

Financial Sector Reforms and Savings Mobilization in Nigeria (1980 – 2013)

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ABSTRACT

This study examined the impact of financial sector reforms on savings mobilization in Nigeria between the period of 1980 and 2013. It specifically examined the effects of financial sector reforms variables namely ratio of domestic credit given to the private sector to Gross Domestic Product, prime lending rate, ratio of broad money supply to Gross Domestic Product. Others include percentage contribution of financial sector to Gross Domestic Product, Inflation and Dummy variable (a measure of pre-reform and post reform periods) on savings mobilization (measured by domestic savings ratio) in Nigeria. Using the ordinary least square (OLS) estimation technique, the time series data used in the study were sourced mainly from CBN statistical bulletin and Annual Report and Statement of Account. The result obtained from the regression analysis confirmed that financial sector reforms variables used in the study have been effective in enhancing savings mobilization in Nigeria. Hence the need for policy makers and regulators to initiate policies that will ensure stability of the financial sector, reduce lending rates and increase credit to the private sector.

Keywords: Financial Sector; Reforms; Savings Mobilization

INTRODUCTION

The financial sector in Nigeria plays a vital role in savings mobilization and financial intermediation. Thus, the introduction of several reforms in the sector is to reposition, deepen and promote its efficiency. McKinnon (1973) postulates that an increase in holding financial assets (financial deepening) by the public promotes savings mobilization, which leads to higher levels of savings, investment, production, growth, and poverty alleviation. Financial market intervention by governments in developing countries is believed to

limit the potential of financial markets to mobilize savings for growth and development (Ziorkluei et al., 2001).

Since the introduction of the Structural Adjustment Program (SAP), Nigeria has been undergoing financial sector reforms in one form or the other. These reforms include bank liberalization of 1986-1990; universal banking carried out from 2001-2010; banking consolidation of 2004-2005; stress testing and regulator intervention of 2009, the reversal (reform) of the universal banking of 2010 and the recent sterilization of 50 per cent of public sector funds in deposit money banks (DMBs). Despite these significant reforms and (some insignificant) less reforms, the instability and inefficiency of the banking system has been exposed and particularly savings rate in Nigeria has been affected.

Available statistics from the Central Bank of Nigeria show that financial reforms have not significantly influence savings in Nigeria. For instance, before the introduction of structural adjustment program (SAP) in 1986, savings ratio was estimated at an average of 8.68 percent. However, the introduction of SAP which lasted till 1990 did not have much effect on savings at 7.11 percent. The period of banking consolidation (i.e. 2004-2005), saving ratio was 8 percent, this increased slightly to 11.7 percent from 2001-2010, when the universal banking system was introduced. However, the significant rise in savings during the period of regulatory intervention may be attributed to some factors such outside the financial sector.

Table 1.1: Profile of Financial reforms and Domestic Saving Ratio

Period	Reforms	Domestic Savings Ratio
1980-1986	Pre-SAP	8.68
1987-1990	SAP	7.11
2001-2005	Universal Banking System	11.74
2004-2005	Banking Re-capitalization	8.00
2009-2012	Regulatory Intervention	19.5

Source: Central Bank of Nigeria (CBN) Statistical Bulletin.

Ogwumike and Ofoegbu (2012) supported the above when they examined the impact of financial liberalization and domestic savings in Nigeria and found a minimal positive effect between domestic savings and financial liberalization. Matovu (2010) finds that financial reforms stimulate growth in savings and financial intermediation. Balamoune-Lutz (2006) opines that the effectiveness of financial intermediation does not have a direct effect on savings but savings significantly influence the volume of intermediation. He furthers that in the long run savings have a stable relationship with financial reforms but the influence of interest rate remains negative.

Onwioduokit (2006) examines financial liberalization and savings mobilization in Nigeria between the periods of 1980-2005. The study broke the assessment period into two segments 1980-1986 representing the pre reforms era, while 1987-2005 represents the post reforms era. Using six measures which include broad money supply as a ratio of gross domestic product, private credit as a ratio of GDP, currency outside bank as a ratio of broad money, interest rate spread, real interest rate and gross savings as a ratio of GDP found a less significant influence of financial liberalization on savings. Hence the need to examine the impact of financial sector reforms on savings mobilization in Nigeria and how reforms can enhance savings in the financial sector.

Concept of Savings

The concept of savings has been defined in various literature both as an individual (micro) and national (macro) concept such as Alade (2006), Otu (2006), Afolabi and Mamman (1994), Adam and Agba (2006), Ogwumike and Ofoegbu (2012) and Onwioduokit and Adamu (2005).

Alade (2006) defines saving as "a surplus of production over consumption, which can be achieved in two ways: either by reducing consumption or by increasing production. The English Chambers Study Dictionary view saving as money set aside for future use, while Pan Dictionary of Economics and Commerce define saving as the

converse of consumption, that is an individual may either consume or save his or her disposable income. The Business Dictionary view saving as the portion of disposable income not spent on consumption of consumer goods but accumulated or invested directly in capital equipment or in paying off a home mortgage, or indirectly through purchase of securities. Hence savings does not necessarily mean making deposits at banks or financial institutions.

Adam and Agba (2006) added that saving becomes available when an individual refrains from consumption. Thus, saving is a sacrifice of current consumption for capital accumulation which results in investment and subsequently increase productivity or output that will be available for consumption in future.

Gross national savings can be defined as the residual of what is consumed from gross domestic income. In a simple income-expenditure model, the economy is in equilibrium when investment is equal to saving. In conclusion, saving in a country shows the capacity of an economy to cope with a cyclical downturn or the capacity of the economy to finance itself while for the household or individual, it indicates the ability to provide for their future needs.

Trend in Domestic Savings in Nigeria

In order to further analyze savings, we present below the trend of domestic savings rate (measured by total savings divided by gross domestic product) in Nigeria based on the data sourced from Central Bank of Nigeria (CBN) and National Bureau of Statistics (NBS). The savings rate, which was 11.63 percent in 1980 rose consistently to 18.44 and 20.15 in 1985 and 1986 respectively. This could be attributed to high gross domestic product (GDP) growth recorded between 1980 and 1986. Thereafter, savings rate began to decline and by 1989, savings rate had declined to 10.98 percent, about half of the rate in 1985 despite the introduction of structural adjustment program (SAP) at that time. During the period 1986 to 1990 domestic savings averaged 15.7 percent of GDP. However, the emergence of financial sector distress in the 1990s the rate of aggregate savings declined

significantly. The distress syndrome resulted in a significant fall in domestic savings in the period 1990 to 1999 as the savings-gross domestic product ratio dropped to 6.0 percent and had continued to fall. By 2005, the savings- gross domestic product ratio was approximately 9.0 percent which was relatively low when compared to the figures of some other countries like Canada (23.7 percent), France (19.7 percent), United Kingdom (14.9 percent), Japan (27.5 percent), United State of America (12.6 percent), China (43.2 percent) and East Asia (24.3 percent), (Ononugbo and Nwosu, 2006). By 2007, savings rate rose from 13.0 percent to 23.3 percent in 2009 before the start of the global financial crisis.

Table 2.1: Profile of Domestic Savings Rate in Nigeria

Year	Total Savings (N'mn)	% Growth in Total Savings	GDP at Current Basic Prices (N'mn)	Total Savings as Ratio of GDP at Current Basic Prices (%)
1980	5,769.9	-	49,632.3	11.63
1981	6,562.60	13.74	47,619.66	13.78
1982	7,514.40	14.50	49,069.28	15.31
1983	9,443.90	25.68	53,107.38	17.78
1984	10,988.10	16.35	59,622.53	18.43
1985	12,521.80	13.96	67,908.55	18.44
1986	13,934.10	11.28	69,146.99	20.15
1987	18,676.30	34.03	105,222.84	17.75
1988	23,249.00	24.48	139,085.30	16.72
1989	23,801.30	2.38	216,797.54	10.98
1990	29,651.20	24.58	267,549.99	11.08
1991	37,738.20	27.27	312,139.74	12.09
1992	55,116.80	46.05	532,613.83	10.35
1993	85,027.90	54.27	683,869.79	12.43
1994	108,460.50	27.56	899,863.22	12.05
1995	108,490.30	0.03	1,933,211.55	5.61
1996	134,503.20	23.98	2,702,719.13	4.98
1997	177,648.70	32.08	2,801,972.58	6.34
1998	200,065.10	12.62	2,708,430.86	7.39
1999	277,667.50	38.79	3,194,014.97	8.69
2000	385,190.90	38.72	4,582,127.29	8.41
2001	488,045.40	26.70	4,725,086.00	10.33
2002	592,094.00	21.32	6,912,381.25	8.57

2003	655,739.70	10.75	8,487,031.57	7.73
2004	797,517.20	21.62	11,411,066.91	6.99
2005	1,316,957.40	65.13	14,572,239.12	9.04
2006	1,739,636.90	32.10	18,564,594.73	9.37
2007	2,693,554.30	54.83	20,657,317.67	13.04
2008	4,118,172.80	52.89	24,296,329.29	16.95
2009	5,763,511.20	39.95	24,794,238.66	23.25
2010	5,954,260.50	3.31	54,204,795.14	10.98
2011	6,531,913.01	9.70	63,258,579.01	10.33
2012	8,062,901.35	23.44	71,186,534.87	11.33
2013	8,656,124.80	7.36	80,222,128.32	10.79

Sources: Central Bank of Nigeria (CBN) Statistical Bulletin 2012 and Q4 2013.

FINANCIAL SECTOR EVOLUTION AND REFORMS IN NIGERIA

In any economy, the financial sector is the hub of productive activity. It comprises an impressive network of banks and other financial institutions and a wide range of financial instruments. In Nigeria, the financial system is made of financial institutions, such as banks, insurance companies, specialized banks, capital market, finance companies, discount houses, bureau de change, mortgage institutions, community banks, and the development finance institutions (DFIs), each covering a particular area of activity or activities (Mordi, 2004). It performs the core function of financial intermediation, adequate payment services as well as the fulcrum for monetary policy implementation. This evolution and reforms period in the Nigerian financial sector will be decomposed into i) Pre-reform period; and ii) Post reform period.

Pre-Reform Period

The pre form period in the Nigerian financial sector was essentially a stabilization policy regime during the nascent age of the Central Bank of Nigeria. The period was characterized by the reliance of CBN on administrative fiat dictated more or less by the Federal Government; monetary policy during this era was largely used to support the fiscal policy operations of government. A stronger policy posture was, however, taken during the Civil War period, 1967 – 1971 and in the “oil affluent” era of 1973 – 1980, with a series of CBN and

banking amendment decrees designed to strengthen Central Bank of Nigeria's operations (Ndekwa, 2013).

Accordingly, the essential characteristic of monetary management during this era was monetary control whereby monetary variables, namely, the lending rates of commercial banks (deposit money banks), deposit rates, credit growth and allocation were administered by fiat, while the exchange rate was fixed and capital flows directly controlled. It was an era of administered prices in the monetary and financial system by the CBN operating largely as a department of Nigeria's Federal Ministry Finance. Such monetary control regime, which could be described as a regime of "financial repression" in the Nigerian monetary and financial system was, in fact, characterized by fiscal dominance. Though monetary policy instruments such as interest rate, liquidity ratios of banks, and credit allocation were used, they were largely controlled to support the fiscal operations of the government of the day. Interest rate levels were fixed most of the time, with ceilings on loan rates through the Central Bank's Minimum Rediscount Rate (MRR). Credit allocation was in the form of directives in the sense that banks were directed to allocate specific proportions of credit to specified economic activities and sectors, with specified growth rates of bank credit. Interest rates were capped and credit allocated to preferred, presumably priority, sectors and sub-sectors of the economy. Target rates of the growth of credit and money supply were to be maintained as a rule. There were, accordingly, in this era, both monetary rule and monetary targets in the monetary policy process of the CBN. All the rules and targets were designed to ensure that monetary policy satisfied the fiscal operations of government and to contain inflationary pressures (Ndekwa, 1983, 1990). Consequently, inflationary pressures were to be contained through the complementary role of monetary to fiscal policy. An exchange control regime was, for the most of the period, in operation for the control of capital movement, especially of scarce foreign exchange resources.

Post Reform Period

The introduction of the Structural Adjustment Program (SAP) in September 1986 was the beginning of reforms in the banking sector with the aim of remedying long period of direct controls, pervasive government intervention in the financial system resulting in the stifling of competition and resource misallocation. After the introduction of SAP, several reforms were introduced in the financial sector which will be discussed later in this chapter.

The exposure of the financial sector in Nigeria to these various reforms resulted in mixed developments for the sector using various indices. Though, statistics from the Central Bank of Nigeria shows that financial reforms have not significantly influence savings in Nigeria. For instance, before the introduction of structural adjustment program (SAP) in 1986, savings ratio was estimated at an average of 8.68 percent. However, the introduction of SAP which lasted till 1990 did not have much effect on savings at 7.11 percent.

The period of banking consolidation (i.e. 2004-2005), saving ratio was 8 percent, this increased slightly to 11.7 percent between 2001 and 2010 when the universal banking system was introduced. However, the significant rise in savings during the period of regulatory intervention may be attributed to some factors such outside the financial sector. Other financial sector reforms indicators such as number of banks, ratio of broad money to gross domestic product, ratio of private sector credit to gross domestic product, ratio of currency outside banks to broad money supply, prime lending rate, inflation, exchange rate and contribution of financial sector to gross domestic product also improved during the period of these various reforms in the sector. On the number banks, a smaller number of banks emerge with various reforms in the sector though with larger assets and equity.

The introductions of reforms have mixed impact of inflation and exchange rates. Inflationary pressures, though still contained through the complementary role of monetary to fiscal policy. Exchange rate during the period of these reforms has been deregulated with several

devaluations. The past CBN regime was headed by Lamido, Sanusi Lamido though had a contrary policy with past reforms, stabilizing the value of Naira against dollars at expense of the country's foreign reserves. The sack of the regime is expected to trigger a change in policy direction of the CBN on exchange rate.

An Overview of Nigerian Financial Sector Reforms

The Nigerian financial sector over the years has witnessed several reforms due to several challenges facing the sector. Abdullahi (2007) opines that reforms are predicated upon the need for reorientation and repositioning of an existing status quo in order to attain an effective and efficient state. The period before the introduction of reforms in the Nigerian financial sector, the sector was characterized by under capitalization, unhealthy and hostile competition, poor management, low technology and innovation. The period according to Abdullahi (2007) was described as unregulated banking activities. The setting up of Patron's commission to enquire banking business in Nigeria and the extent of control that can be introduced recommended the formulation of Banking ordinance of 1952, which can be described as the first attempt to reform banking business in Nigeria since 1892 when the first commercial bank namely Standard Bank of Nigeria Ltd (now First Bank) was established in Nigeria. A provision in that ordinance prescribed as part of condition for entry into commercial banking a minimum paid up capital of £25,000 for bank incorporated in Nigeria and £200,000 for banks incorporated outside Nigeria. Since then, several reforms have been carried out to strengthen, reposition and enhance competition in the sector. According to Ogujiuba and Obiechina (2011), the Nigerian banking system has undergone remarkable changes over the years, in terms of the number of institutions, ownership structure, as well as depth and breadth of operations. These changes according to them have been influenced largely by challenges posed by deregulation of the financial sector, globalization of operations, technological innovations and adoption of supervisory and prudential requirements that conform to international standards. Reforms in the sector are therefore classified below:

Theoretical Literature

One element of the Mackinnon-Shaw thesis is that abolition of ceilings on interest rates stimulates savings. Increased interest rates, however, may reduce rather than increase the volume of savings for a number of reasons. First, the negative income effect of increased interest rate might offset the positive substitution effect between consumption and savings. Second, an increase in the real interest rate may merely reallocate the existing volume of savings in favor of financial savings as opposed to other forms of savings and leave the total volume of savings unchanged (Gupta 1984, Rangarajan 1997). Such a reallocation may also occur if reforms provide a new range of financial instruments such as shares, mutual funds, postal savings and pension funds.

Third, at very low levels of income interest rates are unlikely to stimulate savings since the totality of incomes would be devoted to consumption. Statistical evidence on the issue suggests that a one percent increase in the real interest rate raises the savings rate by only about one-tenth of one percent point in the relatively poor countries, whereas this coefficient is about two-thirds of one percentage point in the relatively rich countries (Ogaki et al 1996). Fourth, even at relatively high levels of income, financial reforms which ease borrowing constraints may stimulate consumption rather than savings (Hall 1978; Jappelli and Pagano, 1989, 1994).

Finally, increased interest rate may restrict the ability of the corporate sector to restructure production methods and enhance its productivity and growth. And if savings propensity of the household sector is lower than that of the corporate sector total savings may decline (Singh, 2003).

On theoretical grounds, it has been postulated that a relaxation of liquidity constraints will be associated with a consumption boom and decline in aggregate saving. More specifically, Campbell and Mankiw (1990) postulated that there are two types of household in the economy: the first types of household, x , is liquidity constrained

and their consumption is entirely determined by the evolution of current income, while the second type $(1-x)$, has free access to capital markets and can smooth their consumption inter-temporarily. Such a development led these authors to challenge the implicit McKinnon-Shaw assumptions that were based on a homogeneous household set in which it was assumed that all relevant households had free access to capital market within the domestic economy. This argument stemmed from the Stone-Geary utility function where the inter-temporal elasticity of substitution, which determines the sensitivity of consumption to real interest rates, is determined by permanent income and subsistence consumption. Thus, increases in real interest rates will affect consumption/savings decisions in varying degrees. In countries where the representative's household is close to subsistence consumption (and saving), they may not be sensitive to changes in the real rate of interest. Only the wealthier countries would consumption decline (and saving increase) following an increase in real interest rates. Hence, in this analysis the magnitude of the increase in saving following higher real interest rates associated with financial reforms will depend on the level income.

Savings from the above theory is about choosing between current consumption and future consumption. Savings theory however, has gone beyond the traditional relationship with current consumption and income. Keynes (1936) justifies the traditional theory referring it as "psychological law" that when income increases, people increase their savings to such an extent that the saved part of their incomes increases.

Keynes theory was however, proved contradictory by Simon Kuznets with some statistical data in the United States savings share of national income had not undergone a long-term increase despite an enormous increase in personal incomes. This contradiction was seen as a paradox and it soon became the object of a number of studies. One of those studies resulted in the work of Franco Modigliani and his assistant, Richard Brumberg, called "the life-cycle hypothesis". The life-cycle hypothesis derives from a simple idea that people save

for their own retirement and that they therefore accumulate savings during their active years in order to be able to consume those savings during their retirement. A stringent, mathematical formulation of this hypothesis led to a number of conclusions that could not be drawn from earlier theories, for example that a person's saving is not determined only by his income, but also by his wealth, his expected future income, and his age. The conclusion therefore provided regarding household saving include:-

1. That saving is not determined, as earlier theories have suggested, by households' income level, but rather by the rate of increase in that income level.
2. That savings is affected by population growth as well as the population age structure
3. That saving is affected by households' aggregate wealth and hence also by the interest rate in its capacity of capitalization factor, and
4. That the multiplier effect of an autonomous expenditure increase approaches the inverted value of the marginal tax rate.

Empirical Review

Under this section, empirical literature on the relationship between financial sector reforms and domestic savings is extensively discussed. Adam and Agba (2006) study the conceptual issues on savings in Nigeria. The study aimed to review conceptual issues on savings behavior in Nigeria and analyze the factors that affect savings performance in Nigeria. The methodology adopted in the study includes descriptive analysis and review of relevant empirical studies on savings/consumption behavior. The descriptive analysis basically involve trend analysis of national savings, number of financial institutions in Nigeria and deposit interest rate trend in Nigeria between the period of 1970 and 2004. The study found that financial reforms' does not have significant influence on savings mobilization in Nigeria. Similarly, empirical evidence from Emmanuel (2006) and Okpara (2010) supported the findings Adam and Agba (2006). Their findings suggest that though financial reforms results in higher interest rates and financial deepening, it does not necessarily lead to higher savings and investment.

Onwioduokit (2006) in his study titled "financial liberalization and savings mobilization in Nigeria" assessed the impact of financial sector reforms on savings mobilization in Nigeria. Using descriptive analysis, the paper analyzed the roles of financial sector reforms indicators that are studied in recent literature. The indices used to measure reforms in the financial sector include broad money as a ratio of GDP, private credit as a ratio of GDP, currency outside banks as a ratio of broad money, interest rate spread, real interest rate and gross savings as a ratio of gross domestic product broken into two segments 1980-1986 representing the pre-reforms era, while 1987-2003 represents the post reforms era. The study found that Nigeria's financial sector reforms only impacted on two indicators namely currency outside banks as a ratio of broad money and real interest rate compared with the pre-reforms era.

Iganiga (2010) evaluates the Nigerian financial sector reforms using behavioral models. The study adopted Omole (1993) model with emphasis on the indicators of financial development, using the ordinary least squares technique. The choice of the study's approach was premised on two reasons. First, the Gaus-Markov theorem portends that the least squares technique is the best linear unbiased estimator, with which straight line trend equations could be estimated. Second, this version of the straight line trend model has been used by previous researcher such as Ike (1984) Omole (1993) and Adam (1998), with good results to conduct a financial appraisal of the Nigerian financial market. The result shows that performance of the Nigerian financial sector has been greatly influenced over time by reforms that began in 1986.

Maimbo and Mavrotas (2004) in the study titled financial sector reforms and savings mobilization in Zambia examines the linkages between the financial reforms of the early 1990s and savings mobilization. It considers the characteristics of banks and non-bank financial institutions, especially micro finance institutions, and savings levels and identifies problems associated with the relatively

poor performance of savings in recent years and concludes with a set of policy guidelines for strengthening savings mobilization, highlighting the expected effect on poverty reducing growth. Using a descriptive analysis, the study compares the trends of inflation and interest rate, gross domestic savings and gross national savings, private and government savings, and total deposit trends within the period of reforms. The study found that characteristics exhibited by banks and non-bank financial institution reduce the effectiveness of reforms which leads to relatively poor performance of savings level.

Adenutsi (2010) examines the implication of financial development for commercial bank savings mobilization and economic performance in Ghana since the pursuit of financial reforms program in September 1987. The study used a structural vector autoregressive (SVAR) model on quarterly time series data from 1987(3) to 2009(4) and finds that financial development has enhanced the performance of commercial banks by way of savings mobilization but adversely impacted on long run economic performance indirectly through increased savings mobilized by banks. Odhiambo (2006) previously arrive at similar conclusion by examining the impact of financial liberalization on domestic savings in South Africa from 1987-2000. The study utilizes two proxies of financial liberalization: real deposit rate and financial depth (M_2/GDP). The result showed a distinct positive relationship between domestic savings and financial depth in South Africa. However, the result fails to support the interest rate elasticity to savings. Based on these findings, the study concludes that financial liberalization/reforms may not significantly influence domestic savings in South Africa through its effect on interest rates but affect savings through its impact on financial deepening.

Ashfaque and Lubna (1998) in a similar study on Pakistan using time series data from 1959-1960 and 1994-1995 find a strong support for McKinnon's hypothesis. The study concludes that the financial liberalization policies undertaken in Pakistan were unlikely to result in financial deepening.

Jappelli and Pagano (1994) use a panel of data of OECD countries for 1960-1987, investigating the role of capital market imperfections on aggregate savings and growth. Their analytical framework is built on the Overlapping Generations Model within the context of which it is shown that liquidity constraints on households (but not firms) can raise the savings rate; strengthen the effect of growth on savings, increase growth rate if productivity is endogenous and may increase welfare. The authors find empirical support for their propositions that financial deregulation in the 1980s contributed to the decline in national savings and growth rate in the OECD countries and thus the concern about the growth and welfare implications of further liberalization within European Union (EU).

Azeez and Ojo (2012) examine the effect of banking reforms on the economic growth of Nigeria from 1986 to 2010. The model used in the study proxy gross domestic product (GDP) as being dependent on interest rate margin, credit to private sector, savings and inflation all representing banking reforms. The result suggests that banking reforms has not adequately and positively impacted on the economy. Ononugbo and Nwosu (2006) examined a pro poor framework for enhancing micro-savings in Nigeria and concluded that the informal sector of the economy consists mainly of low income who desire to save for different reason. Soyibo (1996) opines that improper pace and sequencing in the initial reform years led to the crisis and eventual collapse of the financial system, necessitating several policy reversals in Nigeria.

Awan *et al*; (2010) analyze the long and short run relationship among the real rate of interest on deposits, financial liberalization, economic growth, terms of trade, real remittances and domestic savings behavior in Pakistan using time series data for 1973-2007. The result shows that the real interest rate, financial liberalization and economic growth positively affected domestic savings in Pakistan in the long run. The coefficient of liberalization dummy is also positive and statistically significant suggesting a need for increased liberalization and deregulation of interest rate for mobilization of savings.

Conversely, the terms of trade and real remittances by Pakistan emigrants show a negative relationship with domestic savings also supporting the complementarity hypothesis of McKinnon (1973) and Shaw (1973).

Baliamoune-Lutz (2006) explores the short run dynamics and long run linkages between financial liberalization reform, and the mobilization of domestic savings in Morocco from 1960-1999, using a vector error correction model. In the short run, financial depth (volume of financial intermediation) is shown to have a positive influence on private savings while increases in real interest rate have a negative impact. The effectiveness of the financial intermediation does not seem to have a direct effect on savings but has a significant influence on the volume of intermediation. In the long run savings have a stable relationship with financial liberalization but the effect of interest rates remains negative implying that the income effect dominates in the long run.

Model Specification

Based on the model used by Ogwumike and Ofoegbu (2012) in their empirical works on the impact of financial liberalization on Nigeria's domestic savings, The study engages a linear equation model which includes domestic savings ratio (DSR) as the dependent variable and ratio of private sector credit to gross domestic product (CPVTR), prime lending rate (PLR), ratio of broad money supply to gross domestic product (BMGDPR), percentage contribution of financial sector to gross domestic product (PCFGDP), inflation rate (INF) and pre-reform and post reform period (D) as the independent variables.

Explicitly, the model can be stated as:

$$DSR = F (CPVTR, PLR, BMGDPR, PCFGDP, INF, D) \text{ ----- (1)}$$

Where

DSR is domestic savings ratio (measured by total financial savings divided by GDP).

CPVTR is the ratio of private sector credit to GDP.

PLR is Prime lending rate

BMGDPR is the ratio of broad money supply to GDP

PCFGDP is the percentage contribution of financial sector to GDP

INF is Inflation rate, a measure of macroeconomic stability.

D is a dummy variable (D captures the pre-reform and post reform period in the financial sector. It takes the value 0 during pre-reform years and takes the value 1 otherwise.)

Linearly, the model becomes:

$$DSR = \beta_0 + \beta_1 CPVTR + \beta_2 PLR + \beta_3 BMGDPR + \beta_4 PCFGDP + \beta_5 INF + \beta_6 D + \mu_t$$

Where all variables remain as previously defined except

β_0 is the constant term

$\beta_1, \beta_2, \beta_3, \beta_4, \beta_5$ and β_6 are the parameter estimates

μ is the stochastic error term.

Technique of Analysis

To test the empirical viability of the data, ordinary least square (OLS) method was used in this study because it is the best technique suitable for this research work.

Source of Data

The study engaged the use of secondary data. The data cover the periods 1980 to 2013 and were obtained from the Central Bank of Nigeria (CBN) Quarterly and Annual statistical bulletin.

DISCUSSION OF THE RESULT

This study made use of Ordinary Least Square technique. The model specification was patterned in line with the one used by Ogwumike and Ofoegbu (2012). Domestic savings ratio was used to proxy savings mobilization while ratio of domestic credit to the private sector, prime lending rate, ratio of broad money supply to gross domestic product, percentage contribution of financial sector to GDP, inflation rate and dummy variable- indicator for pre and post reform period (independent variables) were used to proxy financial sector reforms. The data were sourced from Central Bank of Nigeria (CBN) Statistical Bulletin, Annual Reports and Statement of Accounts, and National Bureau of Statistics (NBS) for hypothesis testing.

The results obtained from the regression analysis suggest in clear terms that financial sector reforms indicators contribute significantly to savings mobilization in Nigeria, while the coefficient of prime lending rate, inflation rate and financial sector reforms have insignificant effect on domestic savings ratio. The significant impact of the reform can be attributed to the fact that it boosts investors' confidence in the country's financial sector.

This study authenticates earlier studies on the assessment of the Nigerian financial sector reforms on the effectiveness and efficiency of the Nigerian financial institutions with emphasis on the banking sector which suggested that performance of the Nigerian financial sector has been greatly influenced over time by reforms that began in 1986 (Iganiga, 2010). Specifically, the study discovered that the Nigerian financial sector is positively influenced by financial reforms.

This study empirically examined the impact of financial sector reforms on savings mobilization in Nigeria using annual time series data from 1980 to 2013. It examined the impact of financial sector reforms variables on domestic savings ratio (proxy for savings) in Nigeria. In order to achieve the objectives of this study, a model was formulated.

Domestic savings ratio was used to represent savings mobilization. Variables namely- ratio of private sector credit to gross domestic product, prime lending rate, ratio of broad money supply to gross domestic product, percentage contribution of financial sector to gross domestic product, inflation and dummy variable (which captures the pre-reform and post reform periods in the financial sector) were used as independent variables.

The study used ordinary least square (OLS) estimation technique. Data employed for the estimation were collected mainly from the statistical bulletin and annual report of the Central Bank on Nigeria (CBN), and the National Bureau of Statistics (NBS).

In testing for hypothesis 1, the result from the analysis is positive, that is, 0.2446, meaning that financial sector reforms have a significant impact on domestic savings mobilization in Nigeria. This implies that financial sector reforms promotes and encourages savings in the financial sector. In this hypothesis 1, the null hypothesis was rejected while the alternative was accepted that financial sector reforms have significant influence on savings mobilization in Nigeria.

In testing for Hypothesis two, the result from the analysis is positive, that is, 0.0055, the coefficient of inflation rate is positive but insignificant. This suggests that inflation contributes positively to domestic savings ratio. This result indicates that macroeconomic instability has a positive impact on domestic savings ratio in Nigeria. This could be attributed to high investment risk when the economy is unstable. In hypothesis 2, the alternative hypothesis was rejected and null hypothesis was accepted.

In testing for hypothesis 3, the result from the analysis is negative, that is, -0.0469, therefore Prime lending rate has a negative and insignificant impact on domestic savings ratio. This implies that prime lending rate depresses growth of domestic savings ratio. Lending rate has no significant influence on savings mobilization in Nigeria. In hypothesis 3, the alternative hypothesis was rejected and null hypothesis was accepted.

Other major findings of the study are summarized below:

Savings continues to grow significantly while its ratio to gross domestic (i.e. savings ratio) remains very low in Nigeria particularly after the rebasing exercise of the country's gross domestic product.

Financial sector reforms have positively impacted on savings mobilization and financial sector development in Nigeria particularly in the area of credit to the private sector, ratio of broad money supply to GDP and contribution of financial sector to GDP. However, lending rate and inflation negatively impact savings mobilization.

The result from this study indicates that critical challenges faced in savings mobilization include management of macro-economic variables such as inflation and lending rate. Besides, the improper pace and sequencing of reforms introduced in the financial sector led to instability in the financial sector.

CONCLUSION

This study reveals that there is a link between financial sector reforms and savings mobilization in Nigeria, particularly focusing on variables including ratio private sector credit to gross domestic product, prime lending rate, ratio of broad money supply to gross domestic product, percentage contribution of financial sector to gross domestic product, inflation and dummy variable (which captures the pre-reform and post reform periods in the financial sector). The empirical result obtained in this study indicated that lending rate and inflation negatively influence savings mobilization implying policy actions that will reduce lending rate and make loans attractive to borrowers.

RECOMMENDATIONS

Based on the research findings, policy action is needed on several fronts to enhance the effectiveness of reforms in the financial sector and grow savings in the Nigerian economy. It is believed that this will be achieved if the following suggestions are adopted: Policy actions should be directed towards reducing lending rate in the financial sector. This will improve efficiency of financial intermediation in the sector, allocates more funds to the productive sector and increase investment which will in turn enhance private savings.

There is need for consistency in reforms in the financial sector. Reforms in the sector should not be politicized due to its strategic importance to the financial sector and the economy at large. This will ensure stability in the financial sector and boost public confidence in the sector.

REFERENCES

- Adenutsi C. (2010). Financial development, bank savings mobilization and economic performance in Ghana: evidence from a multivariate structural VAR. *International Journal of Development Research and Quantitative Techniques* 2.1(2011): pp. 3-24
- Abdullahi, I.B. (2007). Banking Sector Reforms and Bank Consolidation in Nigeria: Challenges and Prospects. *BJMASS Vol 6, No. 1.*
- Adam, A.J. and Agba, A.V. (2006). Conceptual Issues on Savings in Nigeria. *Central Bank of Nigeria Bullion, January-March, Volume 30, No.1.*
- Afolabi, J. and Mamman, H. (1994). The Dynamics of Saving in a Deregulated Economy: *The Case of Nigeria. NDIC Quarterly, Vol. 4, No. 4.*
- Alade, S.O. (2006). Enhancing Long-Term Savings Culture in Nigeria through National Savings Certificate. *CBN Bullion, Vol. 30, No. 1.*
- Ashfaq, H.K. and Lubna, H. (1998). Financial Liberalization, Savings and Economic Development in Pakistan. *Economic Development Cultural Change, 46.*
- Awan, R.U., Munir, Z. H. and Sher, F. (2010). Rate of Interest, Financial Liberalization and Domestic Savings Behaviour in Pakistan. *International Journal of Economics and Finance, 2.*
- Balioune-Lutz, M. (2006). Financial Reforms and the Mobilization of Domestic Savings: The Experience of Morocco. *World Institute for Development Economics Research Research Paper 2006/100, Florida: UNU-WIDER*

- Campbell, J. and Gregory Mankiw. (1990). "Permanent Income and Consumption." *Journal of Business and Economic Statistics*, 8 [3]
- Jappelli, T. and Pagano, M. (1989, 1994). Saving, Growth and Liquidity Constraints. *Quantitative Journal of Economics*, 109.
- McKinnon, R.I (1973). Money and Capital in Economic Development. *Brookings Institute, Washington, DC, USA*
- Ndekwe, E. C. (1983). Government Borrowing, Money Supply and Monetary Policy, Ibadan: Nigerian Institute of Social & Economic Research (NISER).
- Ndekwe, E. C. (1990) Monetary Development and Management in Nigeria, Ibadan: Nigerian Institute of Social & Economic Research (NISER).
- Ndekwe E (2013). An Analysis of The Monetary Policy Transmission Mechanism and the Real Economy in Nigeria CBN
- Odhiambo, M.N. (2006). Financial Liberalization and Savings in South Africa: An Empirical Analysis. *African Review of Money, Finance and Banking*.
- Ogujiuba, K.K. and Obiechina, M.E. (2011). Financial Sector Reforms in Nigeria: Issues and Challenges. *International Journal of Business and Management*, Vol. 6, No. 6.
- Ogwumike, F.O & Ofoegbu, D.I (2012). Financial Liberalization and Domestic Savings in Nigeria. *Midwell Journals*, 7 (4)
- Okpara, G.C. (2010). The Effect of Financial Liberalization on Selected Macroeconomic Variables: Lesson from Nigeria. *International Journal of Applied Economics and Finance*, 4.

- Ononugbo, M.C. and Nwosu, C.P. (2006). A Pro-Poor Framework for Enhancing Micro Savings in Nigeria. *CBN Bullion, Vol. 30, No. 1.*
- Onwioduokit, E.A. (2006). Financial Liberalization and Savings Mobilization. *Central Bank of Nigeria Bullion.*
- Otu, M.F. (2006). Imperatives of National Savings: A Case for Adoption of Appropriate Benchmark Price for Crude Oil. *Central Bank of Nigeria Bullion, January- March, Volume 30, No.1.*
- Rewane, A. (2013). Nigeria's CBN's CRR Policy Shock Effect on Money Market. *Financial Derivative Company Analysis on CRR Policy.*
- Shaw, E. (1973). Financial Deepening in Economic Development. *Oxford University Press, New York, USA.*
- Singh A (1993). The Stock Market and Economic Development: Should Developing Countries encourage Stock Markets? UNCTAD, Review No.4.
- Soyibo A. (1994). *Financial Liberalization and Bank Restructuring in Sub-Saharan Africa: Some Lessons for Sequencing and Policy Design.* Paper Presented at an AERC Plenary, December, 1994.
- Ziorklui, S., Fanara, P., Mahone C., Goekel, F. & Mensah, S. (2001). The Impact of Policy Reforms on Bank Efficiency and Savings Mobilization in Ghana. Eager Policy Brief.