

THE IMPACT OF FINANCIAL DEEPENING ON ECONOMIC GROWTH IN NIGERIA (1986-2009)

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ABSTRACT

The aim of this study is to ascertain the influence of financial deepening on economic growth, and to examine the causal relationship between economic growth and financial development in Nigeria. The study used Quantitative research design and applied time series econometrics technique and ordinary least square regression model to estimate the relationship between financial deepening and economic growth, while controlling for other variables specified in the model. The study found that financial development over the years impacted significantly on economic growth in Nigeria; the growth of the financial depth is significant to economic growth even though it is relatively low over the years, and that economic growth causes financial development in Nigeria. The implication of the findings is that although the financial structure had enhanced the level of financial savings and thus affected the level of financial deepening positively, the financial system has not been efficient in resource allocation, especially credit allocation and a high level of monetization of the economy, and that the low level of financial deepening does not lie in the inefficiency of the liberalization theory; but on the macroeconomic inconsistencies that accompanied its implementation. It is therefore recommended that the financial liberalization policies be strengthened through effective and efficient regulation and supervisory framework to ensure good risk management, corporate governance and stemming of systematic crisis in the system.

Keywords: Financial Deregulation, Quasi-equity, Financial Deepening, Economic Growth.

INTRODUCTION

Background of the Study

For more than two decades after independence, the Nigerian financial system was repressed, as evidenced by high interest rate and credit expansion, selective credit policies; high reserve requirements, and restriction on entry into the banking industry. This situation inhibited the function of the financial system and especially constrained its ability to mobilize savings and facilitate productive investment. This situation led to the financial liberalization measures adopted with the introduction of structural adjustment program in 1986. Nzotta and Okereke (2009) assert that the link between financial sector stability and growth is explained by increased market depth, which potentially increase market efficiency and reduce risks through elimination of weak institutions.

The reforms in the financial system in Nigeria which heightened with the 1986 deregulation affected the level of financial deepening and the relevance of the financial system to economic growth and development. However, the rapid globalization of the financial market since then and the increased level of integration of the Nigerian financial system to the global system have generated interest on the level of financial deepening that has occurred (Nnanna and Dogo, 1998). The central focus is that a high level of financial deepening is a necessary condition for accelerating growth in an economy (Nzotta, 2004). Thus a high level of financial deepening should sustain and provide basis for moderate lending rates and high level of financial intermediation.

Aspiel (1990), Nnanna and Dogo (1998) and Nzotta (2004) maintain that financial deepening generally entails an increased ratio of money supply to Gross Domestic Product. Financial deepening is thus measured by relating monetary and financial aggregates such as M_1 , M_2 and M_3 to Gross Domestic Product (GDP). The logic here is that the more liquid money is available to an economy, the more opportunities exist for continued growth of the economy. Financial deepening encompasses the increase in the stock of financial assets or the ability of financial institutions in general to effectively mobilize financial resources for development (World Bank, 1994 cited in Nzotta and Okereke, 2009). This view accepts the fact that a financial system's contribution to the economy depends on the quality and quantity of its services and the efficiency with which it performs them.

Financial deepening is an outcome of real finance policy and the broadening of the market; hence it needs to be accompanied with appropriate policies for financial reforms and regulations to effectively contribute to economic growth and development of the economy. Thus, deepening the financial system and repositioning it for growth and integration into the global financial system in conformity with the international best practices remains the best approach to economic growth.

While the McKinnon-Shaw hypothesis of financial liberalization has been a subject of debate in the literature, little attempt has been made to examine its impact on financial development/financial intermediation and economic growth. It is therefore expedient to examine whether the significant switch in the regulatory regime generated substantial financial depth predicted by the financial liberalization paradigm, and the impact it has made on economic growth in Nigeria.

STATEMENT OF THE PROBLEM

The financial reforms since 1986 in Nigeria have evolved various strategies to encourage financial intermediation and mobilization of savings for investment which promotes economic growth and development. These reforms seek to act proactively to strengthen the market mechanism, remove systematic and financial crisis, ensure a more liberal financial system and increased financial depth. However, these policy shifts have not been able to adequately achieve the desired level of financial depth required for productive activities that will ensure efficient growth and development of the economy (Nzotta and Okereke, 2009). The inability of the financial system to effectively utilize the identified critical factors that affect the level of financial development and its relationship with economic growth and development has been observed as a problem.

Since the 1990s, a burgeoning empirical literature has illustrated the importance of financial sector development for economic growth. Despite the growing consensus, however, we find that the link between finance and growth has weakened considerable over time (Rousseau and Wachtel, 2007). At this time that financial liberalization spread around the world, the influence of financial sector development on economic growth has diminished. This however is the same in Nigeria where despite the financial liberalization policies put in place to encourage financial deepening, the financial depth over the years has remained relatively low (Nzotta, 2004). The index (M_2/GDP) which has become a measure of the financial deepening that has occurred has been the issue of theoretical debate on the ability of financial liberalization policies to effectively remedy the situation of low financial depth in Nigeria, hence the need for this study.

OBJECTIVES OF THE STUDY

The broad objective of this study is to examine the impact of financial deepening on economic growth in Nigeria.

The specific objectives of the study are:

- i. To ascertain whether the level of financial development in the financial system over the years have actually had significant influence on economic growth in Nigeria.
- ii. To ascertain if the financial deregulation aimed at enhancing the growth rate of financial depth (M_2/GDP) has had any significant impact on the level of economic growth in the country.
- iii. To examine the causal relationship between economic growth and financial development using respective indicators.

Research Hypotheses

To accomplish the objectives of the study, the following hypotheses were formulated.

- H_{01} : The level of financial development over the years has not positively impacted significantly on economic growth of Nigeria.
- H_{A1} : The level of financial development over the years has positively impacted significantly on economic growth of Nigeria.
- H_{02} : The growth rate of the financial depth (M_2/GDP) has had no significant positive impact on economic growth of the country.
- H_{A2} : The growth rate of the financial depth (M_2/GDP) has had significant positive impact on economic growth of the country.
- H_{03} : There is no significant causal relationship between the financial development indicators and economic growth.
- H_{A3} : There is significant causal relationship between the financial development indicators and economic growth.

VIEW OF RELATED LITERATURE

THEORETICAL FRAMEWORK

Financial repression is said to exist when government tax and otherwise distort their domestic financial keeping real returns on financial assets low and shifting the nexus of decision-making to the government (Fry, 1982; McKinnon, 1988 and Athukorala and Rajapatriana, 1993 cited in Anyanwu, 1995). The seminal works of McKinnon (1973) and Shaw (1973) to highlight the adverse effects of "financial repression" on economic growth. Anyanwu (1995) outlines three principal channels through which the hypothesized negative effect of financial repression works. The first is the Shaw's "debt-intermediation hypothesis" whereby real deposit rates produce financial deepening resulting in a shrinking in the volume of institutional credit. The second is the McKinnon "complimentary hypothesis" whereby the process of self-finance within enterprise is reduced because low real yields on deposits increase the cost of accumulating the necessary money for investment in preparation for making future investment. The third is the postulation that low deposit rates of interest produce a bias in favour of current consumption and against future consumption resulting in lower savings and investment levels as compared with socially optimal levels, given the high money growth rate and saving behaviour.

Athukorala and Rajapatriana (1993) in Anyanwu (1995) assert that the remedy to financial repression is to be found in its conceptual framework "financial liberalization"/"financial deregulation" – keeping positive real rates more uniformly high real rates of interest within comparable categories of bank deposits and loans by eliminating undue reserve requirements, interest ceilings and mandated credit allocations on the one hand, and stabilizing the price level through appropriate macro-economic measures on the other. Thus, this McKinnon-Shaw financial liberalization paradigm concludes that, with such financial liberalization; savers and investors would better "see" the true scarcity price of capital, and hence reduce the great dispersion in the profitability of investing in different sectors of the economy. The theoretical framework for this study is the financial liberalization theory. This theory explains the role of financial market in economic growth. McKinnon (1973) and Shaw (1973) introduced financial liberalization as a process and strategy to achieve faster economic growth and development. The implication of this theory therefore, is that financial deepening would contribute most significantly to economic growth, provided that monetary authorities did not interfere in the operation of the financial institutions and the financial structure generally.

VIEW OF EMPIRICAL STUDIES

Many studies have investigated financial deepening and economic growth in developing and developed countries and below are their views.

Chikanda and Khatkhat (1993) used correlation graph to examine the relationship between economic growth and financial intermediation for eleven African countries. Financial intermediation is measured by the ratio of currency, demand deposits, and time and savings deposits to GDP. They found no definite relationship between economic growth and financial intermediation for the countries either individually, or for the whole group.

Chikanda (1986) used cross-section analysis to estimate the correlation between financial deepening and economic growth by using data for 20 countries in Africa from 1969-1983. The degree of financial intermediation is measured using the ratio of monetary liabilities (M_1 , M_2 and M_3) to GDP. For the full sample, all the monetary liabilities are negative and only the ratio of M_3 to GDP is statistically significant. When the countries are split into high and low income countries, some of the coefficients of the monetary liabilities are positive while some are negative. However, they are all insignificant and offer no support to the growth enhancing capabilities of financial intermediation.

Chikanda (1992) used time series econometrics estimation to see how interest rate liberalization has affected economic growth in Kenya. The author used data from 1970 to 1989 and the results showed a negative and significant coefficient for the real interest rate. The sample was then split into two sub-periods: 1970-1979 and 1980-1989. The real interest had a negative and significant coefficient for the 1970-1979 periods, but was positive and significant for the period 1980-1989; thus offering no robust result of the effect of interest rate liberalization on growth.

Chikanda and Zeijvous (1998) in their study on financial deepening and economic growth in both developing and developed countries using the standard growth regression equation and fixed panel effect estimation model found out that financial deepening has a strong impact on growth as long as a country can avoid financial crisis and that financial deepening causes growth as long as the relationship is not exploited by

policy makers who try to take advantage of the benefits of financial deepening without adequate precautions in place.

Rousseau and Wachtel (2007) in their empirical work on growth-finance nexus of countries that have or have not experienced financial sector crisis for the period 1960 to 2003 and using the King and Levine (1993) growth regression model and panel estimator technique found out that: financial deepening has a positive effect on growth if not done in excess; rapid and excessive deepening as manifested in a credit boom can be problematic even in the most developed markets because it can weaken the banking system and bring inflationary pressures; and the finance-growth relationship remains once financial crisis episodes are removed from the system.

Anyanyu (1995) studied Structural Adjustment Program, Financial Deregulation and Financial Deepening in sub-Saharan African economies for the period 1960-1992 using the ordinary least square and two stage least square regression model with the panel fixed effect estimator technique, found out that interest rate deregulation did not positively affect financial deepening as predicted by the McKinnon-Shaw paradigm. The results rather suggest that the lackluster performance of the financial deregulation comes principally from its half-hearted nature and macro economic policy inconsistencies that accompanied its implantation.

Erdal, Okan and Behiye (2007) studied Financial Development and Economic Growth: Evidence from Northern Cyprus. Using the Ordinary Least Square Estimation Method (OLSEM) and fixed and dynamic effect estimation technique found out that there is a negligible positive effect of financial development on economic growth of Northern Cyprus.

Nzotta and Okereke (2009) investigated financial deepening and economic development in developing countries for the period of post financial reforms in Nigeria. Using the stepwise ordinary least square and two stage least square regression models, the study revealed that there is a significant relationship between financial deepening and economic development.

Ndebbio (1998) carried out a study on financial deepening, economic growth and development using evidence from selected sub-Saharan African countries. Using the standard growth equation, two stages least square regression model and panel fixed effect estimation technique, found out that there is a significant relationship between financial development and economic growth.

ANALYSIS OF THE FINANCIAL LIBERALIZATION POLICIES AND FINANCIAL MARKET DEPTH IN NIGERIA

Prior to the introduction of Structural Adjustment Program (SAP) in Nigeria in 1986, the Nigerian financial sector was characterized by fixed and relatively low interest rates, mandatory sectoral allocation of bank credits, and quantitative ceilings on bank credit to the private sector, all of which engendered distortions and inefficiencies.

With the introduction of SAP, financial liberalization measures were adopted, including the deregulation of the foreign exchange market, the deregulation of interest rates, rationalization of credit controls, liberal licensing of new banks, and institutional and regulatory changes (Ogwuma, 1993). Financial deregulation as used here refers to the deliberate and systematic removal of regulatory controls, structures and operational guidelines which may be considered inhibitive of orderly growth, competition and efficient allocation of resources in the financial system (Ojo, 1991). The principal aim were to stabilize the economy in the short run, induce the emergence of a market-oriented financial sector for effective mobilization of financial savings and efficient resource allocation, to increase competition, strengthen the supervisory role of the regulatory authorities and streamline public sector relationship with the financial sector.

Popiel (1990) analyzes the Nigerian financial market depth from the qualitative point of view and argued that the financial markets are deep, if the following are obtainable:

- i. That the domestic financial markets must be linked together through various financial institutions or instruments who function as market maker or intermediaries.
- ii. That the financial market must encompass a diversity of sub-markets trading in different financial instruments.
- iii. That the domestic financial markets must be mature and integrated into the international financial market.
- iv. Finally, the financial market must offer savers and investors a broad range of financial instruments, which differ in terms of liquidity, yield, maturity and level of risks, including debts, equity and in between quasi-equity instruments.

Nzotta (2004: 191) opines that the Nigerian financial market depth is shallow and supported his opinion by conclusively arguing as follows:

- i. That the range of financial instruments are limited and dominated by government securities in terms of volume.
- ii. There are limited linkages in the market and information is constrained by various institutional structures and factors.
- iii. There is virtually a limited integration of the domestic financial markets with the international financial markets, and
- iv. Even though the reforms in the financial markets have not enhanced the number of market participants, the level of their efficiency has not improved significantly, thus, constraining the intermediation process.

PROBLEMS OF FINANCIAL DEEPENING IN DEVELOPING COUNTRIES

From the empirical studies available, the following has been adduced as the reasons why financial deepening is poor in developing countries.

Ju and Wei (2007) contend that the low level of foreign direct investments, shallow capital market, distortions in interest rate, and weak association between financial openness and financial deepening are the factors responsible for poor financial deepening in developing countries.

Nzotta (2004) identifies the low level of corporate governance in financial institutions as one of the problems that have sustained poor financial deepening in the system. He however argued that in a world of frictionless capital market and various country risks, the least developed financial system is completely bypassed by international fund flows.

Furthermore, Yan (2007) states that a developing country with a poor financial infrastructure may experience large outflow of foreign capital which in real terms sustain poor financial deepening.

Anyanwu (1995) attributes the macro-economic policy inconsistencies that accompanied implementation of liberalization policies such as high and unstable exchange rates, huge and high fiscal deficits and high inflation rates which according to him operate through the interest rate variables and inflation rate to constitute hurdles for the financial deepening in Nigeria. Villanueva and Mirakhor (1990) attributed the problem of poor financial deepening to macro-economic instability and inadequate bank supervision.

FINANCIAL DEVELOPMENT AND ECONOMIC GROWTH

Even though a growing body of work reflects the close relationship between financial development and economic growth, it is possible to encounter especially empirical researches evidencing all possibilities as positive, negative, no association or negligible relationship. In this respect, it is important to establish the relationship between financial development and economic growth in Nigeria by conducting empirical analysis.

Since the seminal work of Patrick (1966), which first postulated a bi-directional relationship between financial development and economic growth a large empirical literature has emerged testing this hypothesis. Two trends in this literature can, however, be identified. The first, testing the relationship between economic growth and financial development, frequently adopts a single measure of financial development and test the hypothesis on a number of countries using either cross section or panel data techniques (Demetriades and Hussein, 1996). The second trend in the empirical literature is to examine the hypothesis for a particular country using time series techniques (Odedokun, 1996; Agung and Ford, 1998; and Wood, 1993).

Other empirical studies on financial development and economic growth include Levine and Zervos (1998), Rousseau and Wachtel (2007), and Ndekwa (1998). Thus, financial deepening needs to be accompanied with appropriate policies for financial reforms to effectively contribute to economic growth and development of the country.

The studies by McKinnon and Shaw (1973) observed that financial repression is correlated with sluggish growth in developing economies. Such countries, according to Nnanna and Dogo (1998) are typically characterized by high and volatile inflation, distorted interest and exchange rate structures, low savings and investments and low financial intermediation, as interest rates do not reflect the cost of capital. Various studies investigated the relationship between financial system structure and development and the level of economic growth in Nigeria. These studies include Akinola and Akinola (2007), Ayida (2007), Ndebbio (1998) and Oyejide (1994).

The studies relied on money market indicators and established a positive and significant relationship between financial development and economic growth.

EFFECTS OF FINANCIAL REFORMS ON DEVELOPING COUNTRIES

Through the removal of the elements of financial repression, particularly controlled interest rates, financial sector reform is expected to lead to higher nominal and real interest rates. This is the postulate of the McKinnon-Shaw hypothesis. A higher real interest rate encourages people to substitute consumption for savings (the substitution effect). On the other hand, the higher interest income on savings makes savers to achieve their savings target with lower stock of savings (the wealth or income effect). The two effects operate in opposing directions and the net outcome would depend on which one that dominates. The underlying logic of McKinnon-Shaw doctrine is that the substitution effect would outweigh the wealth effect. Financial savings will further be boosted by a shift in the savers wealth portfolio from non-financial assets to financial assets (asset substitution effect).

Contrary to McKinnon-Shaw premise, the increased real interest rate may not necessarily lead to improved private savings. In very poor countries for instance, the level of income could be so low that households spend very high proportion of their earnings on basic needs. In such a case, even with high real interest rates, very little (if any) proportion of income could be saved. This implies that the McKinnon-Shaw proposition would therefore be more relevant in rich nations. A recent study of this proposition (Ogaki, Ostry and Reinhart, 1996) found that 10% rise in real interest rate leads, in the long-run, to a 66.7% rise in savings in high income countries but only 10% rise in very low income countries. This basic needs explanation and even the tendency for dissaving in Africa might explain the insensitivity of savings to real interest rates in some African countries (Oshikoya, 1992 for the case of Kenya).

Also, in an under-banked economy, where the financial market are rudimentary, with large size of financial intermediation taking place in the informal sector, savings may not be sensitive to real interest rates. The informal financial sector is of course large in most of sub-Saharan Africa (Aryeetey and Udry, 1994). For savers who operate in the formal financial sector, a history of government interference in the deposit market or growing incidence of bank distress could scare them from saving in financial instruments despite the lure of rising real interest rate. Also, innovations in financial products following financial liberalization, such as consumer credit could induce a rise in the consumption habit of people, thereby reducing their savings (a liquidity effect).

Even when financial reforms lead to increased savings, it may not promote growth. The use to which savings is committed is an important linkage. Economic activities would be stimulated if more of the growth in savings is channeled to the productive activities. On the contrary, the gains to economic growth through increased credit to the private sector would be sidelined if the increased savings is used to finance public sector deficit (Wijnbergen, 1983). Also, if the increase in interest rate is excessive, the lending portfolio of banks could become riskier just as firms would face harder times in meeting interest and capital repayment commitments. Baring some of these possible developments, financial liberalization would naturally improve the financial intermediation process and lead to more investment, productivity and increased economic growth (McKinnon, 1988).

Measures of financial sector development are used to assess the effectiveness of financial reforms. Some of these measures according to (Biscat, Johnson and Sundarajan, 1992) are as follows:

- i. The growth of private financial asset as measured by M_2/GDP , which indicates the liquidity position of the financial system. Their growth rates and ratio to GDP show the degree of monetization and financial market development.
- ii. The flow of credit to the private sector from the financial institutions.
- iii. The growth of financial institutions credit to the private sector relative to the growth of private deposits with financial institutions.

Other general indices used to assess the performance of the financial system and the effectiveness of liberalization policies include, the trend of real interest rates, real GDP growth rates, number and types of institutions, and the spread between lending and deposit rates which show the efficacy of the financial intermediation process.

METHODOLOGY

Research Design

This research used the Quantitative research design. A set of regression estimation techniques was applied to resolve the three hypotheses stated with the aim of examining the relationship between financial deepening and economic growth in Nigeria. This type of design was used for a similar study by Odedokun (1996) for Nigeria, Lyon and Murinde (1994) for Ghana, Agung and Ford (1998) for Indonesia, and Wood (1994) for Barbados. Given the secondary nature of the study, the population shall be taken to be all the deposit money banks that operated in the country from 1986 to 2009. The data generated from the CBN and Federal Bureau

