

Banks and Economic Growth in Nigeria: A Re-Examination of the Financial Repression Hypothesis

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This study examines the relationship between banks and economic growth in Nigeria with emphasis on the financial repression hypothesis. The study seeks to establish among others, the relationship between banking sector development in Nigeria and economic growth; the impact of regulation of banks on economic growth; the applicability of the financial repression hypothesis to Nigeria; and the direction of causality between banks and economic growth over a period of forty-one years divided into three regulatory regimes (intensive regulation regime (1970-1985), deregulation regime (1986-1995) and guided deregulation regime (1996-2010)). Regression analysis of the ordinary least square method was used to estimate the models and the significance of the estimated parameters. The Pairwise Granger Causality test was adopted to determine the direction of causality. The results show that banks have significant positive impacts on growth in Nigeria under all the regulatory regimes. However, the impact is felt most under the regime of deregulation. The conclusion is that although banks have positive impacts on growth in Nigeria, banks cannot be said to be the propelling force for economic growth. This study recommends the continuation of the current policy of guided deregulation; adoption of entrepreneur friendly policies in lending by banks; and periodic review of various regulations affecting banks in Nigeria.

Key Words: Financial repression, Economic growth, Deregulation

Introduction

The importance of financial institutions in generating growth within the economy has been widely discussed in literature. There seems to be a consensus in literature among scholars of banks' role in facilitating technological innovation through their intermediation roles. The belief is that efficient allocation of savings through identification and funding of entrepreneurs offers the best chances of successfully implementing innovative products and production processes that add value to the macro-economy. Several scholars like McKinnon and Shaw (1973) Fry (1988) King and Levine (1993) have supported the above postulation about the significance of banks to the growth of the economy.

While reporting on the works of various authors on financial intermediation, Ndebbio (2004) posited that the economic development of any nation greatly depends on financial intermediation by banks just as he observed that stagnant growth in output of any country, especially the less developed ones, is often blamed on shallow finance. However, there are divided opinions on the roles of banks in economic development. While some authors like Schumpeter (1934), Adelman and Morris (1967), Goldsmith (1969) among others are of the opinion that

development in the financial institutions (banks) precedes and hence plays significant role in economic development; others like Patrick (1967) see finance as passive in the growth process.

In their contributions to the bank-development debate, McKinnon (1973) and Shaw (1973), in a financial repression hypothesis, argue that the performance of banks in the growth process is affected by the regulation of the system. According to Akpan (2004), the Financial Repression Hypothesis believes in a financial market driven by the forces of demand and supply hence with freed interest rate, depositors earn greater interest on their deposits and are therefore encouraged to deposit. This in turn leads to capital formation and consequently economic growth through the multiplier effect. It is on the basis of this divergence of opinions that it is necessary to examine the role of banks in the economic growth process in Nigeria in the light of whether it is active or passive and if active, whether the financial repression hypothesis applies to Nigeria.

The Nigerian banking industry has been subjected to varying degrees of regulations since the enactment of the 1952 Banking Ordinance. This has seen the rise and fall of several banks in Nigeria. Hence the role of banks in the economic growth process in Nigeria will be comparatively examined

under various regulatory regimes. Regulatory regimes will be grouped into three phases: era of intensive banking regulation (pre-SAP), era of Financial Liberalization (1986 to 1995) and era of re-regulation (1996 till date). The intention is to find out under which regulatory regime the impact of banks is felt most in the Nigerian economy.

Research Questions

The relationship between banking sector development and economic growth has been a subject of great scholarly research over the years with several of these studies trying to empirically unravel this relationship and the level of its influence. Regrettably however, all the researches have not yet agreed on the level of relationship if any, between banking sector development and economic growth. One of the earliest researchers in this field, Joseph Schumpeter argued that banks play a pivotal role in economic development because they choose which firms get to use society's savings. In his view, better banks influence growth primarily by raising domestic saving rates and attracting foreign capital. Yet others (Robinson, 1952 for instance) argue that the financial system does not spur economic growth; rather it responds to the development of the real sector. The questions this study intends to give answers to are:

1. Do banks really contribute significantly to economic growth in Nigeria?
2. Under which regulatory regime do banks contribute more to economic growth in Nigeria?
3. Does growth in banks respond to real sector growth or vice versa

Objectives of the Study

The broad objective of this study is to investigate the impact of banks on economic growth in Nigeria with recourse to the hypothesis of financial repression.

Specifically, this study will:

1. Examine the contribution of commercial banks credit to Gross Domestic Product with the aim of examining past and current trends based on historical data to examine the effectiveness of this sector and the direction of causality.
2. Determine under which regulatory regime the impact of banks is felt most in the growth process of the Nigerian economy.
3. Determine the direction of causality between banks in Nigeria and economic growth: Whether banks induce growth or only respond to the growth process in Nigeria.

Purpose and Outline of the Study

This research will not be the first in the field as there exists a plethora of works on the role of banks in economic development in Nigeria but the research brings a unique addition to the various studies in the field as it takes a deeper look at the financial repression hypothesis as it applies to the Nigerian economy. That is, the research seeks to put forward a position on whether banks actually perform better in the period of *laissez faire* banking. This study provide a platform of relevant reference for future researchers in the field as well as help policy makers in making decisions on the regulatory regime best suited for the economy if banks must perform a leading role in financing economic growth.

The study covers a forty year period (from 1970 to 2010) grouped under three banking eras thus:

1. 1970-1985 era of intensive banking regulation
2. 1986-1995 era of financial liberalization
3. 1996 till date era of re-regulation or guided deregulation.

Over the period covered, two basic variables will be used: bank credit to the economy (as a proxy for the contribution of banks to economic growth) and the Gross Domestic Products (as a measure of growth in the economy). Comparative analysis of the impact of banks on economic growth will be done under the various banking eras. In determining banks' credit to the economy, credit advanced to the private sectors only is considered. The whole research work is structured as follows: Introduction, review of related literatures, research methodology, Data analysis and results and conclusion

Literature Review

There are theoretical disagreements in the literature over the roles of banks in the economic growth process; while some economists see the role as minor and negligible, others see it as significant (Ndebbio, 2004). This view is shared by Ojo and Adewunmi (1982) when they noted that the importance of financial institutions is not in doubt but that the controversy over the role of banks in the development process is whether the development of financial institutions precedes, and hence plays an active role in economic development or whether it passively adjusts to the growth of the real sector. The two views are discussed hereunder.

Among those who believe in the active roles played by banks are Schumpeter (1934), Porter (1966), Adelman and Morris (1967), Mckinnon (1973), Shaw (1972) and Levine and Zervous (1996) to mention only a few. Shaw argued that the financial

sector of an economy does matter in economic development, and that it can assist in the break away from plodding repetition of repressed economic performance to accelerated growth. In his analysis of the economic development process, Schumpeter (1934) noted that two things are crucial for economic development: entrepreneurship and financial institutions. Commenting on the importance of financial intermediaries (inclusive of banks), he noted as follows: *“the services provided by financial intermediaries- mobilizing savings, evaluating projects, managing risk, monitoring managers, and facilitating transactions- are essential for technological innovations and economic development.”*

Schumpeter (1934) further wrote on the importance of banks thus: *“The banker stands between those who wish to form new combinations and the possessors of productive means. He is essentially a phenomenon of development, though only when no central authority directs the social process. He makes possible the carrying out of new combinations, authorizes people, in the name of the society as it were, to form them. He is the ephod of the exchange economy”*

Adam Smith, as reported by (Obamuyi 2002), in the eighteenth century highlighted the importance of banks in economic growth as follows: *“I have heard it asserted that the trade in the city of Glasgow doubled in about fifteen years after the first erection of the banks there; and that the trade of Scotland has more than quadrupled since the first erection of two public banks at Edinburgh..., that banks have contributed a good deal to this increase cannot be doubted”*

In a similar vein, Porter (1966) was reported by Agu (1998) as commenting on the relevance of financial development to real (economic) development stated thus: *“The visible correlation in the world between financial and real development are indeed commanding. Whether one relates the real developments of a nation’s financial system (however measured) to its per capital income across countries at a moment of time or across time for a particular country, the relationship between real and monetary variables is undeniable”*.

Agu (1998) posited further that banks are noted to provide financial intermediation, the supply of money, the activation of entrepreneurial talents and guidance for the economy. Goldsmith (1969) observed that the financial superstructure of an economy accelerates economic performances to the extent that it facilitates the migration of funds to the best users, that is, to the place in the economic systems where the funds yield the highest social returns (Dare, 2000; Ndebbio, 2004). Greenwood and Javanovic (1990) agree with the above view when

they state that financial intermediation promotes growth because it allows a higher rate of return to be earned on capital, and growth in turn provides the means to implement costly financial superstructure. Adelman and Morris (1967) while analyzing the development trends in 70 developing nations of the world studied 14 variables. They found out that financial institutions are the most important determinants of growth. Degregorio and Guidotti (1995) showed convincingly, according to Ndebbio (2004) that measures of banking sector development are strongly correlated with economic growth, affirming that a well-functioning financial system is critical to sustained growth. Fry (1938) and Goldsmith (1969) agreed on the ways banks can affect economic growth (through financial intermediation) as raising the volume of investment and by improving the volume and structure of savings.

Gerschenkron (1962), in his contribution to the debate on the relevance of financial institutions to economic development undertook a review of the role of banks in the industrial development of Europe and Soviet Union. He noted some imperfections both in the operations of banks and the demand for loanable funds by needy enterprises at the initial stage of the development process. He attributed a greater influence to the banking systems of some countries than other economic institutions during the industrialisation of an economy, and the contribution of institutions, such as the State and the banks, is determined by its relative backwardness. He utilised this degree of backwardness as an indicator of the potential of a country’s industrialisation as well as a determinant of the behaviour of its economic institutions. He concluded that the efficiency of banks in the development process depends on the level of development in the economy and its structural peculiarities. Gerschenkron thus depicted three major types of economy at different stages of development during the industrialisation process; namely:

- An advanced economy- the English type of Industrialisation
- A moderately backward economy- the German type of Industrialisation
- An extremely backward economy- the Russian type of industrialisation

In highly industrialised and advanced economy of the British type of industrialisation, banks play a less important role as most of the financing needs can be met outside the banking system. Ojo (2010) noted that in this type of industrialisation, the Gerschenkron analysis suggests that the structure of the economy and the approach to development determine the role of the banks, in view of the available alternative finance sources which implies that banks’ roles should adapt to the particular needs of the economy.

In a moderately backward economy of the German type, banks play significant roles in the development process, accompanying firms from cradle to grave. As Ojo (2010) noted in this type of economy, there is a need for some special institutions to supply long term funds for industrial capital; because:

- There are no substantial plough back profits, and
- The average plant size is assumed to be much larger.

The banks of the industrial banking type as against commercial were the prime source of capital and entrepreneurship for this type of industrialisation. “The banks would not only create credits for capital formation but would also, as shown by Gerschenkron in the case of German bank, accompany an industrial enterprise from cradle to grave, from establishment to liquidation throughout all the vicissitudes of its existence” (Ojo, 2010).

In the third type of industrialisation (extremely backward economy), the structure of the economy is such that not even the banks could supply the necessary capital and entrepreneurship for industrialisation. The contribution of banks to capital formation appear to be negligible as a result of some underdevelopment bottlenecks, hence there is a need for the state in such economies to be instrumental to the provision of required finance for capital formation. This was typical of the Russian economy.

There is a strong argument that the financial sector of an economy does matter in economic development and can assist in the breakaway from plodding repetition of repressed economic performance to accelerated growth. But if the financial sector is repressed and distorted, it can intercept and destroy impulses to development. In other words, shallow finance which distorts financial prices, including interest rates and foreign exchange rates will reduce the real rate of growth and real size of the financial system relative to non-financial magnitudes. This hypothesis suggests that interest rate ceilings create a repressed level of private savings. It thus assumes that private savings is quite sensitive to the real returns on physical and financial assets and their stability. According to Ojo (2010), by discouraging or failing to stimulate savings, financial repression results in an inadequate amount of mobilised savings which has to be rationed in an inefficient manner to a small group of favoured borrowers. As postulated by the proponents of the hypothesis, interventions by the authorities in the money and capital markets have the effects of distorting the flow of credits as well as indirectly sustaining the apparent excessive risk aversion of financial intermediaries in developing countries. According to McKinnon (1973), the impact of the authorities’ monetary and fiscal policies on the

capital market is to stifle incentives to save and invest and thereby repress the financial sector in the same manner as tariffs and quotas distort foreign trade. An analysis of this relationship is hereunder done to establish the direction of causality.

Methodology

This study adopts the linear regression function and specifies that the level of real Gross Domestic Product, which is a measure of economic activity, is a function of banks credit to the economy which is a measure of the contribution of banks. This mathematical statement can be written explicitly as:

$$RGDP= f(BC).....(1)$$

Where:

RGDP= real gross domestic product

BC= Bank credit to the economy

F= functional relationship.

Equation (1) can be stated in functional (linear) form as below:

$$RGDP= \alpha + \beta (BC)-----(2)$$

Where:

RGDP and BC are as previously defined

α = intercept

β = slope of the equation

If we include the stochastic (error) term in the equation, we have an econometric equation as stated below:

$$RGDP= \alpha + \beta (BC) +\mu-----(3)$$

For the purpose of this study, the model represented by equation (3) will be estimated.

In an attempt to estimate the model above, regression analysis of the Ordinary Least Square (OLS) estimation technique is adopted. Moreover, three different regressions are performed with the aim of isolating the effect of regulation on the performance of banks’ role towards economic growth.

The first regression covers the period 1970 to 1985 generally referred to as period of intensive banking regulation in Nigeria. The second regression covers the period 1986 to 1994 generally referred to as period of financial liberalization in Nigeria. The third regression covers the period 1995 to 2010 generally referred to as period of guided regulation in Nigeria. The statistical significance of the regression estimates is econometrically tested. Correlation coefficients and coefficient of determination are also estimated to determine the level of relationship between variables in the model explained by the model.

Analysis of Data, Result and Discussion of Results

This section presents the empirical analysis of the study. Three models were estimated, reflecting the

three periods in the Nigeria banking Industry. The first model covers the period of era of intensive regulation in the banking industry in Nigeria (1970 to 1985). The regression Result for model 1 is presented in Table 1 while table 2 shows the Pairwise Granger Causality Tests for this model. The second model covers the period of financial liberalization in the Nigerian banking industry (1986 to 1995). The regression results for model 2 are presented in table3 while table 4 shows the Pairwise Granger Causality

Tests for this model. The third model covers the period 1996 to 2010 regarded as the era of re-regulation or guided deregulation in the Nigeria banking industry. The regression results for model 2 are presented in table 5 while shows the Pairwise Granger Causality Tests for this model are presented in table 6. The variables were logged to prevent spurious result

Era of Intensive Regulation (1970-1985)

Table 1: Regression Result of Model One

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|--------------------|-------------|-----------------------|-------------|-----------|
| C | 4.740197 | 0.313741 | 15.10862 | 0.0000 |
| LNBKC | 0.683384 | 0.039029 | 17.50944 | 0.0000 |
| R-squared | 0.756329 | Mean dependent var | | 10.17157 |
| Adjusted R-squared | 0.953210 | S.D. dependent var | | 0.869617 |
| S.E. of regression | 0.188107 | Akaike info criterion | | -0.387143 |
| Sum squared resid | 0.495379 | Schwarz criterion | | -0.290570 |
| Log likelihood | 5.097145 | Hannan-Quinn criter. | | -0.382198 |
| F-statistic | 306.5806 | Durbin-Watson stat | | 1.951318 |
| Prob(F-statistic) | 0.000000 | | | |

Dependent Variable: LNGDP
 Method: Least Squares
 Date: 10/18/12 Time: 20:37
 Sample: 1970 1985
 Included observations: 16

The result in model one shows that bank credit has positive effect on the GDP in Nigeria. It further implies that one unit change in bank credit is capable of bringing about 68 percent changes in the in GDP of Nigeria. Assuming zero value for bank credit, The Gross Domestic Products will have a value of 4.74. For the goodness of fit for the model (R^2), the result shows that bank credit is capable of explaining the change in GDP by 75.6 percent. The remaining 24.5 % variations are better accounted for by the other omitted variable which is represented with the stochastic error term U_t . The Durbin-Watson statistics of 1.95 suggest that there is no serial correlation in the model. A correlation coefficient of 86.9% shows a strong positive correlation between bank credit and gross domestic product in the period under consideration.

The observed/computed value of the F-statistic (306.5) is greater than the theoretical value of the F-statistic table value with a chosen significant level of

5% and degree of freedom 14 (4.49), hence the Null hypothesis H_0 : that there is no significant relationship between GDP and bank credit is rejected while the Alternative hypothesis H_1 : that there is significant relationship between the GDP and bank credit. The t-test is also used to test for the statistical significance of the explanatory variable on the independent variable. The observed/computed value of the t-statistic (17.5) is greater than the theoretical value of gotten from the t-statistic table with a chosen significance level of 5% and degree of freedom 15 (1.75). This means that the calculated beta value for model one statistically significant. Hence we accept the H_1 : Alternative hypothesis and conclude that bank credit has significant impact on the GDP. We adopt Pairwise Granger Causality Test to determine the direction of causality between banks (measured by banks credit) and economic growth (measured by the Gross Domestic Products in the model). Table 2 below shows the result of the test

Table 2: Pairwise Granger Causality Tests

| Null Hypothesis: | Obs | F-Statistic | Prob. |
|------------------------------------|-----|-------------|--------|
| LNBKC does not Granger Cause LNGDP | 14 | 0.90866 | 0.4371 |
| LNGDP does not Granger Cause LNBKC | | 6.50557 | 0.0179 |

Date: 10/18/12 Time: 20:55
 Sample: 1970 1985
 Lags: 2

The result of the causality shows that bank credit does not absolutely cause GDP, however, GDP cause bank credit in Nigeria. This is a situation of the role of banks being passive in the economic growth process.

Era of Deregulation (1986-1995)

The period is popular for the adoption of the Structural Adjustment Programme in Nigeria and its attendant deregulation of the banking industry. The result for the model is presented in table 3 below.

Table 3: Regression Result of Model Two

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|--------------------|-------------|-----------------------|-------------|----------|
| C | -1.019671 | 1.132135 | -0.900661 | 0.3941 |
| LNBCK | 1.310724 | 0.107650 | 12.17579 | 0.0000 |
| R-squared | 0.648800 | Mean dependent var | | 12.73256 |
| Adjusted R-squared | 0.942400 | S.D. dependent var | | 1.022262 |
| S.E. of regression | 0.245343 | Akaike info criterion | | 0.204539 |
| Sum squared resid | 0.481546 | Schwarz criterion | | 0.265056 |
| Log likelihood | 0.977306 | Hannan-Quinn criter. | | 0.138152 |
| F-statistic | 148.2498 | Durbin-Watson stat | | 1.935778 |
| Prob(F-statistic) | 0.000002 | | | |

Dependent Variable: LNGDP
 Method: Least Squares
 Date: 10/18/12 Time: 20:41
 Sample: 1986 1995
 Included observations: 10

The result in model two shows that bank credit has positive significant effect on the GDP in Nigeria. It further implies that one unit change in bank credit is capable of bringing about 131 percent changes in the in GDP of Nigeria. Assuming zero value for bank credit, The Gross Domestic Products will have a value of -1.02. For the goodness of fit for the model (R²), the result shows that bank credit is capable of explaining the change in GDP by 64.9 percent. The remaining 35.1% variations are better accounted for by the other omitted variable which is represented with the stochastic error term U_t. The Durbin-Watson statistics of 1.94 suggest that there is no serial correlation in the model. A correlation coefficient of 80.5% shows a strong positive correlation between bank credit and gross domestic product in the period under consideration. The observed/computed value of the F-statistic (148.2) is

greater than the theoretical value of the F- statistic table value with a chosen significant level of 5% and degree of freedom 8 (5.32), hence the Null hypothesis Ho: that there is no significant relationship between GDP and Bank credit is rejected while the Alternative hypothesis H1: that there is significant relationship between the GDP and bank credit. The t-test is also used to test for the statistical significance of the explanatory variable on the independent variable. The observed/computed value of the t-statistic (12.17) is greater than the theoretical value of gotten from the t-statistic table with a chosen significance level of 5% and degree of freedom 9 (1.833). This means that the calculated beta value for model two is statistically significant. Hence we accept the H₁: Alternative hypothesis and conclude that bank credit has significant impact on the GDP. Again, we adopt Pairwise Granger Causality

Test to determine the direction of causality between banks (measured by banks credit) and economic growth (measured by the Gross Domestic Products in

the model). Table 4 below shows the result of the test.

Table 4: Pairwise Granger Causality Tests

| Null Hypothesis: | Obs | F-Statistic | Prob. |
|-------------------------------------|-----|-------------|--------|
| LNBACK does not Granger Cause LNGDP | 8 | 4.31449 | 0.1310 |
| LNGDP does not Granger Cause LNBACK | | 1.27340 | 0.3978 |

Date: 10/18/12 Time: 20:53

Sample: 1986 1995

Lags: 2

The Table 4 above lends a support to the regression in Table 3. It shows the causality in between bank credit in Nigeria and the GDP in the period 1986 to 1995. The result of the causality shows that there is no granger causality between bank credit and GDP in Nigeria in the period. This is a situation of zero causality.

Era of Re-regulation (1996-2010)

This period covers 1996 till date. The period is popularly referred to as period of guided deregulation as there returns some elements of regulations while liberalization is not completely jettisoned. This period is covered by the third model and the result is presented below.

Table 5: Regression Result of Model Three

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|--------------------|-------------|-----------------------|-------------|-----------|
| C | 6.648083 | 0.578129 | 11.49931 | 0.0000 |
| LNBK | 0.663363 | 0.040915 | 16.21304 | 0.0000 |
| R-squared | 0.952875 | Mean dependent var | | 15.98436 |
| Adjusted R-squared | 0.949250 | S.D. dependent var | | 0.881645 |
| S.E. of regression | 0.198615 | Akaike info criterion | | -0.271335 |
| Sum squared resid | 0.512821 | Schwarz criterion | | -0.176928 |
| Log likelihood | 4.035009 | Hannan-Quinn criter. | | -0.272340 |
| F-statistic | 262.8628 | Durbin-Watson stat | | 2.159054 |
| Prob(F-statistic) | 0.000000 | | | |

Dependent Variable: LNGDP

Method: Least Squares

Date: 10/18/12 Time: 20:44

Sample: 1996 2010

Included observations: 15

The result in model 3 presented in Table 5 above shows that bank credit has positive significant effect on the GDP in Nigeria. It further implies that one unit change in bank credit is capable of bringing about 66.3 percent changes in the in GDP of Nigeria. Assuming zero value for bank credit, The Gross Domestic Products will have a value of 6.65. For the goodness of fit for the model (R^2), the result shows

that bank credit is capable of explaining the change in GDP by 95.3 percent. The remaining 4.7% variations are better accounted for by the other omitted variable which is represented with the stochastic error term U_t . The Durbin-Watson statistics of 2.15 suggest that there is no serial correlation in the mode (since the value is still in the neighborhood of 2). A correlation coefficient of 97.6% shows a strong

positive correlation between bank credit and gross domestic product in the period under consideration. The observed/computed value of the F-statistic (262.8) is greater than the theoretical value of the F-statistic table value with a chosen significant level of 5% and degree of freedom 13 (4.67), hence the Null hypothesis H_0 : that there is no significant relationship between GDP and bank credit is rejected while the Alternative hypothesis H_1 : that there is significant relationship between the GDP and bank credit. The t-test is also used to test for the statistical significance of the explanatory variable on the independent variable. The observed/computed value

of the t-statistic (16.2) is greater than the theoretical value of gotten from the t-statistic table with a chosen significance level of 5% and degree of freedom 14 (1.76). This means that the calculated beta value for model three is statistically significant. Hence we accept the H_1 : Alternative hypothesis and conclude that bank credit has significant impact on the GDP. Again, we adopt Pairwise Granger Causality Test to determine the direction of causality between banks (measured by banks credit) and economic growth (measured by the Gross Domestic Products in the model). Table 6 below shows the result of the test.

Table 6: Pairwise Granger Causality Tests

| Null Hypothesis: | Obs | F-Statistic | Prob. |
|-----------------------------------|-----|-------------|--------|
| LNGDP does not Granger Cause LNBK | 13 | 3.69472 | 0.0730 |
| LNBK does not Granger Cause LNGDP | | 0.57908 | 0.5823 |

Date: 10/18/12 Time: 20:49
 Sample: 1996 2010
 Lags: 2

The Table 6 above, present the causality result of GDP and bank credit in the period of 1996 to 2010. The result shows that the GDP granger-cause bank credit in Nigeria in the period 1986 to 1995. The result however shows that the bank credit does not granger cause GDP in Nigeria in the period. This is a situation of the role of banks being passive in the economic growth process.

Discussion of Results

The results of the regression of the three models covering 1970 to 1985 show that the impact of banks in the growth process is positive and significant. The beta values in all the three models estimated are positive and statistically significant as tested. The estimated parameters have been statistically tested to be significant hence confirming our expectation.

Evident from the results of the regression of the models is the fact that regulations of banks have negative impacts on the roles they perform in the economy. This is confirmed by the higher beta value in the era of liberalized banking (1986-1995) than in the era of intensive banking regulations (1970-1985) and era of guided deregulation. This is more explained by the negative constant value in the model explaining the era of deregulation meaning that there would not have been growth at all had there not been bank credit in the period. Hence, the impact of banks is felt most under the regime of financial

liberalization. The argument of Shaw (1973) that the financial sector of an economy does matter in economic development and can assist in the breakaway from plodding repetition of repressed economic performance to accelerated growth can be said to apply to Nigeria.

The Pairwise Granger Causality Test used to measure the direction of causality between banks and economic growth however shows that under the eras of intensive banking regulations and guided deregulations, bank credits do not cause gross domestic product. Rather, Gross Domestic Products actually cause bank credit. This measure shows that banks cannot be said to be active in the growth process in Nigeria. Banking in Nigeria could therefore be classified as a demand following one since banking development only reacts to the growth in the real sector. Banks here do not have the cradle to grave philosophy of the German banks typified in the Gerschenkron analysis. During the period of deregulation (1986 to 1995) in our analysis, the pairwise granger causality test reveals no causality between banks and economic growth.

Summary, Conclusion and Recommendations

The results of the models estimated show that banks have positive impacts on economic growth in Nigeria. The tests of significance conducted (both t-test and F-test) show that the impact of banks on

economic growth is significant in all the banking eras studied but in varying degrees. The impact is however greater under the regime of deregulation than under intensive regulations and guided deregulation regime. From the findings from data analysis, the following conclusions are made in line with the objectives of the study set out earlier:

1. Banks contribute to economic growth in Nigeria irrespective of the regulatory regime
2. Bank regulations have negative impact on banks contribution to economic growth in Nigeria. This is evident from the fact that the model explaining the contribution of banks to economic growth in the deregulation era has a negative constant which explains that without bank credit, gross domestic product will be negative in that period while the constant parameter for the other models are positive.
3. The impacts of banks in the economic growth process in Nigeria are felt most under the regime of deregulation. This stems from the fact that the beta value of the regression model for this period (1986-1995) is much higher than under the intensive regulation regime (1970 to 1985) and the regime of guided deregulation (1996 to 2010). It can then be said that the hypothesis of financial repression applies to Nigeria.

Consequent upon the result from this study, the following recommendations are made:

1. Although the impacts of banks are felt most under the regime of deregulation in the Nigerian economy, the banking industry should not be totally deregulated. This is because of the fact that the Nigerian economy witnessed major collapse of banks during the period. Hence, a guided deregulation, as is practised now, is recommended for the country.
2. Management of banks should be encouraged by monetary authorities to adopt entrepreneur friendly policies in granting credit to ensure speedy growth of the Nigerian economy.
3. Periodic review of the various regulations affecting banks is recommended as this will enable the Central Bank of Nigeria to know when to amend, repeal or strengthen such regulations for better performance of the banking sector.

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