Financial Sector Reforms and Economic Growth: Evidence from Nigeria

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ABSTRACT

This research analyzed the impact of financial reforms on economic growth in Nigeria. The scope of this research covered the period between 1986–2016. This period was chosen because liberalization of Nigeria financial sector began in 1986 with the introduction of Structural Adjustment Programme (SAP), which policy thrust included deregulation of interest rates. Secondary data were collected from Central Bank of Nigeria statistical bulletin and National Bureau of Statistics publications. This research used econometrics analysis. Ordinary Least Squares (OLS) technique and Cochrane Orcutt iterative method were used to analyze the data. The results show that implemented financial reforms during the period has positive impact on economic growth. This research recommends that government should enhance financial reforms and macroeconomic stability and be sensitive to the behavior of interest rates especially, lending rates for overall economic growth in the country.

Keywords: financial reform, economic growth, econometrics analysis

INTRODUCTION

The financial sector plays an essential part in the realization of macroeconomic objectives of a nation. One of the essential objectives of macroeconomic policies is to achieve a high rate of economic growth. Because of the strategic nature of financial sector in the economy, especially in developing countries, it is the most regulated in most economies (Sanogo & Moussa, 2017).

The financial segment of the economy mobilizes funds and allocates them to the real sector for productive investment. It also attains economic growth as well as development. The financial system is not just a set of institutions in facilitating payment and extending credit. It involves all functions that allocate financial resources to their ultimate users. In other words, it constitutes the essential institutions that make a market economy function efficiently. It also contains a set of separate but mutually supporting institutions which are critical to successful performance of the economy (Iyiegbuniwe, 2010).

Economic growth entails an increase in a country’s total output of goods and services continuously over a period. As a result, there are more available commodities and services for everybody in the economy such as the increase in per capital income (Iganiga, 2010). A high rate of economic growth is a major policy objective of most governments. This is because it provides an opportunity for a higher standard of living, reduces poverty, and allows redistribution of income to reduce the gap between the rich and the poor. Therefore, part of the hurdles before any nation, especially underdeveloped and emerging economies, is to attain a high rate of economic growth.

Financial sector plays crucial roles towards the attainment of economic growth of a country. Any reform formulated to reposition the sector will have multiplier effects on other parts of the economy. This is expected to herald a new era of economic growth.
and more opportunities for the citizen (Eta & Anabori, 2015).

Formulation and implementation of financial reforms in the country started in 1952. It was when the colonial government enacted the first banking ordinance. For over 20 years after independence, Nigeria financial system was under strict control of the government. This was evident in the ceiling of deposit and lending rates, the direction of credit to preferred sectors, high reserve requirements for banks, and lack of free entry and exit into the banking sub-sector (Onayemi, 2011). Unfortunately, these policies produced unintended consequences during the period. The failure of monetary and exchange rate policies to achieve the desired economic objectives under the control regime led to the implementation of the World Bank and International Monetary Fund economic policies in Nigeria. They suggested financial reform measures known as Structural Adjustment Programme (SAP) in 1985/1986. Since then, reforms that cut across all strata of Nigeria financial system had been initiated and implemented.

Taking a critical look at the country’s financial sector, many issues and opposing views have been expressed in the ways and manner series of reforms have been implemented over the years. According to Omankhanlen (2012), some of the major problems are seen in the activities of Nigeria financial system. These include inadequate attention to the needs of the productive sector of the economy, inadequate policy reforms to stimulate financial sector development, and weak regulatory administration in a deregulated financial environment. Thus, these make financial institutions not to comply with rules and guidelines from regulatory agencies. They are less transparent and ethical in the handling of their portfolios of assets. Moreover, there is excessive penchant by banks on granting credits for general merchandise instead of growth-enhancing sectors like power, agriculture, manufacturing, and others. There is overconcentration on the financing of imported finished goods, instead of raw materials and capital goods.

A considerable number of literatures are available on the nexus between financial reforms and economic growth. These literatures cover both theoretical and empirical aspects in developed, emerging, and third world economies. Some of the reasons for the necessity of financial reforms also abound in literatures. The idea that financial reforms and development promoting economic growth was first put forth by Schumpeter (1911) as cited by Abdallah (2016). He stated that theories relevant to this postulation included Shaw financial deepening hypothesis, financial market theory, and efficient market hypothesis.

Then, Mackinnon (1973) and Shaw (1973) in Adegbite (2015) affirmed some of the theoretical arguments concerning the link between financial reforms and economic growth. They argued that if the financial sector was deregulated, it could be the key stimuli for economic growth and development. Therefore, they opined that a well-developed financial system through reforms would improve the efficiency of financial intermediation by reducing monitoring and transaction costs. This will eventually lead to economic growth and development both in the short and long run respectively.

Eta and Anabori (2015) used cross sectional data. Those were pooled into panel data set by adopting linear regression model technique. It examined the effect of financial reforms on economic growth in Nigeria. They found out that credit claims of deposit money banks affected economic growth in positive ways. Meanwhile, interest rate charged by banks on lending had negative relationship with economic growth. Therefore, they recommended that management of banks in Nigeria should enhance their capacity in credit analysis and loan administration, so that financial reforms would be more effective.

Gibson and Tsakalotos (1994) in Sanusi (2011) also emphasized the significance of financial sector reforms on funds intermediation, accumulation of capital, and economic growth. They posited that it was deregulation of financial segments of the economy in many emerging economies in South America, South East Asia, and Eastern Europe that led to the quantum leap in their economic growth and development.

Agbor (2016) investigated the nature and extent of the impact of financial sector reforms on economic growth in Cameroon. Data were gathered from 1980 to 2015. The researcher adopted Vector Autoregressive (VAR) technique. It was discovered that more than 70% of variations in real GDP was accounted for lagged financial sector development indicators. The research concluded that there was a strong positive long run relationship between financial sector development and economic growth in Cameroon.

Sulaiman, Oke, and Azeez (2012) reiterated the significance of financial segment deregulation for investible funds mobilization, efficient allocation of resources to the real sector, and economic growth. They stated that the need to eliminate restrictions from the financial segment of many countries was well deserved. Such courses of actions led to growth of the economy in the long run. Therefore, this was the motivating force behind financial deregulation policies in many countries across the world especially in Asia, Africa, and South America.

Owusu and Odhiambo (2015) equally expressed the view that the ability of the financial system to enhance the liquidity of securities and stimulate savers to hold their wealth in productive assets (debentures, stocks, and preferential stock) would be greatly enhanced. It led to increase in productive capacity and investment with a resultant increase in economic growth.

Umejiaku and Obumneke (2017) investigated the effectiveness of financial reforms towards economic growth in Nigeria. They used Error Correction model approach. The findings showed that continuous fall in real deposit rate led to low mobilization of credit in the economy. This resulted in not too impressive
performance of GDP. Therefore, it was recommended that reforming of interest rates stimulated savings, credit, and investment level.

Obamuyi and Olorunfemi (2011) used the co-integration and error correction model on time series data from 1970-2006. They discovered that reform of the financial segment of the economy especially interest rates deregulation had a positive and significant impact on economic growth. Their findings confirmed the existence of a positive long-run relationship between financial reforms and economic growth. They also suggested that government should engage in the formulation of growth generating reforms that would stimulate economic growth.

Adu, Marbuah, and Mensah (2013) examined the relationship between financial development and economic growth in Ghana. The research adopted Autoregressive Distributed Lag (ARDL) bound testing approach. They used GDP per capita as a growth indicator. They discovered that there was a long run relationship between economic growth and financial reforms. They suggested that financial sector policy makers should focus on reforms. It would stimulate credit expansion and investment level and increase productive capacity of the economy and per capita income.

Moreover, Hernandez and Parro (2008) used data that covered the period between 1960-2005 for Latin America countries. Using cross-section econometric model, they highlighted the leading roles played by financial institutions and policy reforms on economic growth. They found out that in spite of reform initiatives taken by governments of these countries, the economic performance of South America countries during the 1990s was not impressive. However, Chile economy grew almost 7% per year during the period. The better performance achieved by Chile in comparison to other Latin America countries during the period could be explained by the formulation of growth-enhancing policies and more efficient financial institutions. They consequently suggested that other countries in the region should emulate Chile’s model by strengthening their financial institutions. If this were done, it would increase the investment level and boost economic growth and development.

Empirical study conducted by Mwenda and Mutoti (2011) in Zambia used a two-step procedure to investigate the impact of financial sector deregulation on banks performance and economic growth. They revealed that banking system cost efficiency was generally increased over time. However, the overall performance of banks was not encouraging. Their findings showed conflicting results that were not in compliance with theoretical expectations.

There have been conflicting results from different studies, especially developing economies on the relationship between financial reforms and economic growth. However, from most studies, there is a causal link between financial sector reforms and economic growth. Most of the previous researchers focus on the relationship between financial reforms and economic growth in Nigeria using single variable for the period they covered. Sulaimon, Oke, and Azeez (2012) focused on financial sector liberalization using interest rates. Similarly, Owusu and Odhambo (2015) concentrated on the liquidity of long-term securities as a stimulus for economic growth through financial reforms.

This research focuses on the long-term impact of financial reforms on economic growth in Nigeria using four macroeconomic variables. This study use data that cover period of 30 years. This period covers post financial sector liberalization period and series of financial reforms that have been implemented in Nigeria.

The main objective of this research is to investigate the impact of financial sector reforms on economic growth in Nigeria. Three specific objectives are formulated for this research. First, it is to look at the causal relationship between banking sector reforms and economic growth in Nigeria. Second, it is to find out the contributions of financial sector to the productive sector of the economy in Nigeria. Last, it is to establish the long run impact of financial sector reforms on the Nigerian economy.

This research is guided by a hypothesis, “there is no significant relationship between financial sector reforms and economic growth in Nigeria.” It is expected that the outcome of this research will assist policy makers of Nigeria financial sector. Thus, it can identify performance indicators variables that need furthers reforms (such as lending rates) for adequate performance of the financial sector to attain the desired economic growth.

**METHODS**

Ordinary Least Squares (OLS) technique and Cochrane Orcutt iterative method are used. It examines the relationship between financial reforms and economic growth. Data were collected using the following financial indicators and economic growth indices. Loans, credit to private sector, investment, and lending rate are used to proxy financial reforms and gross domestic product to proxy economic growth.

This research has one dependent variable and four explanatory variables. The model is adapted from the OLS method. It is stated as follows.

\[ Y_t = B_0 + B_1x_t + U_t \]  \hspace{1cm} (1)

In specific, this research model is specified that Gross Domestic Product (GDP) is the dependent variable. Meanwhile, the explanatory variables are commercial/deposit money banks loan and advances (LOAN); Credit to Private Sector (CPS); investment/capital formation (INV); and lending rate (LEND). Thus, the model is as follows.

\[ GDP = F(LOAN, CPS, INV, LEND) \]  \hspace{1cm} (2)
Then, the model is specified in a linear estimation form. Moreover, the a priori expectations are $B_0 > 0$, $B_1 > 0$, $B_2 > 0$, $B_3 > 0$, $B_4 > 0$. A priori expectation refers to the sign and size of the parameters of a model as postulated by economic theory. It is the expected outcome of the relationship between two or more variables in a model (Obademi, 2016). The model can be seen as follows.

$$GDP = B_0 + B_1 LOAN + B_2 CPS + B_3 INV + B_4 LEND + U_t$$

(3)

Where,

$B_0$ = Intercept
$B_1, B_2, B_3$ and $B_4$=$The various slopes coefficients$
$U_t$ = Stochastic error term

This approach is adopted because of good results by Omankhanlen (2012) when it was used for similar research. Moreover, Eta and Anabori (2015) used a similar method and resulted in robust results.

The data used for this study are from secondary sources. The sources of data include Central Bank of Nigeria Statistical Bulletins and Federal Bureau of Statistics publications. The data cover the period between 1986 and 2016 (30 years). Five variables (economic growth indicator and financial sector performance indicators) are used for this research. GDP, LOAN, CPS, INV, and LEND are used as proxies for economic growth and financial sector performance indicators. This is because they represent variables that link financial sector together with the real sector to achieve economic growth. Moreover, these are the available variables from Central Bank of Nigeria and National Bureau of Statistics publications for economic growth and financial sector indicators for the period covered in this research.

RESULTS AND DISCUSSIONS

The data analysis was initially carried out with OLS technique. The variables are GDP, LOAN, CPS, INV, and LEND. Table 1 shows the results of the analysis.

<table>
<thead>
<tr>
<th>VARIABLE</th>
<th>COEFFICIENT</th>
<th>T-STAT</th>
<th>PROB</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>9,152949</td>
<td>52,40471</td>
<td>0,0000</td>
</tr>
<tr>
<td>Loan</td>
<td>-8,01E-09</td>
<td>-3,213976</td>
<td>0,0651</td>
</tr>
<tr>
<td>LCPS</td>
<td>2,371103</td>
<td>25,87914</td>
<td>0,0000</td>
</tr>
<tr>
<td>INV</td>
<td>-1,32E-08</td>
<td>-3,966683</td>
<td>0,0212</td>
</tr>
<tr>
<td>LEND</td>
<td>0,004053</td>
<td>0,494475</td>
<td>0,8040</td>
</tr>
<tr>
<td>R2</td>
<td>R-2 F-STAT (PROB) D-W TSTA 0,99 0.98 767,5033 (0,0000) 1,39</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

From Table 2, autocorrelation which has been previously noted in the OLS is eliminated after Cochrane-Orcutt method is applied. The results show that all the coefficients have their expected relationship except INV and LOAN due to their negative values. However, there are respectively statistically significant. Investment and loan have negative values because of the high cost of funds (LEND) and high rate of inflation in the Nigerian economy. These factors result in the
slow growth of loans to the real sector and investment level, even in subsequent years being lower than the preceding years. A similar trend was observed in a research conducted by Omankhalem (2012).

The coefficient of determination (R2) from the results is 0.99. Meanwhile, the adjusted R2 is also 0.99. This shows that changes in all independent variables can explain about 99% of the systematic variation in the dependent variable. Durbin Watson value of 1.82 shows the autocorrelation has been corrected. However, Cochrane-Orcutt method causes the loss of one observation period in the data.

Apriori affirmation for OLS shows there is a negative relationship between LOAN and GDP. It signifies that they are inversely related. An increase in LOAN will reduce GDP by -8.01E-09. This does not agree with the apriori expectation. However, there is a positive relationship between CPS and GDP. It signifies that they are linearly related. An increase in credit will increase the GDP by 2.371103. This relationship agrees with the apriori expectation.

Moreover, there is a negative relationship between INV and GDP. It shows that they are inversely related. Increased investment will reduce the GDP by -0.003005. This does not support the apriori expectation. Then, there is a positive relationship between LEND and GDP. It implies that they are linearly related. An increase in lending rate will increase the GDP by 0.004053. This does not agree with the apriori expectation. Therefore, it is only CPS that agrees with the apriori expectation and Loan, INV, and LEND do not (B1< 0, B2> 0,B3< 0, B4> 0).

Next, the t-test is statistically significant for LOAN, CPS, and INV at 3.213976, 25.87914 and 3.966683 respectively. However, LEND is insignificant at 0.494475. The t-test is statistically significant at 1% level using the probability statistics of 0.000000. Similarly, R2 is a very good fit. It shows that over 99% of the variation in the GDP is accounted for within the model. Meanwhile, less than 1% is not accounted due to the error term.

The R bar-square is also a very good fit, because it shows that over 98% of the variation in the GDP is accounted for. Less than 2% is not accounted for within the model. This is due to the error term. Moreover, the Durbin Watson is 1.39. This shows that there is autocorrelation. A test of overall significance of the model shows that the overall model is significant at both 1% and 5% levels of significance.

The results reveal that there is a positive relationship between banking reforms and economic growth as measured by LOAN. It has t-statistics of 3.121368 and P-value of 0.0568. The results show that LOAN is significant to economic growth.

Nigeria financial sector also makes significant contributions to the real sector of the economy, during the period covered through CPS. It has t-statistics of 25.10817 and P-value of 0.0000. It shows that CPS is significant to economic growth.

Then, the financial sector reforms have resulted in positive changes to Nigerian economy through increase in overall level of investment. It has t-statistics of 3.108379 and P-value of 0.0076. This reveals that INV has a significant impact on economic growth. Therefore, the hypothesis which states that there is no significant relationship between financial sector reforms and economic growth in Nigeria is rejected.

The results of this research conform with the findings of similar research conducted by Omankhanlem (2012). Omankhanlem (2012) used similar variables and discovered that financial sector reforms had significant impact on economic growth in Nigeria. Similar results were also achieved by Obamuyi and Olorunfemi (2011). They found that interest rates reforms (one of the variables used in this research) had significant impact on economic growth.

The results have also shown that there is a need for formulated financial reforms to be promptly implemented. Hence, the intended outcomes of policy reforms can be effectively achieved on time. Policymakers should also pay attention to reforms measures that will increase deposit money banks loans to the real sector of the economy and overall level of investment and reduce interest rates being charged on credit. This research also confirms the long held assumption of the positive relationship between financial reforms and economic growth.
While carrying out this research, some grey areas were discovered that are militating against the achievement of desirable results of financial reforms process. From the findings, some recommendations are made. There should be proper planning before financial reforms are carried out. An improvement in financial intermediation process, through properly formulated reforms should be strengthened to stimulate savings, lending, and investment. The general public should always be sensitized on the goals and objectives of financial reforms, so that they will not take divergent actions in opposition to the goals of financial reforms program.

Moreover, policy makers should consider putting in place regulatory and supervisory framework for financial institutions. This should be done before the introduction of liberalization and reforms program. This can achieve macroeconomic stability and economic growth which are the ultimate goals of financial reforms.

CONCLUSIONS

The findings of this research work show that financial sector reform is a major factor that determines the level of economic growth in Nigeria. It has also been confirmed that there is a causal link between reforms carried out in the financial sector and the Nigeria economy. Therefore, it can be stated that the implemented reforms program in the financial sector, especially banking sub-sector, is very crucial to the sustenance and growth of the economy. This is evident in the fact that total credits to the private sector still increases in spite of the major challenges posed by government regulations, administrative bottlenecks, and other economic factors.

There is a limitation in this research. The data for the period before 1986 are not included in the analysis. This does not give room for comparison of economic growth in pre and post financial reforms periods.

Further research on the link between international financial reforms across the world, globalization, and their impact on economic growth of developing countries should be carried out. The research will help developing countries to benefit from lessons of financial reforms carried in different countries and world economies liberalization and deregulation.

REFERENCES