Research Journal of Finance and Accounting
ISSN 2222-1697 (Paper) ISSN 2222-2847 (Online)
Vol 3, No 8, 2012

Demand for, and Supply of Credit in Nigerian Banking Sector

Akinleye G.T[1*], Ojenike J.O[2] and Afolabi A.A[3]

1. Department of Accounting, Crescent University, PMB 2104, Abeokuta, Ogun State, Nigeria.
2. Department of Management and Accounting, Obafemi Awolowo University, Osun State, Nigeria.
3. Department of Management, University of Nigeria, Nsukka, Enugu campus

*E-mail of the corresponding author: gtakinleye@gmail.com

Abstract

The study investigated the determinant of the volume of demand and supply of credit in the banking industry in Nigeria 1986 and 2007. The study utilized secondary data. Annual time series data covering the period 1986 to 2007 on bank credit supply, lending rate, saving deposit ratio, nominal exchange rate, liquidity ratio, numbers of banks and loan-to-deposit ratio. The result showed that LDR and SDR were the primary drivers behind changes in the supply and demand for credit in the banking sector as they exhibited some degree of sensitivity to changes that are statistically significant ($t = 2.56$, $p < 0.05$) and ($t = -2.70$, $p < 0.05$) respectively. The conclusions drawn from the finding is that the neo-liberal economic policy prescriptions such as financial sector reforms, most often, failed to work through the postulated channels for developing countries like Nigeria. Thus, the policy package should only be adopted with modifications within the context of existing and prevailing social, macroeconomic and political situations in the country. Therefore, within the range of factors that can lead to credit rationing in Nigeria, asymmetric or imperfect information is expected to become less relevant.

Key words: Credit, demand and supply, banking, regulation

1. Introduction

The price shock in the world market in the late 1970s and early 1980s led to severe economic crises in most developing countries in which Nigeria was inclusive. This, together with the neglect of agricultural sector, which could have served as an alternative source of export earning as it did prior to the oil boom, led to a major decline in the growth process of the country. Consequently, there was a widening in the saving-investment gap, high and fluctuation in inflation rates, chronic balance of payment problem, huge budget deficits, high level of unemployment and low productivity in the general output of goods and services (Leff & Sato, 1980). The economic condition that prevailed in Nigeria during those periods became unbearable for the government. It was against this background that the Nigerian government started seeking for new and more comprehensive ways of restructuring the economy with the ultimate aim of improving the growth process. The economic strategy adopted was embodied in the Structural Adjustment Programme (SAP) in 1986. Financial liberalization was one of the key pillars of the programme (SAP).

Many studies have found a close link between financial liberalization, productivity and economic growth. They concluded that policies affecting the financial sector have substantial effects on the pace and pattern of economic development. King & Levine (1993) estimated that policies that would raise the M2/GDP ratio by 10% would increase the long-term per capita growth rate by 0.2–0.4% points. The financial sector is involved in the mobilization of resources among savers and their allocation to borrowers as well as transformation and distribution of risks and maturities over time. The sector facilitates saving and the efficient allocation of these saving to investment. In the process, plays an important role in reducing risks and in the transformation of maturities in the saving-investment nexus (Nissanke et al. 1995). Financial institutions lower the cost of investment when they evaluate, monitor and provide financial services to entrepreneurs. They promote productivity and growth through improved efficiency of intermediation, a rise in the marginal product of capital and or an increase in the savings rate (Montiel 1994).

According to Callier (1991), the performance of the financial sector in Sub-Saharan Africa has an important bearing on the overall economic performance because: (i) the region continues to be in economic crisis and the financial system is relatively underdeveloped compared to any other developing region; (ii) structural adjustment programs require more reliance on the private sector and hence its financing; (iii) the debt crisis and reduction in external savings translates to the need to increase the mobilization of domestic savings for investment; (iv) reform is needed

if the financial system is to overcome and avoid the problems of financial distress and restore confidence; and (v) the need for international competitiveness requires that the financial system be as adaptable and flexible as possible.

Financial sector reforms in Nigeria and elsewhere have mainly been motivated by the financial repression paradigm promulgated by the McKinnon (1973) and Shaw (1973) who emphasized the role of government failures in the sector. Accordingly, the objective of financial reforms is to reduce or reverse this 'repression'. According to the McKinnon-Shaw hypothesis, financial repression arises mainly when a country imposes ceilings on nominal deposit and lending interest rates at a low level relative to inflation. The resulting low or negative real interest rates discourage savings mobilization and the channelling of the mobilized savings through the financial system. While the low and negative interest rates facilitate government borrowing, they discourage saving and financial intermediation, leading to credit rationing by the banking system with negative impacts on the quantity and quality of investment and hence on economic growth (Mwega *et al.* 1990).

Advocates of McKinnon-Shaw hypothesis are of the opinion that the financial system in Nigeria has been subjected to financial repression characterized by low or negative real interest rates, high reserve requirements (sometimes of 20%- 25% compared to 5%-6% in developed countries) which had led to high spreads thereby imposing an implicit tax on financial intermediation; mandatory credit ceilings; directed credit allocation to priority sectors which undermine allocative efficiency; and heavy government ownership and management of financial institutions. The latter suggests that much credit is given on political rather than commercial considerations, giving rise to a huge pile of non-performing loans in the banks' portfolios.

In an attempt to overcome all these and as well create enabling environment for a change, the Nigerian government in its Structural Adjustment Programme, which was initially scheduled for two years, introduced deregulation and liberalisation in the banking sector. The chief aim of the programme was to stimulate saving that would be transformed into investments which will eventually lead to economic growth. This programme pre-supposes a direct relationship between changes in interest rates, deposits, savings, investment and economic growth (Ndekwu, 1991).

The reason behind this is that, the banking system remains the nerve centre of the modern economy being the supplier of credit, which lubricates the economy's engine of growth. It plays the role of intermediation between the surplus and deficit units within the economy. It also mobilizes and facilitates efficient allocation of national savings, thereby providing potential for increasing quantum of investments and hence national outputs. The Nigerian banking sector has witnessed significant structural change starting from 1986 to date. It attracted a great deal of attention from the banking public as well as the regulators, supervisors and monetary authorities.

The sector experienced considerable physical expansion in the late 1980s with the introduction of liberalisation. This opened up the industry for intense competition within the sector. There were total of 40 banks in existence in 1986, the count rose to over 70 by 1991. Essentially, more than 60 per cent of operating banks today are less than 19 years of age. Despite this phenomenal growth in the number of banks during those liberalisation periods, the industry's ability to supply credit to the economy is still constrained. There were also cases of widespread distress within the industry in the early part of 1990s.

2. Market and Demand Conditions

The capital needs of a firm are associated with its sales. Nevertheless, it is hard to specifically establish the association between volume of sales and capital needs. In practice, current assets will have to be employed before growth takes place. It is therefore, necessary to make advance planning of working capital for a growing firm on a continuous basis. Growing firms may need to invest funds in fixed assets in order to sustain growing production and sales. This will, in turn, increase investment in current assets to support enlarged scale of operations. Growing firms need funds continuously. They use external sources as well as internal sources to meet increasing needs of funds. These funds face further problems when they retain substantial portion of profits, as they will not be able to pay dividends to shareholders. It is therefore, imperative that such firms do proper planning to finance their increasing needs for working capital. Sales depend on demand conditions. Large number of firms experience seasonal and cyclical fluctuations in the demand for their products and services. These business variations affect the working capital requirement of the firm. When there is an upward swing in the economy, sales will increase; correspondingly,

the firm's investment in inventories and debtors will also increase. Under boom, additional investment in fixed assets may be made by some firms to increase their productivity capacity. This act of firms will require further additions of working capital. To meet their requirement of funds for fixed assets and current assets under boom period, firms generally resort to substantial borrowing. On the other hand, when there is a decline in the economy, sales will fall and consequently, levels of inventories and debtors will also fall. Under recession firm try to reduce their short-term borrowing.

Seasonal fluctuations not only affect working capital requirement but also create production problems for the firm. During periods of peak demand, increasing production may be expensive for the firm. Similarly, it will be more expensive during slack periods when the firm has to sustain its working force and physical facilities without adequate production and sales. A firm may, thus, follow a policy of level production, irrespective of seasonal changes in order to utilize its resources to the fullest extent. Such a policy will mean accumulation of inventories during off-season and their quick disposal during the peak season. The increasing level of inventories during slack season will require increasing funds to be tied up in the working capital for some months. Unlike cyclical fluctuations, seasonal fluctuations generally conform to a steady pattern. Therefore, financial arrangements for seasonal working capital requirements can be made in advance. However, the financial plan or arrangement should be flexible enough to take care of some abrupt seasonal fluctuations.

3. Methodology

In investigating the effects of financial reforms on bank credit management in the period 1986-2007, the study utilized secondary data for the analysis. The data on Bank Credit Supply, Lending Rate on short-term loan of banks, Nominal Exchange Rate, Cash Reserve Ratio and Minimum Rediscount Rate were derived from the following sources

- Central Bank of Nigeria {CBN}: Statistical Bulletins, Annual Report and Statement of Accounts
- International Financial Statistical Year Book {IFS}
- The World Development Indicators (2007) by the World Bank.

Both descriptive statistics and econometric techniques were adopted for the study. Objective one was achieved by the descriptive statistics analytical technique. This involved analysis of the trend and pattern of financial reforms as they are carried out in the banking sector. The various stages of financial reforms were presented and their structural changes examined. The data used for objective two were time series. The study used annual data series from 1986 to 2007 to determine the volume of demand and supply of credit in the banking sector in Nigeria.

4. Result and Discussion

4.1 Determinants of the Volume of Demand and Supply of Credit in Nigeria

Efficiency in the banking sector is recognised by central bank of Nigeria (CBN) as a precondition for macroeconomic stability and important for effective monetary policy execution (Hartmann, 2004). In addition, a banking sector's ability to allocate credit efficiently is expected to have positive implications for economic growth (Galbis, 1977). One of the objectives of this study is to evaluate the factors that deal with credit supply and the essential elements of the credit crunch. There is a need to investigate the possible imbalances between credit supply and demand considering the good liquidity environment and the declined interest rates registered during the commencement of the reforms programme in the country. The goal was to identify factors that influenced demand and credit supply in Nigeria's banking sector. This was done to inform the efforts of policy makers and regulators in their attempts to boost the effectiveness of the banking sector in allocating credit.
After the commencement of the on-going banking sector reform, a number of elements emerged in the economy that have encouraged the demand for credit. The reduction in interest rates in time of generous liquidity, the growth in domestic and foreign investment, and good export performance especially in crude oil, are some examples, which have stimulated the growth in revenue of the banking sector. Moreover, the behaviour of the economic agents in the economy, particularly households, shows a low indebtedness level. This surely allowed for a certain amount of momentum in bank loans. However, to achieve the growth required, for example, to lower the unemployment rate

and provide greater well-being, we must identify the barriers that might explain the slow growth in loans and determine if these barriers remain on the supply side. Looking at the chart in fig.4.1, from 1986 to 2007, there was a sizeable decrease in that portfolio. This was called a *credit tightening*, given the downward atypical pattern of loans during those years, based on macroeconomic fundamentals that were far less dynamic. In fact, the loan portfolio reduced from approximately 50% to 22% as at 1991. This could be attributed to financial reformation stemming from SAP. The second period involves the financial crisis that was brought about by the issue of bank distress in the early 1995 and late 1997, which was marked by an abrupt drop in the loan portfolio to below the level registered at the start of 1991. During that lapse, the value of the portfolio accumulated over a period of more than four years was reduced by half. The third period was characterized by a gradual recovery in loan growth that persisted till 2003 when a major financial reform in the form of bank recapitalisation policy was put in place. In spite of this, the ratio of bank credit to private and public enterprises relative to GDP decreased continuously after 2003. From a high point of business, loans worth 23% of GDP in 2003, decreased to 8% of GDP by the end of 2007.

There are several factors that actually determine credit demand and supply in Nigeria with some having more impact than others at various stages of economic growth. One thing we noticed is that the supply of credit to domestic economy and the banks total deposits are influenced by changes in economic conditions. This often affects the demand for credit in general. Fig 2 shows that the growth of credit has tracked closely the growth of nominal GDP. Secondly, the composition of growth and, specifically, the importance of the demand loan for small scale business relative to other demand can be expected to influence the demand and the supply of credit of the country's banks. The importance of small scale enterprise demand for loan as a source of economic growth has declined which is likely to have reduced the credit supply of the banking sector in Nigeria.

Loan portfolio quality is another supply determinant that influenced the pattern of loans, and apparently still does, given the banks' aversion to risk. Although the ratio of non-performing loans to the total gross loan portfolio is now at an all-time low, it rose substantially during the 1980s and early 1990s, aggravating risk aversion and affecting portfolio growth. Nevertheless, at the time of the surge in credit, and at present, the index seems to have no implications that would obstruct the good momentum in loans. Moreover, credit-reporting agencies clearly have better financial information about debtors in the loan sector and cover many more clients. Therefore, within the range of factors that can lead to credit rationing in Nigeria, asymmetric or imperfect information is expected to become less relevant.

We also need to note that in the loan market, asymmetric information stems from the difficulty in differentiating less risky projects from those with greater risk. Accordingly, banks are motivated to keep the supply of credit (at the same interest rate) below the supply that eliminates surplus demand. The assumption is that, with a higher rate, only the riskiest borrowers would apply for loans. Under these circumstances, lending rates would not be expected to adjust immediately to change in market rates. For lack of complete information on client performance and credit rating, financial intermediaries prefer to make the adjustment themselves by rationing credit. Consequently, one way to identify the existence of a credit crunch is to determine whether or not lending rates show a certain amount of rigidity to changes in the market rate in order not to undertake credit risk, equity reduction and the loss of loan collateral value (value of real estate and companies).

4.2 Degree of Rigidity in Lending Rates to Changes in the Market Interest Rate

Some rigidity in interest rate adjustments in the Nigeria economy could be understood as a necessary condition, but not enough in itself, to identify the existence of credit rationing at the aggregate level and by portfolio type. As mentioned earlier, in a credit rationing environment, banks do not adjust their lending rate; doing so could increase their credit risk, as they expect new borrowers to be those with projects that have higher expected returns, which also makes them the riskiest. The behaviour of the minimum rediscount rate, which was used as a proxy of the market rate and the lending rate by portfolio type, is shown in Fig 3.

5. Conclusion

It is evident from the results of the study that the credit management strategies adopted in Nigeria since the onset of economic reforms programme have been geared towards making domestic credit available to support the economy. In spite of all these efforts, supply of domestic credit to the real sector has not improved. Hence, an increased

shortage of credit for real sector investment. It is also concluded from the findings that the neo-liberal economic policy prescriptions most often, failed to work through the postulated channels for developing countries like Nigeria. Thus, the policy package should only be adopted with modifications within the context of existing and prevailing social, macroeconomic and political situations in the country.

References

Callier P., (1991) "Financial Systems and Development in Africa." Economic Development Institute of the World Bank, Washington D.C., World Bank

Galbis, Vincente (1977), "Financial Intermediation and Economic Growth in Less Developed Countries. A theoretical Approach, *"Journal of Development studies 13 (2), pp 58 – 72.*

Hartmann, P, (2004). The impact of financial infrastructure transformation on monetary policy execution – the Namibian experience. *Keynote Address at the Perago User Group Conference. BIS Review 53. South Africa: www.sadcbankers.org.*

King, R.G. and R. Levine (1993b), "Finance and Growth: Schumpeter Might Be Right*," Quarterly Journal of Economics 108, 717-738.*

Leff, N.H. and Sato, K. (1980) "microeconomic Adjustment in Developing Countries: Instability, Short-run growth and external depending*", Review of Economics and Statistics, Vol.24, No.63 (May)*

McKinnon, R. (1973), "Money and Capital in Economic Development*", The Brookings Institution, Washington, DC.*

Montiel P.J.,(1994) "Financial Policies and Economic Growth: Theory, Evidence and Country-Specific Experience from Sub-Saharan Africa*." Paper Presented at an AERC Plenary, May.*

Mwega F. M., N. Mwangi, and S.M. Ngola,(1990)"Real Interest Rates and the Mobilization of Private Savings in Africa: A Case Study of Kenya*." AERC Research Paper 2.*

Ndekwu, E.C. (1991) "Interest Rates, Bank Deposits and Growth of the Nigerian Economy", *NISER Monograph Series, No. 4.*

Nissanke, M., E. Aryetey, H. Hettige, and W.F. Steel, (1995) Financial Integration and Development in Sub-Saharan Africa. *Washington D.C., World Bank. Mimeo.*

Shaw, E.S. (1973)."Financial Deepening in Economic Development*", Oxford University Press,New York.*

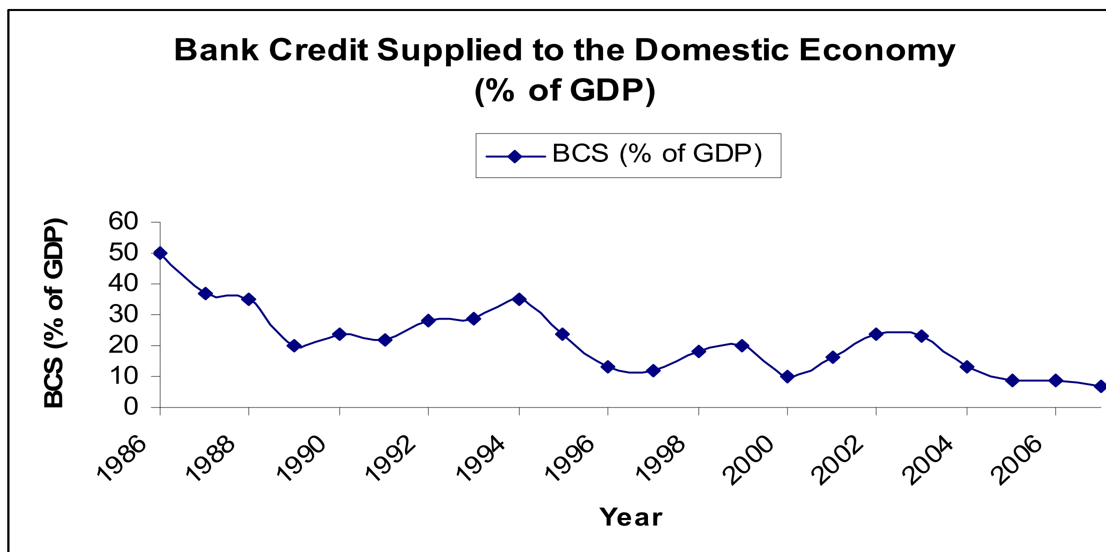

Fig 1: Trend of Credit supply

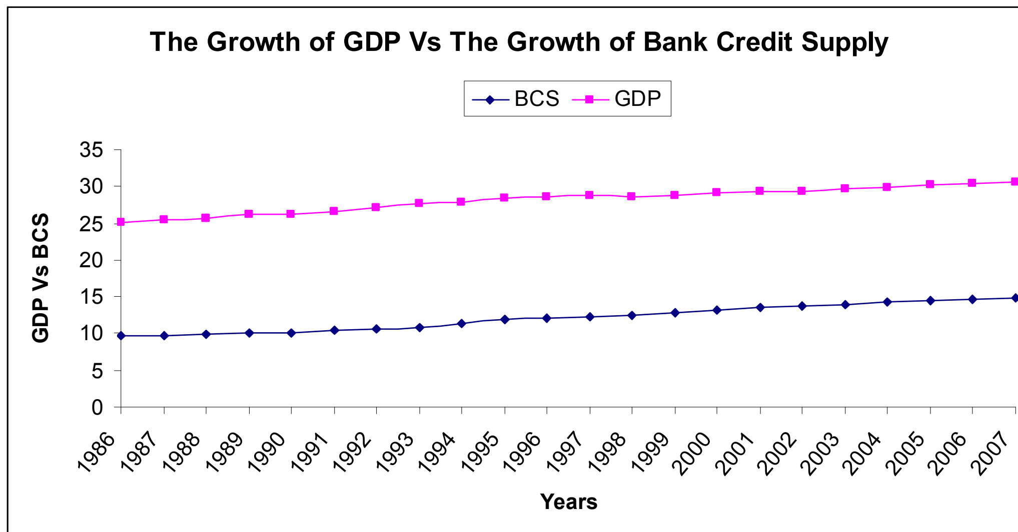

Fig 2: Bank Credit Supply

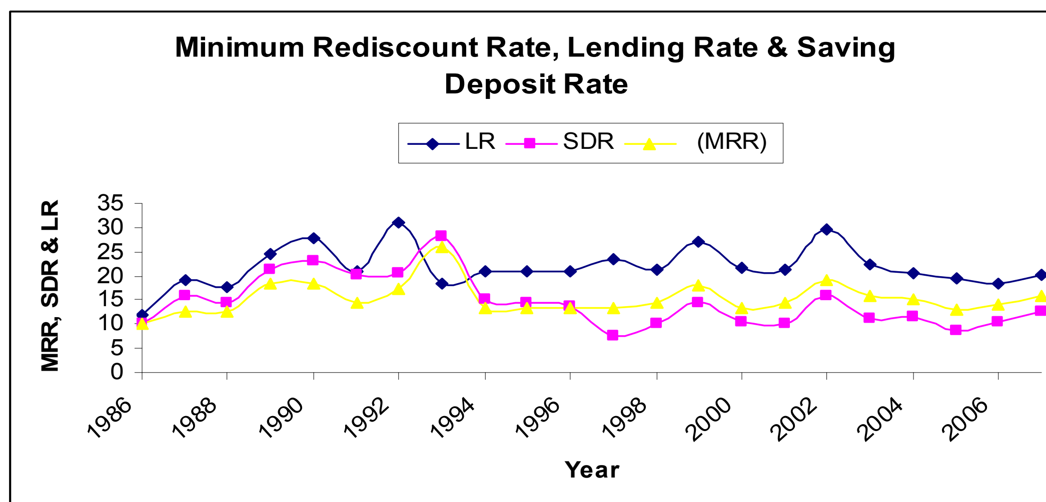

Fig 3: Lending, Saving and Discounting rate