International Journal of Economics, Commerce and Management

United Kingdom http://ijecm.co.uk/ Vol. III, Issue 9, September 2015 ISSN 2348 0386

# FINANCIAL SECTOR REFORMS AND ECONOMIC **GROWTH IN NIGERIA**

# Akakabota Edward Eta

Department of Accounting, Banking and Finance Faculty of Management Sciences, Delta State University, Asaba Campus, Nigeria akabutaeduward@gmail.com

Mmadu Benjamin Anabori 🔛

Department of Economics, Faculty of Social Sciences University of Nigeria, Nsukka, Enugu State, Nigeria mmadubenjamin@gmail.com

## Abstract

Financial Sector reforms refers to the process or change in the components of the financial sector (i.e Deposit Money Banks, stock markets other financial intermediaries and a central bank) becoming more efficient in providing financial services. The study examines the effect of financial sector reform on Economic Growth in Nigeria over the period of 27 year (1986-2012); data were sourced from the Central Bank of Nigeria Statistical Bulletin and annual reports of Banks. The objective of the study includes; determining the impact of INR (interest rate) on economic growth, to examine the impact of the DMB'SCC (Deposit money banks credit claims) on GDP; to examine whether the TDDMB'S (Total deposit of deposit money banks) has an impact on economic growth or performance. The data comprises of time- series and cross sectional data which were pooled into a panel data set and estimated using linear regression model techniques. The result shows that there is a positive relationship between Deposit money bank credit claims and economic growth in Nigeria. Interest Rate (INRT), and Deposit Money Banks credit claims (DMBCC) conform to apriority expectations. This indicates that credit claims of Deposit money banks affects economic growth in positive way while interest rate charge by Banks for lending has negative relationship with economic growth. An increase in loan and



advances increases economic growth through interest income generated from loan and advance. Based on our findings, it is recommended that management of banks in Nigeria should enhance their capacity in credit analysis and loan administration.

Keywords: Financial Sector Reforms, Bank Credit Claims, Deposit Money Bank, Interest Rate, Total Deposit, Economic Growth

## INTRODUCTION

The nature of the relationship between intermediation function of financial sector and economic growth has been one of the debated in the recent past, thus, for with a little consensus (agreement). The debate and possibly answer to it is appropriate and relevant as to determine the reasons between the intermediation function of financial system or institutions and economics growth in other to enable policy-makers to communicate or channel their decisions appropriately about growth and development policies. The fact that strong relationship exists between finance and economic growth has been well acknowledge in the economic growth literature. However, different empirical studies have produced mixed and conflicting results on the nature and direction of the cause relationship between finance and economic growth (Nzottal and Okereke, 2009 & Akinlo and Egbetunde, 2010).

Financial reforms refers to the process or change in the components of the financial sector (i.e. deposit money banks, stock markets other financial intermediaries and a central bank becoming more efficient in providing financial services (e.g. the pooling of savings from the ultimate lending or surplus units to the deficit units and information management), so transaction, enforcement and information costs decline. On the contrary, the demand - following hypothesis posits a cause relationship from economics growth to financial development whereby growth implies the demand of financial services which in turn stimulates the creation of financial intermediaries. Zaka and Manadou (2010) also propose the stages of development hypothesis whereby financial development is first generated by capital accumulation at the existing stage of development. This innovation and new financial services, create an opportunities for investors and savers. The effect of finance on economic growth decrease with time, and finally the expansion of the real sector generate new financial services needs requiring innovations in the financial sector.

Government led development was the ruling economic development paradigm (example) in Nigeria up to the 4th quarter of 1986. The quarter of 1986 a programme was fashioned out for the nation call the structural adjustment programme (SAP). The Structural adjustment programme, attempted to move the country away from government direct – control



of economic activities to indirect control, (i.e. control of economic activities through the market forces). So, all sectors of the economy were deregulated-trade, exchange, finance, industry etc. prior to the deregulation of the economy, the financial sector had been the most highly regulated. The reasons for this are not farfetched. First to finance development funds are needed and the stock in trade of the financial system is fund, so government needed to have a good grip (understanding) over sector especially its banking sub-sector.

The function of the financial sector is not only to provide the intermediation that pools funds from savers and channel to investors, but also to economic growth by channeling fund from areas of surplus to areas of scarce. There is a near certainty on the role of finance in enhancing economic growth in Nigeria. Recent studies agreed that there exist a linear relationship between financial sector development and economic growth (Roija and Valey 2003, Iwuamyawn 2013, Onural and ozurumba 2013). Economic growth here refers to annual increase in productivity which is often measured by Gross Domestic Product (GDP).

Economic growth has long been considered an important goal of economic policy with a substantial body of research dedicated to explaining how this goal can be achieved (Fadare, 2010). Economic growth has received much attention among scholars. According to Khorravi and Karimi (2010), classical studies estimate that economic growth is largely linked to labour and capital as factors of production. The emergence of the endogenous growth theory has encouraged specialists to question the role of other factors in explaining the economic growth phenomenon (Bogdanov, 2010).

Economic growth represents the expansion of a country's potential GDP or output. For instance, if the social rate of return on investment exceeds the private return, then tax policies that encourage can raise the growth rate and levels of utility. Growth models that incorporate public services, the optimal tax policy lingers on the characteristic of services (Olopade and Olopade, 2010). Economic growth has provided insight into why state growth at different rates over time; and this influence government in her choice of tax rates and expenditure levels that will influence the growth rates.

Furthermore, in the working of government's monetary policy to provide macroeconomics stability for all economics agents, the financial sector provides the platform for the working out of this policy. Given the key position of the financial sector especially the banking sub-sector, the government rigidly controlled every aspect of their activities. For instance, for the banking sub-sector government regulated how much interest banks could charge on the loans that go to the different sectors and much loans banks could give (i.e what proportion of their loan-portfolio) to different sectors.



# **Statement of the Problem**

The financial sector has been affected by several bouts of reforms and challenges. A number of banks were pruned down (i.e stake out) through the recapitalization programme. Among the recapitalized bank, five chief executives were charge of fraud and replaced. Microfinance banks and insurance companies had their capital base reviewed more recently; the central Bank of Nigeria (CBN) and its monetary policy committee reviewed the interest rate upward to dampen (less) the rate of inflation in Nigeria (Ogboi, 2011). More so, according to the manufacturing Association of Nigeria (M.A.N) Cited in Ameafule (2011), Nigeria lost 1.9 million manufacturing job spaces 2002-2009, owing to harsh operating environment include finance related problems.

The recent development in the banking sector indicated a mixed trend in the performance of banks. Available data from the CBN Annual Report (2004), has been on the banks satisfactory rating has been on decline since 2001 from 63 banks to 51 banks, 2004. During the years under review, the number of banks categorized as sound had exhibited a mixed trend, while the marginal banks have been on the meanest (i.e have been reduce). The reasons attributed to the development were under-capitalization illiquidity, weak or poor assets guality which resulted in poor earning. Though the banking system in Nigeria is on the average rated satisfactory, a detailed analysis of the condition of individual banks showed that no banks was rated very sound (Soludo 2005). How then has the recent banking reforms and bank consolidation been effecting the growth of the Nigeria economy. (i.e the recent banking reforms by Soludo 2005, produce a change in the growth of the Nigeria economy). Having seen or mentioned some of the reforms in the financial sector of the economy and their effects on the economy, this study therefore seeks to look at the relationship between these reforms from 1986 to 2012 and the growth of the Nigerian Economy.

## **Objective of the Study**

The objective of this study is simply to take a close look at the understanding of the relationship between financial sector of selected indices (INR, DMBCC, TDDMB's) and economic growth (GDP) in Nigeria.

These include:

- 1. To determine the impact of INR (interest rate) on economic growth.
- 2. To examine the impact of the DMB'SCC (Deposit money banks credit claims) on GDP.
- 3. To examine whether the TDDMB'S (Total deposit of deposit money banks) has an impact on economic growth or performance.



## **Research Questions**

Based on the objective stated above the following research questions are put in place.

- 1. Does the interest rate of the DMB (Deposit money bank) drive economic growth?
- Does DMB'S CC (Deposit money banks credit claims) affect GOP?
- 3. Does TD of DMB (Total deposit of deposit money bank) have a significant relationship and impact on Economic growth

## **Hypotheses**

The study will be guided by the following research hypothesis

- $HO_1$ : There is no positive relationship between interest rate and economic growth.
- HI<sub>1</sub>: There a positive relationship between interest rate and economic growth.
- HO<sub>2</sub>: There is a negative correlation between the DMB'S CC (deposit money banks) and economic growth.
- H1<sub>2</sub>: There is a positive correlation between DMB'S CC (Deposit Money Banks Credit Claims) and economic growth.
- $HO_3$ : There is no significant impact between TDDMB'S (Total Deposit of deposit money bank) and economic performance or growth.
- H1<sub>3</sub>: There is a significant impact between TDDMB'S (Total deposit of deposit money banks) and economic performance or growth.

## **REVIEW OF LITERATURE**

## **Financial Institution**

The system in Nigeria has undergone remarkable changes in terms of ownership structure, the depth and breadth of instruments employed the number of institutions established, the economic environment and the regulatory framework within which the system operates currently. The Nigeria financial system include banks, capital markets, insurance, pension asset managers and other financial institutions with the central bank as the apex institution. According to central Bank of Nigeria (2008) at the end of 2008, there were 805 financial institutions in Nigeria including banks. These are discussed briefly:

The central Bank of Nigeria (CBN) the central Bank of Nigeria is the apex regulatory authority of the Nigeria financial system. The Central Bank of Nigeria (CBN) was establishing 1959, under the colonial Banking Act, which conferred on it a number of functions and powers, including powers to control the operation of commercial banks (Gbosi, 2009). The colonial Banking Act was amended and Consolidated in the series of central Bank Acts and Banking



Decree of 1979. Specially, under the Decree, the principal objectives of the CBN are the issue of legal tender (Currency) in Nigeria, the maintenance of external reserves to safeguard the international value of the local Currency, and a sound financial system in Nigeria. Under the 1958 Act, the CBN was designed to ensure the control over monetary policy. It was however, recognized that within this framework, the Bank will not be completely independent of the government, although it could be independent. This therefore, made the formulation and execution of monetary policy in Nigeria a very difficult task. In view of this several Banking decree were promulgated in 1991. The new decrees supersede CBN currency conversion Act of 1967 and its amendment.

The promulgation of Degree No 24 of June 20, 1991 was also an important landmark in the history of CBN. This is because of the expanded powers conferred on the CBN to execute its primary functions. The Band and other financial institutions Decree (BOFID) No 25 of 1991 were also promulgated to strengthen the CBN'S supervisor activities. The BOFID supersedes the bank Act of 1969 and it amendment. It has also made it easier for the CBN to promote monetary Stability and soundness of the financial system. By the CBN Decree, the CBN is subject only to the authority of the president of the Federal Republic of Nigeria. The promulgation of the 1991 Decree has tremendously enhanced the legal power of the CBN to deal with the problems of banks. This is very clear in its role of controlling the pace and direction of monetary and financial activities in Nigeria. The central Bank of Nigeria like the Bank of England or the U.S Federal Reserve Bank performs several function in the economy. These include services functions and monetary management. The major functions of the CBN are discussed below: first, the CBN is responsible for currency issue and distribution. This function is very important because economic transactions to a large extent are cash oriented in Nigeria. Another important function of the CBN is its role as banker of banks. The CBN has the statutory function of acting as banker to other banks within and outside Nigeria, Third, is its role of supervision of banks in Nigeria in order to the promote a sound financial system. Fourthly, it serves as a financial adviser to the Federal Government. It is the Organ of government for maintaining monetary stability.

As an operator in the financial market, it serves as an important link between the government and the business community. Fifth; it also provides the forum for cheque clearing, the inter-bank clearing. Sixth, the CBN also acts as banker to the Federal Government Specifically; the bank undertakes most of the federal Government Banking activities within and outside Nigeria. It is also involved in managing the country's foreign reserves.



© Akakabota & Mmadu

# The Nigerian Banking Subsector

The banking subsector includes deposit money banks, micro finance bank, primary mortgage institutions, trustees and trust companies. Deposit money (commercial) banks are the dominant operators in the industries; they are the largest in terms of size and profitability. These are currently 24 of such banks in Nigeria. Micro finance banks are financial institution established to provide credit, banking and other financial services to designated convenient areas or communities. Currently, there are 757 microfinance banks in Nigeria. These community banks were converted to microfinance bank in 2007. Micro-finance banks are established to provide financial access to the poor who are traditionally not served by the conventional financial institutions, this is because the formal financial system provide services to about 20percent (%) of economically active population, the other eighty (80) percent (%) are excluded from access to financial service, (CBN, 2008). primary mortgage institutions also known as saving and loans companies are specialized institutions which collect household savings originate mortgage loans. There are currently about 90 primary mortgage institutions in Nigeria. Trustee and trust company are typically subsides of banks. They provide funds and management services for organizations or individuals who sets up trust funds. There other services include portfolio management, investment advising, property management and custodial services for non-person funds.

# Theory of Financial Intermediation

Credit is an important aspect of financial intimidation that provide fund to those economic unit that can put them to the most productive use. Theoretical study have established the relationship that exist between financial development and economic growth. For instance, Schumpeter (1934), Goldsmith (1969) McKinnon (1973) and Shaw (1973), in their studies, they strongly emphasized the role of financial reforms in economic growth. In the same vein, Greenwoods and Jovanovich (1990) observed that financial development can leads to rapid growth. In a related study, Bencivenga and smith (1991) explained that development of bank and efficient financial intermediation contribution to economic growth by channelling saving to high productive activities and reduction of liquidity risk. They therefore conclude that financial intermediation leads to growth. Based on the assertion, this study examines the extent to which credit to various sectors of the economy have influenced economic growth in Nigeria.

## Theory of Economic Growth

There are numerous growth models in literature. However, there is no consensus as to which strategy will achieve the best success. The achievement of sustained growth requires minimum



levels of skills and literary or the part of the population a shift from personal or family organization to large scale unit (Nnanna, 2004). Some of these existing growth models are Twogap model, Marxian Theory, Schumpeterian Theory, Harrod-Dormar Theory of growth, Neoclassical Model of Growth and Endogenous Growth Theory. The growth models relevant to this study are those of: Neo-classical model of Growth and Endogenous Growth Theory, since these growth models explain the situation in developing economies such as Nigeria, Ghana, and Gambia etc. (i.e. Anglophone South Sub-Saharan countries).

## **Neo-Classical Model of Growth**

The Neo-classical model of growth was first devise (create) by Robert Solow. The model believes that a sustained increase in capital investment increase the growth rate only temporality. This is because the ratio of capital to labour goes up (there is more capital available for each workers to use) but the marginal product of additional units of capital is assumed to decline and the economy eventually moves back to a long term growth path, with real GDP (Gross Domestic Product) growing at the same rate as the work force plus a factor to reflect improving "productivity", "A steady state growth path" is reached when output capital and labour are all growing at the same rate so output per worker and capital pre worker are constant. Neoclassical economies' believe that to raise an economy's long term trend rate of growth requires an increase in the labour supply and an improvement in the productivity of labour supply and an improvement in the productivity of labour and capital. Differences in the rate of technological change are said to explain much of the variation in economic growth between developed countries. The neo-classical model treats productivity improvements as an "exogenous" variable meaning that productivity is assumed to be independent of capital invest (IMF, 2001).

## **Endogenous Growth Theory**

Endogenous growth theory or new growth theory was developed in the 1980s by Rome (1986), Lucas (1988), and Rebelo (1991) among other economists as a response to criticism of the neoclassical growth model. The endogenous growth theory holds that policy measures can have an impact on the long run growth rate of an economy (Wikipedia, the free encyclopaedia). The growth model is one in which the long run growth rate is determined by variable within the model, not an exogenous rate of technological progress as in a neo-classical growth model emphasis technical progress resulting from the rate of investment, the size of the capital stock and the stock of human capital. In an endogenous growth model Nnanna, Englama and Odoko (2004) observed that financial development can affect growth in three ways, which are: raising the efficiency of financial intermediation, increasing the social marginal productivity of capital



and influencing the private saving rate. This means that a financial institution can effect economic growth by efficiently carrying out its functions among which is the provision of credit.

#### Finance- Growth Relationship: Theoretical Underpinning

Major theoretical literature on financial development and economic growth process postulate (assume); four distinguishable but not mutually exclusive effects of financial activity and development on overall economic performance. The first is the provision of an inexpensive and reliable means of payment. The second is the volume and allocation effect, in which financial activity increases resources that could be channelled into investment while improving the allocation of resources. The third is a risk management effect by which the financial system helps to diversify liquidity risks, thereby enabling the financing of riskier but more productive investment and innovations (Greenwood and Jovanovich, 1990: Bencivenga and Smith, 1991). The fourth is an informational effect; according to which an ex antes information about possible investment and capital is made available, ameliorating although not necessarily eliminating the effect of asymmetric (lack of being equal) information (Levine, 2004).

From an aggregate production function point of view, each of this financial effect may contribute to the transformation of a given amount of serving and investment inputs into a larger amount of output through either a capital accumulation channel (Hicks, 1969) or a technological change channel (sehumpeter, 1912).

Taking the capital accumulation channel as an example, the Solow growth model shows that an increase in the savings rate,  $\delta$ , will increase steady-state level of capital (k) and per capital output (y). Such shift in  $\delta$  is illustrated in figure 1. The shift from  $\delta_1$ , to  $\delta_2$  cause steady state k to rise from  $k_{1*}$  to  $k_{2*}$  and per capital output to raise from  $y_1^*$  to  $y_2^*$ 





The elimination of financial repression and a reduction in financial market failures are also likely to improve the quality of investment because only projects with returns greater than the interest rate are funded. This implies that the entire production function will shift up, from (k) to g (k). This increase in the economy's efficiency further increase savings because  $\delta_2 g$  (k) >  $\delta_2 f$  (k), as shown in figure 2. It could be seen from figure 2 that the new steady and per-worker output K\*<sub>3</sub> and y\*<sub>3</sub>, exceed not just the original levels, K\*<sub>1</sub> and y\*<sub>1</sub> but also the higher levels caused by just the increase in savings and investment, K\*<sub>2</sub> and y\*<sub>2</sub>.





Among other reasons, the financial sectors role as a monitor of how investment projects are managed contributes to the raising of the productivity function. The Solow model captures only the short-run and medium-run effect of improvements in financial development as it does not explain technological progress or long-run economic growth. The limitation of Solow growth model leads to Schumpeterian model of growth. Schumpeter posited that a well- developed financial sector is absolutely necessary if entrepreneurs are to successfully engage in a process of ingenuity. New projects require innovation is not costless, and the upfront investment cannot always be covered by the entrepreneurs themselves. Without a financial sector to channel funds from savers to the most capable entrepreneurs, to monitor the projects, and to spread risk for savers, who are the sources of the investment funds, innovation would be little permanent economic growth.



#### **Empirical Issues**

Empirical studies have agreed that exist a linear relationship between financial sector and economic growth. In order to examine this relationship previous studies have used several analytic approaches. These include cross country growth regression used by king & Levine (1993); penal technique used by Rioja & Valev (2003). Time services used by demetriades and Hussies (1996); Iwuamyawu (2013) uses ordinary least squares econometric technique and Onuoral and Ozurumba (2013) uses times services employing co-integration VAR model.

This approach summarized that it is to draw at any reliable policy implication from crosscountry; panel regression, econometric etc and those conclusions that are draw from series studies for individual countries cannot be generalized. In time series or econometric technique method seems to be more applicable for simple country analysis. Hence, this study intends to use econometric method following the method used by Nwanyanwa (2013) and Onuorah and Ozurumba (2013). This according to Nwanyanwu (2013) allows the use of appropriate economic procedures, such as co-integration to test for the long-run relationships; they also allow the use of econometric procedures that can shed high on the causality between two or more variables in both the long-run and the short run. Though not without its limitation, it is often considered an appropriate tool in single country analysis. The study of Demetriades & Hussein (1996) that both Engle/Granger and Johnson based ECM (Error Correction Method) are useful in determining the direction of causality between variables in a series.

The determinants of credit-growth have also been critically discussed in literature as earlier stated. What is very clear is that there is not universal model for dealing with this issue. According to Rioja and Valev (2003), what appears not to have statistical significant in one area may have a positive significant effect in other areas, even with varying degrees of significance. This study uses the multivariable model developed by Crowley (2008) to determine this relationship. The model adopts a cross country regression approach to determine the factors that are crucial in driving credit growth within the Middle East, Mediterranean North Africa and Southwest Former Soviet Union countries of central Asia.

#### **RESEARCH METHODOLOGY**

#### **Research Design**

A research design refers to the approaches, framework or plans of carrying out research studies. It is used as a guide in collecting and analyzing data. Research design is view as he structuring of investigation aimed at identifying variables and their relationship to one another, Asika (1991). Research design is also refers to as the plan, structure and strategy of investigation conceived to obtain answers to research question to control variables. Baridam



(2001) asserted that research design does not mean the specific method of collecting data e.g. questionnaire, interview or direct observation, but the more fundamental question of how the study subjects will be brought into the research setting to obtain the require data. The research design used by the researcher in this work, is an ex-post facto which is a Latin word that is interpreted "after the facto". The data in this study, is collected from already established information from CBN statistical bulletin. But the dependent variable (GDP) and the independent variables (INR, DMBCC, and TDDMB) are data collected from the Bulletin to examine the impact of financial sector reform (independent variable) to economic performance or growth (GDP). The researcher has no control and cannot manipulate the variables because it is already existing fact. The hypothesis in this research work is constructed to test the impact of selected financial sector variables to economic growth and to know the negative or positive relationship that will occur in carrying out the data analysis.

## **Population and Sample Size**

Ordinarily the term population refers to a large number or group of people living in a specified geographical location. In research, the population of study is the totality of all element or objective of a well-defined group being studied. Sample size is a proportion or subset of the population which is studies in place of the entire population so, the sample size is the result studied used to represent the entire population. In this research work, the sample studied from 1986-2012 is the duration of the sample of the GDP (the dependent variable and the independent variables (INR, DMBCC, TDDMB). The totality of the population of this research work is based on the financial sector reform of DMBs (Deposit Money Banks), and determinants of economic growth in Nigeria between the periods of 1986 – 2012 as extracted from the CBN statistical Bulletin. Due to the research limitation as stated previously and constrain in data accessibility, the researcher limited its sample size to few financial sector reform mechanism (INR, DMBCC, TDDMB) and economic growth using GDP as a financial indicator. So therefore, the sample size is the INR, TDDMBs, DMBCC, and GDP within the period of 1986-2012 as collected from CBN Statistical Bulletin.

## Method of Data Collection

Data collection is the gathering of relevant information for addressing the questions raised in the research and the problem statement Olannye (2002). Ofo (1994) illustrates data collection as similar to a cook gathering the necessary ingredient before embarking on cooking. Against this backdrop, the generalization and the acceptability of a research report depends on the competency and the proficiency displayed in data collection.



The data used for this work was collected from the secondary source, i.e. an already published work from other sources like: Journals, CBN statistical Bulletin, and Articles, online. The data collected from journals, online and other articles are majorly used in the review of literature to explore the past research carried out from this field. The secondary data from CBN statistical Bulletin is the major sources of the researcher's data analysis to examine the impact of the variables. In analyzing the data, the research work will employed linear equation and regression, using software programme for social scientists (SPSS) version 2.0, to analyses the data collected from the National Bureau of Statistics and statistical Bulleting of CBN for the period of 1986-2012.

## **Model Specification**

The model specification uses the linear function to examine the relationship between the dependent variable (GDP) and the independent Variables financial sector Reform (FSR). Although the Explanatory variables which is the independent variables are not the only variables to be used in examine the economics growth but for the purpose of this research, only the Three (3) variables (INR, DMBCC, TDDMB), will be used as proxy to FSR (Financial sector Reform). The model can be expressed thus:

GDP = F(FSR)GDP = F (INR, DMBCC, TDDMB) ......2 Where: GDP = Gross Domestic Product INR = Interest Rate DMBs CC = Deposit Money Banks Credit Claims TDDMBs = Total Deposit of Deposit Money Banks  $GDP = b_0 - b_1 INR + b_2 DMBCC + b_3 TDDM_3 + Ut \dots 3$ Where:  $b_0 =$  Intercept or Constant  $b_1-b_3 = Slope$ Ut = Error term or stochastic

## **ANALYSIS AND RESULTS**

The data for the study was sourced from the central bank of Nigeria statistical bulletin for the period of 1986-2012. The variables included in the study are; Gross Domestic Product (GDP), Interest rate (INR), Deposit money banks Credit (DMBC) and Total Deposit TD as shown below in table 1.



YEARS	GDP(N'Million)	INR	DMBCC (N'Million)	TD OF DMB (N'Million)
1986	134603.32	10.5	20031	18137.6
1987	193126.2	17.5	25238.3	23086.7
1988	263294.46	16.5	27026.3	29065.1
1989	382261.49	26.8	25940.4	27164.9
1990	472648.75	25.5	35268.2	38777.3
1991	545672.41	20.01	37344.8	52408.7
1992	875342.52	29.8	48370.4	75047.7
1993	1089679.72	18.32	79546.1	110453.6
1994	1399703.22	21	133085	142537.5
1995	2907358.18	20.18	165109.4	178962.1
1996	4032300.34	19.74	222456.9	214359.8
1997	4189249.77	13.54	280184.2	269847.2
1998	3989450.28	18.29	321690.8	314303.5
1999	4679212.05	21.32	541246.6	476350.9
2000	6713574.84	17.98	764647.9	702104.5
2001	6895198.33	18.29	1052756.7	947182.9
2002	7795758.35	24.85	1415985.8	1157111.6
2003	9913518.19	20.71	1581403.5	1337296.2
2004	11411066.91	19.18	2128318	1661482.1
2005	14610881.45	17.95	2621994.6	2036089.9
2006	18564594.73	17.26	3602819.8	3245156.5
2007	20657317.67	16.94	6781103.5	5001470.5
2008	24296329.29	15.14	9516550	7960167
2009	24794238.66	18.99	11548957.8	9150037.7
2010	33984754.13	17.59	11786017.3	9784542.5
2011	37409860.61	80.11	50255910.9	43357781.3
2012	40544099.94	83.96	52610588.1	48834853.7

Table 1: GDP, Interest Rate, Deposit money Bank Credit and Total Deposit 1986-2012

The data presented above show some interesting trends over the period under review. The Gross Domestic Product GDP show steady growth form N134603.32 (Million Naira) in 1986 to N 4189249.77 (Million Naira) in 1997 with an average growth rate of more than 22% annual increase. The value of GDP fall s from N 4189249.77 (million naira) in 1997 to N3989450.28 (million) in 1998 and maintained an all-time growth between 1999 to 2012 from N 4679212.05 (million) to N 40544099.94(million) respectively as illustrate by figure 3.





Figure 3: Line Graph showing Growth Rate of GDP 1986-2012

Interest rate increased from 10.5 in 1986 to 26.8 in 1989 and fall to 25 in 1990. Interest rate growth was up and down from 1991 to 2012 in response to government different reform effort in the nation's financial sector as dispatched in figure 4. Every Government makes it a priority to lower the interest rate to encourage economic growth.



•

Figure 4: Line Graph showing Deposit Money Banks Interest Rate 1986-2012

Deposit money bank credit claims (DMBCC) show steady growth throughout the period under review with few years of decline in response to changes in financial sector. DMBCC increased from N20031 (Million) in 1986 to N 764647.9 (million) in 2000, N 1052756.7 (million) in 2001, and N 1581403.5 in 2002 representing more than 120% increase in growth. However Deposit money bank credits decreased to N 2128318 (million) in 2004 and N9516550 in 2008 due to banking sector reform in Nigeria at that time and the onset of global economic crisis as shown in figure 5 below.



Figure 5: Line Graph showing Deposit Money Bank Credit Claims 1986-2012

Total Deposit (TD) of Deposit Money Banks increased from N 18137.6 (million)in 1986 to 702104.5 (million) in 2000 represent an annual increase rate of 15.3 %. The Total Deposit increased from N1157111.6 (million) in 2002 to N5001470.5(million) in 2007 with sharp fall in 2008 to N9516550(million) due to the global economic crisis and deposit money banks adjustment to the problem as shown in figure 6.





# **Empirical Linear Regression Result (OLS)**

The result analysis for the study was carried out using linear regression model with SPSS software package version 20. Three variables used were to establish the nature of the relationship between Deposit Money banks Credit Claims with Economic growth, interest rate and Economic growth and Total Deposit of DMB and Economic Growth in Nigeria over 27 years period. DMBCC, Interest rate (INR), and Total Deposit (TD) was regressed GDP. The data set used ran for the period of (27) years. This is to enable us established long term effect of bank, credit policy on economic growth. The result of the analysis is presented in table 2 and 3, while the complete result is presented in Appendix 1.

Descriptive Statistics					
	Ν	Minimum	Maximum	Mean	Std. Deviation
GDP(N'million)	27	134603.320	40544099.940	10472040.585	12237925.495
INR	27	10.5	84.0	23.998	17.194
DMBCC (N'million)	27	20031	52610588	5838133.05	13606095.396
TD of DMB (n'Million)	27	18137.600	48834853.700	5079473.296	12181996.768
Courses CDCC v 20 Deput output					

Table 2: Descriptive Statistics of GDP INR DMBCC and TD

Source: SPSS v. 20 Result output

The descriptive result of the variables show that GDP has a minimum value of N134603.320 (million Naira) and maximum value of N40544099.940 (million Naira) with mean value of N10472040.585 (million Naira) and Std. deviation of N12237925.495 (million Naira) for the period 1986-2012. The bank Interest Rate (INR) has minimum value of N10.5% and maximum of 84.00% with mean Interest Rate of 23.99% and Std. deviation of 17.19% for the period 1986-2012. Loan and advance show minimum value of N51035747 (Million Naira) and maximum value of N70433702 (million naira) with mean loan and advances of N311377097.0 (million Naira) and std. deviation of N194391679.9 (million Naira) for the period under review.

Table 3: Linear Regression	Model Summary
----------------------------	---------------

Model Summary <sup>b</sup>							
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson		
1	.935 <sup>a</sup>	.874	.858	4615330.111	1.615		
a. Pred	a. Predictors: (Constant), TD% DMB (\U00e4 Million), INR, DMBCC (N'million)						
b. Dependent Variable: GDP(N'million)							
			Source: SPSS	Result output			

Source: SPSS Result output



Model		Unstandard	Unstandardized Coefficients		Standardized Coefficients		Sig.
		В	Std. Error	E	leta	-	
1	(Constant)	18664738.173	2957534.929		6.311		.000
	INR	-743703.713	155915.010	-1.045	-4.770		.000
	DMBCC (N'million)	2.944	1.488	3.273	1.979		.040
	TD OF DMB ( <del>N</del> 'Million)	-1.483	1.742	-1.476	851		.403
		S	ource: SPSS Result	Output			

Table 4: Coefficient of Estimated Variables

From the result of the regression analysis, there is a significant positive relationship between Deposit Money Banks Credit Claims and Economic growth (GDP) in Nigeria. With R value of 0.935,  $R^2 = 0.874$ , Adjusted R 0.858, show the model estimated is well fifed and the independent variables DMBCC, Interest Rate and Total Deposit(TD) could predict the dependent variables Economic growth very well. From the result R<sup>2</sup> of 0.874 implies that the independent variable has been able to explain 87.4% changes in the dependent variable. The Durbin-Watson statistics of 1.615 can be approximated to 2 and hence show absence of serial correlation among the variables used for the study and with these we can confidently say that the result obtained is not by chance.

The coefficient estimated for the three variable used for the study show that Interest rate (--743703.713, -4.770) has negative relationship with economic growth as a 100 unit increase in Interest rate will result to more than 47.7 % decrease in economic growth. Interest rate is a significant determinant of growth potential of Deposit Money Banks in Nigeria.

Furthermore, the result reveal a positive relationship between Deposit Money Bank Credit Claims (2.944, 1.979) and Economic growth with the t-value of 1.979 implies that 100 unit increases in DMBCC will lead to a more than 19.79% increase in Economic growth in Nigeria. Also the result revealed negative relationship between Total Deposit of Deposit money banks (-1.476, -.851) and economic growth in Nigeria. Total Deposit is not a significant determinant of economic growth in Nigeria.

# **Test of Hypothesis**

The three hypothesis formulated in chapter one will be tested using the result obtained from the linear regression model analysis. The hypothesis will be validated base on the value obtained of  $R^2$  and the P-value both set at apha = 0.05



## **Decision Rule**

With higher value of  $R^2$ >0.20, there is a significant relationship between the dependent and independent variable (Gujarati, 2007). Secondly, for the acceptance or rejection of the hypothesis, we use the P-value mark (sig) on the result output. P<0.05 (Alpha) reject H0 and accept H1 if otherwise accept H0.

## Test of Hypothesis One

From the result of the analysis in table 2, 3 and 4,  $R^2 = 0.874$  and P-value for interest rate (INR) is 0.000. The R<sup>2</sup> value of 0.874 shows there is a significant relationship between interest Rate and Economic growth in Nigeria. Since the P-value 0.000<0.05 (Apha) we reject the null hypothesis and accept the alternative, that There is a significant relationship between interest rate and economic growth in Nigeria

# Test of Hypothesis Two

From the result of the analysis in table 2, 3 and 4,  $R^2 = 0.874$ , P-value for Deposit money banks credit claims DMBCC 0.040, the R<sup>2</sup> of 0.874 implies there is a significant relationship between Deposit money banks credit claims DMBCC and Economic growth in Nigeria. The P-value of 0.040<0.05 (Apha) implies that the relationship is strong enough to conclude that Deposit money banks credit claims (DMBCC) contribute to economic growth in Nigeria. Since 0.040<0.05 we reject the null hypothesis and accept the alternative that there is a significant relationship between Deposit money banks credit claims DMBCC and Economic growth in Nigeria.

## Hypothesis Three

From the result of the analysis in table 2, 3 and 4,  $R^2 = 0.874$  P-value for Total (TD) of Deposit money banks 0.403, the R<sup>2</sup> of 0.874 implies there is a significant relationship between Total Deposit and Economic growth in Nigeria. However, the P-value of 0.403>0.05 (Apha) implies that the relationship is not significant to conclude that Total Deposit of Deposit Money Banks causes economic growth in Nigeria. Since 0.403>0.05 we accept the null hypothesis that Total Deposit has no impact on economic growth in Nigeria.

# **DSCUSSION OF FINDINGS**

The study examines the effect of financial sector reforms on growth in Nigeria. The estimation results reveal that the explanatory variables jointly account for approximately 87.4 percentage changes in economic growth. The Durbin Watson statistic (1.96) illustrates the absence of auto



correlation. The estimation results show that the variables- interest rate(INR), Deposit money bank Credit (DMBCC) and Total Deposit of Deposit Money Bank (TD) and total bank performance indicators are statistically significant explaining changes in economic growth. From the result of the analysis in table 2, 3 and 4,  $R^2 = 0.874$ , P-value for Deposit money banks credit claims DMBCC 0.040, the R<sup>2</sup> of 0.874 implies there is a significant relationship between Deposit money banks credit claims DMBCC and Economic growth in Nigeria. The P-value of 0.040<0.05 (Apha) implies that the relationship is strong enough to for one to conclude that Deposit money banks credit claims (DMBCC) contribute to economic growth in Nigeria. similarly, From the result of the analysis in table 2, 3 and 4, R2 = 0.874 P-value for Total (TD) of Deposit money banks 0.403, the R2 of 0.874 implies there is a significant relationship between Total Deposit and Economic growth in Nigeria. However, the P-value of 0.403>0.05 (Apha) implies that the relationship is not significant to conclude that Total Deposit of Deposit Money Banks causes economic growth in Nigeria.

Moreover, the estimation results indicate that a 1 percentage increase in interest rate as a result of financial sector reforms in the previous one year leads to approximately 0.06 percentage decrease in economic growth. Thus, increases deposit money bank credit claims (DMBCC) will increase productivity of the people, thereby promoting economic growth. The regression results also illustrate that any increase in total bank deposit of deposit money bank will increase economic growth on the long run. This confirmed the result of Fadare 2010 and Iwuamyawn, 2013.

## CONCLUSION

Nigerian deposit money banks remain dominant in the banking system in terms of their shares of total assets and deposit liabilities. Their total loans and advances, a major component of total credits to the private sector are still on the increase in spite of the major constraints posted by the government regulations, institutional constraints and other macro-economic factors. We concludes that, both government and deposit money banks should be mindful of the facts that the environments in which they operate are important factors in the bank performance. Where the environment is conducive and supportive, performance of banks is enhanced and good lending behaviour is guaranteed. But where the environment is unstable and harsh, the bank's performances suffer. Deposit money banks should note that they need to do a lot in order to ensure good lending behaviour even where a good measure of macroeconomic stability is achieved. This is because of the positive and significant relationship found between bank lending rate and bank performance in both short and long run.



## RECOMMENDATIONS

Based on the findings in this study, the following suggestions are recommended:

- Having seen that there exists a long run and short run relationship between bank earnings and explanatory variables (LR and MPR) through the use of co-integration test and error correction model, government should adopt policies that will help Nigerian deposit money banks to improve on their performance.
- There is need to strengthened bank lending rate policy through effective and efficient • regulation and supervisory framework.
- Banks should try as much as possible to strike a balance in their loan pricing decisions. This will help them to be able to cover cost associated with lending and at the same time, maintain good banking relationship with their borrowers.

## SCOPE FOR FURTHER STUDY

In line with the current result, the study suggested the following areas for further research. The effect of financial sector reforms on banks corporate performance in Nigeria, Examine the growth of ICT usage and Deposit money banks performance.

## REFERENCES

Asika, N. (1991) Research Methods in the Behavioural Sciences, Lagos Nigeria Plc.

Ameatule E. (2011). Nigeria lost 1.9 million Manufacturing jobs in seven years' The Punch Thursday, Feb. 17

Baridam, D.M. (2001) Research Method in sciences, Port Harcourt: Sherbrook Associates

Bencivenga, V.R. and smith, B.D (1991).financial intermediate and endogenous growth. Review of economics studies. Vol. 58, P. 195-209

Bogdanov, B. (2010). Cyclicality of Fiscal Policy over Business Cycle: An Empirical Study on

Developed and Developing Countries. Agency for Economic Analysis and Forecasting, Working paper Series.

Central bank of Nigeria (CBN) (2008). Economic and financial review Abuja: CBN

Central bank of Nigeria (CBN) (2009). Statistical bulletin golden jubilee.

Crowley J. (2008) credit growth in the Middle East, North Africa and central Asia region IMF working paper NO. 08/184

Davis, E.P. and Madsen J.B (2008) "Productivity and equity market fundamentals; 80 years of evidence For 11 OECD countries". Journals f international money and Finance, PP. 1-23

Ezirim CB (2005). Finance Dynamics, Principles Techniques and Application. Port Harcourt: Markowitz center for research Development

Fadare, S.O. (2010). Recent Banking Sector Reforms and Economic Growth in Nigeria. Middle Eastern Finance and Economics. 8: 1450-2889

Gbosi A N (2009). Monetary Economics Port Harcourt: Emhai Press



Goldsmith, R.W (1969) financial structure and development. Yale University Press New Havent, etc.

Greenwood, J. and Jovanovic, B. (1990). Financial Development, Growth and the distribution of income, Journal of political Economy. Vol. 98, pg. 106-1107

IMF (2001). Theories of ECONOMICS Growth-Neo-Classical. Retrieved on April 19, 2010 from www.google.com

Jhingan, M. L (2003). Monetary Economic India: Vrinda publications Ltd

Khosravi, A. and Karimi, M. S. (2010). To Investigate the Relationship between Monetary Policy, Fiscal Policy and Economic Growth in Iran: Autoregressive Distributed Lag Approach to Cointegration. American Journal of Applied Sciences, 7(3), 420 - 424.

Lucas, R. (1988). "On the mechanics of Economics Development". Journal of monetary Economics 22, 2-42

MCKinno R.I. 1973 "Theoretical Isuues in Financial Intermediating Financial Markets, Macro-Economic Management and Monetary Policy In Financial Markets In Nigeria, CBN, Abuja.

McKinnon, R (1973). Money and Capital in Economics Development (Washington: The Bookings Institute).

Nigeria Bureau Statistics (2009). Annual Abstract of Statistic. Abuja NBS

Nnana, T. Englana, S. and Odoko, R. (2004) Based on Solow's Analysis of the American Data on Credits from 1909 and 1949.

Ofo, J.E. (1994) Research Method and Statistics in Educational Research and Published Ltd

Olannye, P.A (2002) Research Methods for Business A skill building Approach

Olopade, B.C and Olopade, D.O. (2010). The Impact of Government Expenditure on Economic Growth And Development In Developing Countries: Nigeria As A Case Study

Onuorah, A.C and Ozurumba, B.A (2013). Bank Credits: An Aid to Economic Growth in Nigeria: Journal of information and Knowledge Management Vol.3, No.3, pg. 41-50

Ogbi V (2011). Nigeria's Rising Interest Rate persistent inflation the Punch Thursday, Feb 17.Ibadan Express Way, Lagos

Shaw, E.S. (1973). Financial Deepening in Economic Development. Oxford University Press, New York.

Soludo C.C. (2004). "Consolidating the Nigeria Banking Industry to Meet the Development Challenges of the 21<sup>st</sup> Century" and Address by the CBN Governor at the special meeting of the BANKER'S COMMITTEE on July 6th 2004, CBN Headquarters Abuja.

