credit affordable to investors and as such, boost the output level of goods and services.

- Corruption needs to be brought to its knees as well as improve our energy generation and consumption; this will help a great deal in stabilizing the exchange rate of the naira.
- CBN should continue with the interest subsidy on agriculture as this is capable of increasing Foreign Exchange earnings through export of Agricultural products.

- The Bank will undertake a careful review of the liquidity ratio, Cash Reserve ratio to enable Deposit Money banks have available more fund to loan out to their customers

- A careful review of the NDIC premium should also be undertaken in a bid to reduce cost of funds to Deposit money banks

The findings of this study has contributed to existing knowledge as it has empirically and scientifically revealed a strong link between interest rate management and economic growth in Nigeria. The study contributes to the existing body of knowledge as it helps to fill up all loopholes arising from other research works. Also, the findings of this study will aid an effective and efficient financing decision of projects by banks and other financial institutions in Nigeria. It will guide analysts, consultants, other professionals, leaders and even the entire populace especially as it relates to the effects of Interest Rates and its effect on Productivity.

It is important to equally state here that further research work could be carried out on the effect of interest rate on the Nigerian Economy using Fiscal Deficit as an additional variable and testing separately for the pre and post deregulation periods. Furthermore, this further work can apply other econometric tools to achieve its objectives. To this extent therefore this research work is suggesting the use of correlation analysis or discriminate analysis. All these will enable other researchers to evaluate the extent of the impact of interest rate on Productivity in Nigeria.

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