References


BANK CREDIT AND ECONOMIC GROWTH IN NIGERIA (1990-2009)

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Abstract

This paper on bank credit and economic growth in Nigeria examines the impact of the total domestic credit of commercial banks on the growth of the Nigerian economy for a period of twenty years (1990-2009). It examines the significance of bank credit in stimulating growth within the real sector of the Nigeria economy. Data were collected from secondary sources and the simple regression analysis was used in analyzing the data. The findings of this study reveals that the total domestic credit of banks exerts a significant impact on the growth of the Nigerian economy within the period under study. It is recommended in this work that banks should channel a good proportion of their total credits to the productive sectors of the economy such as agriculture and manufacturing in order to further enhance growth in the economy. Interest rates charged by banks on loans and other advances should be reduced to encourage investors borrow for meaningful investments.

Introduction

Globally, the banking system remains very critical to any economy. Economic growth and development depends largely on the effective flow of funds between the surplus units and deficit units, as this enhances the productive capacity of a county. Banks accept deposits from individuals and institutions thus transferring funds from the surplus sector to the deficit sector (Mishkin, 2007). Though they are subject to certain regulations by the regulatory authorities, financial intermediaries still determine the rules for allocating funds and as such, they play a significant role in determining the type of investment activities, the level of job creation and the distribution of income (Gross, 2001).

Several economists have said that the role of intermediation that banks play help in providing linkages for different sectors of the economy as well as encouraging high level of specialization, expertise, economics of scale and creating a conducive environment for the implementation of various economic policies of government. For instance, Schumpeter (1934), argued that financial intermediation through the banking system plays an essential role in economic development by affecting the allocation of savings, thereby improving productivity, technical change and the rate of economic growth. He acknowledged that efficient savings through identification and funding entrepreneurs is vital to achieving desired objectives. Thus, one of the activities of financial institutions involve
intermediating between the surplus and deficit sectors of the economy. The availability of credit function positively allows the fruition of this role and is also important for the growth of the economy.

The role of credit in economic growth and development of a nation has been recognized as credits obtained by various economic agents to enable them meet operating expenses. The banking sector helps to make these credits available by mobilizing surplus from savers who have no immediate need of such funds in form of credit to investors who have brilliant ideas on how to create additional wealth in the economy but lack the necessary capital to execute the ideas. For instance, firms obtain credit for the purchase of machineries and equipment. In the same vein, farmers obtain credit to purchase seeds, fertilizers and erect farm buildings. The government obtains credit in order to meet various kinds of recurrent and capital expenditures, individuals and families are not left out here as they also take credit to purchase and pay for goods and services (Adeniyi, 2006). Ademu (2006), posited that the provision of credit with sufficient consideration for the sector's volume and price system is a way to generate self-employment opportunities. This is because credit helps to create and maintain a reasonable business size as it is used to establish and expand the business, to the advantage of economies of scale and then, increase business efficiency.

According to Nwaeze and Ujah (2007), credit is a financial assistance or facility granted to a personal or corporate customer by a bank for a specified purpose, period of time and at a specific interest rate.

Economic growth is seen as a positive change in the national income or the level of production of goods and services by a country over a certain period of time. Todara and Smith (2006), defined economic growth as a steady process by which the productive capacity of the economy is increased over time to bring about rising levels of national output and income. Jhingan (2006), viewed economic growth as an increase in output. He further explained that it is related to a quantitative sustained increase in the country's per capita income or output accompanied by expansion in its labour force, consumption, capital and volume of trade. According to Dewett (2005), it implies an increase in the net national product in a given period of time. This is often measured in terms of the level of production within the economy. Other possible measures include total factor productivity, factors of production such as technological change, human capital termed the Schumpeterian approach, other measures of growth ranges from real per capita GDP, the rate of physical accumulation, etc. (Odedokun, 1998). Can we say that the private sector is sufficiently mobilized by available credit to stimulate growth within the real sector of the economy? Thus, this paper seeks to examine the impact of bank credit on Nigeria's economic growth from 1990 to 2009.

Statement of the Problem

Nigeria is the most populous African country with a population of over 150 million people. This represents over 20% of the total population of the African continent. Again, Nigeria is also one of the world's top producers of oil. Despite the above credentials, the country is ranked among the poorest economies in the world today. In this work, the following problems are identified, which make it very important to examine the impact of bank credit on the economic growth of the country:

1. Basic infrastructures and amenities are poor and grossly inadequate.
2. Power supply is highly inadequate, irregular and epileptic and therefore cannot support any meaningful productivity activity.
3. Income per head is low as a result low savings and investment.
4. High rate of unemployment exists as there are few functional industries.
5. Insecurity is the order of the day and investments required for growth, hampered.

Objective of the Study

As widely believed by many scholars, financial intermediation is a crucial function of banks and helps in driving growth in an economy. This paper has its main objectives as:

1. To examine the impact of bank credit on the economic growth of Nigeria.
2. To determine the factors which accelerate the growth of financial intermediation.
3. To make suggestion that will likely assist the financial sector and the economy at large in generating growth.

Research Questions

The following research questions are raised in the paper based on the aforementioned objectives of the study.

1. Is bank credit a significant tool for generating growth within the Nigerian economy?
2. What factors are significant in accelerating the growth of credit or financial intermediation in Nigeria?

Research Hypothesis

Based on the objectives of the study and research questions, the hypothesis in this work is stated as:

Ho: Bank credit has no significant impact on the growth of the Nigerian economy.

Literature Review

The importance of financial institutions especially banks in generating growth within the economy has been widely discussed in literature. Early economists such as Schumpeter in 1991 as cited in Ohuitan (2010), identified banks' role in facilitating technological innovation through their intermediary role. He believed that efficient allocation of savings through identification and funding of entrepreneurs with the best chances of successfully implementing innovative products and production processes are tools to achieve growth in an economy. Several scholars thereafter (Mackinnon 1973, Shaw 1973, King and Levine 1993) have all supported the above postulation about the significance of banks to the growth of the economy. In assessing the relationship, a large number of recent empirical studies...
have relied on measures of size or structure to provide evidence of a link between financial system development and economic growth. They use macro or sector level data such as the size of financial intermediation or of external finance relative to Gross Domestic Product (GDP) and found that financial development has a significant positive impact on economic growth.

The existence of a relationship between finance and growth seems incontestable as many researchers have worked on the issue and positively confirmed it. What is debatable is the direction of causality between finance and growth. The direction of causality has been described by Patrick (1966), as supply-leading and demand-following hypothesis. This postulation was buttressed by Mackinnon (1973). When causal relationship runs from financial development to growth, it is termed supply-leading because it is believed that the activities of the financial institutions increase the supply of financial services which create economic growth. The proponents of this hypothesis believe that the activities of the financial institutions serve as a useful tool for increasing the productive capacity of the economy. They opined that countries with better developed financial system tend to grow faster. According to Mackinnon (1973), a farmer could provide his own savings to increase slightly the commercial fertilizer that he is now using and the return on this marginal new investment could be calculated. However, there is a virtual impossibility of a poor farmer’s financing from his current savings, the total amount needed for investment in order to adopt the new technology. As such access to finance is likely to be necessary over the one or two years when the change takes place, he concluded.

Going through the literature in more detail, the seminal study conducted by King and Levine (1993), on seventy countries made up of developed and developing economies used cross-country growth regression. The aim of the research was to find out whether higher levels of financial development are significantly and robustly correlated with faster current and future rates of economic growth, physical capital accumulation and economic efficiency improvements. The results showed that finance not only follows growth; finance seems important to lead to economic growth.

Demirguc-Kunt and Levine (2008) in a review of the various analytical methods used in finance literature, found strong evidence that financial development is important for growth. To them, it is crucial to motivate policy makers to prioritise financial sector policies and devote attention to policy determinants of financial development as a mechanism for promoting growth.

Similarly, when growth within the economy results in increase in the demand for financial services and this subsequently motivates financial development, then, it is termed demand-following hypothesis. The proponents of this hypothesis believe that economic growth is a causal factor for financial development. According to them, as the real sector grows, the increasing demand for financial services stimulates the financial sector (Gurley and Shaw, 1967). Robinson (1952) was of the opinion that economic activities propel banks to finance enterprises. Thus, where enterprises lead, finance follows. The study by Muhsin and Eric (2000) on Turkey further lends credence to this postulation. According to their study, when banks deposits; private sector credit or domestic credit ratios are alternatively used as proxy for financial development; causality runs from economic growth to financial development. They therefore concluded that growth seems to lead financial sector development.

However, there are other scholars who believe that causality runs in both directions. The proponents of this view postulate that there is a bi-directional relationship between financial development and economic growth. Demetriades and Andrianova (2004), postulate that whether financial development causes growth, it is important that the financial system is well functioning. If so, they believe it will assist the real economy to fully exploit available new opportunities. When there is reverse causation, it is assumed that when the real economy grows, there will be more savings coming into the financial system which will allow it to extend new loans. This assertion could readily be applied to the Shan and Jianhong (2006) study of China economy where they found a two-way causality between finance and growth. Using five variables namely GDP, total credit to the economy, labour, investment and trade, the study observed that financial development was the second most important factor after the contribution from labour force growth in affecting economic growth. They also found out that strong economic growth in the last 20 years has significant impact on financial development by providing a solid credit base. The study concluded that causality for GDP growth to financial development is stronger than the causality from finance to GDP growth.

Concluding, the relationship between finance and real output is country specific and one should not extrapolate one country’s experience to another. Therefore, this study will examine the impact of bank credit on economic growth in Nigeria.

Design of the Study
According to Onwumere (2009), research design is a blueprint which guides the researcher in his scientific inquiry, investigation and analysis. A research design is a scheme of attack; a plan and a strategy designed for systematically solving research problems of interest to the researcher within his relevant circumstances (Osuala, 1991). Therefore, in this study, ex-post facto research design is adopted in obtaining, analyzing and interpreting data relating to the objectives of the study. The choice of this type of design gives the researcher the opportunity to observe variables over a long period of time the dependent and independent variables, between 1990 to 2009.

Population and Sample Size
Population according to Amaechi and Amara (2005), represents a universe or elements with similar characteristics, hence it is a census of all relevant elements and may be finite or infinite while a sample is a group of variables or items derived from a relevant population for the purpose of examination or analysis. Thus, the population of this study comprises of all
financial institutions in Nigeria commercial banks, finance houses, microfinance banks, etc. These institutions provide one form of lending service or the other to their numerous customers. Owing to obvious constraints in studying the entire population due to their size and pattern of distribution, sufficient knowledge of the population will be obtained from studying a representation of the population. Therefore, the sample of this study is the commercial banks in Nigeria, the reason for this choice being the fact that they are the major institution of credit extension to the deficit units in our economy.

Methods of Data Collection

Data were sourced from secondary sources. These include relevant textbooks, journals, talks presented at seminars as well as published materials from the Central Bank of Nigeria (CBN) Statistical Bulletins.

Methods of Data Analysis

Data collected will be analyzed and the hypothesis tested using the simple regression analysis technique to determine the impact of bank credit on the growth of the Nigerian economy.

Model Specification

This paper specifies a functional relationship between Real Gross Domestic Product RGDP = f (ABCE)
Where: RGDP = Real Gross Domestic Product (Proxy for Economic Growth Dependent Variable);
ABCE = Aggregate Bank Credit to the Economy (Independent variable).

The econometric model of this functional relationship is given as:

RGDP = β1 + β2 ABCE + μ

Where: β1, β2 = Regression coefficients
μ = Error term or Stochastic term

Given the assumed relationship, the apriori expectation of the model is that β1, and β2 > 0. That is, a positive relationship is expected between Gross Domestic Product (GDP) and Aggregate Bank Credit to the Economy (ABCE).

Data analysis

The econometric technique or estimation model employed to achieve the objectives of this study is the simple regression. The F-Statistics and the t-statistics are also used in evaluating the model.

Table 1: Gross Domestic Product and Aggregate Bank Credit to the economy.

<table>
<thead>
<tr>
<th>YEAR</th>
<th>REAL GDP (N’ million)</th>
<th>COMMERCIAL BANK CREDIT (N’ million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990</td>
<td>267,550</td>
<td>26,000.1</td>
</tr>
<tr>
<td>1991</td>
<td>265,379.1</td>
<td>31,306.2</td>
</tr>
<tr>
<td>1992</td>
<td>271,365.5</td>
<td>42,736.8</td>
</tr>
<tr>
<td>1993</td>
<td>274,833.3</td>
<td>65,665.3</td>
</tr>
<tr>
<td>1994</td>
<td>275,450.6</td>
<td>94,183.9</td>
</tr>
<tr>
<td>1995</td>
<td>281,407.4</td>
<td>144,569.6</td>
</tr>
<tr>
<td>1996</td>
<td>293,745.4</td>
<td>169,437.1</td>
</tr>
<tr>
<td>1997</td>
<td>302,022.5</td>
<td>38,555.0</td>
</tr>
<tr>
<td>1998</td>
<td>310,890.1</td>
<td>272,895.5</td>
</tr>
<tr>
<td>1999</td>
<td>312,183.5</td>
<td>322,764.9</td>
</tr>
<tr>
<td>2000</td>
<td>329,178.7</td>
<td>508,302.2</td>
</tr>
<tr>
<td>2001</td>
<td>356,994.3</td>
<td>79,616.4</td>
</tr>
<tr>
<td>2002</td>
<td>433,203.5</td>
<td>95,462.8</td>
</tr>
<tr>
<td>2003</td>
<td>477,333.0</td>
<td>121,003.1</td>
</tr>
<tr>
<td>2004</td>
<td>527,576.0</td>
<td>151,924.2</td>
</tr>
<tr>
<td>2005</td>
<td>561,931.4</td>
<td>197,671.2</td>
</tr>
<tr>
<td>2006</td>
<td>595,821.6</td>
<td>252,429.7</td>
</tr>
<tr>
<td>2007</td>
<td>634,251.1</td>
<td>481,348.8</td>
</tr>
</tbody>
</table>

Table 2: ANOVA

<table>
<thead>
<tr>
<th></th>
<th>Df</th>
<th>SS</th>
<th>MS</th>
<th>F</th>
<th>Significance F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression 1</td>
<td>1</td>
<td>231,512,502,228.67</td>
<td>231,512,502,228.67</td>
<td>18.46</td>
<td>0.000431719</td>
</tr>
<tr>
<td>Residual</td>
<td>18</td>
<td>225,445,488,51.95</td>
<td>125,247,475,38.44</td>
<td>4.41</td>
<td>0.413873</td>
</tr>
<tr>
<td>Total</td>
<td>19</td>
<td>456,957,501,00.63</td>
<td></td>
<td></td>
<td></td>
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</table>

Table 3

<table>
<thead>
<tr>
<th>Coefficient</th>
<th>Std Error</th>
<th>t-Stat</th>
<th>P-Value</th>
<th>Lower 95%</th>
<th>Upper 95%</th>
<th>Lower 95%</th>
<th>Upper 95%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>325,772.77</td>
<td>27,147.968</td>
<td>13.3628</td>
<td>305,736.9767</td>
<td>349,808.6</td>
<td>305,737</td>
<td>419,808.6</td>
</tr>
<tr>
<td>Commercial Bank Credit</td>
<td>0.0114</td>
<td>0.0026</td>
<td>4.2993</td>
<td>0.0004</td>
<td>0.0058</td>
<td>0.0169</td>
<td>0.0058</td>
</tr>
</tbody>
</table>
Decision/Results Interpretation
Reject Ho if the test statistics F is greater than the critical value, otherwise accept

<table>
<thead>
<tr>
<th>Test Statistics F</th>
<th>Critical Value @ 0.05 significant level</th>
</tr>
</thead>
<tbody>
<tr>
<td>18.4844</td>
<td>4.4139</td>
</tr>
</tbody>
</table>

Thus, since the test statistics F (18.4844) is greater than the critical value (4.4139), we reject H₀ and accept H₁. The coefficient of determination $R^2$ of 0.51 shows that the independent variable explained 51% variation in the dependent variable. Furthermore, the t-statistics are positive. We therefore conclude that bank credit has a significant impact on the Nigerian economy for the period under study.

Conclusion And Recommendations
This paper examined the impact of bank credit on the growth of the Nigerian economy. Banks are seen as agents for development across the globe today as they play the role of financial intermediation. The findings of this study show that bank credit has a significant impact on the economic growth of the Nigerian economy. It is important to note that a large proportion of the aggregate credit of the banks goes to the government sector and these are not for productive purposes. Most government expenditures are on transfer payment with little impact on production and this has also affected the growth of the economy.

In view of the above discussions, this paper recommends that:

1. Better and stronger credit culture should be evolved, promoted and sustained in our banks.
2. Banks should be encouraged by the monetary authorities to channel a good proportion of their credits to the priority sectors of the economy such as Agriculture and Manufacturing.
3. Rural banking schemes should be encouraged and promoted by mandating banks to open branches in the rural areas of the country to enable them mop up savings from rural dwellers and also extend credit to those who have investment needs and opportunities.
4. Interest rates charged by banks on loans and other advances should be reduced to encourage investors borrow for meaningful investments.
5. Furthermore, banks should compile information on bad debtors and ensure that each of them has this document in order to prevent a situation in which these debtors access more credits from the banks.

References
Odedokun, M. O. (1998). Financial Intermediation and Economic Growth in Developing Countries; Faculty of Commerce, University of Swaziland, Swaziland.


