

# Impact of Bank Lending on Economic Growth in Nigeria

Aliyu Mamman<sup>1</sup>, PhD Yusuf Alhaji Hashim<sup>2\*</sup>, PhD

1.Department of Business Management, Federal University, Dutsinma, Katsina State, Nigeria

2.Department of Business Administration, College of Business and Management Studies, Kaduna Polytechnic  
Kaduna-Nigeria

\*Corresponding author email: danmallamm@gmail.com

## Abstract

In Nigeria, the banking sector is an important part of the financial system. The banking sector dominates the Nigerian financial system as it accounts for about 90% of the total assets in the system. However, the banking sector has not contributed significantly to the growth and development of Nigerian economy as expected. The poor performance of the sector has been attributed to numerous problems that faced the sector such as inadequate capital, high nonperforming assets which had led to frequent distress in the sector and collapse of banks in the past. This study is carried out to examine the impact bank lending on economic growth in Nigeria. In addition, the objective of this study is to examine the impact of bank lending on economic growth in Nigeria for the period 1987 to 2012. This study relies purely on secondary data, and using multiple regression model, the study find out that bank lending accounts for about 82.6% variation in economic growth in Nigeria for the period under study. The study concludes that there is a statistically significant impact of bank lending on economic growth in Nigeria. This, suggest that the performance of the Nigerian economy is greatly influence by bank lending. The study recommends that the federal government of Nigeria through the central bank of Nigeria (CBN) should strengthened the banking sector to ensure an improve credit flow to the activity sectors because of its strategic importance in creating and generating growth of the economy.

**Keywords:** Bank lending, economic growth, financial system, banks, banking sector, Nigerian economy, Gross Domestic Product (GDP)

## 1. Introduction

A typical capitalist or mixed economy is made up of surplus and deficit units. In performing their primary function of intermediation, banks collect deposit from the surplus unit of the economy and lend it out to the deficit unit in form of loans and advances (Kalu, 2009). The role of the financial system in mobilizing and channeling of funds to the real sectors of the economy cannot be taken for granted. Sound financial system is recognized as a necessary and sufficient condition for rapid growth and development for every modern economy (Sanusi, 2012).

The financial system consists of institutions like banks, insurance, stock market, and other financial institutions. In Nigeria, the banking sector is an important part of the financial system. The banking sector dominates the Nigerian financial system as it accounts for about 90 % of the total assets in the system and about 65 % of market capitalization of the Nigeria Stock Exchange (Soludo, 2009a). However, the banking sector has not contributed significantly to the growth and development of Nigerian economy as expected. The poor performance of the sector has been attributed to numerous problems that faced the sector such as inadequate capital, high nonperforming assets which had led to frequent distress in the sector and collapse of some banks in the past (Sanusi, 2012).

If banks cannot grant loans to the deficit economic units within their immediate operational environment, the business sector will not grow, deposits will be limited and this will hinder the ability of banks to generate income (Galac, 2001: Honohan, 1997). For most banks, loanable funds account for about fifty percent or even more of their total assets and about half to two-thirds of their revenue (Udoka and Effiong, 2006). This made lending the first and most important function of banks. The function is considered important due to number of reasons. First, the general public or customers use lending in assessing banks stability. Banks that are willing and able to give out loans are considered more stable than those that mostly reject loans proposals of their customers.

Second, lending is regarded as part of legal requirement by the monetary authority, which may stipulate certain percentage of bank lending to some sectors like agriculture, small scale industries etc. Third, lending is use as tool in implementation of the monetary policies of government, which affects money supply and demand in the economy. Fourth, lending affects pattern of production, level of entrepreneurship and consequently, aggregate output and productivity. The last and the most important reason why the lending function of banks is crucial and important in every economy is that it is generally accepted that there is positive relationship between bank credit and economic growth (Oluitan, 2009)

Economic growth entails positive change in the national income or the level of production of goods and services by a country over a certain period of time (Oluitan, 2009). Economic growth is measured in terms of the level of production within the economy, factor productivity, technological change, physical capital accumulation and real Gross Domestic Product, (GDP) (Odedokun 1998; Allen & Ndikumama 1998; King and Levine 1993). According to Bencivenga & Smith (1991), consumption of goods in the economy is produced from capital and labour. Capital is usually mobilized from either personal savings of entrepreneurs and/or loans from banks. This makes banks loans relevant to economic growth of countries. Research findings have revealed that bank loans can be a causal factor for economic growth. For instance, according to Bayoumi & Melander (2008), a 2.5% reduction in overall credit causes reduction in the level of GDP by around 1.5%. Demetriades & Hussein (1996) who studied 13 countries supported the causal relationship between bank loan and economic growth, but argued that the causality is time and country bound specific rather than general.

In Nigeria, there is detailed information about Nigerian banking industry and its activities, but little information is available about how bank lending specifically affect economic growth (Oluitan, 2009). In view of this development, the objective of this study is to examine the impact of bank lending on economic growth in Nigeria for the period 1987 to 2012. Furthermore, in order to examine the impact of bank lending on economic growth in Nigeria, the following hypothesis is postulated: there is no significant relationship between bank lending and economic growth in Nigeria. The paper is divided into five sections including this introduction. Section two presents the literature, section three contains the methodology, section four presents the results and discussion and section five presents the conclusions and recommendations.

## **2. Literature Review**

### **2.1 *Developments in Nigerian Banking Sector***

The development of banking activities in Nigeria can be classified as free banking era, regulated banking era, deregulated banking era, consolidated banking era and post consolidated banking era (Somoye, 2008). The free banking era also known as pre-independence banking period marked the genesis of the development of banking activities in Nigeria and the era was before 1952. Two main features characterized the era. The first feature was the absence of any banking legislation as anyone could establish a banking company as long as he registered under the Companies Ordinance 1948. The second feature of the era was that five banks were established consisting of three biggest foreign banks and two biggest indigenous banks (Nwankwo, 1980). However, Aigbiremole and Aigbiremolen (2004) reported that between 1947 and 1952, 22 banks were registered in Nigeria.

Banking operation actually started in Nigeria with establishment of African Banking Corporation (ABC) in 1892 and two years later, the Bank of British West Africa (BBWA) (now First Bank of Nigeria Plc) was established to take over ABC. BBWA remained the only bank operating in Nigeria until Barclays Bank (now Union Bank Plc) joined it in 1912. The third foreign bank to operate in Nigeria was British and French Bank Ltd (now UBA Plc) which was established in 1949. The first indigenous bank in Nigeria was the National Bank of Nigeria, which was established in 1933. The second successful indigenous bank was African Continental Bank Ltd, which started operation in 1947 (Alabede, 2012).

Following the collapse of some banks in the free banking era, it became obvious that there was need for legislation for the control of the Nigerian banking sector. As a result, the first banking legislation in Nigeria was passed in 1952. This marked the beginning of regulated era in the Nigerian banking sector. Under the 1952 Banking Ordinance, before a bank was allowed to operate in Nigeria, it must have a banking licence and must have a minimum paid up capital of £25,000 for indigenous bank and £200,000 for foreign bank. In 1958, Central Bank of Nigeria (CBN) was established through CBN Ordinance of 1958 to supervise Nigerian banking sector and under 1958 Ordinance, the authorised capital of foreign banks was raised to £400,000 (Alabede, 2012).

The Banking Ordinance of 1952 together with its several amendments was replaced with the Banking Decree of 1969. With the introduction of Structural Adjustment Programme (SAP) in 1986, the Nigeria banking sector was deregulated. As a result of the deregulation, the number of banks operating in Nigeria increased from 55 to 125 together with 275 branches of the people's bank and 1,000 community banks (CBN, 1998). During the deregulation era, Banking Decree of 1969 was repealed while Bank and Other Financial Institution Act of 1991 (BOFIA) was promulgated. The new Act raised the minimum capital of banks to N50 million for commercial banks and N40 million for merchant banks in 1991 and this was further increased to N2 billion in 2001 (Alabede, 2012).

In 2004, CBN embarked on major reform in the Nigerian banking sector with a 13-point agenda and this marked the commencement of the consolidation era. The objective of the reform was to consolidate the Nigerian banks

and increase their capital (Somoye, 2008). As part of the reform, the minimum capital for Nigerian banks was reviewed from N2 billion to N25 billion in July 2004 with effect from 31 December 2005. Before the consolidation era, 89 commercial banks were operating in Nigeria but the number reduced to 25 after consolidation. The grave conditions in the Nigerian banking sector under the crisis provoked the post consolidation reform tagged “The Project Alpha Initiative” in 2009 (Sanusi, 2012).

As part of the reform, CBN carried out special examination into operation of Nigerian banks with specific reference to the liquidity, capital adequacy and corporate governance in 2008. The results indicate that 10 of the 24 banks were in grave condition (the 10 banks in grave condition included Afribank, Equatorial Trust Bank, FinBank, Intercontinental Bank, Oceanic International Bank, Platinum-Habib Bank, Spring Bank, Sterling Bank, Union Bank, Unity Bank and Wema Bank) (Alabede, 2012).

To save the sector, CBN emoved and replaced chief executive and directors of 8 banks (the chief executive officers removed from office were that of Afribank, Equatorial Trust Bank, FinBank, Intercontinental Bank, Oceanic International Bank, Platinum-Habib Bank, Spring Bank, Sterling Bank and Union Bank) with more competent hands and bailed out 9 banks with N620billion public money (Sanusi, 2010b). Similarly, in order to reduce the problem of liquidity in the banking sector, CBN established the Assets Management Corporation of Nigeria (AMCON). In 2011, AMCON acquired 1.7 trillion naira nonperforming assets of some Nigerian banks in Nigeria. Furthermore, the CBN reviewed and replaced the universal banking model which was adopted in Nigeria in 2001 with a new model which make banks to focus on core banking business (Sanusi, 2012).

Under the new model, banking licences are categorized into three: commercial banking (regional, national or international); merchant (investment) banking and specialized banking which could be microfinance (unit, state or national) mortgage (state or nation) or non-interest banking (CBN, 2011; Sanusi, 2010a). In 2011, after 3 of the 8 banks bailed out with the public money failed to show commitment towards recapitalization, their banking licences were revoked and NDIC formed three new banks to take over their assets and liabilities (the 3 banks that failed to recapitalize before the CBN dateline were Afribank, Platinum-Habib Bank and Spring Bank; while Main Street Bank Ltd, Keystone Bank Ltd and Enterprise Bank Ltd were new banks established to take up their operations respectively) (CBN, 2011).

The remaining bailed banks were recapitalized through merger/acquisition and injection of capital by core investors (Equatorial Trust Bank, FinBank, Intercontinental Bank and Oceanic Bank International entered into merger/acquisition agreement with Access Bank, Eco Bank, FCMB and Sterling Bank respectively). Subsequently, the number of deposit money banks (DMBs) operating in Nigeria reduced to 20 with 5,810 branches at end of 2011 (Alabede, 2012). The various reforms in the Nigerian banking sector had impact on the performance of the sectors. For example; the 2004 reform indicates that capital adequacy rate increased from 13.16% in 2004 to 21.25% in 2005 while liquidity improved from 50.44 % to 60.69% and the ratio of nonperforming debt to total credit dropped from 23 to 20% in the same period (NIDC, 2005).

Furthermore, because of the impact of the reform, all the 25 DMBs operating in Nigeria in 2005 were in sound condition. The 2009 reform also shows great impact on performance of the banks and save the sector from collapse as a result of the adverse effect of the global financial crisis. Evidence available shows that the banks are recovering from the shock of the crisis as the number of DMBs in sound healthy condition increased from 13 in 2009 to 19 in 2011. This is reflected in the performance indicators: capital adequacy rate moved from 10.24% in 2009 to 17.9% in 2011, liquidity increased from 44.17 % to 69.1% and the ratio of nonperforming debt to total credit declined from 32.8 to 5% respectively (NDIC, 2010; CBN, 2011). However, this impressive performance was partly driven by the activity of AMCON. The AMCON took over N1.7 trillion nonperforming risk assets of the DMBs in 2011 (Sanusi, 2012).

In view of the foregoing, Nigeria is considered a veritable case for investigating the link between bank lending and economic growth, for at least two reasons. First, since the reform measures are meant to strengthen the banking system to adequately play its intermediary role between the surplus and deficit unit, there is need to assess the efficacy of the measures in raising the lending ability of banks. Second, since the ultimate aim of developments/reforms in the banking sector is boosting of economic activities, there is need to determine the level of impact of bank lending on economic growth.

## **2.2 Empirical Literature**

Most scholars have agreed that there is relationship between bank lending and economic growth. However, scholars have differed on the direction of causality between bank lending and economic growth (Oluitan, 2009).

Mohd and Osman (1997) broadly categorized the causality into demand-following relationship and supply-following relationship. The proponents of demand-following hypothesis argued that economic growth is a causal factor for bank lending, not the reverse.

Robinson (1952) maintains that economic growth propels banks to finance enterprises. Gurley & Shaw (1969) also argued that as the economy expands and grows, the increasing demand for financial services stimulates banks to provide more credit. Similarly, Oluitan (2009) is of the opinion that policy makers should focus less on measures leading to increase in bank lending and concentrate more on legal, regulatory and policy reforms that boost the functioning of markets and banks. Muhsin & Eric (2000) in their study on Turkey concluded that economic growth lead to financial sector development.

However, the proponents of supply-leading hypothesis are of the belief that bank lending is a veritable tool for attainment of economic growth and development. The hypothesis was originally credited to the works of Schumpeter (1934). Schumpeter strongly believed that efficient allocation of savings by means of identification and funding of entrepreneurs who invest such funds in innovation and production of goods and services, thus leading to economic growth. This view was supported by other scholars like McKinnon (1973), Shaw (1973), Fry (1988), and Greenwood & Jovanic (1990).

Studies conducted across countries and continents have also supported the postulations of the supply-leading hypothesis. King and Levine (1990) conducted a study involving seventy-seven countries made of developed and developing economies using cross-country growth regression. The objective of the study was essentially to find out the correlation between bank lending, capital accumulation, economic growth and efficiency. The result of the study indicated that bank lending leads to economic growth and efficiency.

Similarly, Diego (2003), came out with similar result from his study of fifteen European Union economies, using panel estimation technique to assess the mechanisms through which policy changes have influence the economic growth of the countries. Habibullah and Eng (2006) conducted causality testing analysis on 13 Asian developing countries and also found that bank lending promotes economic growth. Similarly, the IMF 2008 Global Financial Stability Report indicated a statistically significant impact of credit growth on GDP growth. Specifically, it was revealed that “ a credit squeeze and credit spread evenly over three quarters in USA will reduce GDP growth by about 0.8% and 1.4% points year-on-year respectively assuming no other supply shocks to the system” (Oluitan, 2009).

In addition studies were conducted to test the old Schumpeterian hypothesis, for example; Jao (1976) used cross-section data averaged over 1967-72 in 44 developing countries and 22 developed economies, to study the relationship between bank lending and economic growth. The study found that the money balance-GDP ratio and growth of per capita real money balances (proxy of financial intermediation variables) had a strong positive relationship with economic growth (Tang, 2003).

Fritz (1984) examined the direction of causation between economic development and financial intermediation. Using data from the Philippines, the study discovered that financial intermediation brings about economic development at the early stage of economic growth/development and the direction of causation was reversed at a later stage. This assertion is supported by the work of Rousseau and Wachtel (1998), who examined the links between the intensity of financial intermediation and the economic performance of five industrialized countries. The duo discovered that intermediation played an important role in the rapid industrial transformations of those countries (Tang, 2003)

According to Lang and Nakamura (1995) bank lending alone cannot lead to economic growth. They believe that other monetary policies of central banks are equally important in making bank loans to make the desired impact on economic growth. This is an important contribution to the discourse on supply-leading hypothesis. A more recent research work by Swiston (2008) conducted in USA detected quantitatively, the significance of bank lending on economic growth. He posited that credit availability is an important driver of the business cycle, accounting for over 20% of the typical contribution of financial factors to growth. He further argued that a net tightening in lending standards of 20% reduces economic activity by 0.75% after one year and 1.25% after two years. The key findings of all the studies are that financial intermediaries (proxy deposit money banks (DMBs), have significant positive impact on productivity of factors of production which leads to increase in real GDP and economic growth.

### **2.3 Scope of Bank lending and indicators of Economic Growth**

Bank lending refers to funds granted to individuals and organizations to meet their temporary or long- term

deficit operations (Mbat, 2006). Bank lending includes Short, Medium and Long Term Loans and Advances. Bank lending can be categorized in to two: lending to the private sector and lending to the public sector. It has been empirically proven that lending to the public sector is weak in generating growth within the economy because it is prone to waste and politically motivated projects which may not yield or deliver the best result (Oluitan, 2009). This position is supported by Crowly (2005) and Boyreau-Debray (2003). Beck, Demirguc-Kunt and Levine (2005) maintain that lending to the private sector make more impact on economic growth than the one to the public sector. Based on this undisputable fact, the study will concentrate on the impact of bank lending to the private sector.

There are many indicators of economic growth. They include money supply (M2), Consumer Price Index (CPI), Producer Price Index (PPI), Consumer Confidence Survey (CCS), Current Employment Statistics (CES) and Real GDP (www.aimr.org). Though any or combination of the indicators can be used in measuring the economic growth of a country, this study use the Real GDP indicator.

### 3. Methodology

This study relies purely on secondary data collected from e-Books, online journals, textbooks, CBN annual report and statement of accounts, and CBN statistical bulletins, among others. The validity and reliability of the data collected was based on similarity and sameness of the facts and figures from the multiple sources. Similarly, in this study, it is presumed that the level of performance of the Nigerian economy (represented by real GDP) is dependent (dependent variable) on aggregate bank lending (the amount of money lend out to the activity sectors of the economy) (independent variable). Furthermore, aggregate bank lending in relation to real GDP have been used by researchers to indicate the importance of banks in financial intermediation, and the DMBs total assets in relation to GDP have been used as a measure of size of financial intermediaries by researchers.

In addition, in order to examine the impact of bank lending economic growth proxy by real GDP in Nigeria, multiple regression model was used to analyse the data gathered for this study. Accordingly, the multiple regression model is specified thus:

$$Y = b_0 + b_1x_1 + b_2x_2 + U_t$$

Source: Howell (1995).

Where:

- Y = (estimated value of the dependent variable) economic growth as measured by real GDP growth
- $b_0$  = base constant
- $b_1$ - $b_2$  = regression coefficient
- $x_1$  = aggregate bank lending
- $x_2$  = size of financial intermediaries (proxy by total Deposit Money Banks' assets)
- $U_t$  = error term

The statistical significance of the regression coefficient is based on the appropriateness of the sign of the coefficient of determination ( $R^2$ ). The regression equation specified above is analysed with aid of Statistical Package for Social Scientists (SPSS).

### 4. Results and Discussion

This study made use of time series data drawn from CBN annual reports and statement of accounts and CBN statistical bulletin for various years. Therefore, this section present the data collected, interprets, and analyse the data. The hypotheses formulated for the study were also tested and discussed. Finally, the section concludes with the summary of findings for this study. The descriptive statistics for the variables of this study are presented as follows:

**Table 1: Nigeria's real GDP (N' billion) 1987-2012**

Year	1987	1988	1989	1990	1991	1992	1993	1994	1995
Real GDP (N)' Billion	204,806.5	219,875.6	236,729.4	267,550.0	265,379.1	271,365.5	274,833.3	275,450.6	281,407.4
Year	1996	1997	1998	1999	2000	2001	2002	2003	2004
Real GDP (N)' Billion	293,745.4	302,022.5	310,890.1	312,183.5	329,178.7	356,994.3	433,203.5	477,533.0	527,576.0
Year	2005	2006	2007	2008	2009	2010	2011	2012	
Real GDP (N)' Billion	561,931.4	595,821.6	634,251.1	674,889.0	716,949.7	775,525.7	832,914.6	888,893.06	

Source: CBN Statistical Bulletin (2012) and CBN annual report and statement of accounts for various years



Table 1 above presents data on the real GDP in Nigeria for the period 1987 to 2012. It can be seen from the table that the growth in real GDP has been stable, while in some cases there was an appreciable growth in the real GDP; in others the real GDP growth has been appreciable. For example, between the periods 2006 to 2007, there was a 6.5% growth in real GDP; however the growth in real GDP between the periods 2007 to 2008 was only 6.0%.

Similarly, the growth in real GDP for the periods between the periods 2008 to 2009 was 7.0% showing an appreciable improvement over previous periods. The periods 2009 to 2010 recorded a 7.9% growth in real GDP, which exceeded the 7.0% in 2009; even though lower than the target growth rate of 10.0 % for the year 2009. Finally, the period 2011 over 2010 recorded a 7.6% growth in GDP, and in the period 2012, a 7.4% growth in GDP was recorded over 2011.

**Table 2: Aggregate bank lending (sectoral distribution of loans and advances) by Deposit Money Banks' (DMBs) in Nigeria (N' billion) 1987-2012**

Year	1987	1988	1989	1990	1991	1992	1993	1994	1995
Aggregate bank lending by DMBs (N)' Billion	17531.9	19561.2	22008.0	26000.1	31306.2	42736.8	65665.3	94183.9	144569.6
Year	1996	1997	1998	1999	2000	2001	2002	2003	2004
Aggregate bank lending by DMBs (N)' Billion	169437.1	4233.691	2148.214	16401.665	9355.446	12562.766	15226.543	17059.140	221121.785
Year	2005	2006	2007	2008	2009	2010	2011	2012	
Aggregate bank lending by DMBs (N)' Billion	23983.35	7993.494	36512.399	174117.92	9667876.7	17331559.0	12878259.10	8150030.7	

Source: CBN Statistical Bulletin (2012) and CBN annual report and statement of accounts for various years

Table 2 depicts the aggregate bank lending in Nigeria for the period 1987 to 2012. From the table it can be seen that aggregate bank lending exhibit a growth from 1987 to 1996. However, there was a decline in aggregate bank lending from 1996 to 1997. In 1999, aggregate bank lending experienced an appreciable growth. Similarly, aggregate bank lending continues experienced an appreciable growth rate from 2001 to 2005. However, there was a decline in aggregate between 2005 and 2006. Finally, there was a decline in aggregate bank lending between 2011 and 2012.

**Table 3: Deposit Money Banks' (DMBs) Assets in Nigeria (N' billion) 1987-2012**

Year	1987	1988	1989	1990	1991	1992	1993	1994	1995
Total DMBs Assets(N)' Billion	49,828.4	58,027.2	64,874.0	82,957.8	117,511.9	159,190.8	226,162.8	295,032.2	385,141.8
Year	1996	1997	1998	1999	2000	2001	2002	2003	2004
Total DMBs Assets (N)' Billion	458,777.5	584,37.5	694,615.1	1,070,019.8	1,568,839.0	2,247,039.9	2,766,880.0	3,047,856.0	3,753,278.0
Year	2005	2006	2007	2008	2009	2010	2011	2012	
Total DMBs Assets (N)' Billion	4,515,118.0	7,172,932.0	1,474,211.0	5,009,804.0	17,522858.2	17,331,559.0	19,396,633.8	21303951.8	

Source: CBN Statistical Bulletin (2012) and CBN annual report and statement of accounts for various years

Table 3 above depicts the data on assets owned by DMBs in Nigeria for the period 1987 to 2012. From the table it can be seen that there was an inconsistent growth in the assets owned by DMBs in Nigeria. As for example there was a growth of 54.4% in assets owned by DMBs between 1998 and 1999. However, only an increase of 10.15% was recorded between 2002 and 2003.

#### 4.1 Test of hypothesis

In this sub-section, the hypothesis formulated is tested, the results presented, interpreted, and discussed. The results of the multiple regressions are presented as follows:

**Table 4: Model Summary b**

Model	R	R Square	Adjusted R Square	Std. error of the Estimate
1	.909a	.826	.811	90917.86902

a. Predictors (constant), DMBs assets, Aggregate bank lending

b. Dependent Variable: real GDP

Source: Output of SPSS version 16.0 using data in tables 1-3

**Table 5: ANOVA b**

Model	Sum of Squares	Df	Mean Square	F	Sig.
1 Regression	9.016E11	2	4.508E11	54.534	.000a
Residual	1.901E11	23	8.266E9		
Total	1.092E12	25			

a. Predictors (constant), DMBs assets, Aggregate bank lending

b. Dependent Variable: real GDP

Source: Output of SPSS version 16.0 using data in tables 1-3

**Table 6: Coefficients a**

Model	Unstandardized Coefficients		Standardized coefficients	T	Sig.
	B	Std. Error	Beta		
1 (constant)	302931.081	22304.098		13.582	.000
Aggregate Bank Lending	-.017	.009	-.379	-1.956	.063
DMBs assets	.039	.006	1.231	6.355	.000

a. Dependent Variable: real GDP

Source: Output of SPSS version 16.0 using data in tables 1-4

#### 4.2 Interpretation of results

The results in table 4 indicate that the growth of the Nigerian economy is predicated by the variables bank lending, and DMBs assets, with a coefficient of determination of 82.6% ( $R^2 = .826$ ). Thus, implying that these variables significantly account for 86% variation in growth of the Nigerian economy for the period under study (1987-2012). The remaining 14% is as a result of other factors outside the model which were depicted as  $U_t$  (error term). Accordingly, therefore, from the results in table 4, it is shown that the variables (aggregate bank lending and DMBs assets) had significant impact on economic growth in Nigeria.

Also, the significance of the coefficient of determination of the multiple regression results is shown in table 5. The F-statistics indicated a statistically significant impact of bank lending on economic growth in Nigeria since the F-statistics calculated stood at 54.534 against the tabulated F-statistics (6.39), at 5% level of significance.

Moreso, table 6 shows the coefficients of the parameter estimate. It can infer from table 6 that the slope of the model ( $b_0$ ) is statistically significant at 5% level of significance, since the P-value stood at 0.000, which is lower than 0.05. Similarly, the coefficient of beta ( $b_1$ ) aggregate bank lending ( $x_1$ ) indicate a negative relationship with economic growth, and statistically insignificant at 5% level of significance with  $b_1$  stood at -0.379 and P-value stood at 0.063, which is higher than 0.05. Thus, arising from this results we could not reject the null hypothesis which states that there is no significant relationship between aggregate bank lending and economic growth in Nigeria; since there is no enough evidence to suggest a statistically significant relationship between **bank** lending and economic growth in Nigeria.

Meanwhile, the coefficient of  $b_2$  DMBs assets ( $x_2$ ), stood at 1.231 and P-value stood at 0.000. At 5% level of significance the results indicate a statistically significant relationship between DMBs assets and economic growth in Nigeria, since P-value (0.000) is lower than 0.05. Thus, we conclude that there is enough evidence to suggest a significant relationship between DMBs assets and economic growth in Nigeria. Finally, from the foregoing analysis and the results in table 6, one variable (bank lending) is insignificant, and one variable (DMBs assets) is significant.

Accordingly, therefore, from table 6, the regression equation is:

$$\text{Real sector growth} = 302931.081 - 0.17(x_1) + 0.039(X_2)$$

$$\text{Standard Error} = (22304.098) \quad (0.009) \quad (0.006)$$

#### 4.3 Findings

From the results of the test of hypotheses and interpretation, this study found the followings;

Firstly, there is a statistically insignificant relationship between aggregate bank lending and economic growth in Nigeria. The implication of this finding is that the banking sector in Nigeria showed a weak capacity and low level activities of banks to finance the Nigerian economy. Secondly, there is a statistically significant

relationship between DMBs assets (which is a measure of importance of banks) and economic growth in Nigeria.

Lastly, on the overall, this study found that there exist a 86.2% degree of variation between aggregate bank lending and economic growth in Nigeria for the period 1987-2012, which implied that aggregate bank lending account for 86% variation in the growth of the Nigerian economy. The implication of this finding is that for the Nigerian economy to grow it depends to a greater extent on the banking sector to finance the activity sectors in Nigeria.

### 5.1 Conclusions

The empirical results of this study reveal that banks in Nigeria exhibit a low level of activities and a weak capacity to funds to the Nigerian economy. Another conclusion that can be drawn from the findings of this study is banks are important in stimulating economic growth in Nigeria. Specifically, bank lending contributed about 86.2% variation in the growth of Nigerian economy during the period under review (1987-2012).

### 5.2 Recommendations

From the foregoing, this study recommends the followings:

Firstly, the federal government of Nigeria (FGN) through the central bank of Nigeria (CBN) should strengthened the banking sector to ensure an improve credit flow to the activity sectors because of its strategic importance in creating and generating growth of the economy. Secondly, the FGN through the CBN should ensure the financial stability of the Nigerian economy by initiating programmes that would enhance the growth, operation, and quality of banks in Nigeria.

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