IMPACT OF DEREGULATION ON FINANCIAL SECTOR DEVELOPMENT IN NIGERIA

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Abstract

The financial system in an economy is known to serve as the lubricant which facilitates the smooth running of the economy. The Nigeria financial sector has undergone several reforms since 1987 when the Structural Adjustment Programme was introduced. This paper investigates the impact of these reforms on the development of the sector using correlation analysis and Granger Causality test. The result obtained showed that deregulation has failed to enhance the development of the financial sector. It is therefore, suggested that the supervisory authorities should be strengthened to enhance peopleøs confidence in the sector; so that the sector can perform its intermediation role effectively.

Keywords: Financial reforms, Financial sector, Deregulation, and Nigeria JEL Classification: E 58, G18, G28

Introduction

The financial system has been described as the gamut of financial institutions, financial instruments and financial markets. It performs the important role of financial intermediation as well as capital formation in the economy and performs the role of managing the payment system and facilitating the effectiveness of monetary policy in an economy. There is the debate in the literature on whether the financial system should be regulated or deregulated in order to achieve financial sector development and hence economic growth. Some economists (McKinnon, 1973, and Shaw 1973) have argued that financial system liberalization is the only means of developing the financial sector and ensuring the attainment of economic growth and development while others (Williamson and Mahar, 1998) are of the opinion that financial liberalization would lead to financial instability and crises, hence the need for financial sector regulation. The argument however, weighs much in favour of the former hence many developing countries have engaged in financial system liberalization of varying degrees especially following the recommendation of the IMF and the World Bank in the 1980s. In line with the reasoning above, the Nigerian financial sector has also undergone liberalization with the aim that this would promote the growth of the sector and facilitate economic growth and development. However, economic growth in Nigeria has been epileptic and oil has been the main driver of the economy.

The pertinent question that comes to mind is whether the various reforms programmes that have occurred in the Nigerian financial sector led to the growth of the sector or not. In other words, does financial sector development follow the McKinnon ó Shaw hypothesis? The main objective of this paper is thus to investigate the impact of financial sector deregulation on financial sector development.

Some previous works have examined the growth of the financial sector in Nigeria, although tangentially (Nzotta and Okereke, 2009, and Soyibo and Adekanye, 1992 among others). However, these works have focussed on only one measure or indicator of financial sector development, which bothers on financial deepening, the ratio of broad money supply to GDP (M2Y). This measure is however inadequate since it covers the overall size of the financial sector only, leaving out the issue of allocation of credit between private and public sector. Moreover, the earlier works on Nigeria investigated the effect of financial sector development on economic growth without examining the impact of deregulation of the sector on its development. This paper therefore fills these gaps by evaluating the effect of financial sector deregulation on the sectorøs development. In addition, other measures of financial sector development which cover the relative importance of players in the sector and the efficiency in the allocation of the societyøs resources, which were not stressed by earlier works were also examined. These other measures of financial sector development are the ratio of domestic credit to GDP, ratio of private sector credit to GDP and the ratio of private credit to domestic credit. To address this objective of the paper, we examined the various indicators of financial system development in the economy under regulation and deregulation and compared their performances under the different eras. Moreover, correlation analysis and Granger Causality tests were also performed. The rest of the paper is structured as follows: Section two, which follows this introduction presents the background to the study while section three presents the literature review. Section four contains the data description; sources and methodology while section five presents and interprets the result. The last section contains the findings and conclusion.

Background

In Nigeria, the financial system comprises bank and non-bank financial institutions, which are supervised by the Federal Ministry of Finance, Central Bank of Nigeria, Nigerian Deposit Insurance Corporation, Securities and Exchange Commission, and the National Insurance Commission, among others. The Nigerian financial system has undergone various reforms in order to enhance its efficiency and promote its growth. The period 1959 ó 1986 was regarded as the era of banking regulation in Nigeria. This era began with the enactment of the Central Bank of Nigeria Act of 1959 which gave legal backing to the establishment of the Central Bank of Nigeria (CBN). According to Soyibo and Adekanye (1992), the Act also gave substantial incentive to the development of the money and capital markets in Nigeria. This Act regulates the establishment of new banks as it regulated the operation of existing ones. Foreign banks operating in Nigeria during this time were also obliged to be incorporated in the country. This regulation lasted till 1986, since then the sector has witnessed different types of reform policy. The period between 1986 and 1995 was regarded as expansionary banking era because during this time, the number of new entrants into the banking industry increased significantly such that by 1993 the number of banking firms rose by 200% from its 1985 figure (Ndako, 2010). The abysmal performance of the economy

between 1980 and 1986 indicates that the economy did not do well under regulation hence the justification for deregulation.

Period of Financial System Deregulation

A key component of the structural adjustment programme (SAP) is to liberalize the financial system so as to make the system operate on the basis of the market system and also to encourage competition in the system so as to attract foreign investors as well as local investors. It is believed that if the financial sector is liberalised it will be able to mobilise the necessary funds for development and also that liberalization will allow funds to be channelled into the most efficient use in line with the McKinnon and Shaw argument. Financial liberalization is recommended as a policy to overcome the problems of financial repression hence with the adoption of the structural adjustment programme, the adopted the policy of financial deregulation culminated into the policy of deregulation of interest rates in 1987, wherein the CBN ceased to prescribe interest rate chargeable on loans and advances or payable on deposits.

Deregulation also led to the privatization of most of the federal government banks. The period of deregulation saw the establishment of many banks and other financial institutions as the policy made it lucrative to own and run a financial institution. Between 1986 and 1989, a total of 38 new banks opened their doors while 25 others were granted licences to start operation (Soyibo and Adekanye, 1992b). Between 1987 and 1991 the licensing procedures for banks were relaxed, allowing politically connected people to obtain licenses and operate banks despite having no obvious qualifications or relevant experience. During this time 84 new banks were established. The increased number of banks overwhelmed the examining capacity of the CBN/NDIC hence many banks failed to comply with prudential guidelines. During this time the number of commercial banks and other financial institutions such as finance houses, loans and savings associations as well as community banks rose phenomenally. As at 1990 the number of banks in Nigeria was well over 100 with still over 20 licensed to begin operation at that time. The period of deregulation came with other strategic changes in the banking sector. Among such is the creation of the Nigerian Deposit Insurance Corporation (NDIC) by Decree No. 22 of 15th June, 1988. The NDIC was charged with responsibility of insuring bank deposits, ensuring safe banking practices through effective supervision, and assisting the CBN to formulate banking policies with a view to ensuring the stability of the financial system (NDIC, 1989).

To strengthen the operations of banks the minimum paid up capital for banks were increased from September 1989 from ₦10 million to ₦20 million for commercial banks and from ₦6 million to ₦12 million. In 1990, the CBN introduced new capital adequacy requirement under which the bankøs minimum required capital and reserves are based on risk weighted assets, as in the Basle accords, in addition to the previous requirement, under which banksø minimum adjusted capital were computed as a percentage of loans and advances. In 1991, the minimum paid up capital of commercial banks was raised from ₦20 million to ₦50 million while that of merchant banks was raised to ₦40 million. This was later raised to ₦5 billion for commercial banks. To enable Nigerian banks to compete effectively in international businesses, the capital base of banks was raised to ₦25 billion by the CBN in 2004. With this upward review of capital base, some banks have to merge while some were bought over in order to meet the requirement. However the banks which could neither merge nor bought over, but were unable to meet the new capital requirement were

liquidated. The regulation on capital requirement greatly reduced the number of banks in Nigeria presently to less than forty.

The financial sector witnessed another reform with the ascendancy to office of the new CBN Governor, Sanusi Lamido Sanusi, who organised rescue programme for some banks who were about to collapse following allegation of corporate mis-governance and probably as a result of the global economic meltdown. Between 1980 and 1986 when SAP was introduced, the average deposit rate was 7.9% but this increased to 13.47% on the average between 1987 and 2003. Similarly inflation rate, which was 16.0% on the average between 1980 and 1986 rose to 26.3% on the average between 1987 and 2003. Banking system credit to the private sector, which was ₦13,315.30 on the average between 1980 and 1986 rose to ₦340,357.23 between 1987 and 2003 while the credit to the public sector increased from ₦13,315.53 to ₦141,972.84 within the same period. However, when this is deflated by the size of the economy, another picture is displayed.

Literature Review

The financial system in any economy serves as financial intermediary between those with surplus fund and those with deficit in order to facilitate production, trade and capital formation, it serves as the õlubricant of the economyö. The fund in the financial system is expected to be managed in accordance with specified statutory requirements laid down by government or regulatory authorities. The argument for regulation rests on the need for soundness of the financial system and sustenance of confidence of the public in the financial system (Soyibo and Adekanye 1992). Moreover, it is argued that the financial system is characterised by information asymmetry hence there is need for government regulation to prevent financial system instability (Knutsen, 2001). Information asymmetry in the financial system and the ensuing credit market failure can create inefficiency at both micro and the macro level, via underinvestment (Mankiw, 1986 and Hubbard, 1995), and overinvestment (Bernanke and Gertler, 1989).

Soyibo and Adekanye (1992a) argue that imperfections and externalities existing in the financial markets of developing countries are much more pronounced than those of the developed economies thus justifying regulation in the developing countries. Apart from the issue of asymmetry of information, other arguments put forward for the need for regulation of the financial system in developing countries include the need to redirect credit into sectors or sub-sectors deemed to have high social rates of return and low private/market rate of return; and the need to increase the flow of income towards identifiable õdisadvantagedö groups in the population (Soyibo and Adekanye, 1992a). However, what is observed in many developing countries is that the purpose of regulation is defeated as the performance of the economies has not justified these reasons. Rather, the governments of many of these nations have used financial system regulations to keep interest rate at low level (sometimes negative real interest rate) to minimise the cost of government debt thus sustaining their unsustainably high budget deficits. What is experienced in these countries are distortions like suppression of the equity market and inducement of present consumption at the expense of savings. The regulation of the financial system according to McKinnon and Shaw results in financial repression which is characterised, in Nigeria by the policies of directed credit and interest rate ceiling. This is believed to cause some imperfections in the operations of the financial market.

According to McKinnon (1988) financial repression in the form of usury restrictions on interest rates, heavy reserve requirements on bank deposits, and compulsory credit allocations, interact with ongoing price inflation to reduce the attractiveness of holding claims on the domestic banking system. It was postulated by McKinnon (1973) and Shaw (1973) that the fragmentation of the capital market resulting from financial repression also has adverse consequences for the quality and quantity of capital formation.

Financial sector development in, which is the ratio of private credit to domestic credit, is meant to capture the aspect of domestic asset distribution of an economy. A rise in this ratio is expected to be an indication of improvement in financial development. The four measures used above were also used by Quartey and Prah (2010) with respect to Ghana.

In many studies, interest rate spread has been used as a measure of financial sector many empirical works is measured using the ratio of money/liquid liabilities to GDP or deposit to GDP (Quartey and Prah, 2008). A higher ratio is usually associated with greater financial liquidity and depth. This may however be misleading because the ratio may decline rather than rise as financial system develops because people have more alternatives to invest in longer-term or less-liquid financial instruments. Moreover this measure only focuses on the size of the financial sector without consideration for the efficiency of the sector in allocating the societyøs resources or the issue of accessibility. Hence in this study, we shall use four measures of financial sector development. The first of these measures is the ratio of broad money to GDP (M2Y). The ratio of broad money to GDP is designed to capture the financial depth or the real size of the financial sector in a growing economy and it is expected to be rising over time if the financial sector develops faster than the real sector economy.

The second measure is the ratio of domestic credit to GDP. This represents the domestic assets of the financial sector. It is expected to increase in response to improved price signalling. The third measure, which is the ratio of private credit to GDP, isolates the credits issued to the private sector as opposed to credits to the government and excludes credit by the central bank. This measure was proposed by Beck et al (1999). Although this measure is the most preferable measure of financial development in the literature, it does not directly measure the amelioration of financial and transaction costs. Higher level of this variable can be interpreted as depicting higher levels of financial services and therefore greater financial intermediary development. The last measure deregulation. This is so because with financial sector deregulation, interest is allowed to be dictated by market forces rather than being fixed by the authority. This is obvious in the Nigeria case. Between 1980 and 1986, prior to the deregulation of the financial sector, maximum lending rate was 9.5% in 1980, this was adjusted to 10% in 1981 and was 12% in 1986. However, by 1987, with deregulation, it jumped up to 19.2% and fluctuated widely thereafter, increasing and decreasing at some other times as dictated by market forces. Similar trend is observed with the interest rate on saving. This was fixed at 6.5% in 1980 and 1981. It was adjusted to 8% in 1982 and 1983, and increased to 10% in 1984 to 1986. But immediately after deregulation, it went up to 15.8% in 1987 and continued to move thereafter in line with market forces.

Figure 1: Interest Rate Spread in Nigeria

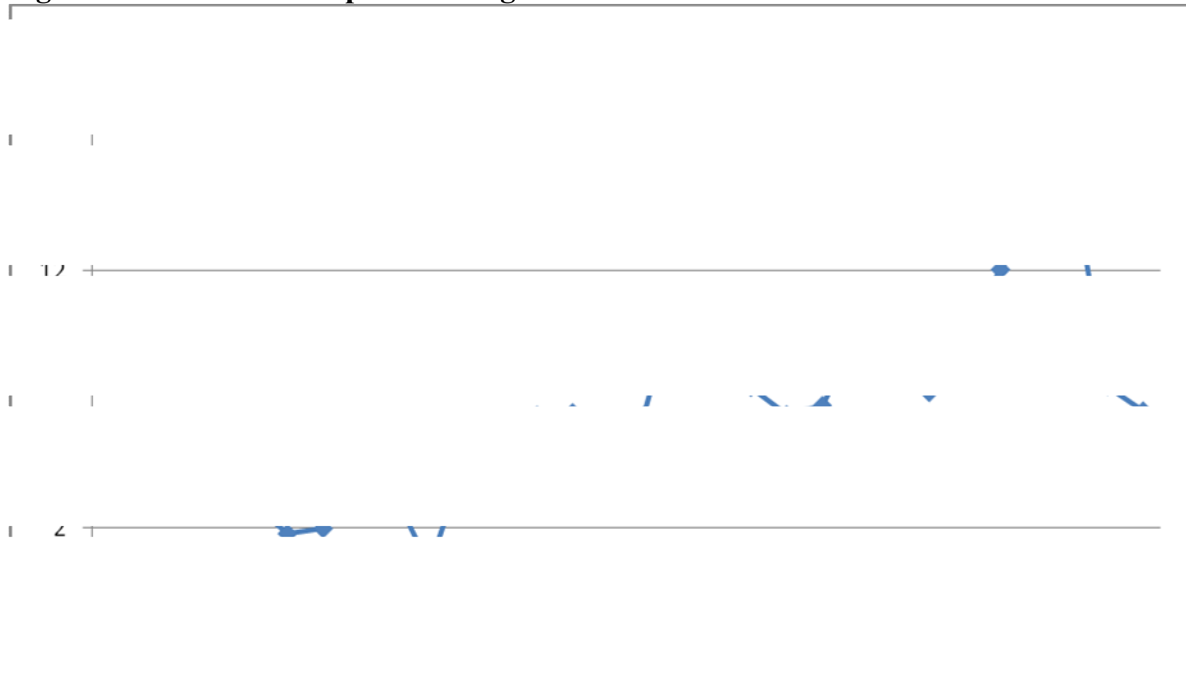


Figure 1 above shows the interest rate spread in Nigeria. The spread was low between 1980 and 1986, hovering around 4%. Although, it nosedived between 1988 and 1989, it went up afterwards reflecting the increasing gap between lending and deposit rates. This indicates that the spread was high during the deregulation era. It went as high as 16% in 2007.

Data Sources and Methodology

The description of data used and their sources are presented in Table 1 below. The variables and percentages are expressed and they span the period 1980 to 2007.

Table 1: List of variables, their definition and Sources

VARIABLE	DEFINITION	SOURCE
M2Y	Broad Money (M2) to GDP ratio	Statistical Bulletin, 2003 and 2009
DCY	Domestic Credit to GDP ratio	Statistical Bulletin, 2003 and 2009
PCY	Private Credit to GDP ratio	Statistical Bulletin, 2003 and 2009
PCDC	Private Credit to Domestic Credit Ratio	Statistical Bulletin, 2003 and 2009
SPREAD	The difference between maximum lending rate and Saving deposit rate	Statistical Bulletin, 2003 and 2009

Method of Analysis

In this paper the descriptive approach is used. Data are presented in tables and graphs for easy understanding. Simple averages of financial sector development indicators are presented to make comparison between regulation and deregulation eras. Inferential statistics such as correlation coefficients and granger causality test were used to determine

the correlation between deregulation and financial sector development. While the correlation coefficients shows the degree of association between deregulation and financial sector development, the granger causality test shows the direction of the causation between deregulation and financial sector development.

Presentation and Analysis of Results

Trend in the ratio of Private Credit to GDP (PCY)

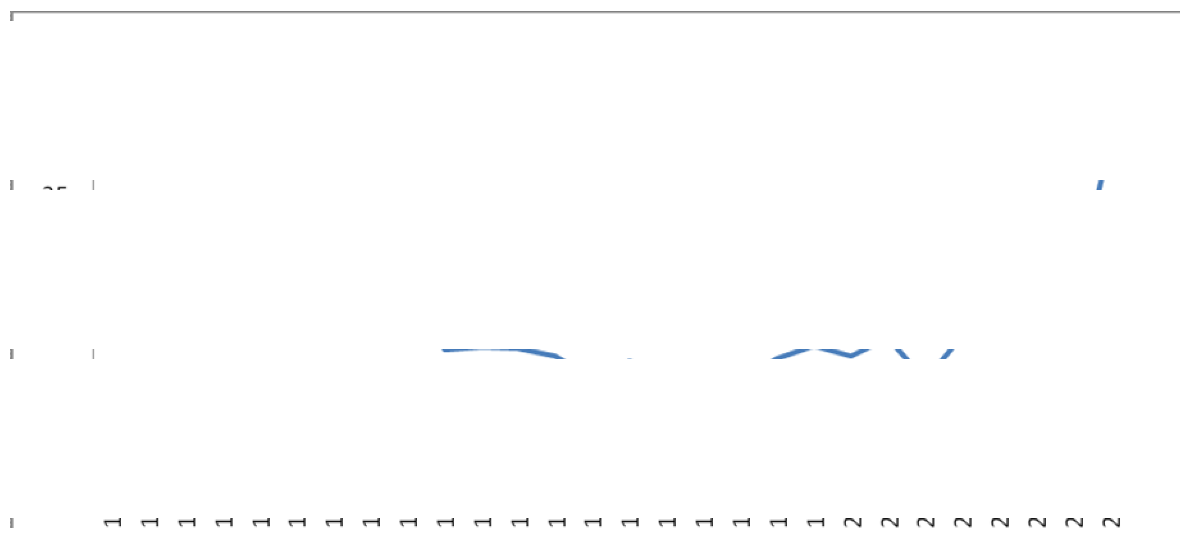
An examination of the trend in the ratio of private credit to GDP in Nigeria during the period of analysis reveals that this ratio which was 14.3% in 1980 increased to 21.9% in 1982 but declined to 18.9% in 1985 before rising to 23.8% in 1986. With the introduction of SAP and deregulation of the financial sector, the ratio declined marginally to 23.4% in 1987 and continued to decline afterwards. On the average, this ratio was 19.98% between 1980 and 1986 but fell to 15.5% on the average between 1987 and 1993. It fell further on the average to 15.1% between 1994 and 2007 (see Table 2).

Table 2: Averages of Financial Sector Development Indicators

Variable	1980 - 1986	1987 - 1993	1994 - 2009
M2Y	31.69	22.83	20.13
DCY	41.36	29.82	22.99
PCY	19.98	15.47	15.14
PCDC	50.34	52.48	68.24

The trend in this indicator does not show that the deregulation enhances financial sector development since this ratio was lower under deregulation compared to the era of regulation.

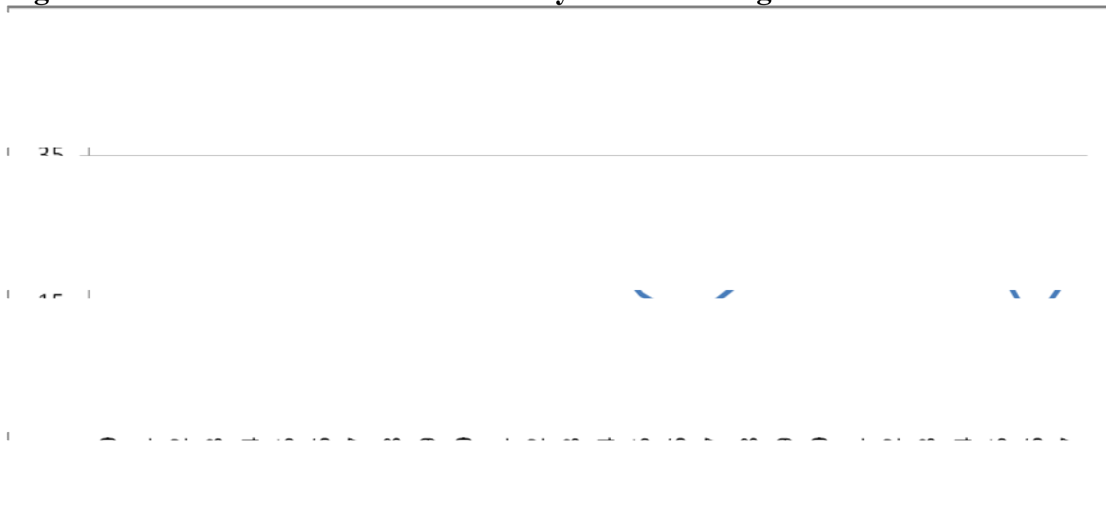
Figure 2: Trend in Ratio of Private Credit to GDP in Nigeria



Trend in the ratio of broad Money to GDP (M2Y)

When the ratio of broad money to GDP (M2Y) is considered, one would observe that this ratio, which was 28.6% in 1980 rose to 32.3% in 1986 but the ratio declined afterwards. On the average, M2Y was 31.7% between 1980 and 1987 but declined to 22.8% on the average between 1987 and 1993. M2Y declined further between 1994 and 2009, it became 20.1% on the average during this period. M2Y is graphed in Figure 3 below. Using this indicator; the level of financial sector development has not followed a consistent trend.

Figure 3: Trend in Ratio of Broad Money to GDP in Nigeria



A higher level of M2Y to GDP is generally associated with greater financial liquidity and depth. The trend in this ratio does not indicate that deregulation favours financial sector development in Nigeria. It is however important to note that this ratio may decline rather than rise as a financial system develops because people have more alternatives to invest in longer-term or less-liquid financial instruments however gyration of this ratio does not indicate a definite direction which makes it difficult to use as a measure of financial development.

Trend in Domestic Credit to GDP (DCY)

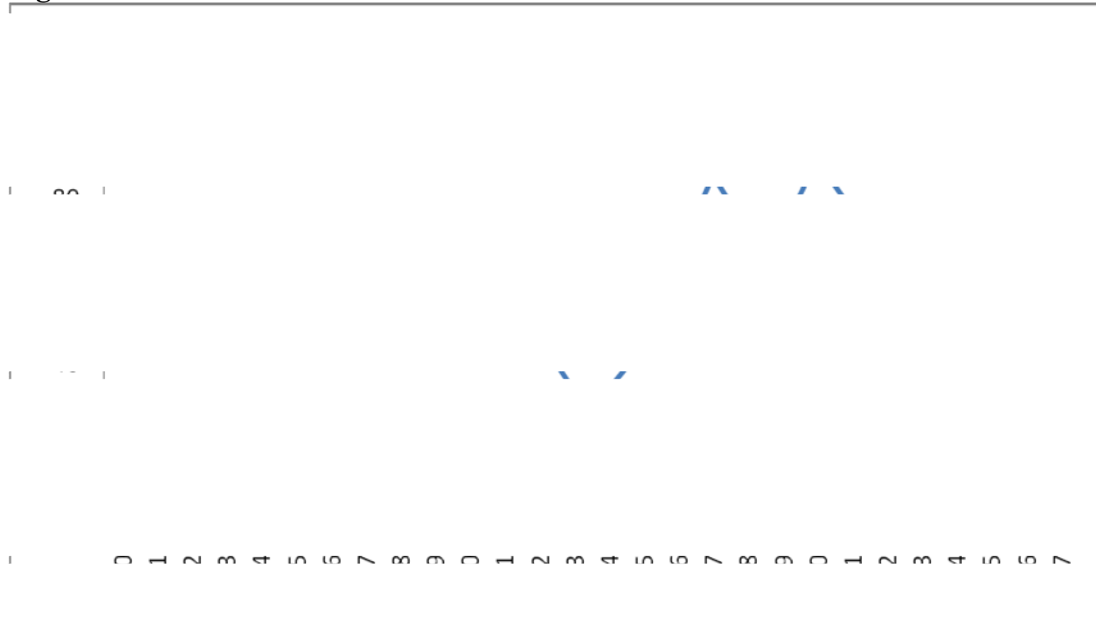
The ratio of domestic credit to GDP showed similar trend as M2Y. DCY initially rose between 1980 and 1983 but declined marginally between 1985 and 1986. The ratio fell significantly afterwards and rose marginally between 1990 and 1993. It fell sharply after 1993 only to start picking up around 2004 (see Figure 4). This ratio (DCY), which was 41.4% on the average between 1980 and 1986 declined to 15.5% between 1987 and 1993. The ratio declined further to 15.1% between 1994 and 2009. The trend in DCY also fails to show that deregulation favours financial sector development.

Figure 4: Trend in Ratio of Domestic Credit to GDP in Nigeria

Trend in Private Credit to Domestic Credit (PCDC)

The only ratio that showed a different pattern is the ratio of private credit to domestic credit. This ratio was 50.3% on the average between 1980 and 1986 before rising to 52.5% between 1987 and 1993. The ratio went up further to 68.2% between 1994 and 2009. The trend in this ratio shows that the ratio of domestic credit going to the private sector is rising over time and was higher during the deregulation era compared to the regulation period (see Figure 5). The performances of other indicators showed opposite pattern. For the other three indicators, the ratios were higher during regulation era compared to the deregulation era.

Figure 5: Trend in the Ratio of Private Credit to Domestic Credit



Correlation Analysis

The result for the correlation analysis is presented in Table 3 below. The result indicates negative correlation between the spread and all indicators of financial sector development (except private to domestic sector credit). This implies that as the sector becomes more deregulated, the indicators of financial sector development worsen, suggesting that financial sector deregulation actually fails to promote the development of the financial sector.

Table 3: Correlation Analysis Result

	DCY	PCDC	PCY	SPREAD	M2Y
DCY	1	-0.71	0.85	-0.70	0.76
PCDC	-0.71	1	-0.28	0.45	-0.37
PCY	0.85	-0.28	1	-0.70	0.81
SPREAD	-0.70	0.45	-0.70	1	-0.63
M2Y	0.76	-0.37	0.81	-0.63	1

The Granger Causality Test

The Granger Causality test result is presented in Table 4. The result of the test fails to show that financial sector deregulation granger cause financial sector development. In all cases, the null hypothesis that financial sector deregulation does not granger cause financial sector development were accepted (since the probability is greater than 10% in all cases)

Table 4: Granger Causality Test Result

Null Hypothesis:	Obs	F-Statistic	Probability
SPREAD does not Granger Cause DCY	30	0.78	0.47
DCY1 does not Granger Cause SPREAD		3.56	0.05
SPREAD does not Granger Cause PCDC	30	2.15	0.15
PCDC does not Granger Cause SPREAD		1.22	0.32
SPREAD does not Granger Cause PCY	30	1.28	0.30
PCY1 does not Granger Cause SPREAD		3.87	0.04
SPREAD does not Granger Cause M2Y		0.20	0.82
M2Y does not Granger Cause SPREAD	30	3.46	0.05

Findings

All indicators of financial sector development (except the ratio of private credit to domestic credit) fail to show that financial sector deregulation has enhanced the development of the financial sector. The correlation analysis suggests negative relationship between financial sector deregulation and financial sector development. Moreover, the Granger causality test failed to show that financial sector deregulation granger cause financial sector development. This may be due to the fact that some degrees of regulation still exist in the Nigerian financial system, in form of required reserve and cash reserve ratios. In addition, the setting aside of some percentage of banks for profit for small and medium scale enterprises and the proposed ceiling on daily cash withdrawal are forms of regulation. Besides, the public sector dominates the financial system as huge proportion of bank credit goes to the public sector.

Conclusion

From the analysis carried out in this paper, it is difficult to establish that financial sector deregulation has enhanced the development of the financial sector. It can thus be concluded that deregulation of the financial sector has not enhanced the growth and development of the financial sector, therefore the McKinnon Shaw Hypothesis cannot be said to hold in Nigeria during the period of analysis. To promote the growth of the financial sector as well as the real sector of the Nigerian economy, there is need to strengthen the supervisory abilities of the regulatory bodies. This will go a long way in building confidence in the financial sector and enables the sector to discharge its financial intermediation role efficiently.

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